GUIDE TO THE AD1 FORMOSA FILE

[The AD1 Formosa file contains information on the island of Formosa (Taiwan) and its non-aboriginal inhabitants. Formosa lies about 100 miles off the coast of China, between Japan and the Philippines. Chinese began settling the island in the beginning of the seventh century. Their name for the island was Taiwan. Around 1590 the Portuguese explored the area and named the island "The Beautiful" (Formosa). During the first half of the seventeenth century Formosa was ruled by the Dutch and Spanish. It was reclaimed by the Chinese late in the seventeenth century and they held the island until 1895 when it became Japanese territory after the first Sino-Japanese war. After World War II, Formosa was restored to China. Since then it has reassumed the Chinese name of Taiwan and become the seat of the Nationalist Chinese government of the Republic of China. In 1953, the Chinese population was 8,000,000. The indigenous inhabitants numbered 200,000.

There are forty sources in the file, numbered 4, 6-22, 24-29, 31, 34-37, 39-40, 42, 45-52, nine of which have been specifically marked for the AD4 Formosan Aborigines subfile. Eleven sources are translated from the German (sources 6, 7, 9, 10, 14, 18, 22, 25, 26, 27, 31, and 42); four sources are translated from the French (sources 11, 19, 28, and 29); and three sources are translated from the Chinese (46, 48, and 49). Many of the remaining sources contain considerable information on the aborigines as well. The most comprehensive information will be found in 45: Stanford University, which is a complete and lengthy monograph on the island as a whole. 4: Grajdanzev is a study of the Japanese colony based on official Japanese sources. 40: Kirk is a study of Japanese programs of assimilation.

Sources 10, 15, and 26 deal with the Japanese period in general. The physical characteristics of the island are discussed in sources 8, 9, 12, 13, 27, and 31. Early Chinese explorations are discussed in sources 28 and 29. 42: Schetelig is an account of an 1868 visit to Northern Formosa. 47: Balfour, et. al., is concerned with public health. 48: Chen is a study of population changes are related to social changes. 52: Barclay is a study of demography in relation to the Japanese colonial administration. The file was processed in 1951-56 and most of it is in the typed format and lacks the standardized OWC codes.]

4: Grajdanzev--1 S-4 (no date) 1942 Formosans
116, 101, 121

"Taiwan, or Formosa is a Japanese island near the Chinese province of Fukien and the northern Philippine island of Luzon with a population of six million. One may wonder what are the reasons for a better acquaintance with a relatively small island lost in the Western Pacific, forming a very small part of the Japanese yen-bloc area. Readers may be expected to be interested in broad problems or in problems concerning large areas but not in a small island or a local Japanese problem. However there are important reasons for a better knowledge of Taiwan."

4:Grajdanzev--4 [2] S-4 (no date) 1942 Formosans
116, 101, 177.72 Japan
636.72

"Taiwan is therefore halfway between Shanghai and Hongkong and halfway between Tokyo and southern Indo-China. This makes it an extremely important point for the Japanese. Geographically it is nearer to China and to the Philippine Islands than to Japan. Since its conquest the Japanese have looked upon Taiwan as a base for their advance to the south, as a stepping-stone toward domination over the adjacent areas."

4:Grajdanzev--9 S-4 (no date) 1942 Formosans
116, 101, 131

"The name Formosa was given to the island in 1590 when the first Portuguese sailors to sight the island are said to have called it Ihla formosa (Beautiful island). However the name Formosa is not used by either the Chinese inhabitants or their Japanese masters. In Chinese and in Japanese alike it has been called Taiwan (or Terraced Bay) since 1612.

The island is only 100-120 miles from the coast of the Chinese province of Fukien. Two hundred miles to the south, separated by the Bashi Straits, lies Luzon, northernmost of the major Philippine islands, and less than 700 miles to the north lies Nagasaki, southern port of Japan. The intervening Riu-Kiu Archipelago made it possible for even primitive fishing boats to make the journey from Japan to Taiwan. These three connections—to the south with the Malayan Archipelago, to the west with the mainland of China, and to the north with Japan—have shaped the history of Taiwan."

6: Kirchhoff--25 [3] U-4 (no date) 1895 Formosans
116, 101

Formosa received its name ("beautiful") from the Portuguese who, in the 16th century, sailed by and saw the fine mountain chains rise above the luxuriant vegetation of the foreground.

At the place where nowadays the creek flowing westwards from the town widens out to form a broader stream, more resembling a river, there lies the rather higher ground that bears the village of An-ping, 2 1/2 km. from the town and close to the shore of this creek, which continues on in a southwesterly direction for another kilometer, offering anchorage to junks of shallow draught and finally joining the sea after traversing a shifting sandbank. This hilly ground on which is An-ping measures 1 km. from east to west and 1/2 km. from north to south; it still rises like an island amidst river arms and swampy plains, and is the already mentioned former coastal island of Tai-uan, its name then being given by the Chinese to the whole island of Formosa.

7: Joest--54-55 E-5 (no date) 1882 Formosans
116, 101, 437

Formosa is divided lengthwise into two sections; the Chinese inhabit the western half of the island, while the natives live in the eastern half. [55] Along the boundary there is a stretch of land 10 miles wide which is considered neutral territory. Here there are several hundred Chinese settlements, ranging from single one-storied houses to villages; in this section the two groups meet for barter.

9: Yamasaki--221[5] N-5 (1896-1897) 1900 Formosans
116, 101, 131

The Taiwan island group embraces the chief island of Taiwan (Formosa), the Hōko-tō or Pescadores Islands and a number of accessory islets. To these last belong: Kōtō-sho (Botel-Tobago), Shōkōtō-sho (Small Botel-Tobago), Kashō-tō (Samasana), Shō-ryūkyū-tō (Lambay Island), Kisan-tō (Steep Island), Agincourt and some even smaller rocky islands. The group lies opposite the Chinese province of Fōkien which, in keeping with a treaty with Japan, the Chinese Government may not cede to other nations. The Taiwan Islands form the southern end of the three great Japanese island groups which, in three curves, cut off three of the eastern Asiatic bordering seas from the Pacific Ocean. In the north west we have the Ryūkyū (Riukiu) Islands. These form a whole with Taiwan not only geographically but also geologically, and in the south are separated by the Bashi Straits from the Batan Islands, the northernmost group of the Philippines.

9: Yamasaki--221 N-5 (1896-1897) 1900 Formosans
116, 101

When the Portuguese voyagers pushed forward into the East China Sea, during the opening decades of the 16th century, they found a large island to which they gave the name of Formosa ("beautiful"). It appears with this name, for the first time, on a map published in 1550. Until later than the middle of the century this name was used in Europe almost exclusively. Gradually there appeared beside it the Chinese name for the island, Taiwan, and when the island was taken over by the Japanese in 1895, this name was taken over too.

20: Alvarez--248 (no date) 1927 Formosans
116, 131, 101

"Formosa is still almost unknown to [MC: the] scientist. It is one of the great islands which are situated to the southeast of the vast Chinese empire (now republic), and it is separated from the mainland by the Strait of Formosa, also called Channel of Formosa. In the centre of the latter, about 25 sea-miles away from Formosa and from the shores of China, are the poor islands named 'islas Pescadoras' (fisher islands), which, on account of their important strategical position have on several occasions been coveted by powerful foreign nations."

"The history of Formosa, as commonly known by Western historians, seems to commence in the XVIth century. It was then that first appeared the name 'Formosa', which is undoubtedly of Portuguese origin. Yet no evidence can be found in Portuguese history that this name was first applied by Portuguese to the island. The same may be said with respect to the discoverer who first saw the shores of Formosa. Nor do we know, whether the motive by which that navigator was compelled to land on those far shores to which he gave a name so much in accord with the real beauty of the island was fatal or purposive.

Among the peoples of the Far East, the Chinese and Japanese have for many centuries known the island, as in their respective histories are preserved names, such as Piisaye, Pak-kando and Taiwan (1). The latter appellation first appeared in the XVIth century,

1. Taiwan, according to the Chinese characters in use at present, means: 'bay of earthy cover', or 'high bay', though one can see no relation between this denomination and the object to which it is applied, a fact altogether contrary to Chinese custom of namegiving. It is to be presumed that the tribe called Paiwan, in whose territory the first Chinese invaders had established themselves, might have given origin to that name; or, that the word Pairan, the nickname applied by the Formosan aboriginal inhabitants to the Chinese, induced the latter to call the island by this name. The Chinese dialect of

> Formosa locks the R, and the interchange of P and T, in order to soften the pronunciation, make that supposition very probable.

and it is still in use among the Chinese and Japanese. The latter of course had already known the island under the name Takasago, 'a place most beautiful and famous in Japan', according to a Japanese author. Taikosama, who in 1592 sent an expedition with the object of subjecting the island to his empire, called it Takasago, viz., 'Kingdom of the great mountains'. This took place long before the arrival of Europans [sic] at Formosa. These possessed the island for a short time only; the Spaniards occupied the northern part from 1626 to 1641, while the Dutch, first established in the south and afterwards possessing the whole eastern section from 1624 to 1661, were expelled by the wild Koxinka, or Ti-kok-sieng. From now on Formosa formed an independent kingdom under the name of Tong-to, or Tonglieng, viz., 'Oriental Metropolis'. Here reference is surely made to its geographical position with respect to that of China."

"The races who share among themselves the whole of the hilly parts and plains of Formosa are three in number:

(I) The Japanese, new-comers, intruders, yet the masters of the island to-day, number about a hundred thousand souls.

(II) The Chinese, owners of the island for more than two centuries, constitute the main part of its population. They call themselves hok-lo (2), viz., 'good' 'plain', and

2. This name is applied by the Khe-lang to other Chinese of Formosa. It seems to take its origin from the fact that when the Hak-kas, persecuted everywhere in the Celestial Empire, arrived at the South of Fokien, they were welcomed there. Henceforth they appear under the name of 'thankfulness' that had been given to them by the inhabitants of that province. This, indeed, did not prevent at all the fact that until the arrival of the Japanese the Khe-lang and Hok-lo were living in continuous shie [sic] with each other. The Hok-lo of southern Fokien, whose dialect, with slight differences, is the same as that spoken in Formosa, call Khe-lang, viz., guests, those, to whom, in the dialect of Canton, in China, is applied the nickname Hak-kas, viz., terrible guests.

this name is applied also to the Chinese born and brought up in the 'Prefecturas' of Chiang-chin, Choan-chin and Anke, in southern Fokien. They number more than two

millions. They call Khe-lang their neighbours, who proceed from Canton and the 'Sub-Prefecturas' of Chiau-an and Tin-chiu, likewise situated in Fokien, where their ancestors are still living and their brothers well known under the name of Hak-kas. The terrible civil war that followed the downfall of the Ming Dynasty in China compelled most of the partisans of the Mings to leave their native soil. The Hak-kas, who had suffered most from persecutions, crossed the strait and established themselves in Formosa. At present they constitute the third part of the population of the island. They number about 800,000 souls.

(III) Finally, there are the genuine aborigines, who were masters of the island for many centuries before the Chinese and Japanese made their way from their native countries and reached Formosa. They are divided into two classes, viz., Pepo-huan and Che-huan. The former once occupied the vast plains which at present are inhabited by the Chinese invaders. Subdued by them, the tribes now called Pepo-huan in time adopted not only Chinese fashions, but also the Chinese language. Several northern branches still retain their mother-tongue, the old customs, manners and traditions. But their number is very limited to-day. They are named Che-huan, viz., 'savages' by the Chinese. They are hillmen, with their own peculiar language, and number about 121,500 souls, according to the official report of December, 1910."

31: Hofmann--606 N-3 (1909) 1912 Formosans
116, 101, 162

In the region of Taikokan I was struck by the fact that the Chinese women did not have crippled feet. From this it is clear that the Chinese living there do not belong to the largest of the tribes, the Hoklos, among whom it is the custom to maim the feet; they belong to the smaller tribe, the Hakkas. It should also be stressed that, while two thirds of the population today is Chinese, there were no Chinese on Formosa until three hundred years ago.

Annex "A," Subparagraph 1a',
Sociological Background

GEOGRAPHICAL SETTING

101 The island of Formosa is called Taiwan by the Chinese and the Japanese. The name may have been derived from an aboriginal tribe called Tai-yuan who inhabited the western coast of the island and with whom the Chinese first came into contact in the early sixteenth century. Taiwan means "Terraced Bay". Later, the Portuguese appeared as regular traders in the China Sea. Plying between the coast of China and Japan, they often sighted the island. Apparently impressed by its scenic grandeur, they gave it the name "Ihla Formosa", the beautiful isle.

I. LOCATION AND AREA

131 Taiwan, as a province, comprises the islands of Formosa and the Pescadores. It is situated in the western Pacific astride the Tropic of Cancer, between latitudes 21° 45' 25" N and 25° 37' 53" N, and longitudes 122° 10' 25" E and 119° 18' 13" E. To the west, the Formosa Strait separates the islands from the China Mainland by less than one hundred miles of water at the closest point; to the south, the Philippines lie beyond the 230 miles of Bashi (Luzon) Strait; to the east is the Pacific Ocean. The islands of Formosa are midway on the water route between Shanghai and Hong Kong, 400 miles southwest of Okinawa, and 720 miles south of Japan.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER I

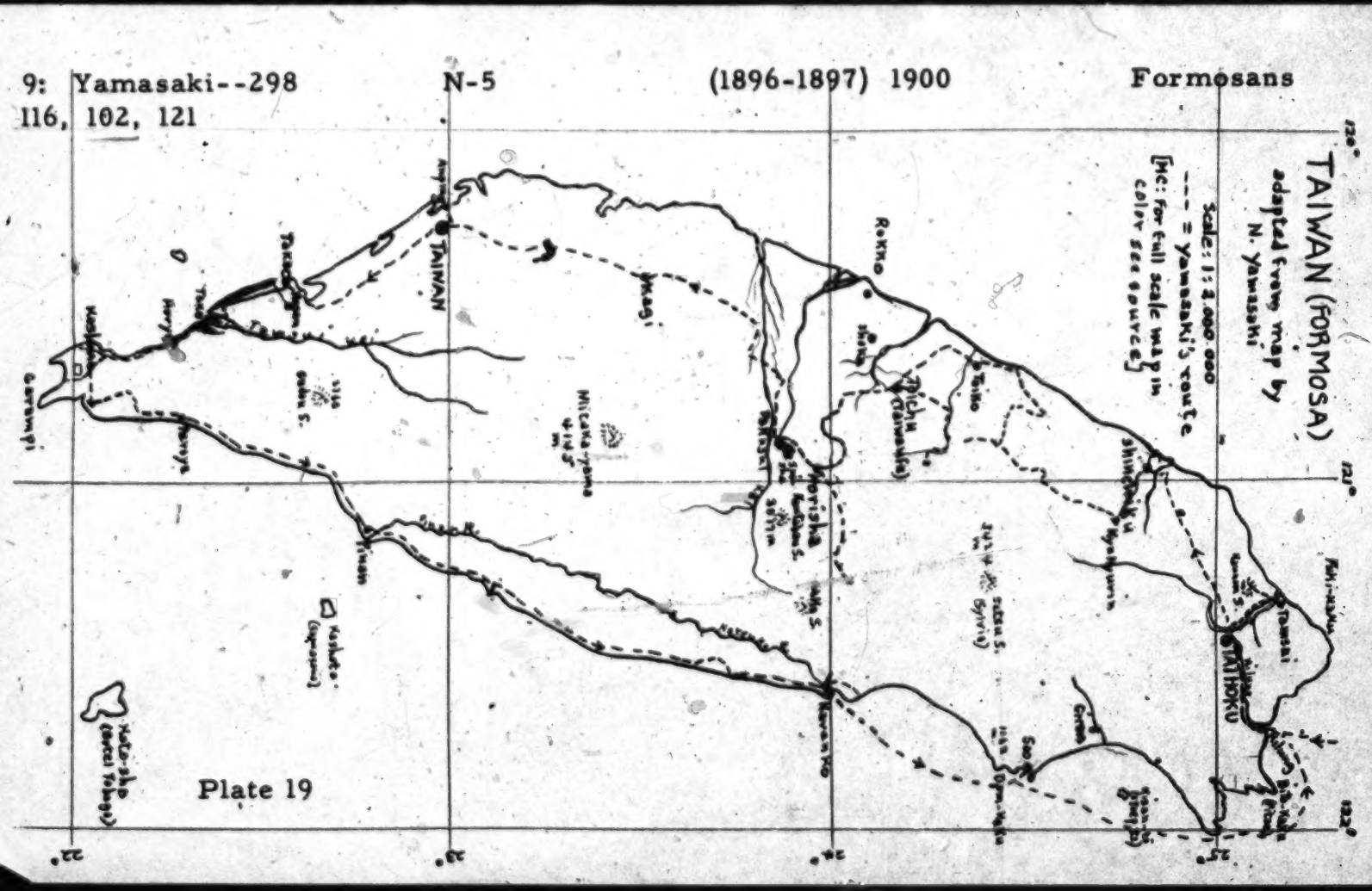
The Growth of Population

101 In the last century and again in modern times, Taiwan has repeatedly become the object of rivalries among some of the most powerful nations of the world. Though its history has been a succession of disruptive incidents resulting from such contacts, by its size alone the island scarcely seems to merit the covetous attention that outsiders have given to it. It is not large—only 250 miles from north to [131] south, and about 90 miles across at the widest point. The area that it covers is only 14,000 square miles, or slightly less than that of the Netherlands. There is little in the way of precious minerals that would arouse the desire of industrial countries. It offers no great area into which other peoples can expand. It has only its significant location in the path of transportation routes off the coast of China, and a territory potentially rich in agricultural output. While the former of these has had the greater attraction to foreign nations, it is the latter that actually yielded—perhaps exceeded—the full measure of wealth that was expected.

132 The topography and climate of Taiwan in the past have combined to make the island inhospitable to settlement. Being at the fringe of the tropics, the climate is hot and rainy, with marked changes of season and variations from one section to another. The greater part of its surface is not readily put to human use. Over half of this area consists of rugged mountains, rising steeply from a plain along the western coast and extending to the Pacific Ocean in the east. Heavy rainfall therefore runs off very quickly, creating torrential floods and occasional droughts in between. Large parts of the island are frequently swept by typhoons and shaken by earthquakes.

175 Within the span of recorded history, the difficulties presented by the physical environment never succeeded in discouraging human habitation. There were vague reports of residents there before A.D. 1000. When Taiwan first came officially to the attention of China, during the Ming dynasty, some tribes of primitives were known to be living near the western coast. Since the 16th century people swarmed to Taiwan from the relatively crowded parts of South China, and prospered there as agriculturists. The Japanese, who ruled the island from 1895 to 1945 and exploited its possibilities

9: Yamasaki--298 N-5 (1896-1897) 1900 Formosans
116, 102, 121


TAIWAN (FORMOSA)
adapted from map by
N. Yamasaki
Scale: 1:4,000,000
--- = Yamasaki's route
[NC: for full scale map in color see source]
TAIWAN
TAIHOKU
Rokko
Taiko
Shinchiku
Kyoshumon
Tamsui
Kaohsiung
Soochow
Kuchiko
Hokoto
Hokoto (Pescadores)
Kuchiko (Japanese)
Hikaku-yama
Mori-shita
Kaosiung
Tamsui
Kiirun
Tainan
Takao
Taiko
Rokko
Shinchiku
Kyoshumon
Kaos

Only where the island attains its greatest breadth does there seem to be such a central chain, approximately equidistant from the two coasts and in the direction mentioned. It is designated by the name of Ta-schan ("Large mountain range") among the Chinese settlers (almost the whole of our nomenclature for the island coming from their language and not from that of the natives).

In the neighborhood of the town of Fung-schan there rises the ridge to which the town owes its name ("Phoenix Mountain"); the Chinese see in it the shape of a flying phoenix.

6: Kirchhoff--27 [2] U-4 (no date) 1895 Formosans-1-2
116, 103, 133

Formosa suffers from a shortage of large rivers that are always navigable; in Chinese all the Formosan rivers are called, not kiang or ho, but ki ("stream"). Most of them become a trickle in the dry season or dry up altogether, their beds then being used for land transport. Yet in the rainy season they carry such a mass of material in precipitation that their mouths are ever and again being blocked by shifting sandbanks. Consequently larger ships cannot travel up any river at all; even the keelless junks do not dare to risk crossing many of the bars; these are then crossed on curious bamboo rafts, called Katamarans.

The only better known river system is that of the Tam-sui, as Europeans say (in Chinese it is called Tan-tschui-ki, "Stream of Fresh Water"). It arises from the junction of the Tokoham and Sintiam Rivers and below this is navigable for larger junks; on the right it also receives the Ki-lung River, which has its source at the Ki-lung-schan and, in spite of its numerous rapids, is traveled on by curious boats with quite flat bottoms that are 10 m. long and 2 m. wide. *

* The branch of this river leading to the harbor of Ki-lung, and which looks like a bifurcation, does not exist, and was given on Imbault-Huart's map by mistake.

The name of Tan-tschui-ki is also borne by the only large river flowing towards the

south, and which enters the sea near Fung-schan. Near Tai-nan Ta-mu-ki makes its way to the sea through the stretch recently regained; it originates in several mountain brooks. But the largest river in the west is said to be the Niëu-tschao-ki which flows to the south of the town of Kia-y. It is quite broad, particularly towards the mouth, but is difficult of navigation because of its shallowness and many sandbanks. ** The

** Neither Imbault-Huart's map nor that of Hosie indicate this river.

rivers on the eastern side of the island are naturally only raging mountain streams.

Lakes are rare; yet the western low-lying land also possesses some, which we have not been able to enter on the map, owing to a lack of exact indications. There are also said to be small, cauldron-shaped crater lakes.

9: Yamasaki--228 [4] N-5 (1896-1897) 1900 Formosans
116, 103, 133

The largest river, the Dakusui-kei, has its source in a gorge on the southwestern slope of the Setsu-san (Mount Sylvia). Its clear, burbling water forms in the upper course, a longitudinal valley between the chains in front of and behind the highest range. Approximately in the middle of the island it turns west at a right-angle to its upper course. On the two steep sides of these transverse valleys one can find frequently landslides and falls of rock. Here the water, mixed with the fine particles of clay slate and schist, is very dark, so that the Chinese gave the river the name of Dakui-kei or "clouded water river." The dark grey, foaming water flows farther west to the neighborhood of Linkiho where the tributary of Seisui-kei, or "clear water river" flows in on the left. From there it suddenly spreads out over the level plain of central Taiwan and forms a complicated, fan-shaped network of branches, of which the Seira-kei is the most important, continuing in a westerly direction to the sea. The distance between the northernmost and southernmost mouths is estimated to be about 40 km. This is certainly a very curious phenomenon on such an island as Taiwan.

182 As long as the urban community still comprises only a small part of society, there will be no remarkable change. But when the scope of the urban community is extended and industry, commerce, and the field of services develop and become more important than agriculture, then the way of life changes greatly, agrarian society is transformed into industrial society, rural society is transformed into urban society. In Formosa the modern political-economic system was enforced by a colonial ruler, and industrialization and urbanization were begun only after the Japanese occupation.

2. Blood Relationship and Locality as Principles of Social Cohesion.

• 103 618 Among the place names in Formosa there are not a few called after the surname of a clan. Examples are, Tan-tso (Ch'en-tsu), which means the hamlet of the clan of the Ch'ens, or Lim-tso-liao (Lin-tsu-liao), which means the cottages of the clan of the Lins. Though hitherto not adequately noticed, this is an indication of the existence of the so-called clan-village, and it is a significant stage in social development.

103 Again, as in other countries, there are places named after the original native town of the residents. In one case the local name of a mainland town or city was adopted in Formosa, such as Chaochow (Ch'ao-chou) in southern Taiwan. In other cases, a prefix or suffix was attached to the

103 name of the town of origin. For example, Hsin-pai-kung means new Pai-kung. This case is parallel to that of the Scotch highlanders of Inverness who named their village New Inverness when they emigrated to Georgia. Tongan-ts'o is an example of a place name (Tung-an) with a suffix, which means the hamlet of the people of Tongan, a district on the Mainland. This is also an indication of the character of early settlements of the Chinese in Taiwan. When people moved to a new place, they naturally settled near their kinsmen. If kinsmen were too few, they settled with people from their town. In other words, blood relationship and locality are the principles of social cohesion at a certain stage of social development.

3. Towns of Origin of the Taiwanese.

162 While most Chinese in Formosa came from south China, there is a marked difference in the localities of their towns of origin. According to a survey made by the Japanese colonial government in 1926, of 3,752,000 Formosan Chinese, 83 per cent came from the province of Fukien, 16 per cent came from the province of Kwangtung, and the remaining one per cent were from other provinces. The Fukienese who comprised 83 per cent of the total may be further broken up as follows: 45 per cent from the prefecture of Chuanchow (Ch'üan-chou), 35 per cent from the prefecture of Changchow (Chang-chou), and three per cent from other prefectures. People from Chuanchow (45 per cent), people from Changchow (35 per cent), and Cantonese (the so-called Hakka) (16 per cent) are the three main groups.

APPENDIX II

Geographical Names

1031 1. Places

European	Chinese Characters	Japanese
Anping	安平	Anpin
Changhua	彰化	Shoka
Chaochow	潮州	Choshu
Checheng	車城	Shajo
Chiayi	嘉義	Kagi
Chichi	集集	Shushu
Chihpen	知本	Chihon
Chihshang	池上	Chijo
Chinshui	錦水	Kinshui
Chishan	旗山	Kizan
Chuhuangkeng	出磺坑	Shukkoko
Chunan	竹南	Chikunan
Chungli	中壢	Chureki

European	Chinese Characters	Japanese
[continued]		
103 Chutung	竹東	Chikuto
Erhchungkang	二重港	Nijuko
Fangliao	枋寮	Boryo
Fantsetien	番子田	Banshiden
Fengkang	楓港	Fuko
Fenglin	楓林	Fulin
Fengshan	鳳山	Hozan
Fengyuan	豐原	Toyohara
Hengtsun	恒春	Koshun
Hsichih	汐止	Sekishi
Hsinchu	新竹	Shinchiku
Hsinchuang	新莊	Shinso
Hsinhua	新化	Shinka
Hsinkang	新港	Shinko
Hsinshih	新市	Shinshi

[continued]

European	Chinese Characters	Japanese
103 Hsintien	新店	Shinten
Hsinying	新營	Shinei
Hualien	花蓮	Karenko
Huwei	虎尾	Kobi
Kangshan	岡山	Okayama
Kaohsiung	高雄	Takao
Keelung (Chilung)	基隆	Kiirun
Kuanyuan	關原	Sekihara
Linpien	林邊	Rinhen
Lotung	羅東	Rato
Lukang	鹿港	Rokko
Makung	馬公	Mako
Minhsiung	民雄	Minyu
Miaoli	苗栗	Byoritsu
Nanchuang	南莊	Nanso
Nantou	南投	Nanto

European	Chinese Characters	Japanese
[continued]		
103 Neiwan	内灣	Naiwan
Panchiao	板橋	Itahashi
Peikang	北港	Hokko
Peitou	北投	Hokuto
Pingtung	屏東	Heito
Puli	埔里	Hori
Putai	布袋	Hotei
Shihlin	士林	Shirin
Shuifang	瑞芳	Zuiho
Silo (Hsilo)	西螺	Seira
Suao	蘇澳	Suo
Sungshan	松山	Matasuyama
Tachi	大溪	Taikei
Tachia	大甲	Taiko
Tachien	達見	Takken
Tahu	大湖	Daiko
Taichung	台中	Tainan
Tainan	台南	Tainan

European	Chinese Characters	Japanese
[continued]		
103 Taipei	台北	Taihoku
Taitung	台東	Taito
Takuan	大觀	Taikan
Tamali	大麻里	Daimari
Tanshui	淡水	Tanshui
Taoyuan	桃園	Toen
Tawu	大武	Daibu
Touliu	斗六	Toroku
Tounan	斗南	Tonan
Tsaoshan, or Grass Mtn., or Yangmingshan	草山 陽明山	Sozan
Tsoying	左營	Saei
Tuchang	土場	Dojo
Tungkang	東港	Toko
Tungshih	東勢	Tosei
Woluanpi	鵝鑾鼻	Garambi
Wushe	霧社	Musha

European	Chinese Characters	Japanese
[continued]		
103 Yilan	宜蘭	Giran
Yingko	鶯歌	Oka
Yuanlin	員林	Inrin
Yuli	玉里	Tamazato

45:Stanford U. S-4,5 1956 AD I Formosa
~~AD I~~ AD I

2. Islands

European	Chinese Characters	Japanese
● 103 Kweishan I.	龜山島	Kizanto
Lanyü	蘭嶼	Kotoshu
Liuchiu I.	琉球島	Shoryukyu
Lutao	綠島	Kashoto
Pescadores (Penghu Islands)	澎湖諸島	Hokoshoto

3. Peninsulas

European	Chinese Characters	Japanese
Fukweichiao	富貴角	Fukikaku
Santiaochiao	三貂角	Sanchokaku

4. Mountains

Hsiu-ku-luan Shan	秀姑巒山	Skukoranzan
Kuan Shan	關山	Kanzan
Mt. Morrison (Yü Shan)	玉山	Nihitaka Yama
Mt. Sylvia (T'zu-kao Shan)	次高山	Tsugitaka Yama

European	Chinese Character	Japanese
103 Nan-hsin-kao Shan	南新高山	Minamini-hitaka Yama
Pei-hsin-kao Shan	北新高山	Kitanihitaka Yama
Tung-t'zu-kao Shan	東次高山	Higashitsugitaka Yama

5. Rivers and Lakes

European	Chinese Character	Japanese
Cho-shui R.	濁水溪	Dakushui Kei
Lower Tan-shui R.	下淡水溪	Shimotanshui Kei
Sun-Moon Lake or Lake Candidius	日月潭	Jitsugetsutan
Ta-chia R.	大甲溪	Taiko Kei
Tan-shui R.	淡水溪	Tanshui Gawa
Tsang-wen R.	曾文溪	Sobun Kei

15: U.S. Navy--30 [7] (no date) 1944 Formosans
116, 565, 511, 105

"The worldly possessions of a coolie-class Formosan-Chinese, the day laborer of the towns and villages, consist of the blue cotton clothes on his back, and perhaps a change for special occasions, a loose smock-like upper garment and black trousers for his wife with an ornament and black headband to wear upon her head, similar clothes (though perhaps in white or light blue) for the younger members of the family, and the simplest of furniture in the house. A table, benches, one or two wooden springless beds, a brazier for cooking, together with chopsticks, bowls, a pot or two, some cups without handles, and the kitchen knives, make up the furniture. If the family can afford it, there may be a bicycle and a two-wheeled carry-all bicycle trailer called a 'riakka' (from the English 'rear-car'), which can be used for hauling an incredible number of objects, including the elders in the family, or livestock for the market. For those who cannot affort [sic] a bicycle, a simple shoulder pole with ropes and side baskets may suffice as professional equipment. For rainy weather, a coconut palm fiber raincape is worn, making the figure seem grotesque to unfamiliar eyes."

162 563 over most of the island. However, an increasing number of Chinese immigrants, with their superior civilization, pushed these natives into mountainous areas and thereafter occupied the fertile lowlands of the island.

563 105 According to language, custom, and physical characteristics, the aborigines are commonly divided into seven tribes: Taiyal, Saiset, Bunun, Ami, Paiwan, Tsou, and Yami. Although physical characteristics may vary, they are generally brave warriors and can run long distance or climb steep mountains and cross swift streams with skill and speed. Their short stature, light-brown skin, and straight black hair, as well as their language and customs, suggest a close resemblance to the Malays of the South Seas. They are independent in nature, passionate in temperament, and show respect for the aged and love for the young. They live in villages and build huts made of wood and stones. Some 70,000 aborigines are called Pepohuan, meaning assimilated savages. Their customs and activities are similar to those of the Formosan Chinese who had assimilated them in the lowlands. Tribesmen who were not able to bear the economic and cultural pressures exerted upon them fled to the mountainous interior.

1. This estimate is the result of reconciling various estimates offered by writers on Formosa's population. The analyses in this chapter, however, will be based on the total registered population because the household registry system provides the only statistics available on the population. The total registered population in 1953 was 8,438,016.

4: Grajdanzev, Andrew J. Formosa Today: an Analysis of the Economic Development and Strategic Importance of Japan's Tropical Colony. New York: Institute of Pacific Relations, 1942.

Pp. vii, 193; map; tables and charts; bibliography.

Yale: Bj10.f 77.942g.

This study of the Japanese colony of Taiwan is based almost entirely on Japanese official sources. "How did the islanders fare in their political and cultural development? Had they any chance to perfect their culture enriched by contact with the Japanese? Have they any semblance of political freedom politically, do they control their own economic life?" In answering these questions the author has successfully analyzed Japan's system of colonial exploitation.
Field date: No date. Evaluation: S-4.

6: Kirchhoff, Alfred. Die Insel Formosa. Dr. A. Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt, Vol. XLI, pp. 25-38. Gotha, 1895.

Yale E10+P442. v. 41.

[VMM: In this article, Kirchhoff seeks to supplement Imbault-Haurt's classic work on Taiwan with material from written sources, primarily German, which the latter had overlooked. A good deal of information was also obtained from Alexander Hosie's Report on the Island of Formosa (see Bibliography No. 1848). Apparently Kirchhoff was never on the island himself.
Field date: no date. Evaluation: U-4]

7: Joest, W. Beiträge zur Kenntniss der Eingebornen der Inseln Formosa und Ceram. Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnographie und Urgeschichte, Vol. XIV, pp. 53-63. Berlin, 1882.

Yale: Nk10. Z37. v. 14.

[MC: This article describing Joest's visit to Taiwan was presented to the Berlin Society of Anthropology, Ethnology and Archaeology in January 1882. His purpose in visiting Formosa was to study the life of the natives of the north. However, most of this article is devoted to the Chin-hoan only. Joest appears to have been a careful observer and to have included material neglected by other travelers of the period. Translated for the Cross-Cultural Survey files by M. Switzer. Field dates: none. Evaluation: E-5.]

8: Chen, Cheng-Siang. Land Utilization in Formosa. Geographical Review, Vol. XLI, pp. 438-456. New York: American Geographical Society of New York, 1951.

9 tables; 33 maps.

Yale: E10. G132v. 41

[EJ: The author of this brief article is professor of geography in, and director of the Institute of Agricultural Geography of the National Taiwan University, Taipei. He presents considerable data on acreage devoted to various crops, which has been drawn from the data contained in the Taiwan Agricultural Yearbook, Department of Agriculture and Forestry, Taipei. A series of excellent maps is included to present this data graphically. This article may be considered a supplementary to source 4: Grajdanzev as it presents production figures for both 1940 and 1947, whereas Grajdanzev's latest figures are for 1935 and 1936. Field date: no date. Evaluation: N-3.]

9: Yamasaki, N. Unsre geographischen Kenntnisse von der Insel Taiwan (Formosa). Dr. A. Petermanns Mitteilungen aus Justus Perthes' geographischer Anstalt, Vol. XLVI, pp. 221-234. 1900.

Yale: E10/P442. v. 46.

[VMM: From his observations made in a five months trip as assistant geologist with a Japanese scientific expedition covering the greater part of Taiwan, particularly the coastal regions, the author has compiled data on the various natural phenomena, including geology, topography, climate, mineral resources, etc.]

[MC: This source has been reprocessed for the HRAF file from a translation made by KD for the Cross-Cultural Survey file. Field dates: 1896-97. Evaluation: N-5.]

10: Schumacher, Robert. Formosa und seine Gebirgsbewohner. Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt, Vol. XLIV, pp. 222-226. Gotha, 1898.

Yale: E10/P442. v. 44.

[MC: The author was apparently in Formosa shortly after the Japanese occupied the island in 1895 and although he is here trying to clarify the general picture, his information is rather scattered, and his conclusions do not seem to be based on very complete or trustworthy information. He excuses certain gaps in his information by saying that he was there during a time of rebellion and it was difficult for him to travel. His information on the aborigines in particular is of extremely doubtful value. This work was originally translated for the Cross-Cultural Survey files by ER. Field dates: ca. 1896. Evaluation: T-1.]

11: Haguenauer, Ch. Les Tayal de Formose. Bulletin de la Maison Franco-Japonaise, Série Française, Vol. II, pp. 25-46. Tokyo, 1929.

1 folding map.

Yale: Fgal0.f927.v.2.

[VMM: This article is the transcription of a lecture given before the Maison Franco-Japonaise in June 1929. Since the author had only one hour to speak on a trip of one month's duration, he was obliged to limit his talk to the Atayal, but he speaks authoritatively, and draws some interesting conclusions as to the origins of various beliefs. This source was translated for the Cross-Cultural Survey files by C. Sherman. Field dates: none. Evaluation: T-3.]

12: Garnot-- (1884-85) 1894 Formosans

AN: This detailed account of military operations was written by a member of the French expeditionary force. Only a few pages, pp. 13-20, pertaining to the geography and settlements of northern Taiwan have been transcribed for the files.

Field dates: 1884-1885

Evaluation: G-3

13: Anonymous. Japan-Manchoukuo Year Book 1941. Cyclopedia of General Information and Statistics on the Empires of Japan and Manchoukuo. Tokyo: The Japan-Manchoukuo Year Book Company, 1941.

Yale: Bj4.010.

[MC: The fauna of Taiwan and Ryukyu Islands belong to two groups of species, the Oriental and the Palaearctic, with a few species peculiar to each place. Field dates: none. Evaluation: U-3.]

14: Tamai, Kisak. Die Erforschung des Tschinwan-Gebietes auf Formosa durch die Japaner. Globus, Vol. LXX, pp. 93-98. Braunschweig, 1896.

Yale: E10/G51.v.70.

[MC: This article is based on one written by a Japanese newspaperman who accompanied the Japanese reconnaissance expedition to several Chin-hoan villages in 1896. To it Tamai has added pertinent facts from other newspapers and periodicals. Except for the actual details of the expedition, most of the information on the Chin-hoan in this source seems to be the result of casual observation or hearsay and should therefore be used with caution. This source has been reprocessed for HRAF files from a translation made by M. Switzer for the CCS files. Field date: 1896. Evaluation: J-2.]

111 15:U.S.Navy Formosa

Only twelve pages done as an experiment.

16: Müller, W. Über die Wildenstämme der Insel Formosa. Zeitschrift für Ethnologie, Vol. XLII, pp. 228-241. Berlin: Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte, 1910.

Yale: Nk10. Z37. v. 42.

[MC: In this summary of the cultural life of the aborigines of Formosa, Müller has traced the distribution of various traits among the tribes wherever possible, and includes a classification of the aborigines into nine groups. A comparative table of the numbers 1 to 10 in the various aboriginal dialects (pages 238-239), which Müller obtained from a Japanese living in the interior of Formosa, has not been processed for the files. However the detailed classification system on which this table was based has been included.
This source was translated by M. Switzer for the Cross-Cultural Survey files. It has been reprocessed here from that translation. Field Dates: none. Evaluation: U-3]

17: Norbeck, Edward. Folklore of the Atayal of Formosa and the Mountain Tribes of Luzon. Anthropological Papers, No. 5, University of Michigan Museum of Anthropology. Ann Arbor: University of Michigan Press, 1950.

Pp. iv, 44; bibliography.

Yale: Nk37.M52d.v.5.

[MC: This brief monograph attempts to show the similarity between the mythology of the Atayal aborigines of Formosa and that of the mountain peoples of Luzon. It is based on a translation of a Japanese study of the mythology of the interior tribes and is valuable both for the additional light it throws on trait similarities and for the new material on Atayal mythology which is made available in English. All the folktales have been included.]

18: Kakyo, Ino. Die wilden Stämme von Formosa, ihre Einteilung und ihr Kulturzustand. Zeitschrift der Gesellschaft für Erdkunde zu Berlin, Vol. XXXIV, pp. 63-74. Berlin, 1899.

Yale: E10. G415. 1899

[MC: In this article, Kakyo develops his thesis that the Formosan savages belong to a stage of development which is primitive, but not on the lowest level, according to the classic evolutionary theories. Much of the article is theoretical and has not been included in the files, only those parts which provide specific information on the life of the aborigines have been processed. The most significant part of the article is the author's detailed tribal classification system. This article was translated for the Cross Cultural Survey by K. D. Field Date: none. Evaluation: E-2]

19: Guérin and Bernard. Les aborigènes de l'île de Formose. Bulletin de la Société de Géographie, ser. 5, Vol. XV, pp. 542-568. Paris, 1868.

1 map.

Yale: E10. So57. V. v. 15.

[MC: This article is concerned chiefly with the Atayal and is based largely on direct observation of the groups in question. The authors' identification of tribal groups is one not encountered heretofore and for this reason their map of tribal locations has been included (facing page 632). The authors have apparently mistaken Mount Sylvia for Mount Morrison, which should be kept in mind in reading the map. Guérin was former vice consul for France in Formosa. This article was enclosed in a letter to Vivien de Saint-Martin, vice-president of the central commission of the Society of Geography, from Yokohama, Novermeber 16, 1866. Field date: ca. 1866. Translated by C. Sherman for the CCS files. Evaluation: G-3.]

20: Alvarez, José Mariá. The Aboriginal Inhabitants of Formosa. Anthropos, Vol. XXII, pp. 247-258. St. Gabriel-Mödling, 1927.

Yale: Nk10. ≠An89. v. 22.

[MC: This article by Alvarez, giving a brief description of the Formosan Aborigines is valuable chiefly for its discussion of the terminology used in identifying the various groups and sub-groups. Otherwise his descriptions are extremely sketchy and superficial. The map accompanying the article (see page 247 in categories 116 or 102) is of value in identifying the tribes. This source contained so many typographical errors that it was decided to correct them rather than to reproduce them exactly and thus add to the reader's confusion. Field dates: none.]

MC: This brief summary of the social structure of the Formosan Aborigines was delivered as a lecture at Yale University in February 1950. A professor of linguistics, Dr. Asai spent some ten years in Formosa--1935-1946--and is presently attached to the National Language Institute, Ministry of Education, Tokyo. His linguistic analysis included in this paper is particularly valuable.

Field Work: 1935-1946

Evaluation: L-5

22: Wiedfeldt, O. Wirtschaftliche, rechtliche und soziale Grundtatsachen und Grundformen der Atayalen auf Formosa. Mitteilungen der Deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens, Vol. XV, Part C, pp. 7-55. Tokyo, 1914.

Yale: All. 15. 15.

[MC: In the spring of 1913 Wiedfeldt spent five weeks on Taiwan as advisor to the Japanese government. He did not intend to study the natives, but during his visit he had a good opportunity to observe them.
Some previous English publications on the Atalyals were not available to Wiedfeldt and he could not read the Chinese writings, so his accounts of the Atayals were written from his contacts with the Atalyals and the Japanese on Taiwan. He talked with the Japanese police and business people who lived in the border territory, with Japanese speaking Atayals, and he questioned not a few native-speaking Atayals with the aid of an interpreter.
Wiedfeldt has incorporated a broad background and considerable observational keenness to turn out a detailed and almost anthropologically functional account of the Atayals. Material on pp. 52-55, in which the author warns that the Atayal institutions cannot be adequately explained in terms of modern political science, has been omitted. Translated for the Cross-Cultural Survey files by RG. Field dates: 1913. Evaluation: F-5.]

24: Anonymous. Aufzeichnungen über die Wilden Formosas. Aus den chinesischen Annalen, Tai-wan-fu-tchi, des XVII. Jahrhunderts, (translated by Friedrich Hirth). Mitteilungen der Anthropologischen Gesellschaft in Wien, Vol. XXII, No. 4, pp. 91-92. Wien, 1892.

Yale: Nk10.An88.22

[EJ: This article was translated from the German for HRAF by MS. The article consists of a miscellaneous collection of facts about the aborigines of Formosa published in the Chinese Annals during the 17th century. The tribes discussed are not located or named in any instance. The article is included in this file because of the very early date of the observations and for the additional insight that it gives concerning the Chinese view toward the aborigines.]

25: Plaut, Hermann. Beiträge zur Kenntniss der Insel Formosa. Mittheilungen des Seminars für Orientalische Sprachen, Vol. VI, pp. 28-62. Berlin: Georg Reimer, 1903.

2 charts.

Yale: Fd12. B45. v. 6.

[EJ: This source was translated from the German for HRAF. The article, as it was published, contained information on the Chinese population of Formosa and on the various native tribal groups. The author obtained his data on the Chinese from source material which will be processed for this file; thus Plaut's description of the Chinese on Formosa has been omitted in this translation. The sections of the article concerning the native groups are based upon various Japanese documents and periodicals and constitute the sections of the report which have been translated and processed for this file. The author attempts to designate tribal groups where possible, but in many instances he generalizes to the native groups as a whole. The report is sketchy and consists essentially of un-related bits of information. Most of the information given deals with trial and judicial procedure and marriage customs. Field date: no date. Evaluation: U-4].

26: Honda, Seiroku. Eine Besteigung des Mount Morrison auf der Insel Formosa. Deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens, Vol. VI, pp. 469-473. Berlin: Asher and Company, 1897.

Yale: All. 025. v. 6.

[EJ: This article was translated from the German for HRAF. This brief article is an account of a Japanese expedition sent to explore Mount Morrison. Honda, a Professor of Forestry, headed the expedition and is the author of this account of the journey. The main contribution of the article ia an account of the topography and flora in the region of Mount Morrison, though there are some incidental references to two Bunun villages seen by the author. Field date: 1896. Evaluation: N-3]

27: Richthofen, Ferdinand von. Geomorphologische Studien aus Ostasien: III. Die morphologische Stellung von Formosa und den Riukiu-Inseln. Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften, Berlin, 1902. [Vol. XLII, Pt. 2], pp. 944-975.

1 map.

Yale: A 31.85.v.42.II.

[EJ: This source was translated from the German for HRAF. The source consists of a detailed description of the topography and the geologic formation of Formosa and the Pescadores. Richthofen obtained his information from Japanese source material, and apparently did not study Formosan geology in the field.
Field date: no date. Evaluation: N-4.]

28: Hervey de Saint-Denys, Marquis di. Sur Formose at les îles appelées en chinois Lieou-Kieou. Journal Asiatique, ser. 7, Vol. IV, pp. 105-121. Paris: Société Asiatique, 1874.

1 map.

Yale: Fd10. J82. VII. v. 4.

[EJ: This source was translated from the French for HRAF. In this brief source, the author presents evidence from early Chinese documents which shows that the Chinese first visited Formosa in 605 A.D. and that the name Lieou-kieou refers to the island of Formosa. In the author's opinion, all Chinese documents written before the 13th century which refer to Lieou-kieou may be applied to Formosa. Field date: no date. Evaluation: S-4.]

29: Hervey de Saint-Denys, Marquis d'. Note Complémentaire sur Formose et sur les îles Lieou-Kieou. Journal Asiatique ser. 7, Vol. V, pp. 435-441. Paris: Société Asiatique, 1875.

Yale: Fd10. J82. VII. v. 5-6.

[EJ: This source was translated from the French for HRAF. In this source the author presents supplementary evidence from Chinese documents showing that the Chinese term Lieou-kieou referred to the island of Formosa. This point is presented in source 28 by the same author.
Field date: no date. Evaluation: S-4].

31: Hofmann, Amerigo. Aus Formosa. Geographischen Gesellschaft, in Wien, Vol. LV, pp. 600-638. Wien: R. Lechner, 1912.

8 photographic plates.

Yale: E10. G265. v. 55.

[EJ: This source was translated from the German for HRAF. In this source, Hofmann describes his impressions of a visit to Formosa in 1909. The most valuable sections of the article are those in which he describes the flora and topography of the area through which he traveled, and that section in which he describes the Tsou, whom he visited for several days. Eight photographs appearing in the article may be found in the Visual File. Six pages of meteorological observational records included in the test have not been translated and processed. Hofmann was a professor of Forestry in Tokyo at the time this article was written.
Field date: 1909. Evaluation: N-3.]

34: Del Re, Arundel. Creation Myths of the Formosan Natives. Tokyo: Hokuseido Press, no date.

Pp. 75; ~~frontispiece;~~ 1 map; 20 photographs; 3 drawings.

HRAF file.

[MLB: An extremely valuable amount of ethnographic data on the little-known Yami group are to be found in texts and abstracts of their myths and legends provided by this source. There is also a good deal of incidental material on present day ceremonials, courtship customs and marital relationships. The researcher should note especially the native drawings of their cosmos on pp. 54-56 (categories 116 and 772) to which the author frequently refers. Nothing is known about the author of this source but much of the work has apparently been drawn from diverse Japanese source materials; from Dr. E. Asai's A Study of the Yami Language (referred to as AYL throughout the text; see footnote 2, p. 8, cat. 116), and VF (Veerwaarlooside Formosa; see footnote 3, p. 15, cat. 116).
Wherever possible the excellent photographs have been reproduced for the Files. Field date: No date. Evaluation: U-4.]

35: Collingwood, F. L. S. Visit to the Kibalan Village of Sano Bay, North-east Coast of Formosa: Including a Vocabulary of the Dialect. Transactions of the Ethnological Society of London, Vol. VI, n. s., pp. 135-143. London: John Murray, 1868.

Yale: D8. 15. v. 6

[MLB: The value of this source lies chiefly in the field date (1866). The author was apparently an English doctor attached to a British naval vessel which had received instructions to investigate the harbor of Sano Bay on the east coast of Formosa. From there the vessel proceeded to the southern side of the bay and the village of Sek-hoan where the author gathered his data. During his brief visit the doctor collected isolated bits of information relating especially to native dress and dwellings. His comments on native appearance and personality are interesting though his chief interest seems to have been the impact on the natives of their British visitors and the attendant wonders of Western civilization.
Field date: no date. Evaluation: D-2.]

36: Dodd, J. A Glimpse at the Manners and Customs of the Hill Tribes of North Formosa. Journal of the Straits Branch of the Royal Asiatic Society, Vol. XV, pp. 69-78. Singapore: Government Printing Office, 1885.

Stale: Fd12. R825. v. 15-16.

[MLB: The data contained in this early account of a visit to the Hill tribes of North Formosa indicates that the author had some degree of training in physical anthropology although his assumptions of racial affinities are of questionable validity and one such passage has been omitted from this text. The somatological observations, however, are apparently the results of careful study despite the author's naive approach (i. e. "there are no signs of a Darwinian tail").
There is a detailed description of native dress and ornamentation but the value of this source is limited to the categories listed above along with a short discussion of native use of tobacco and the cultivation of the plant by the Chinese. Field date: 1865. Evaluation: U-2.]

37: Steere, J. B. Formosa. Journal of the American Geographical Society of New York, Vol. VI, pp. 302-334. New York: 1876.

3 line drawings; 1 chart; 1 song.

Yale: E10. Am35b. v. 6.

[MLB: This article is predominantly concerned with the Chin-hoan and the divisions of the group which the author calls the Che-whan and the Kale-whan. The ethnographic data are well presented and are considered valuable additions to the Formosan File. Also included with this source are extensive listings of aboriginal dialects collected by the author from various Formosan tribes, a reproduction of a Sek-hoan song, and several line drawings showing tattooing methods. Field date: 1873-1874. Evaluation: S-3]

39: Wiedfeldt, O. Eine Untersuchung der Ursachen für das Stehenbleiben der Atayalenkultur. Mitteilungen der Deutschen Gesellschaft für Natur- und Volkerkunde Ostasiens, Vol. XV, pt. D, pp. 1-28. Tokyo: 1917.

Yale: All.15.v.15D.

[MLB: This article is an elaboration of Wiedfeldt's previous work on the Atayals (see source 22, this file), in which he gives additional ethnographic data and also attempts to determine the causes of the Atayal "cultural stagnation."
The factual material in this article has been processed but most of the author's interpretations of the culture have been omitted.
This source was translated for the Human Relations Area Files by RCG. Field date: 1913. Evaluation: F-3].

40: Kirk, William. Social Change in Formosa. Sociology and Social Research, Vol. XXVI, pp. 10-26. Los Angeles: The University of Southern California Press, 1941.

1 chart

Yale: Nml0. Un3j. v. 26

[MLB: This source deals with methods employed and degrees of success attained by the Japanese in their various programs directed toward the assimilation of the Formosans. The author mentions having visited the island but no field date is given. Another article by Kirk entitled, "Social Organization Among The Primitives of Formosa" has not been processed but a critique appears in category 112, this file. Field date: No date. Evaluation: S-2.]

42: Schetelig, Arnold. Bericht über Arnold Schetelig's Reise in Formosa. Zeitschrift der Gesellschaft für Erdkunde zu Berlin. Vol. III, pp. 384-397. Berlin : Dietrich Reimer, 1868.

Yale: E10. G415. 1868. v. 3.

[EJ: This source was translated from the German for HRAF. Schetelig apparently visited Formosa in the 1860's, and this source constitutes a brief account of his findings. The work presents a series of disconnected descriptions of various areas of northern Formosa, some information on the camphor industry and foreign trade, and a few scattered notes on the Chinese inhabitants of Formosa. Field dates: no date; probably early 1860's. Evaluation: T-2].

45: Stanford University. Taiwan (Formosa) Handbook. New Haven: HRAF, 1956. HRAF-31 Stanford-5.

Pp.viii, 680; charts; tables; 10 maps.

/This is one of a series of five handbooks compiled by the research team at Stanford University under the general supervision of HRAF. Within a set format each handbook stresses its area variations wherever found. Under three broad divisions labeled "Sociological," "Political," and "Economic," there are separate sections dealing with all aspects of modern Formosa. Emphasis is placed on events and policies since the Nationalist Government evacuated from the mainland in 1949. Brief background materials are also included. The footnotes refer to numerous documents and periodical articles, mostly in Chinese. There is no bibliography or index. --Analyst/

Field date: 1956
Analysts: Leslie Clark, Robert E. Winter

Evaluation: Social Scientist 4-5
Processed in 1956

111

AD1 Formosa
Formosan Aborigines

46: Ruey, Yih-fu. A Preliminary Study of the Atayal Kinship System of Pinsebukan, Taiwan (Formosa), China. Reprint from Tai-wan Wen-hua [Formosan Culture], vol. 6, no. 3/4. 10 pp. Taipei, Formosa, 1950

On loan from G. P. Murdock.

Translated from the Chinese for Human Relations Area Files by Jennings Wang.

Omitted from Files: Part III, pp. 7-10; and three appended tables.

[This source gives a listing of the kinship terms used by the Atayals. The author is Professor of Anthropology at the National Taiwan University, Taipei, Formosa. --Analyst]

Field date: 1949
Analyst: Samuel Chu

Evaluation: Ethnologist--5
Processed in 1955

111 AD1 Formosa

47: Balfour, Marshall C., Roger F. Evans, Frank W. Notestein, Irene B. Taeuber. Public Health and Demography in the Far East: Report of a Survey Trip, September 13-December 13, 1948. New York: The Rockefeller Foundation, 1950.

Pp. i-vi, 1, 2, 51-60; 1 map.

Yale: TAU; Taf 6. - 9506.

/This paper was based on a preliminary reconnaisance of population problems, health, birth control, and economic livlihood. The level of public health programs is discussed in relation to the multiple factors of population growth, prevalent diseases, and the peoples' attitudes toward each. --Analyst/

Field date: 1948
Analyst: Robert E. Winter

Evaluation: Physician-5
Processed in 1955

48: Chen, Shao-hsing. Population Growth and Social Change in Taiwan. Bulletin of the Department of Archeology and Anthropology, No. 5, pp. 76-103. Taipeh, Taiwan, 1955.

HRAF manuscript file.

[A study of the population statistics (1896-1943) by the author is utilized to show the correlation of demographic trends to social change. --Analyst]

Field date: none
Analyst: Robert E. Winter

Evaluation: Ethnologist--4
Processed in 1956

49: Wei Hwei-lin. Investigation of Social Organization of the Chala'abus Paiwan, Pingtung Hsien. Bulletin of the Department of Archaeology and Anthropology, National Taiwan University, No. 5, pp. 104-112. Taipei: 1955.

HRAF Library

Translated from the Chinese by Chen Chi-lu. (Chinese text on pp. 20-28).

[The author has written a brief sketch of the main features of social organization among the Paiwan of Chala'abus village, Pingtung hsien, in Formosa. He has presented his data under six main headings: Settlement Type and Dual Organization; Aristocracy and Lineage System; Lineage Rule and Marriage Rule; Tribal Chieftainship; Feudalism and Tributary System; and Class and Privilege. This source has been marked in its entirety for AD4, Formosan Aborigines. --Analyst]

Field date: 1955
Analyst: Arthur Fields

Evaluation: Ethnologist--5
Processed in 1956

50: Ruey Yih-fu, Ho Ting-jui, T'ao Shu-hsueh, Hsu Shih-chen, and Ch'iu Ch'i-ch'ien. Ethnographical Investigation of Some Aspects of the Atayal, Chin-shui Ts'un, Miaoli Hsien. Bulletin of the Department of Archaeology and Anthropology, National Taiwan University, No. 5, pp. 113-127. Taipei: 1955.

HRAF Library

Translated from the Chinese by Chen Chi'lu. (Chinese text on pp. 29-43).

[This article is a short ethnographic outline of Atayal culture, organized by the author under five main headings: Kin Groups; Head-Hunting; Food; Clothing and Ornaments; and Housing. This source has been marked in its entirety for AD4, Formosan Aborigines. --Analyst]

Field date: 1955
Analyst: Arthur Fields

Evaluation: Ethnologist--5
Processed in 1956

111

AD1 Formosa
Formosan Aborigines AD4

51: Chen, Chi-lu and Michaie D. Coe. An Investigation of Ami Religion. Quarterly Journal of the Taiwan Museum, Vol. VII, Nos., 3-4, pp. 249-262. Taipei, Taiwan, 1954.

2 text figures; bibliography.

Yale: A13. T14 J. 7 3/4.

[This source contains brief information on the Ami tribe of Formosa. The authors describe Ami gods, shamans, priesthood, age grades, and the New Year festival. --Analyst]

Field date: 1953
Analyst: Ada Farber

Evaluation: Ethnologist--5
Processed in 1956

52: Barclay, George, W. Colonial Development and Population in Taiwan. Princeton, New Jersey: Princeton University Press, 1954.

Pp. xviii, 274; 78 tables; 32 figures; bibliography; index.

Yale: Nbp 96. J3. 954B.

[This source deals with the demographic record of Formosa in relation to social and economic change under the Japanese colonial administration. The author describes: how Formosa became settled; the policies of the Japanese colonial development and their consequences for the population; and some of the Formosan social institutions. --Analyst]

Field date: none
Analyst: Ada Farber

Evaluation: Social Scientist--5
Processed in 1956

Torii, Ryuzo. Etudes anthropologiques: les aborigenes de Formose. Journal of the College of Science, Imperial University of Tokyo, Vol. XXVIII, No. 6, pp. 1-17. Tokyo, 1910.

1 map; 65 photographic plates unpaginated.

Yale: All. 011. v. 28.

[EJ: This brief article is one of the earliest anthropological works concerning the tribal groups of Formosa. The article itself is Part I of a two part series; Part II has been processed for this file as source 30: Torii. The textual material in this first article presents a brief description of the geographical location of the various tribal groups. Following the textual material, is a series of sixty-six excellent photographic plates. Due to the fact that the article is brief and contains only very general information, and because the photographic plates cannot be reproduced due to technical difficulties, this source has not been processed for the Formosan file.]

113, 13 Formosa ADI

[For information on the geography of Formosa, see 81: Cressey, AFI China, category 116, pp. 234-244]

"Previous to Japan's occupation in 1895 Taiwan was a Chinese island, and after 45 years its population is still predominantly Chinese. What have the Japanese accomplished during this period? How has the Chinese population fared under foreign rule? Japan now promises China a new era of 'co-existence and co-prosperity.' What forms have co-existence and co-prosperity taken in Taiwan? Of course, all historical analogies have an important defect: new factors may intervene to alter the course of events. This however, does not render analogies completely useless, but demands only a more precise analysis of their respective actual bases. In the case of Taiwan we have a quite recent experiment. In both occupied China and Taiwan the masters are Japanese and the servants Chinese. What are the reasons for expecting that in conquered China the Japanese will behave worse or better than they behave now in Taiwan? [2]

The part assigned by her Japanese rulers to Taiwan in their plans for penetration into Southeast Asia is extremely important, and a knowledge of Taiwan is necessary for an appreciation of these plans.

Despite the significance of Taiwan, both as an example of Japanese rule and for its own sake, scarcely a work of importance has appeared in English since 1907, when a translation of a book by Yosaburo Takekoshi (1) was published. Previous to that time interest

1. Japanese Rule in Formosa, London, 1907.

in Taiwan among the Powers resulted in a number of works out of all proportion to the island's importance. But since that time only a few travellers' stories of the type of 'Glimpses from Japan and Formosa' and 'Scrambles in Japan and Formosa' have appeared This island, however small and remote, nevertheless has an external trade surpassing that of either Yugoslavia, Indo-China, or Turkey and thus certainly deserves closer attention."

4:Grajdanzev--180-182 S-4 (no date) 1942 Formosans-1-4
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116, 114, 178, 423, 427, 177.42 Japan
636.42

"The division of families occupied in agriculture into owners, part-owners and tenants may be seen from the following table: (1)

1. Here and in the following tables the official figures of families occupied in agriculture are used, though, as was pointed out, they are probably underestimates. The statistics of landowners in Taiwan should be more or less correct because the land is surveyed and change of title involves a complicated procedure. The statistics may be incomplete only as regards tenants and agricultural workers (which they omit completely), and if one takes these into consideration one comes to the conclusion that official statistics probably give a brighter picture than is justified.

Division of Agricultural Families in Taiwan
(thousands)

	1932	1933	1935	1937	1938
Owners	132.2	129.4	132.1	131.1	130.2
Part-owners	119.3	121.7	128.4	134.8	135.6
Tenants (2)	152.4	155.0	159.4	161.5	158.7
Total	403.9	406.1	419.9	427.4	424.5

Footnote (2) on next page.

Division of Agricultural Families in Taiwan [Cont.]
(thousands)

2. Those who have read Japanese Rule in Formosa by Yosaburo Takekoshi may be astonished to discover that there are tenants in Taiwan. Takekoshi wrote in 1905 '. . . The tenants [in Taiwan, after the reform by the Japanese administration] came to enjoy the absolute ownership of the land they or their ancestors have been farming for three centuries. Such a change certainly amounted to a social revolution. Most of the revolutions recorded in history required sacrifices, but the present one was entirely bloodless. This change has given the tenant absolute ownership, thus insuring securing of property. . . . ' (p 132). But what Takekoshi described as a social revolution, was actually only a very modest reform: the government abolished the rights of the taiso--owners who had only doubtful title to land. This reform made transfer of real estate more secure and paved the way for Japanese penetration.

As percentages of total

Owners	32.7	31.9	31.4	30.7	30.7
Part-owners	29.6	29.9	30.6	31.5	31.9
Tenants	37.7	38.2	38.0	37.8	37.4
Total	100	100	100	100	100

Source: Takumu Tokei, 1938.

[77] As this table shows, about forty per cent of all farmers in Taiwan own no land at all and must rent it from landlords and farmer-owners; about thirty per cent have plots so small that they are compelled to rent land, and barely thirty per cent of the farmers till only their own land. These figures are striking. Taiwan does not know rich tenants of the British type. Those who rent land are mostly poor farmers, but even those who cultivate their own land, are not all rich. As to the relative changes, there is a noticeable fall in the percentage of owners in six years--from 32.7 per cent in 1932 to 30.7 per cent in 1938. For the same period the percentage of tenants is the almost the same (37.7 and 37.4 per cent respectively), while the percentage of part-owners rose from 29.6 per cent to 31.9 per cent. It would seem that the farmer-owners are gradually losing their position and sinking to the level of tenants, but a six-year period is not a sufficiently long time to ascertain definitely whether such a trend exists.

However, it is not only the number of owners and tenants which is important, but also the area which they respectively till. Statistics of area are divided into only two categories—owned and rented.

Area Owned and Rented in Taiwan in 1932
(1,000 ko)

	Dry fields		Paddy		Total	
	Area	%	Area	%	Area	%
Owned	230.2	60.0	132.2	33.3	362.4	46.5
Rented	153.8	40.0	264.0	66.7	417.8	53.5
Total	384.0	100	396.2	100	780.2	100

Source: Nogyo Nenkan, 1939-40, p. 641.

In 1932 the area cultivated by owners constituted 46.5 per cent, the area rented by tenants 53.5 per cent. But it is important to emphasize that owners cultivated chiefly dry land while the tenants cultivated paddy. Paddy brings much higher yields than dry fields; in 1937 the average yield of rice per ko of paddy was about 14 koku while that per ko of dry land was only 7.8 koku, and, further, many paddy fields [78] produce two crops a year. In other words, one ko of paddy yields, on the average, more than twice as much as one of dry land, so that the tenants produce about sixty-five to seventy per cent of the total crop of Taiwan on rented land, and the owners not more than thirty-five to thirty per cent."

4:Grajdanzev--170-171 S-4 (no date) 1942 Formosans
116, 175, 114, 204, 177.72 Japan
636.72

"Tadao Yanaihara, writing in 1929 when no Chinese newspaper was published, tried to find the cause of the difference between Taiwan and Korea (in the latter newspapers in Korean language are published). He thinks that the cause lies in the former independence of Korea and a resulting [171] Japanese deference to world public opinion, whereas Taiwan was a former Chinese colony and thus Japan did not have to make the same concessions to world opinion (1). We believe that this explanation is inadequate. The Japan-

1. Page 229. op. cit.

ese government had few scruples concerning world opinion for example in 1919 when it brutally suppressed the national movement of the same Korean people. The explanation is simpler. Korea was sold out peacefully by her rulers to Japan and at the time her people acquiesced in this sale. whereas the people of Taiwan did not recognize the cession of Taiwan to Japan. It is important to note that the act of cession took place not in Taiwan, but on the sea. The representative of the Peking government transferred Taiwan to the Japanese plenipotentiary on the open sea because Taiwan was in a state of turmoil. Abandoned by the government, betrayed by militarists, the islanders continued the unequal struggle for several years."

7: Joest--56 [5] E-5 (no date) 1882 Formosans
116, 114

During the 21 days...before the steamer returned [MC: to Amping], I lived with a German in a Chinese house in Tainan; we lived on fish and crabs and were both ill with a fever. Being thus alone among 200,000 Chinese gave me an opportunity to study their way of life, and to observe the activities of the independent Tautai, who almost every day ordered people to be flogged, tortured, or beheaded and who often let his victims die of starvation.

7: Joest--56 [6] E-5 (no date) 1882 Formosans
116, 114

The real purpose of my stay on Formosa, however, was to study the life of the aborigines in the north; the following pages are the result of my observations.

9: Yamasaki--221[3] N-5 (1896-1897) 1900 Formosans
116, 114, 122

With the transfer of the island to Japan, it entered a new age, not only politically, but also with regard to its scientific investigation. This begins in 1896-97 with an expedition that was organized by the University of Tokyo. Among others, the Professor of Geology, Dr. B. Kotō, took part, and the writer of these lines had the good fortune to accompany him as his assistant.

10: Schumacher--222 T-1 (ca. 1896) 1898 Formosans
116, 114

...My information about the lowland area of Formosa is rather general...for my study was made at the time of a rebellion...

Anyone who knew the conditions [EJ: previous to Japanese occupation] realized that if the new order were to be a permanent one, it would have to be based on the existing circumstances; these circumstances were the culture, customs, laws and habits of the [29] most important and largest element of the population, or the Chinese, and so the first thing to do was to make a thorough study of the old system. A number of capable men were set to this task, and they collected a great deal of material. An imperial decree established a Commission to inquire into the old customs on Formosa, and it was under the direction of Okamatsu Santaro, Professor of Law at Kyoto University. This group was charged to examine the available information and to get some more. That was on the 25th of October 1901. That same year Professor Okamatsu published his first report by order of the Governor General, and in 1902 it appeared in English under the title of: "Provisional Report on Investigations of Laws and Customs in the Island of Formosa compiled by order of the Governor-General of Formosa by Santaro Okamatsu."

The report begins with a brief survey of the history, administration and judicial procedures of the island, then there is a detailed description of the legal status of the lands, their division according to the nature and utilization of the soil, the land tax, inheritance and loss, purchase, sale and lease, as well as of the legal forms relating to these contracts, and there is also a discussion of irrigation and the rights and taxes which it entails. In conclusion he has a brief discussion of the family rights of the Chinese

inhabitant. In an appendix he has added a glossary of the Chinese terms which were used in the work, and then there are 89 "References", or examples of documents in Chinese, as they are used in various legal affairs.

All in all, the report is a valuable contribution not only to our knowledge of Formosa, but to the study of comparative jurisprudence as well.

28: Hervey de Saint-Denys--106-107 S-4 (no date) 1874 Formosans-1-2
116, 114, 175

Since the earliest days of our history, Chinese vessels cruised in the Chinese and Japanese waters...and in 109 B.C. a fleet of the Emperor Hiao-ou-ti transported an army of 50,000 men across the Pe-tche-li gulf to Korea.

When we consider all the facts, it is logical to believe that the Chinese did not know anything about Formosa until 1430? Klaproth's memoire [EJ: Tableaux historiques de l'Asie.] declares that this is incredible, but I think that it is just as impossible to assume, as he does, that Ma-touan-lin did not even mention the large island of Formosa, which is separated from Fo-kien by a narrow strait. This Ma-touan-lin enumerates and describes all of the countries which the Chinese knew and visited, and some of them were so far distant that it took six months, eight months, or even a year to reach them. He speaks of Luzon, Borneo, the Moluccas and perhaps even of California, which he calls by the mysterious name of Fou-sang. [107]

Klaproth says: "The Chinese historians did not mention Formosa because its inhabitants did not send any embassies, or pay any tribute."

We shall see later that this assertion contains a double error, and Ma-touan-lin mentions a large number of little countries which had never sent any ambassadors, or paid any tribute.

In my opinion, the question simply became a matter of deciding what name Ma-touan lin had used for Formosa (as Taï-ouan, the modern name for the island, was not

employed until long after Ma-touan-lin's time).

According to Klaproth and his Tableaux historiques de l'Asie, the inhabitants of Formosa may have been called Man-ti from the third century B.C. until the fifth century of our era; but this term cannot be used as the title for any particular articles for the name Man-ti was a generic one which the Chinese authors used to designate all the foreigners in the south. From the fifth century to the twelfth, the Tableaux historiques omit Formosa, as if the Chinese had lost even the vague information which they had previously possessed about the island....

28: Hervey de Saint-Denys--112-115 S-4 (no date) 1874 Formosans-1- 5
116, 114, 175

Here we must refer to the mistake which Klaproth made both in his memoire on Formosa and in the description of the Lieou-kieou islands. [EJ: i.e., in his Tableaux historique de l'Asie.] As he was deceived by the name Lieou-kieou, he assumed that the Chinese expedition of 606 had visited these islands, and as he attributed to them what was really the ancient history of Formosa, he did not have any documents to use for the history of the island. He thought that there was a gap in the accounts of the Chinese historians, whereas he was making this gap himself; and while he criticized the Peking missionaries for setting the discovery of Formosa at a much too recent date, he made the error which must have motivated their statements.

Now that we have established the main fact, we find that there is a great deal of supplementary proof to corroborate it....

The Chinese text says that the Lieou-kieou country has a great many mountains and caves, that it is governed by a large number of petty kings, that you find wolves, tigers and bears there, and that the customs of the natives in the northern part of the land were quite different from those of the inhabitants [112] in the central and southern portions of the kingdom. Such statements are perfectly applicable to such a large island as Formosa, but they do not fit the Lieou-kieou group, where the largest island is scarcely eighteen leagues long by eight leagues wide; it does not have a single wild animal, and the only mountain is in the north. This is according to the description

which Father Furet gave us recently.

The account of Ma-touan-lin adds that the inhabitants of the country spoke a language which they could not understand. Again this applies to Formosa, because its Oceanic population had never dealt with the Chinese, but it would not fit the people of the Lieou-kieou, whose language is simply a Japanese dialect. Then the Japanese annals show that these islanders had been on intimate terms with the empire since ancient times, since the mother of the famous first mikado, Zin-mou, came from there.

Finally Ma-touan-lin's account accuses the inhabitants of this island of being cannibals, and this has never been imputed to the Lou-tchouans or to the Japanese populations. Then Klaproth mentions this very fact in his account of Formosa. He says that "Rightly or wrongly, the Chinese accuse the Formosans of being anthropophagous; they claim that the villagers gather to [113] feast upon the men who were slain in battle and even on the invalids, old men and orphans."

Ma-touan-lin says about the Lieou-kieou: "After a combat the dead are piled up together, and people gather to eat them. When a person dies in the southern part of the kingdom, the inhabitants of the village and the surrounding countryside collect to devour him."

On the contrary, when Klaproth describes the residents of the real Lieou-kieou islands, he writes: "The inhabitants are like the Chinese in venerating the dead. They

burn the bodies and preserve the ashes."

This contradiction, and several other similar ones, did not escape the scholar, but they did not show him the whole truth. He merely deleted from Ma-touan-lin's article about the Lieou-kieou the passages which were absolutely incompatible with the ethnography of these islands.

It is equally interesting to compare several passages of this article of Ma-touan-lin with a description of Taï-ouan of Formosa which was published by Father du Halde in 1735.

Father du Halde writes: "Although the Formosan islanders are subject to the Chinese, they have preserved some traces of their former government. Each village selects four or five of the elders who are reputed to be very honest, [114] and they become the chiefs of the village.

Ma-touan-lin wrote: "There are four or five head chiefs who govern each center or village. The villages select their own chiefs."

Father du Halde says: "You are amazed at the speed of these islanders; they can outrun galloping horses."

Ma-touan-lin wrote: "The men in the kingdom can run extraordinarily fast." Father du Halde said: "The men wear a cylindrical hat, and over it they have an aigrette of chicken or pheasant feathers."

Ma-touan-lin wrote: "The men wear high hats which they adorn with a tuft of feathers."
Father du Halde said: "They put several strange floral or animal designs on their skin."
Ma-touan-lin wrote: "They use a needle and a special kind of ink to mark their skin with figures of insects and snakes."
Father du Halde, and then Klaproth said: "Like many of the inhabitants of the Indian islands, the Formosans behead their dead enemies and keep these trophies."
Ma-touan-lin wrote: "They pile skulls around the dwelling of their king, and [115] they believe that this constitues a glorious monument.
Father du Halde says: "When a young man has found a girl whom he wants to marry, he takes a musical instrument to her door, and he does this several days in a row. If the girl loves him, she goes outside to join her suitor. They make their plans themselves, and then tell their fathers and mothers about them."
Ma-touan-lin wrote: "When a boy and girl love each other, they decide to get married and then tell their parents."

This final characteristic is interesting because it is so different from the Japanese customs which are observed on the Lieou-kieou islands, and which resemble the Chinese fashion of having the parents arrange the match; frequently the young people have never met before the wedding in that land.

28: Hervey de Saint-Denys--112-115 S-4 (no date) 1874 Formosans-5
116, 114, 175

Someone may think that Father du Halde simply drew these details from the work of Ma-touan-lin, but I do not believe that this is the case. I think that Father du Halde gathered the data which was available at his time. But even if we should admit this supposition, it would even serve to stregthen the evidence of this scholarly Jesuit, for it would show that Father du Halde did as I have done, that is, he applied to Formosa some Chinese documents which were recorded under the title of Lieou-kieou.

29: Hervey de Saint-Denys--439 S-4 (no date) 1875 Formosans
114

For further information about the nature of the currents, which the Chinese call lo-tsi, and which cast vessels on the Formosan coast, see the Nautical Instructions, which were published by the Navy Department, no. 426, p. 21, 24, etc.

The harbor of Sawo has been repeatedly visited by warships and on some occasions by trading vessels, generally only for passing protection against wind and weather or in order to survey the coast. The transport "Elbe," belonging to the Prussian fleet, was also there in 1860 (1). Shortly before us the "Sylvia" had left the harbor, this being

1. This is a mistake, commited also by Dr. Hermann Maron, Japan und China, Berlin 1863, Vol. II, p. 73. The "Elbe" touched only at the south and southwest coasts of Formosa, but the Prussian frigate "Thetis" was involved in an incident with Chinese pirate junks in the neighborhood of Sawo Bay (see Die preuss. Edpedition nach Ost-Asien, Vol. II, 1866, pp. 112 ff.).

an English survey ship which, be it remarked in parenthesis, has just now finished the survey of the Formosan coast begun about one and one half years ago. This survey will considerably transform the shape of the west coast on the map.

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA

ferent."[55] These questions may be better answered by an on-the-spot and independent study.

[55] Dr. Hu Shih, in an essay *Two Kinds of Fundamentally Different Political Parties*, written in July 1947, concludes his remarks on constitutional government in China with these words: "If the conclusion of political tutorage will bring about a new political climate which loves freedom, encourages independent thinking, and tolerates those whose views are different, then the great political reform of China will begin." Hu Shih, *Wo-men Pi-hsu Hsuan-tse Wo-men-ti Fang-hsiang* (Hong Kong, 1949), p. 4.

Gung-hsing Wang, New Orleans, Louisiana, is lecturer in Far Eastern history at Tulane University. He was in the Foreign Service of Nationalist China from 1928 to 1950, most recently as Consul in New Orleans (1938–50). He was secretary of the Chinese Delegation to the United Nations General Assembly (1946, 1947), and Chinese alternate delegate on the United Nations Temporary Commission on Korea (1948). He is author of The Chinese Mind (1946) and Kinesiskt Tankande, Natur och Kultur (1948), and has contributed articles on China to encyclopedias and journals.

ADI 000
114
[p. 223 (B)]

10: Schumacher--226 T-1 (ca. 1896) 1898 Formosans
771, 115

Both Chinese and Japanese priests following the field armies have unanimously assured me, after long questioning, that the Tschin-Huan have continued to be Brahmans until this very day...

25: Plaut--29 U-4 (no date) 1903 Formosans
116, 115, 127

I obtained most of my material about the Chinese population of Formosa from the work of Okamatsu, but I have omitted the question of the properties, as that was given in too great detail. The data on the natives is based first on a report made by two assistants to the Civil Government of Formosa, the scholar Ino Yoshinori and Awano Dennojo; they prepared this for the Civil Governor Goto (Taiwan banjin jijo, Status of the savages on Formosa) January 9 Meiji 32 (1899). Taipei (Taihoku), Meiji 33 (1900) and secondly it is based on the first number of a periodical Banjo-Kenkyu-Kwai-shi that is the periodical of the Society to Investigate the Conditions of the Savages.) Tokyo, Meiji 31, (1898). This society was founded in 1898 to study the island of Formosa and the status of its native inhabitants.

"This study of the Japanese colony of Formosa or Taiwan is based almost entirely on Japanese official sources, the exceptions being very few and explicitly mentioned. This reliance on Japanese sources may be explained by the fact that few foreigners have visited the island and fewer still have written about it. But even in the Japanese language comprehensive studies of Formosa are rather exceptional.

Those who have read something about Formosa may be astonished at some of the author's conclusions. They may remember the idyllic conditions pictured by the Japanese administration or its spokesmen in English publications. They may remember a picture of a prosperous and progressing island, the population of which is happy under the benevolent colonial administration. If progress consists in building roads, railways, harbors, radio stations, irrigation works, primary schools and hospitals, there is such progress in Formosa, and this book abounds in proofs of such progress. But the author has been interested not only in this question but even more in the question of how the Formosan people have fared under its rulers? At the time of annexation—45 years ago—Formosa was economically on about the same level as Japan. Japan was just emerging from her medieval state and was predominantly an agricultural country. Her agricultural technique at that time was hardly above that which prevailed in Formosa. Insofar as land was more abundant in the colony, its population was probably better off than that of Japan. What has happened in these last 45 years? How did the islanders fare in their political and cultural development? Had they any chance to perfect their culture enriched by contact with

the Japanese? Have they any semblance of political freedom or any opportunities to advance? If they are not masters of their own fate politically, do they control their own economic life? If the answers to these questions are of a discouraging character, it is not because of the author's attitude but because of the facts revealed in the Japanese reports.

The best known example of a colonial regime is probably that of British India. In the Western world British policy in India evoked much criticism. Yet conditions in British India cannot even be compared with those in Formosa. The Indian people can organize; they use their own languages in middle schools and even in the Universities; they publish their own newspapers and books in their own languages; they have their own political groups and parties, their voice and their criticism are heard in the provincial assemblies; certain important industries of India are now in the hands of Indians. However limited all these rights and the opportunities to use them may be in India, they are infinitely greater than those of the people of Formosa.

The author expresses his deepest gratitude to Mr. W. L. Holland, Mr. Joseph Phillips, and Mr. Alexander Stevenson for their editorial help and criticism of the manuscript, though this does not mean, of course, that they necessarily share the views and interpretations of the author."

A. J. Grajdanzev

New York City October, 1941

4: Grajdanzev--1 S-4 (no date) 1942 Formosans
116, 101, 121

"Taiwan, or Formosa is a Japanese island near the Chinese province of Fukien and the northern Philippine island of Luzon with a population of six million. One may wonder what are the reasons for a better acquaintance with a relatively small island lost in the Western Pacific, forming a very small part of the Japanese yen-bloc area. Readers may be expected to be interested in broad problems or in problems concerning large areas but not in a small island or a local Japanese problem. However there are important reasons for a better knowledge of Taiwan."

"Previous to Japan's occupation in 1895 Taiwan was a Chinese island, and after 45 years its population is still predominantly Chinese. What have the Japanese accomplished during this period? How has the Chinese population fared under foreign rule? Japan now promises China a new era of 'co-existence and co-prosperity.' What forms have co-existence and co-prosperity taken in Taiwan? Of course, all historical analogies have an important defect: new factors may intervene to alter the course of events. This however, does not render analogies completely useless, but demands only a more precise analysis of their respective actual bases. In the case of Taiwan we have a quite recent experiment. In both occupied China and Taiwan the masters are Japanese and the servants Chinese. What are the reasons for expecting that in conquered China the Japanese will behave worse or better than they behave now in Taiwan? [2]

The part assigned by her Japanese rulers to Taiwan in their plans for penetration into Southeast Asia is extremely important, and a knowledge of Taiwan is necessary for an appreciation of these plans.

Despite the significance of Taiwan, both as an example of Japanese rule and for its own sake, scarcely a work of importance has appeared in English since 1907, when a translation of a book by Yosaburo Takekoshi (1) was published. Previous to that time interest

1. Japanese Rule in Formosa, London, 1907.

in Taiwan among the Powers resulted in a number of works out of all proportion to the island's importance. But since that time only a few travellers' stories of the type of 'Glimpses from Japan and Formosa' and 'Scrambles in Japan and Formosa' have appeare This island, however small and remote, nevertheless has an external trade surpassing that of either Yugoslavia, Indo-China, or Turkey and thus certainly deserves closer attention."

4:Grajdanzev--3 S-4 (no date) 1942 Formosans
116, 131, 631, 177.63 Japan
636.63

"The area of Taiwan, excluding the islands around it, is 35,760 sq. km. (13,807 sq. miles), a little more than the area of the Netherlands, or one-third as large as Virginia, and almost equal to the area of Kyushu or the Japanese part of Saghalien. The island stretches from north to south, the distance from its northern-most point to its southern promontory being 400 km. (249 miles) and, from east to west at the broadest part, 150 km. (93 miles). As an administrative area the Taiwan government-general includes adjacent islands and the Pescadores. The total number of these islands is 76, but their total area is only 64 sq. km. Recently the Spratley Islands off the coast of Indo-China were made a part of the territory of the government-general, but as yet they have not been adequately surveyed."

4:Grajdanzev--3 [2] S-4 (no date) 1942 Formosans
116, 131

"The geographical position of the island is as follows: its northerly point lies at 25° 38′ north latitude, while its southern-most point is 21°45′ N. In other words, Taiwan is crossed by the Tropic of Cancer."

4:Grajdanzev--3-4 S-4 (no date) 1942 Formosans
116, 132, 175

"Its climate and vegetation are tropical, a fact which was of special importance to Japan which is situated in the temperate zone and which, before the World War, had no possessions in the tropics, except Taiwan. After the War she received a mandate over the German Pacific islands lying north of the equator, but their total area is only 2,149 sq. km. (830 sq. miles). Thus before the recent occupation of Kwangtung and Hainan Island, Taiwan was the only important Japanese possession in the tropics. As we see later, [4] this had an important bearing on Japanese economic policy there."

4:Grajdanzev--4 S-4 (no date) 1942 Formosans
116, 131

"The most westerly point of Taiwan is 119°18′E. longitude and the eastermost point 122° 6′E. Thus Taiwan is situated almost 30° (or 2 hours' difference in time) to the west of Japan proper, and on the same meridian as Shanghai. Below are distances from the chief ports of the island to the important points of the Far East (in miles):

To	From Keelung*	Tamsui	Takao
Amoy, China	217	192	186
Foochow, China	144	115	175
Shanghai, China	436	418	637
Yōkohama, Japan	1,245	1,276	1,495
Hongkong	466	440	360
Manila, Philippines	1,116	1,090	1,010
Saigon, Indo-China	1,534	1,508	1,530
Singapore, British Malaya	1,906	1,880	1,800

*'Kirun' in Japanese transcription."

4:Grajdanzev--4 [2] S-4 (no date) 1942 Formosans
116, 101, 177.72 Japan
636.72

"Taiwan is therefore halfway between Shanghai and Hongkong and halfway between Tokyo and southern Indo-China. This makes it an extremely important point for the Japanese. Geographically it is nearer to China and to the Philippine Islands than to Japan. Since its conquest the Japanese have looked upon Taiwan as a base for their advance to the south, as a stepping-stone toward domination over the adjacent areas."

"Topographically, the island may be divided into two parts—an eastern mountainous region and a western plain. By elevation the whole area is divided as follows:

Elevation (in metres)	Area of the island (in sq. mi.)	% of total
100—500 m. (328—1,640 ft.)	2,900	21.0
500—1,000 m. (1,640—3,281 ft.)	2,960	21.4
1,000—1,500 m. (3,281—4,921 ft.)	1,560	11.6
1,500—2,000 m. (4,921—6,562 ft.)	670	4.7
2,000—2,500 m. (6,562—8,202 ft.)	370	2.7
2,500—3,000 m. (8,202—9,842 ft.)	180	1.3
over 3,000 (over 9,842 ft.)	100	.7
Total	13,810*	100.0

* 8,838,000 acres.

[5] Thus 21 percent of the total area of the island rises above one km. and 4.7 per cent—above two km. There are in Taiwan seventy-nine summits of the two parallel mountain ranges traversing the country from north to south, which rise above 3,000 m. Of these Mt. Niiaka (or Morrison), —rises to 3,950 m. (1) and Mt. Tsugitaka (or Sylvia)

1. 3,950 m., a figure given in Taiwan Jijo, equals 12,956 feet. However in the Japan Manchoukuo Year Book, 1939, as well as in some other books, its height is given as 14,500 feet.

to 3,931 m.; both of these (and several others) are higher than the famous Fujiyama of Japan. The ranges of mountains, rising one above the other over the western plain from sea level to a height of four km. over a short distance of eighty km. and then falling abruptly to the sea in the east, present a majestic and fascinating picture and justify the name given to Taiwan by the Portuguese—Formosa (Beautiful). In many places on the east coast magnificent cliffs form an almost perpendicular rock wall 500 to 150 m. high. Only one-third of the island is plain; the other two-thirds are hills, valleys and mountains, a fact which limits the area of cultivation. The mountainous eastern part, covered with thick tropical forest, has become a place of refuge for the aboriginal tribes."

4:Grajdanzev--5-6 S-4 (no date) 1942 Formosans
116, 132, 137

"Situated as it is in the tropics, Taiwan has high temperatures with small variations from year to year, and relatively small fluctuations from month to month.

Average Yearly Temperatures In Taiwan At Sea Level

	Centigrade			Fahrenheit		
	1931	1932	1936	1931	1932	1936
Taihoku (north)	21.6	21.6	21.7	70.9	71.9	71.2
Taichu (middle)	22.1	22.1	22.1	71.8	71.8	71.8
Koshun (south)	24.3	24.3	24.4	75.7	75.7	75.9

Source: Japan-Manchoukuo Year Book and Taiwan Jijo.

The average annual temperature in Manila is 26.6°C. and in Hongkong 22.2°C. January temperature in Koshun is a little above that of Miami, Florida, and the July temperature is the same. Taiwan at low levels thus resembles Florida and is considerably warmer than California. Tropical fruits can [6] ripen in Taiwan and it is possible to raise two crops of rice from the same field and in some cases to grow a third crop also, usually of some vegetable. Land may be used much more intensively than in Japan. Frost is very rare in Taiwan (2) while snow is unknown, even on the mountains.

2. The lowest temperature observed was -0.2 C (31.6 F) at Taihoku and -0.1 C (31.8 F) at Taichu."

"Not less important for the vegetation is rainfall, and in this respect Taiwan is numbered among the places with heavy precipitation, as may be seen from the following table:

	Yearly Precipitation	
Taiwan (1936)	In mm.	In inches
Taihoku	1,913	75.4
Keelung	3,175	135.0
Taichu	1,503	59.2
Taito	1,132	44.5
Koshun	1,708	67.3
Averages		
Singapore	2,340	92
Calcutta	1,930	76
London	636	25
Key West (Florida)	968	38.1
Mobile (Alabama)	1,565	61.6
New York City	1,094	43.0
San Francisco	559	22.0

It is apparent that in spite of the smallness of the island there are very sharp differences in rainfall between its various regions. The difference appears even more striking when we examine the seasonal distribution of precipitation:

Precipitation In Taiwan In MM. (1936)

	Jan. -April	May-August	Sept. -Dec.	(Oct. -Dec.)	Total
Taihoku (N. W.)	789	881	184	(108)	1, 913
Keelung (N.)	1, 503	571	1, 102	(881)	3, 175
Taichu (W.)	426	852	226	(48)	1, 503
Karenko (E.)	292	568	246	(161)	1, 105
Tainan (S. W.)	159	1, 268	41	(10)	1, 468
Taito (S. E.)	232	706	192	(54)	1, 132
Koshun (S.)	227	1, 309	172	(47)	1, 708

[7] It may be seen from this table that there is a marked difference between seasons. In all districts except Keelung, the May-August period brings most of the rain, while the September-December period, and to a less marked degree the January-April period, are dry. This fact is of extreme importance for Taiwan's agriculture."

"It means that Taiwan, and especially the agricultural region around Tainan where the plain is broadest, suffers periodically from a too heavy rainfall and from dry periods.(3)

3. Not only seasonal distribution of precipitation is important, but also its distribution by days and even hours, and this distribution is extremely unequal in Taiwan. In Koshun maximum daily precipitation was 240 mm. and in Taichu 310 mm. (12 inches), or in one day (probably in one or two hours) more than in the four months of September-December. This leads, of course, to flood conditions and extensive damage.

For cultivation to be successful in these conditions necessitates, on the one hand, special arrangements for the prevention of floods and for drainage and, on the other, for irrigation. Only with the help of irrigation can the rich soils of Taiwan give maximum returns. One cannot say that the Chinese neglected irrigation before the coming of Japanese administration. However, they were ignorant of efficient Western methods of controlling the rivers, and in many cases only these methods, applied by Japanese specialists, could give good results."

4:Grajdanzev--7 [2] S-4 (no date) 1942 Formosans
116, 133, 376

"Because of topographical conditions, the rivers of Taiwan are short and swift, the longest being the Dakusui, 170 km. (105 miles) long, which is in the east and flows parallel to the coast. There are only five others longer than 100 km. As they descend rapidl from great heights to the plains, however, they are able to supply a huge amount of power for the production of electricity, an important factor in the prospective industrial development of Taiwan."

4:Grajdanzev--7-8 S-4 (no date) 1942 Formosans
116, 132

"As to the winds, in winter northeast monsoons blow from the continent and in summer southern monsoons from the sea bring rains and storms. Violent storms—typhoons—are frequent and extremely destructive. At Koshun storms were observed with a velocity of 86 miles per hour. Typhoons come either from the direction of the Philippine Islands, passing [8] through the eastern part to the northeast in the direction of Japan, or from the south, to the north through the island, and then towards China."

4:Grajdanzev--8 S-4 (no date) 1942 Formosans
116, 133, 731

"Situated in the Pacific belt of volcanoes, Taiwan has very many earthquakes, on the average 330 each year in various parts of the island, but few are of great violence. In the earthquake of March 17, 1906, 3,643 persons were hurt and 20,987 houses damaged; on April 21, 1935, 15,329 persons were hurt and 54,688 houses damaged."

4:Grajdanzev--8 [2] S-4 (no date) 1942 Formosans
116, 137

"The vegetation is luxuriant and tropical in character. The island is rich in sweet-scented and bright flowers, especially orchids, while in its forests one may see banana, black ebony, camphor oak, maple, palm, cork, oak, tree ferns, persimmons, pineapples, soap trees, tallow trees, etc. Higher in the mountains are found gigantic cryptomeria, red cedar, spruces, hinoki (Thuya obtusa), and pines; still higher the trees give place to short grass."

4:Grajdanzev--8 [3] S-4 (no date) 1942 Formosans
116, 136

"The island is less rich in fauna. There are cattle and water buffalo, although it is impossible to say whether they are native or imported, but few horses; birds are relatively rare, and there is an abundance of snakes, of which thirteen species are poisonous. Mosquitoes are very prevalent, a mosquito net being a necessity. In spite of the efforts of the Japanese physicians, malaria continues to be a scourge of the island."

4:Grajdanzev--9 S-4 (no date) 1942 Formosans
116, 101, 131

"The name Formosa was given to the island in 1590 when the first Portuguese sailors to sight the island are said to have called it Ihla formosa (Beautiful island). However the name Formosa is not used by either the Chinese inhabitants or their Japanese masters. In Chinese and in Japanese alike it has been called Taiwan (or Terraced Bay) since 1612.

The island is only 100-120 miles from the coast of the Chinese province of Fukien. Two hundred miles to the south, separated by the Bashi Straits, lies Luzon, northernmost of the major Philippine islands, and less than 700 miles to the north lies Nagasaki, southern port of Japan. The intervening Riu-Kiu Archipelago made it possible for even primitive fishing boats to make the journey from Japan to Taiwan. These three connections—to the south with the Malayan Archipelago, to the west with the mainland of China, and to the north with Japan—have shaped the history of Taiwan."

4:Grajdanzev--9 [2] S-4 (no date) 1942 Formosans
116 , 144, 174

"Before the 16th century the island was peopled almost exclusively by tribes of Malayan or Polynesian origin, related to the primitive tribes of Mindanao and Borneo. These numerous tribes, separated from one another by high mountains and impassable subtropical forests, were not only disunited, but waged constant war among themselves. As a consequence they could not present a common front to invaders and finally were either conquered or driven into the mountain fastnesses."

4:Grajdanzev--9-10 S-4 (no date) 1942 Formosans
116, 174

"Japan was too far away from the island for permanent [10] occupation and colonization. Malayan tribes could reach the Japanese islands by means of the Riu-Kiu Islands, just as Japanese pirates were visiting Taiwan on their way to pillage the Chinese coast. A permanent occupation, however, demanded more systematic effort and better connections. Later, during the Tokugawa Shogunate it was forbidden for any Japanese subject to go abroad under the penalty of death and thus, in 1650-1750, when the fate of Taiwan hung in the balance, Japan was absent from the scene. As a consequence, her present domination is the result of recent efforts, quite unconnected with the adventures of Japanese pirates in the 16th and 17th centuries."

4:Grajdanzev--10 S-4 (no date) 1942 Formosans
116, 174

"The indifference of the Chinese to an island so near to their shores may seem even more strange. The Pescadores Islands, approximately twenty to thirty miles from Taiwan, were first occupied by the Chinese in the reign of the Emperor Wen (589-604) (1) and after

1. See for details 'Mélanges Critiques' by M.C. Hagenauer, in Bulletin de la Maison Franco-Japonaise, Tokyo 1930, Tome II, pp. 40 et seq.

A.D. 1300 they were already known as a part of the Empire."

"On the other hand the rulers of the Riu-Kiu Islands to the north of Taiwan had been paying tribute to the Chinese Emperor from the fifth century and, according to all evidence, were well known to the Chinese. Taiwan, however, remained virtually unknown to the Chinese for many centuries, a fact which is demonstrated by the absence of a special name for the island, and it is still an open question whether or not they considered it part of the Riu-Kiu Islands. (2) The cause of this indifference was probably the warlike spirit

2. According to G. Schlegel (Problèmes Géographiques, T'oung Pao, VI), the name Riu-Kiu was applied first to Taiwan, and only under the Ming Dynasty was it transferred to the Riu-Kiu Islands proper. According to Chinese historians, the eunuch Wan San-ho of the Peking court, returning from Siam, in 1430 was driven by storm to an island the position and the character of which, as described by Wan San-ho, correspond to Taiwan. But no action followed his report.

of the aborigines, who prevented peaceful settlement on the part of the Chinese. In times of peace private initiative was insufficient to overcome this obstacle, and the Chinese government, as we shall see, showed complete indifference to the fate of the island up to the end of the 19th century."

"Special circumstances contributed to the transformation of Taiwan into a Chinese island. In 1644 China was invaded by the Manchus. The Ming Dynasty was overthrown in the north, but the struggle continued for many years in the south and the population suffered all the horrors of the war. As a consequence more than 100,000 Chinese, according to some reports, fled to Taiwan, which by that time was well known to the inhabitants of Fukien and Canton as the base of operations by Japanese and Chinese pirates alike. This mass emigration to Taiwan changed the character of the island. The newcomers were resolute people, ready to fight aborigines and Manchus, and in their wake thousands of other Chinese followed annually from the densely populated southern provinces.

During the 16th and 17th centuries European Powers laid the foundations of their present Asiatic colonial possessions. Java became a Dutch colony, the Philippine Islands Spanish, and the Portuguese succeded [sic]in acquiring a base at Macao. Rivalry was keen and, after unsuccessful attempts to drive the Portuguese out of Macao, the Dutch established a base on the southwestern shore of Taiwan in 1624, near the present town of Tainan. They began to extend their control over the adjacent territory, to convert the aborigines to Protestantism, to tax the people, to encourage the planting of sugar cane and to develop the production of camphor. Dutch mastery over the island was contested by the Spaniards who in 1626 built Fort San Salvador at Keelung, in the north of the island, and three years later Fort San Domingo at Tamsui, in the northwest. At the same time Spanish missionaries also started preaching the Gospel, trying to convert the

natives to Catholicism. But the Dutch drove out the Spanish soldiers (1) by military force

1. The following correspondence between the Dutch and Spanish commanders is of interest, because it aptly illustrates the spirit of the time:
To Gonsolo Portilio,
Governor of the Spanish fortress in the island of Kelung.
Sir.
I have the honor to communicate to you that I have received the command of a considerable naval and military force with the view of making me master by civil means or otherwise of the fortress Santissima Trinidad in the isle of Kelung of which your Excellency is the Governor. [12]
In accordance with the usage of Christian nations to make known their intentions before commencing hostilities, I now summon your Excellency to surrender. If your Excellency is disposed to lend an ear to the terms of capitulation which we offer and to make delivery to me of the fortress of Santissima Trinidad and other citadels, your Excellency and your troops will be treated in good faith according to the usages and customs of war, but if your Excellency feigns to be deaf to this command there will be no other remedy than recourse to arms. I hope that your Excellency will give

careful consideration to the contents of this letter and avoid the useless effusion of blood, and I trust that without delay in a few words you will make known to me your intentions.

May God protect your Excellency many years.
The friend of your Excellency
Paulus Tradenius.

Fort Zelandia, August 26th, 1641.
To the Governor of Taiwan.
Sir,

I have duly received your communication of August 26th, and in response I have the honor to point out that as becomes a good Christian who respects the oath he has made before his king, I cannot and I will not surrender the forts demanded by your Excellency, as I and my garrison have determined to defend them. I am accustomed to find myself before great armies, and I have engaged in numerous battles in Flanders as well as other countries, and so I beg of you not to take the trouble of writing me further letters of like tenor. May each one defend himself as best he can. We are Spanish Christians and God in whom we trust is our protector.

May the Lord have mercy upon you.
Written in our principal fortress
San Salvador the 6th of September 1641.
(Signed) Gonsalo Portilis.

[12] and to all appearances became the sole masters of Taiwan. Had they retained the island, it might have become a base for further penetration into China and Japan. As has been mentioned, China was at that time in a turbulent state. As the conquering Manchus advanced southwards, many more Chinese fled to Taiwan. In the southwest resistance to the invading forces was carried on first by Cheng Chi-lung. Originally a tailor, he later migrated to Japan, where he married a Japanese girl. He then became a famous pirate and finally, as was often the case in China, a high official. His son Cheng Ch'eng-kung, better known as Koxinga, continued the struggle, but, being hard pressed by Manchu forces, decided to give up Fukien. On April 30, 1661, Koxinga, with a large fleet and an army of 25,000, appeared at Zeelandia, chief Dutch port in Taiwan, where he was supported by the discontented Chinese population. Only nine years before, there had been a serious uprising against the Dutch as a result of oppressive taxes and heavy export duties, and though the rebel-[13]lion had been crushed, the resentment remained. Koxinga besieged the fortress, which was garrisoned by 2,200 Dutch soldiers and a few settlers, and after a long siege the Dutch surrendered on February 1,1662, bringing to an end the attempt to secure a European base for an advance to the north. Within a few years all vestiges of Dutch influence had disappeared, the forts fell to ruins and the aboriginal converts returned to their old practices.

The reasons for the failure of both the Dutch and Spaniards are not far to seek. The purpose of colonial possessions was trade, whilst preaching the Gospel was only an

auxiliary method of subjugation and control. The needs of the local inhabitants were neglected—they were looked upon only as a source of income. The smallness of military forces stationed in the colonies and the great distance from bases prevented speedy reinforcement of the garrison, and the Dutch were compelled to give up in the face of the strong native force.

In 1683 the island fell into the hands of Manchu rulers, and for 212 years it was a part of the Manchu Empire. But little attention was paid by the rulers to the island, for it was made only a fu—a prefecture—of Fukien province, the governors of which did not trouble themselves with visits to a distant island.

The population was unruly and turbulent. The Chinese inhabitants consisted of two groups which did not easily mingle with one another. The earlier settlers were the Hakkas from Kwangtung province, the remnants of the native tribes which were sinified to some degree as they came under Chinese domination. Their name itself means 'stranger', and in China they were the pariahs of society. In the new possession they were able to secure better conditions, and it has been estimated that one third of the Hakkas in Kwangtung province emigrated to Taiwan. (2). Another group was made up of emigrants from the opposite

2. Davidson, J., The Island of Formosa, 1903, p. 8.

shore of Fukien province, called Puntis. Both groups of the Chinese population brought

with them the customs, beliefs, and superstitions which they had [14] known on the continent and thus reproduced on the island the life they had led in China. The Chinese in South China, for example, were organised into clans, and the population of Taiwan was likewise thus divided.

From the occupation of the island by Koxinga to the coming of the Japanese some 220 years later the Chinese were constantly at war with the natives who had once occupied the whole island, including the fertile plains of the west, and who were now forced to give up their lands. Some of the aborigines were absorbed by the Chinese, some annihilated; while the most indomitable were driven step by step into the mountainous regions. As a result of this cruel treatment, they developed a hatred for the Chinese and tried to kill them at every opportunity, raiding their villages or hunting the inhabitants down when they dared to penetrate the dense forests in search of camphor trees. The Chinese organized some kind of semi-volunteer guards, whose duty it was to keep the 'savages' within a pale. But the 'savages', composed of many tribes, were fighting not only against the Chinese, but also among themselves and as a result of these unfavorable conditions, their numbers either remained stationary or decreased, while the Chinese population on the plains, living if not a life of opulence, yet under comparatively easy conditions, was increasing by natural growth as well as by immigration from China. At the end of the period of Chinese sovereignty, the aborigines, who had once made up the whole population of the island, formed only about three to four per cent of the total, so that the island acquired an entirely Chinese character."

"The Chinese, however, were not a homogeneous group with identical interests. The difference between the Hakkas and the Fukienese has already been mentioned [see category 116 p. 13--Analyst] and this difference often found expression in bloody conflicts. Within each of these two groups clans were fighting one another, often for seemingly trivial reasons but most commonly for land and for influence in local affairs. There was also cleavage between the old settlers who possessed the land and the newcomers who had been compelled to rent it and borrow money at exorbitant [15] rates. Finally, there were frequent rebellions against the local officials of the Manchu government who ruled the island with the support of 10,000 to 15,000 poorly trained and badly paid soldiers.

At the time of conquest the Manchu rulers did not resemble the Chinese either in appearance or in language. The Manchus were a warlike Tungus tribe inhabiting North Manchuria and now almost completely assimilated by the Chinese. At least during the first century after the invasion they did not speak the Chinese language, far less the Fukienese dialect. The Hakkas hardly understood the Puntis, and both, as a rule, did not understand the numerous aboriginal dialects. The officials communicated with the population only through interpreters who often abused their position, a bribe being sufficient to change the interpretation of a case before the mandarin. These mandarins and their entourage, coming from distant Peking, looked upon Taiwan as a source of speedy enrichment, and at times their exactions and misrule became so oppressive that revolts followed. A Chinese saying of those days concerning Taiwan sums up the situation:

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'Every three years a disorder, and every five years a rebellion.' (1) Indeed the history

1. Quoted by De Bunsen, 'Formosa,' Geographical Journal, 1928, p. 268.

of Taiwan is represented by some writers as a succession of rebellions."

"However, it would be a mistake to overemphasize these uprisings. Life was not easy under the conditions described above, but it was better than in Fukien and a definite development was taking place. Before 1600 hardly a thousand Chinese lived on the island; in the middle of the 18th century there were, according to Luchow, two and a half million. This may be an exaggeration, but it is a fact that at the end of the 19th century there were three million Chinese in Taiwan, engaged mainly in the cultivation of rice and sugar. About four hundred vessels were then plying between Taiwan and the mainland exchanging the produce of the island for that of China and in 1893, for example, 21 million lbs. of tea, 5.3 million lbs. of camphor and 98 million lbs. of sugar were ex-[16]ported. Taiwan rice played an important part in the economy of Fukien, as did oilcake, which was used as fertilizer. Taiwan sugar made up a great part of the sugar consumed in North China, and her camphor was a not unimportant item in China's foreign trade. This brief inventory is very important because it shows that the present-day character of Taiwan is not the creation of its present rulers, but is the result of a long historical process, though the progress under Chinese administration was slow in comparison with later developments."

"As has been mentioned above, the development of the island was due exclusively to the energy of the local population, for the Peking government neglected this far-away district of Fukien province. However, several events demonstrated to the Chinese government the dangers of this neglect.

The second half of the 19th century witnessed a revival of the struggle for colonies among the Powers. This was the period of the division of Africa, but Asia was not overlooked. In 1842 the British acquired Hongkong, twelve years later Commodore Perry 'opened' Japan to foreign commerce, about the same time the Russians again appeared on the north bank of the Amur, and in 1859 France got a foothold in Cochin China. It was an open secret that the Powers were again alive to the strategic importance of Taiwan. To find excuses for interference was not very difficult. The unruly state of the aborigines and the Chinese distrust of foreigners caused many critical situations and even tragedies for foreign shipping; shipwrecked sailors being maltreated and sometimes killed (1).

1. The fault was not always on the side of Taiwan's inhabitants. For example, in 1869 marines from the Prussian ship 'Elbe' were landed on the Taiwanese coast, though they had no need nor in fact any right to do so. The aborigines fired on them and compelled them to return to the ship, whereupon the commander landed a strong party of marines, destroyed the nearest village and killed those who did not flee.

The foreign nations retaliated with bombardments of the coast and temporary occupation of certain points on the island. In 1874 Japanese forces spent several months on the island and evacuated it only after the friendly intervention of other [17] Powers. This acquaintance of the army with the island was put to good use by the Japanese twenty years later."

"Simultaneously with these military clashes commercial penetration of Taiwan was going on. By the treaty of Tientsin with Great Britain, Taiwan, the former capital of the island (now Tainan), was opened to foreign commerce. In 1860, the year of the ratification of the Tientsin treaty with France, Tamsui was also opened to trade (1). The pioneers

1. Regarding the causes of this opening it is stated in Article VI of the treaty: 'Experience having demonstrated that the opening of new ports for commerce is one of the necessities of the age, it has been agreed that the ports...'

were Jardine Matheson and Company and Dent and Company, two well-known and influential British firms in Hongkong, which in 1858 established trade connections with Taiwan and in 1860 opened offices there. The chief article of export from Taiwan in which they were interested was camphor, while in imports their interests were limited to opium (2). Opium was known in Taiwan before that date, but the years 1860-95 saw

2. Opium was 'practically the only import in which foreigners were interested' wrote Davidson, the American consul in Taiwan for some years.

the greatest spread of this evil. To support the interests of the business firms, British and later American and other consulates were opened in Taiwan. In 1863 the Imperial

Chinese Maritime Customs—actually a foreign-controlled agency in China to service the debts of the Chinese government—began to function at Tamsui. It is interesting to note that at first the customs office was opened on board the opium-receiving hulk Pathfinder, property of Jardine Matheson and Company; at about the same time the British consul opened his offices at Takao on board the opium-receiving hulk Ternate belonging to Messrs Dent and Company. This illustrates the close connection which at that time existed between the Customs, British officials, merchants, and the opium trade. These merchants on several occasions used their own force to compel the Chinese to accept their demands. In 1868 after one such 'small local war' (3) in which British marines had

3. The pretexts for such 'wars' were not difficult to find. Two gentlemen, for example, forced their way into Chinese property to which they had some claim, breaking down the door which was fastened by nails, but were met by 'a mob of [18] some 500 coolies.' 'The two gentlemen attempted immediate flight, but before they had gained many steps they were assailed in the most violent manner with guns, knives, spears and stones by the ferocious ruffians. Mr. Bird was struck down by a stone and beaten and stabbed with spears and muskets,' etc., etc. (Davidson, op. cit., p. 200). Miraculously, both gentlemen remained alive and in command of their faculties. Gunboats appeared on the scene to lend very effective support to their claims.

taken part, "although there [18] was not a shadow of hostilities between China and Great Britain at that time, the British compelled the Chinese officials to abolish the camphor monopoly, to recognize the right of foreigners to travel and buy freely, the right of the missionaries to reside and work in the island, etc."

4:Grajdanzev--18 S-4 (no date) 1942 Formosans
116, 175, 177.65 China
636.65

"In 1884 began the Sino-French war, the purpose of which was to compel the Chinese government to agree to the French version of Tonkin's boundary. Activities spread to Taiwan. which was blockaded by the French navy. The war was not very glorious for French arms, but it brought home to the Chinese government the need for improvements in Taiwan. The island was raised to the rank of a province in 1887, and the energetic Liu Ming-chuan. commander of the Chinese forces during the French blockade, became the first governor. He worked out a plan of substantial improvements and during his short rule the construction of the first railway on the island was begun, a telegraph network was constructed and a cable connecting with Amoy laid; harbors were also improved and fortifications built. But all this was done without any attempt to improve the condition of the masses, to educate them, or to give them some voice in the government. The cost of the reforms Liu Ming-chuan wanted to place upon the local population through the introduction of 'likin' (1) and through a revision of the land tax. This caused disturbances

1. A tax on goods moved across administrative boundaries.

among the population. Liu Ming-chuan was removed from office and the Chinese administration of the island returned to the original state of inaction; but the menace was already at hand."

"In 1894 the war between Japan and China began. China suffered defeat. and by the Treaty of Shimonoseki of April 18, 1895, Liaotung peninsula and Taiwan were ceded to Japan. Though the Pescadores Islands had been occupied by Japanese [19] marines, there were no Japanese troops on the island of Taiwan at the time the treaty was signed, and when the news reached Taiwan, the administration and the population decided not to submit to the cession. It is quite possible that Peking encouraged local authorities to do this and there were rumors that in order to avoid the transfer of the island to the Japanese, the government was ready to give it to the British or to the French. In fact, the British are said to have declined the offer, (1) and under the circumstances, the French too

1. In view of the interest which the British had in the island (as was shown above) the natural question arises as to why they declined this offer. The answer is given in the work of Mr. W.A. Pickering, an important official in British service, of whom none other than Sir Robert Hart said in 1878 that 'no single European had ever possessed such opportunities of learning the Chinese character in all its phases,' and who from 1877 to 1888 'was virtually the ruler of some hundreds of thousands of Chinese in the Straits Settlements and in native States' (See his Pioneering in Formosa, London, 1898, p. 257). Mr. Pickering writes: 'Well, Japan is an Asiatic nation in spite of her modern civilization and her Western

ideas. Against any European power Japan can do absolutely nothing, in fact there is no European nation that has any reason to fear anything from any Asiatic race, however civilized. Japan, however, would be splendid as an ally; and, per contra, she would be just as dangerous in alliance with any other European power. That she would be a splendid ally to us I have not the least doubt.' And further (p.258, op.cit.): 'And Formosa? Well we have had lots of chances to take Formosa. Certainly, we can't allow Russia or France to take it, and it could not be in better hands than those of Japan or in worse than those of China.' The gift of Taiwan to Japan was to pave the ground for a coming alliance. The British were sure of Japan's inability to rule there without British assistance and capital. The Pickerings who thought they knew the Chinese character so well badly misjudged the Japanese.

showed no special inclination to take it. Nevertheless the Chinese of Taiwan decided to act on their own. On May 23, 1895, the Taiwan republic (for which China's treaty was not binding) came into existence with the governor of the province Tang Ching-sung as its president.

But the republic of Taiwan lasted in the north less than three weeks. The president of the republic fled after the first defeat of his troops, and the army was left disorganized and leaderless. It is true that General Liu Yung-fu proclaimed himself president in the south, but at the approach of the Japanese he fled in the same manner as Tang Ching-sung.

As subsequent events clearly showed, it was not the absence of enthusiasm on the part of soldiers and of the people to fight for Taiwan that caused the collapse of the Republic. Describ-[20]ing the guerilla war which took place after the flight of the president, Yosaburo Takekoshi says: 'Whenever our troops were defeated, the inhabitants of the surrounding villages instantly became our enemies, every one, even the young women, arming themselves and joining the ranks with shouts of defiance. Our opponents were very stubborn and not at all afraid of death.' (2)Chinese mandarins showed their inability

2. Japanese Rule in Formosa, p. 88.

to rule the country in time of peace; they proved also their complete inability to organize its defenses in time of war. (3)In better hands Taiwan could have shown incomparably

3. The following rewards promised by the governor of Taiwan may serve as an illustration of his military knowledge: for the capture of a big man-of-war, 70,000 taels; for the capture of a small cruiser, 4,600 taels.

better resistance. The president fled on June 11, but Taiwan (in the south) was not taken until November 18, 1895, and four to six more years were necessary in order to subdue the guerilla warriors whom the Japanese contemptuously called 'brigands'. Japanese

losses in the pacification were not small. Takekoshi gives the following figures: died of disease in Taiwan, 4,642; sent to Japan for treatment, 21,748; remaining in hospitals in Taiwan, 5,246; killed in battle, 164; wounded, 515. This does not include losses suffered after November 1895 (4).

> 4. Engagements of the period of 1895-1901 were often on a quite large scale. In December 1895 General Yamaguchi, suppressing the 'insurrection of Hakkas armed only with long poles... shot five or six hundred of them and forced the rest to submit.' (Takekoshi, op. cit., p. 92.)

The strikingly small number of killed and wounded, as compared with those who died of disease or were treated for illness is possibly the result of the habit of the Japanese command in understating losses in war. Chinese losses up to December 1895 were estimated by Japanese at six to seven thousand killed in action."

4:Grajdanzev--20-21 S-4 (no date) 1942 Formosans
116, 175, 563, 177.65 Japan
636.65

"Thus Taiwan became the first Japanese colony. Many problems faced the new masters of the island, one being the aborigines and the territory occupied by them. About half of the island, sparsely populated by aboriginal tribes, was practically outside Chinese authority and the occupation of the western part by Japanese in 1895 did not bring them nearer to [21] the solution of the problem. It took decades of effort and even now is not finally solved. The Chinese part was easier to control, but several years were spent in the suppression of rebellions, and special measures were required to keep order among the population. Even the pacified population presented many problems. They were foreign in speech, in customs, outlook and allegiance, and no policy worked out in advance could be applied at once."

4:Grajdanzev--21 S-4 (no date) 1942 Formosans
116, 175, 177.65 Japan
636.65

"Finally, a not less important problem was how to make the island pay, for the new masters came to the island not so much in order to benefit the islanders as to benefit themselves. Owen Rutter, explaining the existence of good roads, railways, good streets and other amenities of life in Taiwan, says that 'Money has been poured into Formosa by the Japanese; to them it is like a ewe lamb'. (1) In the following pages however it will be

1. Geographical Journal, London, 1928, p. 286, quoted in the discussion of the report of E. H. Bunsen.

shown that Japan spent relatively very little in Taiwan and received very much from it; that most of what has been done in Taiwan has been done on money raised there.

The history of the island after Japanese occupation will be given along with a description of various phases of human activity in Taiwan."

"In an investigation of the population statistics of the island several questions should be borne in mind: (1) What changes in the racial character of the population have taken place since the occupation of the island by the Japanese? (2) Is there any substantial difference between native and Japanese living conditions as reflected in vital statistics? (3) What changes in the occupational distribution of the population have taken place? (4) What is the condition of the aboriginal tribes? Finally, the investigation of Taiwan's population may furnish an important clue to the riddle of population trends of China. As is well known a census of the modern type has never been undertaken in China, and current vital statistics are non-existent. All information we have is based on more or less bold guesses and on a few samples which represent only a drop in the sea of the Chinese population. However, here in Taiwan we have a quite compact Chinese population of more than five million with a normal age and sex composition, agricultural in character, living according to the customs of their fathers and forefathers. The first census was taken in Taiwan in 1905, fifteen years earlier than in Japan proper. Since that time we have the results of several censuses and current vital statistics of satisfactory value. Demographers should not pass over these results, and yet, so far as is known to the author, they have been neglected (just as were the results of investigations in the Liaotung peninsula) in Chinese population studies. [23]

The estimated total population for 1898 was 2,613,400, but this is only a guess for at that time the government did not control the whole area of the island. The following figures

figures will bear out this point.

	Births	Deaths	Rates per 1000 Births	Deaths
1898	31,688	20,305	13.7	8.8
1900	57,564	48,981	21.0	17.8
1902	75,750	76,306	26.1	26.3
1904	99,395	94,636	33.5	31.9

If these figures are correct, the birth rate in Taiwan increased 2 1/2 times and the death rate four times in six years, an absolutely inconceivable situation. But the tendency is quite clear; the government was more and more successful in the enforcement of rules of registration. Later on we shall see the same phenomenon in agricultural statistics.

The results of the censuses of the population, are as follows:

	Absolute figures (thousands)	Index 1905=100
1905	3,039.8	100
1915	3,479.9	114
1920	3,655.3	120
1925	3,933.4	131

	Absolute figures (thousands)	Index 1905=100
1930*	4,592.5	151
1935*	5,212.4	171
1936†*	5,452.0	180
1937†*	5,609.0	185
1938†*	5,747.0	189

*Including aborigines, who were not registered in preceeding censuses because they had not yet been pacified. This makes the later figures appear about 100,000 larger than they would be on the same basis.
† Official estimates.

From this table it appears that the population of Taiwan in thrity-two years increased by eighty-five per cent. Such a rate is high, for over the same period the population of Japan proper increased by only fifty per cent.

The pressure of population on resources in Taiwan is evidently very great. Population density in 1937 was about 157 per sq. km., i.e. greater than of Italy or Germany and [24] as great as that of Japan proper in 1925. Since the rate of natural growth of the Chinese in Taiwan is considerably higher than that of the population in Japan, the time is not far distant when the density of population in Taiwan will equal the density in Japan Proper."

4:Grajdanzev--24 S-4 (no date) 1942 Formosans
116, 162, 311

"As may be seen from the following figures, the population of Taiwan is very unequally distributed:

Province	Area (sq. km.)	Population (thousands)	Density per sq. km.
Taihoku (N.)	4,594	1,101	240
Sinchiku (N. W.)	4,570	766	167
Taichu (W. center)	7,382	1,251	170
Tainan (W.)	5,421	1,422	262
Takao (S. W.)	5,721	795	139
Taito (S. E.)	3,515	77	22
Karenko (E.)	4,628	124	27
Pescadores	126	68	539
Japan proper (1938)	379,000	72,223	191

Two eastern provinces are comparatively thinly populated, while Taihoku and Tainan have a density greater than the average for Japan. However, the actual distribution is even more unequal than these figures suggest. for almost every province consists of two parts—a coastal plain which is extremely densely populated, and the hilly and the mountainous hinterland where the density is very low. This is not to say that the latter is incapable of development; indeed the development of these areas is one of the greatest problems confronting the government."

4:Grajdanzev--24-25 S-4 (no date) 1942 Formosans-1-3
116, 162, 168, 656, 177.16 Japan
636.16

"Racial Composition of the Population

Since Taiwan is a colonial territory, it is of more than ordinary interest to study the evolution of the racial composition of its population.

After more than forty years of Japanese domination the island thus remains Chinese in character. In 1938 Chinese made up 94 per cent of the population, while the Japanese, who constituted about 2 per cent of the total in 1905, now made up 5.3 per cent. Presumably this figure does not include Japanese soldiers stationed in Taiwan. At the time of the occupation [25] of the island the Japanese entertained high hopes for Japanese immigration

Racial Composition of The Population of Taiwan (1905-1938)

	Oct. 1, 1905 Census		Oct. 1, 1935 Census		Dec. 31, 1937		Dec. 31, 1938	
	Thousands	%	Thousands	%	Thousands	%	Thousands	%
Chinese	2,979.0	97.8	4,990.1	93.86	5,261.5	93.85	5,392.8	93.88
Japanese	59.6	1.93	271.4	5.12	229.3	5.33	308.8	5.37
Foreigners*	8.2	.27	54.1	1.02	46.2	.82	43.4	.75
Total	3,046.9	100.0	5,315.6	100.0	5,609.0	100.0	5,747.0	100.0

* Almost entirely Chinese who are citizens of the Republic of China.

Note:—For 1935, 1937 and 1938 'Chinese' includes also aborigines, numbering about 140,000.

into Taiwan. Climatic conditions are suitable, the density of the population at that time was relatively low and there was no doubt that the island could support much larger numbers than were there. Subsidies were granted to settlers in general and to fishermen in particular and it was thought that in this way the island would be speedily 'japanized.' The results of the first seven years had already brought disappointment:

	Total Japanese arrivals	Total Japanese departures	Remainder
1898	13,214	3,078	10,136
1899	20,743	7,903	12,840
1900	20,995	11,291	9,704
1901	17,841	14,054	3,787
1902	13,821	11,478	2,343
1903	15,892	13,149	2,743
1904	11,564	12,155	591

After the rush of the first three years, when the Japanese administration of the island was organized and many persons were needed for the governmental apparatus, the numbe of immigrants fell sharply. As was shown above, the growth of the Japanese population

on the island was not due to immigration alone, but also to natural increase. After subtracting this natural increase, the average annual number of immigrants is only 4,000 to 5,000."

4:Grajdanzev--25-26 S-4 (no date) 1942 Formosans
116, 168, 464, 656, 609, 177.16 Japan
636.16

"Since the occupation of the island, the Japanese authorities have forbidden the free immigration of Chinese. Coolies were [26] admitted in limited numbers each year for seasonal work but they were compelled to return to the mainland after the expiration of their contract. Besides the coolie class some Chinese could enter Taiwan for business purposes with the permission of Japanese consular authorities, but they remained Chinese citizens and were treated as foreigners. These two groups of Chinese make up most of the 'foreigners'. The fall in their numbers in 1937 and 1938 is connected with the Sino-Japanese war, for many then preferred to return to China and the total number of 'foreigners' is now comparatively small. Thus the purpose of the Japanese authorities —to exclude the Chinese from the island—has been accomplished, but this has been more than offset by the natural increase of the Chinese population."

4:Grajdanzev--26 S-4 (no date) 1942 Formosans
116, 162

"Below we give births, deaths and natural increase for Japanese and Chinese on the island for the last few years (in absolute figures and rates per thousand of population).

	1933		1934		1935		1936		1937	
Japanese	No.	0/00	No.	0/00	No.	0/00	No.	0/00	No.	0/00
Births	7,979	31.1	7,718	29.4	7,999	29.6	7,918	28.1	8,538	28.5
Deaths	2,747	10.7	2,959	11.3	2,951	10.9	2,955	10.5	2,873	9.6
Natural increase	5,232	20.4	4,759	18.1	5,048	18.7	4,963	17.6	5,665	18.9
Chinese										
Births	211,737	45.4	219,189	45.8	225,980	46.1	223,961	44.6	237,090	45.9
Deaths	94,975	20.3	101,270	21.1	102,905	21.0	102,149	20.3	105,199	20.4
Natural increase	116,762	25.1	117,919	24.7	123,075	25.1	121,812	24.3	131,891	25.5

Source: Taiwan Jijo.

Compared with the annual natural increase of the Japanese of 5 to 5.5 thousand, the annual increase of the Chinese is 120 to 130 thousand, or 25 times as great. Even if we include immigration, the Japanese colony is increasing yearly by only 8 or 9 thousand as compared with the Chinese increase of 120 to 130 thousand. Under such conditions there is nothing astonishing in the fact that the population of the island is essentially Chinese in character after forty-five years of Japanese rule and, furthermore, there is no possibility of making it Japanese either through free or subsidized immigration."

4:Grajdanzev--27-28 S-4 (no date) 1942 Formosans-1-2
116, 167, 177.16 Japan
636.16

"Below we give a short survey of the efforts of the Japanese government to colonize the island with Japanese settlers. These were to be of two kinds: (a) farmers, (b) fishermen. Before 1907 no plans for colonization could be worked out because the country was not yet pacified and Japanese immigrants could not appear in the countryside unless supported by armed forces. In 1907 the government elaborated and put into force a plan for the emigration of farmers to Taiwan. Grants of land—about 38,000 hectares—were made to thirty-eight settlements, but only eight settlements were actually made, and even these ended in failure. Taiwan attracted many Japanese adventurers (see figures of immigration for 1898-1904 above) who sought a paradise in the new possession. Finding no outlet for their talents, they became restless, and the government-general decided to repatriate them to Japan, and the would-be farmers departed with them.

The second attempt, started in 1910, was relatively more successful. The government gave to immigrants in eastern Taiwan land, houses, roads, schools, hospitals, irrigation works, etc. on condition that they would repay all advances in ten years, but demanded that each immigrant should have been an independent farmer in Japan and have at least ¥250. The limitations were imposed because the official explanation of the first failure was that the immigrants had no money of their own and were poor tenants in Japan. Under this scheme only 3,368 persons were settled in three different villages. These villages still exist, but after twenty-five years have only 3,117 inhabitants. Conditions of

life on the land cannot have been too attractive.

Since 1915 the Taito Sugar Company, with the support of the government, has tried to attract Japanese colonists for the production of sugar cane. The Taito Colonization Company was established and became active, but all its efforts were unsuccessful, and up to 1936 only seventy-eight families among those who came under these schemes remained on the land. Yanaihara explains this failure by the low price for sugar cane offered by the company and by the difficulties of specialized [28] farming, but a more fundamental cause was that in a colonial society a mass immigration can succeed only if the immigrants lower their standard of living to that of the natives.

In 1931 the indefatigable government-general worked out a new plan of immigration, and up to 1936 brought to Taichu province 156 families, giving each 12.25 acres of land, a monetary subsidy and loans free of interest. Some of the immigrants were settled near Takao."

"It should be noted that, even after the pacification of the island, Japanese immigrants were treated in a hostile manner by the Chinese population. Under this pressure many farmers were compelled to leave their villages, some of them renting their land to Chinese and becoming absentee landowners. The total number of Japanese occupied in agriculture in Taiwan in 1938 (including members of their families) was 8,065.

The colonization schemes for fishermen were not much more successful. In 1909 the government-general began its campaign, promising subsidies and other advantages. But those who answered the call preferred some occupation in Taiwan other than that of fishermen. In 1926 in Taihoku province 49 families (172 persons) were settled and most of them continue to work there. Since 1932, the government has again made efforts to attract fishermen to Taito province, and, up to 1937, 54 families had settled there. The plan for 1938 and 1939 foresaw the settlement of 25 families for each year. Such are the very modest results of the continuous efforts of the Japanese government.

Takahashi is of the opinion (1) (and his opinion reflects the ideas prevailing among

1. See his Gendai Taiwan Keizairon, pp. 8-9.

Japanese economists) that there is little room for the Japanese in Taiwan as long as the island remains an agricultural region; hence his belief that Taiwan should be industrialized."

4:Grajdanzev--28-29 S-4 (no date) 1942 Formosans
116, 168, 609, 701, 177.17 Japan
636.17

"Greater numbers of Japanese in Taiwan are necessary both for military reasons and for the speedy 'japanization' of the islanders. The military considerations advanced by Takahashi [29] are very interesting for they show that, in spite of forty-five years of Japanese domination, there is still a certain anxiety concerning the loyalty among the Japanese rulers of the Chinese. The island is highly militarized and accustomed to martial discipline and yet the Japanese still consider it necessary to strengthen it militarily. But even Takahashi puts greater stress on the 'japanization' of the natives than on the Japanese immigration. After forty-five years of Japanese domination, after their continuous efforts to increase the number of Japanese there and to 'japanize' the natives, the island remains predominantly Chinese in character, the Japanese forming only about five per cent of the total population, and this state of affairs is bound to continue as long as the natural increase of the Chinese remains at its present high level."

4:Grajdanzev--29 S-4 (no date) 1942 Formosans
116, 161, 511

"Native and Japanese Standards of Living as Reflected in Vital Statistics

The high absolute and relative rates of growth of population in Taiwan are extremely interesting and may be illustrated in the following way: in 1937 245,000 children were born in Taiwan—one-third the number of children born in Great Britain and one-fifth of those born in Germany, although the total population of Taiwan is but one-seventh and one-twelfth respectively as great as that of those countries. In other words Taiwan's future population will be much larger than the present figure suggests. If every year about 100,000 persons reach an age of eighteen now, in twenty years their number will almost double. If the islanders are to retain the same standard of life, agricultural and industrial production should increase at the same rate as population and if they are to raise this standard agricultural and industrial production should grow at an even greater rate. This rapid growth of population—more than 130,000 additional mouths each year—raises grave issues for the authorities. As we shall see later, this problem has not been solved and indeed is unlikely to be solved under conditions existing on the island."

4: Grajdanzev--29-30 S-4 (no date) 1942 Formosans
116, 162, 563

"Now let us return to the ratios of births and deaths given in [30] the preceding pages. For 1937 the birth rate for the Chinese was 45.9, for the Japanese 28.5; the death rate for the Chinese was 20.4, for the Japanese 9.6. One possible explanation of this striking difference might be that the age and sex distribution of the Chinese and Japanese on the island is quite different, or that there were more Japanese men than women and that these were represented chiefly by middle-aged groups. But such an explanation breaks down in the face of the facts. There are in Taiwan 111 Japanese males per 100 Japanese females, as compared with 105 Chinese males per 100 Chinese females--too small a difference to account for the difference in birth rates. We have unfortunately no age statistics for Taiwan's population which distinguish between Japanese and Chinese population. However, the following calculation will throw some light on the age composition of the Japanese on the island: in 1937 the Japanese population of Taiwan constituted 0.41 per cent of the population of Japan proper, and Japanese children of school age in Taiwan amounted to 0.393 per cent of the children of school age in Japan proper. The proportion of Japanese juvenile population in Taiwan is therefore almost the same as in Japan. The only possibility of a significant difference in the age structure of the two groups may be that there are proportionately fewer aged Japanese in Taiwan than in Japan, but on the whole the age composition of the population approximates that of Japan."

"The real explanation of the striking difference in birth and death rates is that the Japanese and the Chinese on the island form two separate groups, the living conditions and customs of which are completely different. But the figures reveal more than this. The birth rate of the Japanese in Taiwan is only slightly below that of the Japanese in Japan Proper, while the death rate of the Japanese in Japan is 17.0 (1937) and in Taiwan only 9.6 To some degree this may be explained by the fact that there are a smaller number of aged Japanese on the island, but this alone is not sufficient. It is well known that in the same population different social classes have different death rates. The social composition of the Japanese [31] on the island is such that they are better off than the Japanese in Japan, to say nothing of the Chinese in Taiwan, whose death rate is more than double that of the Japanese. The Japanese on the island live under better sanitary conditions, are better fed, have better medical treatment and more leisure than the masses of the Chinese. This does not mean, of course, that the death rate of the Chinese is stable: it is falling, and this fall, typical of all colonial countries similarly situated, is probably due to improved methods of combatting epidemic diseases.

4:Grajdanzev--30-31 S-4 (no date) 1942 Formosans-2
116, 162, 165, 171, 563

Death Rates In Some Tropical Colonies
(per thousand)

	1911-13	1921-25	1926-30	1931-35	1937
Taiwan	...	24.0	22.0	20.6	19.3
Palestine	...	23.7	24.3	21.0	15.0 (1938)
Philippines	19.1	18.9	19.7	18.5	18.8
Ceylon	31.8	27.8	25.1	24.7	21.7
Straits Settlements	40.0	28.9	30.7	24.7	21.3

As regards mortality, Taiwan is in about the same position as other colonies, a fact which suggests that living conditions are comparable to those in any other colony named above."

"A few words should be devoted to the Chinese emigration from the island. In 1936 the number of the Chinese from Taiwan (i.e. Chinese born on Taiwan, subjects of Japan) living abroad was as follows:

Living in:			
Manchuria	303	British Malaya	187
China	13,492	Dutch East Indies	458
Hongkong, Macao	179	Other countries	138
Siam	92	Total	14,849

This number—about one-fourth of one per cent of the total population—is, of course, small. Taiwan itself was in the not distant past a colony to which emigrants from China flocked and, if it were not for restrictions introduced by the Japanese authorities, this movement would continue. The comparatively large number of Chinese from Taiwan residing in China is easily explained. Being Japanese subjects they enjoy extra-[32] territorial rights in China. This presents certain advantages and is in many cases very profitable. (1) In 1930 there were about 1,500 Chinese from Taiwan resident in Japan, mostly

1. The small number of Taiwanese residing abroad is explained chiefly by the fact that the government-general does not approve of natives going abroad; it fears possible political movements which the emigrants may start. All Taiwanese residing

in China are under the strict supervision of the government-general.

students and rich persons but very few workers."

"Even in advanced countries occupational statistics are not precise, and in the colonies they are far less reliable. Nevertheless, if one wants to determine only the general characteristics of the population, occupational statistics for Taiwan reveal something. The following table divides the population into such broad categories as 'occupied in agriculture and forestry', 'occupied in industry and mining', etc. The division is given for the whole population and also, for the Chinese and the Japanese separately. The year taken is 1930, because no later figures are available, but it will be shown later that no great changes have taken place since that time. Unlike Korea, where the members of the family who do not take part in work are included in the same occupational group as that of the head of the family, in Taiwan they are registered as having 'no occupation'.

Occupational Statistics For Taiwan, 1930
(in thousands)

	Agriculture and forestry	Fishing	Industry and mining	Trade	Communication	Public serv. & prof.	Others	No Occup.	Total
Japanese	4.4	1.6	15.2	18.1	9.1	37.6	4.5	137.7	228.2
Natives	1,191.7	26.8	144.2	151.0	49.8	37.4	67.6	2,645.1	4,313.6
Total (incl. others)*	1,197.1	28.6	173.6	178.3	63.1	76.0	73.4	2,802.4	4,592.5

* Includes 'foreigners', chiefly Chinese from China proper.

The same table is given below in percentages, taking the number of those occupied as 00 For the sake of comparison corresponding figures for Japan proper for the same ear are given: [33]

Occupational Distribution Of Taiwan
(percentages, 1930)

	Agric. and forestry	Fish ing	Industry and mining	Trade	Com- muni- cations	Public serv. & prof.	Others	Total occu- pied
aiwan								
apanese	4.8	1.8	16.8	20.0	10.1	41.5	5.0	100.0
atives	71.4	1.6	8.6	9.0	3.0	2.2	4.1	100.0
ll, incl. others	67.0	1.6	9.7	10.0	3.5	4.2	4.1	100.0
apan proper (1930)	47.7	1.8	20.0	15.1	3.7	6.9	4.5	100.0

In a condensed form this table indicates to us the most important problems of Taiwan. aking the native population, we see that almost three-fourths are occupied in agricul- ure. Forestry as a rule serves only as subsidiary occupation to agriculture. At the ame time only 8.6 per cent are occupied in industry and mining, and this also includes ose occupied in domestic industries where the productivity of labor is almost as low s in Chinese agriculture. At the same time there are more persons occupied in trade the broad sense than in industry (9.0 and 8.6 per cent respectively) while only three

per cent are occupied in transportation. This illustrates the low level of economic development of the country. In this respect comparison with Japan is interesting. Only a few decades ago Japan herself was at about the same stage of economic development as China. Now, we see that less than half of her population are engaged in agriculture and 20 per cent in industry and mining.

The occupational statistics prove once more that there are two distinct groups in the population; 41.5 per cent of the Japanese, as compared with only 2.2 per cent for the natives, are occupied in public service and the professions, i.e. they form the backbone of the administrative services of the island. We shall see later that only the lowest positions in these services are open to the Chinese. Almost 17 per cent of the Japanese are occupied in industry, and they occupy all the key positions. About 18 per cent of them are occupied in trade and 10 per cent in communications. Comparison with figures for 1905 indicates furthermore that no substantial changes have taken place since then. [34]

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Chinese					
1905	75.5	6.1	8.2	1.4	8.8
1930	73.0	8.6	12.2	2.2	4.1

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Japanese					
1905	*	23.5	32.5	37.8	6.2
1930	*	16.8	30.1	41.5	11.6

* Included in 'other occupations.'

More than 75 per cent of the Chinese were occupied in agriculture in 1905, and 73 per cent in 1930; there was a slight rise in the number occupied in industry—from 6.1 to 8.6—and a more pronounced increase of those occupied in trade. As is well known, trade is the refuge of the unemployed and under-employed and its rapid growth as compared with other professions is hardly a sign of strength.

In twenty-five years the number of Japanese occupied in government administration rose from 37.8 per cent to 41.5 per cent. The fall in the percentage of those occupied in industry may be due to the fact that in the period from 1896 to 1905 very many Japanese were obsessed with the idea of making money in Taiwan in the shortest possible time. Since then the potentialities of the island have become better known, large business organizations have squeezed out the independent ventures. In any case these figures illustrating the changes in Taiwan in twenty-five years do not show that with the passing of time the occupational composition of the Chinese and of the Japanese of the island tends to become similar. If data were available for each occupation showing how many Japanese

and how many Chinese are in important executive positions and how many in subordinate positions, the gap would appear much wider. Unfortunately, direct data are not available, but we shall see later that there is no indication that the division is becoming less sharp."

4:Grajdanzev--34-35 S-4 (no date) 1942 Formosan Aborigines
116, 563

"The problem of the aborigines will be treated briefly here, first because their life is a thing apart from that of the rest of the population, and secondly because this side of Taiwan's life is better presented in existing descriptions of Taiwan than [35] any other aspect of it, since European visitors to Taiwan were interested chiefly in the exotic savages and not in the Chinese."

4:Grajdanzev--35 S-4 (no date) 1942 Formosan Aborigines
116, 101, 162, 177

"The Japanese took over from the Chinese the word 'savages' for the aboriginal tribes. At the end of 1938 the total number of aborigines was 155,900. However, only 95,400 of them are classified as 'savages' and are under the special, indefatigable supervision of Japanese police, the remaining 60,500 being 'civilized', that is, they are 'sinified', and in their outlook, customs, and occupation do not differ from the Chinese. The whole group of aborigines is divided into many tribes, among which the most important are:

Tribe	Population (in thousands) 1938
Taiyal	37.1
Saiset	1.6
Bunun	17.6
Tsuwo	2.3
Ami	50.9
Yami	1.8
Paiwan	44.5
Others	.1
Total	155.9

Many of these tribes show an increase in numbers, although much smaller than that of the Chinese on the island, but some are dying out."

4:Grajdanzev--35 S-4 (no date) 1942 Formosan Aborigines
116, 174, 181, 609

"The aborigines formerly occupied the whole island, but in more than three hundred years of ceaseless war they were driven from the best lands. It is no wonder that they began to look on newcomers with suspicion and even hatred. But all who have had closer contact with them emphasize their good nature, open-heartedness, and other qualities which do not warrant the treatment they received first from the Chinese and later, from the Japanese."

4:Grajdanzev--35-36 S-4 (no date) 1942 Formosan Aborigines
116. 563, 657, 727. 177.56 Japan
636.56

"After their occupation of the island the Japanese took over the Chinese 'reservation' system for the aborigines and the territory inhabited by the 'uncivilized' tribes was surrounded by military outposts, (1) which kept constant watch over the [36] natives.

1. The fact that these outposts were manned by Japanese policemen and not by soldiers makes little difference, because at their stage of cultural development the aborigines could hardly appreciate the difference.

The latter understood only that the Chinese system would continue a system of incessant warfare in which finally they were the losers and their best lands were taken away."

4:Grajdanzev--36 S-4 (no date) 1942 Formosan Aborigines
116, 166, 563, 657, 728, 177.56 Japan
636.56

"It is difficult to say whether they understood, at the beginning, even the change of the sovereignty. In any case the war continued. During the first years of occupation the Japanese, preoccupied with the suppression of Chinese rebellions, tried only to keep them within the reservation, but later a complete program of subjugation was worked out. Its essential feature was the removal of aborigines to low lands in order that the mountainous areas which they had occupied might be exploited. These areas were rich (or at least were thought to be) in timber, minerals and agricultural potentialities, for a certain part of the area could be sown with tropical plants."

4:Grajdanzev--36-37 S-4 (no date) 1942 Formosan Aborigines-1-2
116, 175, 721, 177.72 Japan
636.72

"The process of subjugation proved difficult because the terrain was mountainous and covered with tropical jungles. Many times the regular army detachments were sent into the territory of the savages and returned without achieving anything; they lost men in ambushes and from illness, and in some cases the imperial troops were actually defeated by the savages, who knew the terrain perfectly. It became clear to the authorities that the aborigines could not be conquered by a frontal assault, and so they began a constant siege. No weapon was left unused in the struggle. Barbed wire for hundreds of miles surrounded the savages and, in the regions of the most 'difficult' aborigines, electric current was used to make the barbed wire fatal. But the savages soon discovered ways of overcoming this difficulty. After the World War bombing from airplanes was used against them, but without apparent success. Their arms were confiscated, but by paying exorbitant prices they managed to buy new ones from Chinese smugglers. Hatred between tribes was exploited and Japanese policemen would return in company with triumphant tribesmen who were carrying the heads of defeated enemies. Nevertheless, this policy failed, (1) and the reason for its failure was simple; the [37] Japanese could not or

1. Owen Rutter, a British colonial administrator, who is opposed to the 'pampering of the native' and who is a partisan of 'justice and firmness' in dealings with

the [37] natives, writes: 'I say that the Japanese have failed utterly, in their endeavors to solve the important question of bringing the natives under their influence.' Through Formosa, p. 233.

would not understand savages who were unwilling to give up their lands. Governor-General Sakuma, for example, starting his campaign in 1909 to make the savages a 'law-abiding people'—though they were quite law-abiding from their own point of view—compelled them to surrender their arms and had those who refused 'chastised'."

4:Grajdanzev--37 S-4 (no date) 1942 Formosan Aborigines
116, 224, 721, 177.17 Japan
636.17

"But arms were necessary for the aborigines, not only to fight the Japanese, but also to hunt for food. The Japanese authorities may have been sincere in their desire 'to civilize' the savages, but civilization as they understood it meant the turning of hunters into cultivators of rice fields. From the warrior and hunter they were taking away his lands and his gun and were granting him a hen for egg production. Savage 'superstitions' were 'eradicated', but the savages were expected to believe in the Japanese goddess, Amaterasu Omikami, with her million deities and the Son of Heaven. The natural consequence of this 'civilizing' was war. This war with the savages cost 7,083 lives and more than 4,100 wounded. For the time being their resistance may be considered to have been overcome, but this has been due to overwhelming force, and not to the beneficent influence of rice fields and shinto shrines."

4: Grajdanzev--37-38 S-4 (no date) 1942 Formosan Aborigines
116, 659, 728, 177.72 Japan
636.72

"Twenty thousand men with primitive tribal organization and primitive weapons could not resist indefinitely the machinery of a modern state with all its attributes. But the submission was unwilling and as late as October 1930, aborigines, several thousand strong, burnt the police stations in the district of Musha, seized arms, and occupied the town. In order to suppress this rebellion the Japanese were compelled to use a considerable military force. (1) The suppression cost the Japanese

1. 'October 1930' is given by the Japan Year Book, 1939-40; in the 1933 edition it is said that the revolt took place 'in the summer of 1929.' Which is the truth we do not know, for the affair was not made public until long after it took place. Since 1929 a sum of ¥ 60,000 has been spent annually on special guards in Musha district.

160 lives and the incident shows that if the aborigines [38] should see a favorable opportunity, further trouble may follow. Now a force of 5,000 guards 90,000 aborigines, of which probably not more than 20,000 are mature men, disarmed and separated into their various tribal units by government lines."

4:Grajdanzev--38 S-4 (no date) 1942 Formosan Aborigines
116, 241, 433, 454, 511, 464

"The Japanese sources quote the following figures as proofs of their economic progress: in 1938 the aborigines produced 34,079 koku of rice, they received ¥ 230,253 for sugar cane raised on their fields, and ¥ 52,713 for silk cocoons; they had 29,247 pigs, 8,142 water buffalo, 3,964 cows, and 11,766 goats. Eighteen thousand aborigines had deposits in post offices to the aggregate amount of ¥ 414,000 (1937). Let us examine these figures: 34,079 koku of rice for the population of 90,000 give about 0.3 lb. of rice per person per day, less than one-third the average for Japan, and it should be remembered that rice is the aborigines' foremost crop. When the same division is made of the 29,247 pigs and 11,766 goats, there is little more than one sen per day per capita. If one takes into considera-[sic] crops on the average brought ¥ 13 per year per family, or less than one sen per day per capita. If one takes into consideration the fact that numerous tribal chiefs have many more pigs, goats, savings, etc. than the average native, one may understand the poverty in which most of these 'former savages' now live in the new conditions. Here lies the real cause of their rebellious spirit. They cannot exist on what they have. They have no choice but to work for the Japanese, and the Japan Year Book informs us that there are now 32 per cent of them who 'are able to understand Japanese to the extent of performing some simple work'."

"It was mentioned above that an investigation of Taiwan's population statistics might throw some light on the population of China and that it is strange that demographers have not used the results of the six censuses that were taken on the island. We cannot analyse this question in detail here, but our results will point to some divergences from those obtained by Dr. Buck in his most extensive study of land utilization in China. (1)

1. J. L. Buck, Land Utilization in China, Chicago, 1937.

According to Buck's investigation, the average-sized [39] family in China is 5.3, with 6.3 persons per family in double-cropping rice areas. The following figures show that, contrary to the experience of most countries, the average size of family in Taiwan shows a tendency to grow:

	1905	1915	1920	1925	1930	1935
Persons per family:	5.2	5.3	5.2	5.5	5.7	5.8

Whether this increase is due to the improved technique of census-taking or to the change in the definition of family we do not know. If this increase really took place, it may be a symptom of deterioration of standards of living: young people cannot find employment, have no chance to establish their own homes, and are compelled to continue to live with their families.

4: Grajdanzev--38-40 S-4 (no date) 1942 Formosans-2
116, 162, 171

Besides Taiwan, censuses were taken in Kwantung territory, (of South Manchuria) but they do not have the same value because the sex and age composition of the population there is not normal: many people are settling there without families, and leaving their wives and children in their native villages.

Comparison Of The Sex Ratios Of The Population (Men=100) (2)

2. In this and in the following tables the whole population of Taiwan and of Kwangtung, and not only its Chinese part, is taken, because no separate data are available, but this cannot make a substantial difference for Taiwan because there the Chinese make up 94 per cent of the total population.

	China, acc. to Buck	Taiwan census, 1935	Kwantung census, 1935
Women	92	96	66

It is clear that Kwantung is not normal in this respect, but comparison of Taiwan and China, as recorded by Buck, shows that females were probably underestimated in Buck's investigation: in Taiwan the difference in numbers is not great.

Age-Distribution Of The Population
(Percentages)

	China acc. to Buck	Taiwan census, 1935	Kwantung census, 1935
Under 10	25.0	31.1	22.0
10-19	19.3	20.4	19.6
20-29	17.0	17.3	23.6
30-39	13.8	12.3	15.8
40-49	11.4	8.3	9.7
50 and over	13.5	10.9	9.3
Total	100.0	100.0	100.0

[40] Comparison of these columns shows that in Kwantung territory the age distribution of the population is not normal--there are too few children and too many adults in the age groups between twenty and thirty-nine, and therefore we omit Kwantung from further investigation. But a comparison of China and Taiwan suggests that children were underestimated in Buck's investigation.

Comparison Of Crude Birth And Death Rates (3)

3. The figures for Taiwan are averages for ten years (1927-36), and include the whole population. The corresponding figures for the Chinese population only (five-year average for 1933-38) are as follows: birth rate, 45.8; death rate, 20.6

Birth rates		Death rates	
China (Buck)	Taiwan	China (Buck)	Taiwan
38.3	44.6	27.1	20.7

In Taiwan the death rate is lower and the birth rate higher than in China. The difference in respect of death rates is quite probable because the medical service in Taiwan cannot be compared with the more primitive conditions in China, but the lower birth rate in China is much less probable.

Birth rate per 1,000 married females, between the ages of 15 and 44 years is 207 in Buck's investigation, but for Taiwan in 1935 it is 297—a difference too great to be attributed to chance. All this demonstrates once more the importance of a study of Taiwan's censuses for those who are interested in the demography of China."

4:Grajdanzev--41 S-4 (no date) 1942 Formosans
116, 171

"In surveying agricultural conditions in Taiwan, we shall frequently make comparisons with Japan. The reasons for these comparisons are clear: Taiwan has for forty-five years been a part of the Japanese empire, and free movement of capital and, to some degree, of labor takes place between it and the mother country and it is part of the same monetary and banking system. The population which came under Japanese control was at about the same cultural level in 1895 as Japan herself ten to twenty years before. Its agricultural system, its ethics, religion, and literature resemble those of Japan, and therefore comparisons between the mother-country, and Taiwan, a colonial territory, are very instructive."

4:Grajdanzev--41-42 S-4 (no date) 1942 Formosans-1-3
116, 241, 311

"We begin our investigation of Taiwan's economy with agriculture because the majority of the population are occupied in this field. First, let us examine the area under cultivation. In considering the figures given below, one should bear in mind the following fact: in Taiwan, as in other southern regions, in many cases two and even three crops a year are taken from the same field, and thus a distinction should be made between cultivated area and crop area. If each field produced two crops a year, then the total crop area would be double that of the cultivated area. Double cropping usually takes place on irrigated fields, although, if rainfall is evenly distributed from month to month, even dry fields can yield two crops. The growth of total cultivated area of Taiwan and of its irrigated area is shown in the following table: [42]

Cultivated Area Of Taiwan
(1,000 ko) (1)

1. Ko (in mandarin Chinese chia) is a local measure of area equal to 2.377 acres or 0.961 hectare.

Cultivated Area Of Taiwan [Cont.]

	Paddy fields producing one crop	Paddy fields producing two crops	Total paddy fields	Dry fields	Total
1900	...	...	200.7	157.5	358.2
1904	...	...	312.6	332.1	644.7
1909	...	...	337.8	344.7	682.5
1911	...	...	346.4	364.9	711.3
1916	...	...	358.8	379.7	738.4
1923	261.5	115.3	376.8	398.6	775.4
1933	313.1	147.4	450.5	395.0	845.5
1934	320.0	142.9	462.9	388.4	851.3
1935	322.2	141.3	463.5	363.2	856.8
1936	327.4	206.4	533.8	338.4	872.3
1937	332.3	212.1	544.4	338.8	883.3
1938	331.8	211.4	543.2	341.2	884.4

Source: for 1900. Nogyo nenkan, 1937; for 1938, Taiwan Jijo, p. 456.

The population of Taiwan is growing rapidly, and its agricultural population is very large. Under these conditions an increase of area under cultivation should be recognized as significant, and if the figures given above are correct, the cultivated area increased

2.47 times in thirty-eight years—a remarkable advance. But if we examine the figures, we find that between 1900 and 1909 the cultivated area increased from 358,200 ko to 682.500 ko, or by 36,033 ko every year, while between 1909 and 1938 the increase was from 682,500 ko to 884.000 ko, or only 6,940 ko every year. The greatest expansion therefore took place when the government did not even have complete control of the island, and only in 1908 did the administration work out a comprehensive scheme of irrigation. The explanation of this striking initial increase would appear to be that between 1900 and 1909 the Japanese government made a complete survey of Taiwan, and many lands were recorded which formerly did not appear in the official figures."

4:Grajdanzev--42 43 S-4 (no date) 1942 Formosans
116, 651, 177.65 Japan
636.65

"The former Chinese government was exceedingly inefficient and taxes were often paid by the farmers on one ko, where [43] actually there were two. After the Japanese survey this became impossible. The 'striking success' of the Japanese government was largely administrative; for the farmers it meant only the trebling of the land tax. As Takekoshi writes: 'To be more exact, before the survey the total area of the fields and fish nurseries was believed to be 890,000 acres which yielded ¥860,706 tax. The result of the measurement . . . shows that the real area is 1,535,163 acres, and the receipts from the land tax have jumped up to ¥2,989,287.' (1) "

1. Op. cit., p. 130.

4:Grajdanzev--43 S-4 (no date) 1942 Formosans
116, 161, 178, 241

"The average increase of area under cultivation by 7,000 ko each year must be compared with the annual increase of the population of 130,000 to 140,000 persons; for each ko increase in cultivated land there is an increase of twenty persons. It is thus quite evident that the increase of cultivated area is lagging behind the increase of population. The same idea may be expressed in another way: since 1904 the population of Taiwan increased 1.92 times. whereas the cultivated area increased only 1.37 times.

Improvement in the situation may be brought about (1) by cultivating areas now uncultivated; (2) by turning areas now producing one crop into double-crop areas chiefly through irrigation; (3) by increasing yields and substituting crops bringing high income per unit of area for crops bringing low income; (4) by shifting the population from agriculture to industry and importing foodstuffs to feed the growing population. Let us now consider these possibilities in turn, with the exception of the fourth, which will be examined later."

"(1) A special investigation made by a government committee in 1923 estimated the cultivable area in Taiwan at 940,000 ko (900,300 hectares or 2,234,000 acres); another committee in 1929 estimated this area at 930,000 ko (893,700 hectares). (1) The area

1. Quoted by Takahashi, op. cit., p. 94.

cultivated at present is about 850,000 hectares or 23.8 per cent of the total area of the island, which is 3,576,000 hectares. If the estimates of the committees are [44] correct, then the cultivated area of Taiwan is approaching its maximum and only about 40,000 to 50,000 hectares remain to be turned into fields. We do not know what criteria the committees used in their investigations, but there are reasons to believe that their estimates are too low. Almost half of the total area of the island is territory of the aborigines, where fields are almost non-existent. It is true that this territory is mountainous and the cultivable area cannot be great, yet it should be considerably greater than 40,000 to 50,000 hectares. However, it is clear that the greater portion of cultivable land is already under the plough, so that the emphasis should be placed on other methods of increasing agricultural output.

This disparity between the growth of population and the growth of cultivated area has brought a sharp increase in land values. In 1914 one ko of good paddy land in the central

part of Taiwan province cost on the average ¥331; in 1925, ¥700; in 1937, ¥2,000. (2)

2. Ibid., p. 158.

Of course, the depreciation of the yen, the increase of yields and other factors also played a part in this increase, but the pressure of increasing population was probably also an important element."

4: Grajdanzev--44 S-4 (no date) 1942 Formosans
116, 161, 433, 464, 471

"Two thousand yen per ko (2.4 acres) is an apalling [sic] price where the daily wages of a worker are about one yen per day, and it prevents the landless from having a chance to become owners of land. However, the phrase 'population pressure' is not used here in the Malthusian sense. The question is not one of food--the island produces twice as much as the islanders consume--but of employment. Openings in industry are few; independent industrial enterprise is almost impossible because a plant worth a few hundred or thousand yen cannot compete with a modern factory. The only occupation left is that of the farmer--a customary occupation for the majority of the islanders. The rise in land values is a symptom of the growing difficulty of finding employment, and not of a growing scarcity of food."

"(2) Irrigation combined with double cropping is another [45] way of increasing agricultural production. In 1937 one ko of dry field produced on the average eight koku of rice, while one ko of paddy yielded 14.9 koku in one crop or, where two crops were possible, 28.1 koku. (1) Irrigation almost doubles the crop while irrigation and double cropping

1. Figures are taken from Nogyo nenkan, 1939-40, pp. 647-648.

combined increase the yield three and a half times.

Data on the increase of irrigated area and of double-crop area were given in the preceding table. [See p. 42, category 116--analyst] Here we may point out that while in 1909 only 49.5 per cent of the total cultivated land was in paddy fields, in 1937 paddy fields accounted for 61.6 per cent of the total and, according to the same table, 37.6 per cent of the total cultivated area was yielding two crops. If this is true, then the crop area should equal 137.6 per cent of the cultivated area but in the official sources for 1937 the total area of all crops amounts to only 1,120,400 ko or 127 per cent of the cultivated area. A possible explanation of this divergence is that ten per cent of the area was fallow or growing green manure, but this is hardly probable."

4:Grajdanzev--45 S-4 (no date) 1942 Formosans
116, 312, 471, 655, 177.31 Japan
636.31

"In any case the success in irrigation should be recognized as conspicuous, and it is not less striking that it was achieved with the relatively modest investment of about fifty million yen by the state since 1908. But the state has gradually withdrawn from the field, leaving irrigation works to private enterprise and to special irrigation associations. In 1937 the irrigated area was divided among three groups as follows: 140,500 ko were irrigated from the public canals, 132,000 ko from canals belonging to private persons, 259,000 ko from those of irrigation associations. The last are under the influence of landowners and of the owners of enterprises processing agricultural products."

4:Grajdanzev--45-46 S-4 (no date) 1942 Formosans
116, 241, 651, 661, 177.24 Japan
636.24

"Beneficial as these irrigation works are, in many cases they curtail the farmer's freedom to select his crops. The government often compels the farmers to raise crops which they do not want to raise (as, for example, sugar cane). Takahashi tries hard to prove that this compulsion, which in Taiwan is [46] called simply exploitation (sakushu), is to their benefit, (1) but his arguments are not convincing.

1. Takahashi, op. cit., p. 280."

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-1-3
116, 171, 241, 454, 433, 177.24 Japan
636.24

"(3) Increased agricultural production may also be achieved by raising yields per unit of area. Below we give a comparison of yields in Taiwan and in Japan, and in the case of sugar cane, the area of which in Japan is too small, a comparison with Hawaii and the Netherlands Indies, where conditions are similar to those in Taiwan, while groundnut production in Taiwan is compared to that of Kwantung.

Crop Yields In Quintals Per Hectare in Taiwan and Other Countries.

		1928-32 average	1933-37 average	1937
Wheat	Taiwan	8.7	9.7	10.7
	Japan	17.7	19.1	19.1
Barley	Taiwan	6.4	8.0	7.4
	Japan	19.9	20.6	20.9
Maize	Taiwan	11.3	10.8	11.6
	Japan	14.1	14.7	16.7
Rice	Taiwan	22.2	25.1	26.1
	Japan	35.0	36.8	38.6
Sugar cane	Taiwan	684.4	654.4* Four-year average 1933-36.	...
	N. E. I.	1,308.0	1,374* Four-year average 1933-36.	...
	Hawaii	1,349.4	1,515* Four-year average 1933-36.	...

		1928-32 average	1933-37 average	1937
Soya beans	Taiwan	5.6	5.7	6.2
	Japan	10.0	10.0	11.2
Groundnuts	Taiwan	16.2	17.1	18.4
	Kwantung	19.0	20.7	...
Sesamum	Taiwan	3.5	3.9	4.2
	Japan	7.3	7.5	7.5

The yields per hectare of the most important plants in Taiwan's economy are therefore thirty to fifty per cent less than in Japan, or, in the case of sugar, in Hawaii or the Netherlands East Indies, and yet all available sources mention the fertility of the soil in Taiwan, while climatic conditions are at least as good as in Japan or the Netherlands Indies.

The explanation lies in the primitive methods of Taiwan [47] agriculture, including the slight use of fertilizers. Judging by the cultivated area and the number of farmers, the island should have at least 300,000 to 400,000 ploughs, but in 1929 (1) almost all (except

1. The last data available, Nogyo nenkan, p. 642.

18,315 'improved' ploughs for deeper ploughing and 614 of the European type) were of the

primitive Chinese pattern. While in Japan proper an average of ¥170 to ¥180 per hectare is spent each year on commercial and home-prepared fertilizers, in Taiwan less than half that sum is spent for this purpose. These two examples—ploughs and fertilizers—for which quantitative data are available show clearly that Taiwan farming is under-capitalized, especially when we consider that the farmer is obliged to pay ¥2,000 per ko for good land.

This does not of course mean that there is no improvement in the agriculture of Taiwan. The government devotes much effort to increasing the productivity of the farms and the farmers are eager to respond. Yields are now higher than they were twenty years ago, as one may see from the tables given later in this chapter. But progress is slow. It is doubtful whether yields in Japan in 1895—the time of the annexation of the island—were higher than in Taiwan, whereas now they are considerably greater and relatively Taiwan is lagging further and further behind."

4: Grajdanzev--47-48 S-4 (no date) 1942 Formosans
116, 433, 435, 177.43 Japan
636.43

"Furthermore, as will be shown later, the results of the improvements which did take place brought most profit to landowners, traders and the Japanese administration. This may appear to be contradicted by the fact that the gross value of agricultural production in Taiwan for the last five years increased from ¥237.9 million in 1933 to ¥413.7 million in 1937 (seventy-four per cent), and if later data were available they would certainly be still higher. Unfortunately, we do not have at our disposal an index of agricultural prices in Taiwan (1). However, we do know that the average price of [48]

1. The general index of wholesale prices in Taihoku had increased, compared with 1933, by 33 per cent in 1937 and 58 per cent in 1938. Taiwan Jijo, 1939 pp. 606, 607.

rice for the same period rose from ¥14.98 per koku to ¥22.74, or by fifty-two per cent, and rice makes up about half of the gross value of agricultural production in Taiwan. In the same years population increased by only thirteen per cent. By deflating prices to the level of 1933 and dividing by an index of population, we find some evidence that production per capita was less in real value in 1937 than in 1933. How generally this is true is difficult to say because of the paucity and unreliable character of the data. But one thing is clear: no rapid rise in the per capita value of agricultural production has taken place in the last few years."

4: Grajdanzev--48 S-4 (no date) 1942 Formosans
116, 241, 433

"Before we examine the progress that has been made in the production of the most important crops, let us try to evaluate their relative importance in the agriculture of Taiwan. The following table [See following slips, page 49 for table--analyst] gives their gross value for several years (1). It would, of course, be much better to have net

1. Only those products are given, the gross value of which is now over one million yen.

values, i.e. the gross value minus cost of materials, used in production, but these are not available.

This table reveals that Taiwan is an island of two main crops--rice, which accounts for more than half the gross value, and sugar cane."

4:Grajdanzev--48 [2] S-4 (no date) 1942 Formosans
116, 241, 439, 656, 177.45 Japan
636.45

"Rice, as we shall see, is a cash crop; probably not less than two-thirds of the crop finds its way to the market. Sugar cane which constitutes from 12.2 to 19.3 per cent of the total, has special importance because the whole crop is marketed. Sweet potatoes and vegetables are chiefly for home consumption. Next in importance, in the order named, are tea, bananas, groundnuts, pineapples, tobacco, jute, and cassava. This almost complete dependence on rice and sugar cane is the result of government policy, as before 1905 the distribution of cultures was not so specialised. But now Taiwan has become a part of the economy of Japan and its function is to serve that country's needs."

:Grajdanzev--48 [3] S-4 (no date) 1942 Formosans
16. 241, 311

"Let us now see what part the same crops occupy in the sown area of Taiwan and ompare this data with gross value of production."

4:Grajdanzev--49-51 S-4 (no date) 1942 Formosans-1-5
116, 241, 433

"Gross Value of Agricultural Production in Taiwan
(Million yen)

	1921	1933	1935	1936	1937	1938
Rice	88.7	124.9	197.2	214.0	208.8	237.9
Sugar cane	38.9	29.0	55.2	54.4	64.3	78.2
Sweet potatoes	15.9	20.5	25.4	38.3	27.9	29.5
Bananas	5.9	5.7	6.6	6.8	8.1	10.0
Pineapples	.4	2.0	2.6	3.1	3.1	4.0
Groundnuts	1.9	2.3	3.5	3.9	4.1	3.9
Jute	.5	.8	1.8	1.4	1.5	2.5
Tea	4.0	3.9	6.4	7.4	10.3	9.2
Tobacco	1.0	.9	1.2	1.6	2.1	2.6
Cassava	...	...	...	...	1.4	1.2
Other cereals, beans, vegetables, fruits	12.5	15.7	20.1	11.4	27.2	26.3
Animal products	31.6	32.2	41.0	46.0	49.2	54.9
Total	201.3	237.9	361.0	388.3	413.7	460.2
As percentages of total						
Rice	44.1	52.5	54.6	55.1	50.5	51.7
Sugar cane	19.3	12.2	15.3	14.0	15.5	17.0
Sweet potatoes	7.9	8.6	7.0	9.9	6.7	6.4

4:Grajdanzev--49-51 S-4 (no date) 1942 Formosans-2
116, 241, 433

As percentages of total	1921	1933	1935	1936	1937	1938
Bananas	2.9	2.4	1.8	1.8	2.0	2.2
Pineapples	.2	.8	.7	.8	0.8	0.9
Groundnuts	.9	1.0	1.0	1.0	1.0	0.8
Jute	.3	.3	.5	.3	0.4	0.5
Tea	2.0	1.6	1.8	1.9	2.5	2.0
Tobacco	.5	.4	.3	.4	0.5	0.6
Cassava	...	...	...	...	0.3	0.3
Other cereals, etc.	6.2	6.6	5.6	2.9	7.9	5.7
Animal products	15.7	13.6	11.4	11.9	11.9	11.9
Total	100	100	100	100	100	100

[50]

Crop Area In Taiwan
(1,000 ko)

	1921	1933	1935	1936	1937	1938
Rice	510.8	694.4	699.7	702.7	678.1	644.8
Sugar cane	119.9	84.3	121.6	128.3	124.6	134.2
Sweet potatoes	124.5	138.1	142.5	144.5	143.3	138.7
Bananas	6.1	19.2	22.8	24.2	24.1	23.9
Pineapples	1.3	6.6	7.0	8.0	8.9	8.9
Groundnuts	24.4	30.7	31.5	31.7	32.4	32.1

Crop Area In Taiwan [Cont.]
(1,000 ko)

	1921	1933	1935	1936	1937	1938
Jute	2.1	3.0	7.2	5.5	5.2	8.6
Tea	39.1	45.8	42.6	43.0	43.5	43.4
Tobacco	1.4	.8	1.1	1.3	1.5	1.7
All others	190.4	134.1	102.7	109.4	154.2	179.7
Total*	1,020 †	1,159 †	1,176	1,200	1,216	1,216

* Since the figures of total crop area are not available, the total was calculated in the following way: to the total cultivated area is added the double-crop area of paddy fields for each year. The line 'others' was secured by subtraction from the total.

Source: Nogyo nenkan, 1939-40, pp. 640, 647-652; for 1938, Takumu tokei.

† Approximate figures.

	As percentages of total					
	1921	1933	1935	1936	1937	1938
Rice	50.2	60.0	59.4	58.5	55.8	53.0
Sugar cane	11.7	7.3	10.3	10.7	10.2	11.0
Sweet potatoes	12.2	11.9	12.1	12.0	11.8	11.4
Bananas	.6	1.7	1.9	2.0	2.0	2.0
Pineapples	.1	.6	.6	.7	.7	.7
Groundnuts	2.4	2.6	2.7	2.6	2.7	2.7
Jute	.2	.3	.6	.5	.4	.7
Tea	3.8	4.0	3.6	3.7	3.6	3.6
Tobacco	.1	.1	.1	.1	.1	.1
All others	18.7	11.5	8.7	9.1	12.7	14.8
Total	100	100	100	100	100	100

[51] Rice occupies a predominant position in this table also—from fifty to sixty per cent of the crop area is under rice—but here second place is occupied by sweet potatoes, while sugar cane is third. Then, in order of importance, come tea, groundnuts, bananas, pineapples, jute, and tobacco. It would be a mistake to conclude by comparing percentages of value and of area in the last two tables that rice, for example, is less profitable to cultivate in Taiwan than sugar cane, because in 1937 rice occupied 55.8 per cent of the

area and brought only 51.8 per cent in value, while for sugar cane the corresponding percentages were 10.2 and 16.0. Even if one ignores the cost of labor, one must take into consideration the following circumstances: the growth-cycle of sugar cane is eighteen months in Taiwan, while on more than half the area under rice two crops are taken yearly; sugar cane demands a greater amount of fertilizer, which must be purchased. These considerations suggest that the unwillingness on the part of the farmers to plant more sugar cane for sugar companies is probably due not only to the conservatism of the farmer, but is based on sound judgement. Again, the fact that the area under sweet potatoes is 11.8 per cent while the value is 6.9 per cent cannot be taken as proof that sweet potato culture is less profitable to the farmer than sugar cane. They are now consumed largely on the farm, and if the farmers were to reduce the existing acreage of sweet potatoes, their price would be quite different from what it is now."

4: Grajdanzev--51 S-4 (no date) 1942 Formosans
116, 243, 439, 177.43 Japan
636.43

"The unique position of rice in the economy of Taiwan justifies a more detailed discussion. Rice culture was important before the Japanese came to the island and rice exports to China were quite considerable. However, since the Japanese took control the production of rice has doubled in about a quarter of a century and more than half of the total production now goes to Japan. The credit for this achievement is usually given to the Japanese administration and the expansion has been taken as proof of the beneficent results of Japanese rule."

4:Grajdanzev--52 S-4 (no date) 1942 Formosans
116, 243, 311

"Below we give the data on rice production since 1905. Area under rice

(1,000 ko)	1905	1915	1920	1925	1930	1935	1936	1937	1938	1939
Paddy	417	462	471	526	592	657	662	640	617	...
Dry field	44	44	45	42	41	42	41	38	28	..
Total	461	506	516	568	633	700	703	678	645	646
Yield per ko (koku)										
Paddy	9.7	9.8	9.7	11.7	11.8	13.3	13.9	14.0	15.5	14.2*
Dry field	7.7	6.4	6.1	6.9	8.8	8.7	8.4	7.7	7.8	
Crop (1,000 koku)										
Paddy	4,016	4,503	4,567	6,154	7,010	8,759	9,213	8,937	9,599	...
Dry field	338	281	276	289	361	364	345	295	218	...
Total	4,354	4,784	4,843	6,443	7,371	9,123	9,558	9,232	9,817	9,152
Price (yen per koku)	6.6	7.8	22.5	25.2	14.6	21.6	22.4	22.6	24.2†	25.6†

* Average for both paddy and dry field.

† Approximate figures."

2

4:Grajdanzev--52-53 S-4 (no date) 1942 Formosans
116, 243, 311, 656, 177.24 Japan
636.24

"Thus from 1905 to 1920 the area under rice expanded slowly and the yield per ko showed no increase, while from 1920 to 1935 the area under rice increased by thirty-seven per cent and the yield per ko of paddy increased also by thirty-seven per cent. The explanation of this difference does not lie in Taiwan, but in Japan proper. After 1920 the leaders of the Japanese government became worried over the rice supply of the Empire. The rapid growth of population and the insufficiency of domestic production brought a sharp increase of rice imports from abroad. From the annual average of ¥16.6 million in 1913-17 Japan's imports of rice rose to an annual average of ¥72.0 million in the period 1918-22.

Besides the difficulty of balancing payments abroad, the government did not like this dependence on foreign supplies in time of war. A program for the increase of rice production in Japan proper, Korea and Taiwan was worked out and the necessary measures applied, such as the construction of dams and canals for irrigation purposes, the enlargement of the net-[53] work of agricultural experimental stations, the distribution of small subsidies to new producers of rice as well as to those who would produce new varieties of rice selected by the stations. The fact that these measures were quite effective shows not only the efficiency of the administration but also the ability of the Chinese farmers to act in response to economic factors."

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464; 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

4:Grajdanzev--54-55 S-4 (no date) 1942 Formosans -1-2
116 243, 435, 655, 177.24 Japan
636.24

"Space does not permit us to analyse the rice situation in detail. The table below shows the rapid process of displacement of other kinds of rice in Taiwan by horai.

Crop Area Under Various Kinds of Rice in Taiwan
(In thousand ko)

	1905	1915	1920	1925	1930	1935
Common Taiwan rice	393	423	417	370	370	263
Clutinous, round	24	39	53	81	68	73
Glutinous, long	...	...	...	...	19	18
Horai	0	0	0	72	135	305
Total	417	462	472	523	592	659

Yields of Various Sorts of Rice in Taiwan were as Follows
(1930-35 average)

	(koku per ko)
Common Taiwanese	12.1
Round glutinous	10.2
Long glutinous	11.7
Horai	14.6

As may be seen, the difference is quite pronounced—from 2.5 to 4.4 additional koku per ko, or an increase in yield of twenty to forty per cent as compared with other

varieties.

But on the other side, the production costs of one ko of common rice in 1925 were ¥223.8, while for horai the amount was ¥342.0, and—what is also very important—whereas thirty-four per cent of the production costs of common rice consisted of the farmer's own labor, home-prepared fertilizers (which the farmer does not buy) etc., these costs in the production of horai amounted to only twenty-two per cent. In other words a much greater part of the expenses on horai consisted of sums paid for commercial fertilizers, etc. and as a result, the farmer does not receive so much profit from horai. but is compelled to plant it because he cannot sell his own [55] kind of rice in the Japanese market. The expansion of area under horai is therefore not so much a sign of prosperity, as it would at first sight appear, as a sign of the growing need of the farmer for money to pay taxes, to pay for irrigation, and to pay for the tobacco which he formerly produced himself (and is now a state monopoly)."

"Of course, the inclusion of Taiwan—a region of low prices—in Japan's customs area of high prices should result in an increase of prices in Taiwan, but this does not mean that Taiwan's farmers were necessarily the gainers. All prices were raised and it is by no means certain that this rise benefited farmers and workers. We may find an indirect answer to this question by calculating the average per capita consumption of cereals in Taiwan. Rice is the principal food for the islanders, and all other cereals produced there amount to less than 0.5 per cent of the production of rice and, consequently, may be neglected. Import and export data are available and Japan may serve as the standard of comparison. To simplify matters we assume that the crop of a given year and the imports of that year are consumed in the same year.

Rice Consumption in Taiwan*

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1905	4,354	57	620	...	3,039.8	1.25
1910	4,187	43	648	3,582	3,250.0	1.10
1915	4,785	64	767	4,082	3,479.9	1.17
1920	4,842	160	619	4,383	3,655.3	1.20
1925	6,443	718	2,057	5,104	3,993.4	1.28

*Footnote on next page.

4:Grajdanzev--55 S-4 (no date) 1942 Formosans-2
116, 243, 262, 435, 439

Rice Consumption in Taiwan* [Cont.]

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1930	7,480	97	2,220	5,357	4,592.5	1.17
1935	9,122	7	4,493	4,636	5,212.4	.87
1936	9,559	7	4,788	4,778	5,452.0	.88
1937	9,233	7	4,842	4,398	5,609.0	.78
1938	9,619	15	4,878	4,756	5,747.0	.83
1939	9,152	8	4,106	5,054	5,880.0	.86

* In calculations made for the compilation of imports and exports before 1930 one koku of rice is taken as equal to 2.7 piculs.
Sources: for 1930-39: Keizai nenkan; for 1905-25: for production, Takahashi, op. cit.; for trade, Nippon boeki seiran. The last column is calculated."

4:Grajdanzev--56 S-4 (no date) 1942
116, 171, 262, 439, 511, 177.43
636.43

Formosans -1-2
Japan

"Taiwan is famous for its rice production of which it exports almost half. The opinion of Japanese economists is that exports of Taiwan's rice to Japan brought to the island such prosperity that some measures had to be taken to curb it. But the data presented in this table [See page 55--analyst] show quite a different picture. In 1905 the annual per capita consumption of rice in Taiwan was about 1.25 koku. Then it fell, but an increase in production brought it back to that level in 1925. At about that time the heavy exports of Taiwan's rice to Japan started: These exports brought a sharp fall in per capita consumption—it fell to 0.87 in 1935 and has remained on about the same level since that time. Now, 0.87 koku per year is about 0.8 pound per person per day. It was pointed out that the production of other cereals in Taiwan is almost nil. Only sweet potatoes form a significant addition to the diet (more than one lb. per person per day). Some wheat flour is imported but this amounts to only two to three per cent of the exports of rice (by weight).

These figures are for the total population. But the urban dwellers are probably better off than the farmers, so that the average for farmers should be less than 0.87 koku. Exports of rice from Taiwan to Japan cannot therefore be taken as a sign of Taiwan's prosperity, for they resulted in a fall in standards of living for the Chinese in Taiwan. Data for the last five years show that the annual average consumption of rice in Japan is about 1.10 koku, while in Taiwan it is 0.84. In other words, per capita consumption of rice in

4:Grajdanzev--56 S-4 (no date) 1942 Formosans-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

Japan is thirty-one per cent higher than in Taiwan, though the Japanese consume in addition considerable amounts of wheat, barley, and other cereals, which are almost entirely absent in Taiwan, to say nothing of sweet potatoes."

4:Grajdanzev--56-57 S-4 (no date) 1942 Formosans
116, 241, 439, 441, 655, 177.43 Japan
636.43

"The price ruling on the Tokyo market is, however, not the price which the farmer in Taiwan receives. Between him and the Tokyo or Osaka market are landlords, usurers, a chain of local dealers in rice, big Japanese importers and exporters, and Japanese shipping companies. Each one of them makes profits, [57] and good profits, so that little remains for the farmer, and especially the tenant-farmer.

However, the advice of Takahashi and others fell on fertile ground and, beginning with November 1, 1939, the export of rice from Taiwan to Japan became a government monopoly. The government-general decides how much rice should be produced, works out a plan of exports for each month, buys rice from the special local organizations, and sells it to a Japanese company, Nippon Beikoku Kabushiki Kaisha (Japan Rice Corporation). The other suggestion of the Japanese economists concerning the lowering of the price of rice in Taiwan may also be attempted, though it will be difficult to realize in a time of war inflation and rice shortage in Japan."

4:Grajdanzev--57 S-4 (no date) 1942 Formosans
116, 249, 474, 177.24 Japan
636.24

"The culture of sugar cane and the development of the sugar industry is considered one of the most spectacular achievements of the Japanese administration in Taiwan. Here we shall discuss only the culture of sugar cane; the sugar industry as such will be examined later in the section on industry. Sugar cane is an indigenous culture and was not introduced into Taiwan by the Japanese. The Dutch found it there in the 17th century and encouraged it. Before the advent of the Japanese it was produced by Chinese producers' cooperatives, which well deserve a special investigation because of their original character. They not only raised sugar cane, but also extracted the sugar in their old-fashioned mills. The industry had so developed that in 1893, ninety-eight million pounds of sugar were exported and probably not less than that amount was consumed in Taiwan, so that total production may be estimated at about 200 million pounds. This amount was not reached again until twenty years later.(1) With the coming of the Japanese the guerilla

1. Japanese sources say that at the time of Japan's occupation of Taiwan the annual output was only about 80,000,000 kin (104 million pounds). This can hardly be true if in 1893 exports alone equalled 98,000,000 pounds. In 1880 exports equalled 141.5 million pounds.

war continued for several years and ruined the industry."

4:Grajdanzev--57-59 S-4 (no date) 1942 Formosans-2
116. 249, 439, 654, 177.24 Japan
636.24

"At the time of annexation the Japanese [58] government was anxious to improve their 'unfavorable' balance of trade with foreign countries, and the cultivation of sugar cane in Taiwan appeared to be an excellent means of doing this. Japan's imports of sugar at that time were in excess of twenty million yen—about ten per cent of her total imports, and at times equal to the 'unfavorable' balance of trade. Sugar cane is grown in Japan, but climatic conditions and limited area make it impossible to increase the total production significantly. At the most it can supply only a small percentage of the domestic demand for sugar. But Taiwan with its tropical climate could be successfully used for this purpose.

As early as 1896 seeds of improved types of sugar cane were imported from the Hawaiian Islands. In 1898, Kodama, the Governor-General of Taiwan, and his energetic Governor Goto began conferences with Japanese financiers on the question of investment in the sugar industry of Taiwan. A special investigation of the outlook for sugar cane culture in Taiwan was entrusted to Dr. Inazo Nitobe, who presented his report in 1901. In this report Dr. Nitobe recommended that the irrigated area and the area under cultivation be increased through various measures of encouragement, assistance, and direct government action, the establishment of sugar research stations, and the introduction of improved varieties of sugar cane, while other recommendations were made concerning sugar manufacture. The government followed these recommendations, established experimental

stations, imported new varieties of sugar cane from Hawaii and Java, and paid special subsidies and grants to the manufacturers and farmers to induce them to follow its policy. Up to March 31, 1932, it had paid about thirteen million yen in subsidies. Moreover, in 1903 a relatively moderate protective tariff on sugar imported into the Japanese Empire was introduced, the rate being 0.8 sen per kin (0.6 kg.) on No. 20 standard and higher. This rate was increased to 4.65 sen per kin in 1911 on No. 21 standard and higher, to 5.3 sen in 1927 on No. 22 standard and higher, and to 7.15 sen in 1932. As a result—this is the official version—wealth came to the sugar [59] industry and to the island 'and this has resulted in the present industrial prosperity'."

4:Grajdanzev--59-60 S-4 (no date) 1942 Formosans-1-3
116, 249, 311

"The area under sugar cane, the cane crop, and yield per ko were increasing in Taiwan as follows:

	Area (ko)	Cane crop (in million kin or 600 metric tons)	Yield per ko (in 1,000 kin or 600 kg)
1905-06	35,158	1,690.2	48.1
1908-09	39,035	2,219.5	56.9
1914-15	85,150	3,933.8	46.2
1917-18	150,450	6,817.5	45.3
1919-20	108,376	4,382.5	40.4
1920-21	142,032	6,752.8	47.5
1921-22	123,233	7,793.7	63.2
1926-27	101,531	7,412.0	73.0
1927-28	108,318	9,697.6	89.5
1928-29	120,046	12,291.9	102.4
1929-30	109,397	11,618.4	106.2
1930-31	99,094	10,944.7	110.4
1931-32	109,496	13,415.2	122.5
1932-33	83,690	8,782.0	104.8
1933-34	91,163	8,883.8	97.4

	Area (ko)	Cane crop (in million kin or 600 metric tons)	Yield per ko (in 1,000 kin or 600 kg)
1934-35	121,628	13,477.3	110.8
1935-36	128,329	13,190.4	102.8
1936-37	124,555	14,271.9	114.6
1937-38	134,208	15,101.1	112.5
1938-39	149,834*	19,602.1*	130.8

* There are reasons for questioning the data for 1938-39. If they are accurate, the acute shortage of sugar in Japan in 1939-40 is hard to explain. Japanese official figures for the rice crop in 1939 were also extraordinarily optimistic in spite of drought, but it is hard to understand why it was necessary to import rice hurriedly from foreign countries, wasting scarce foreign exchange if there was such an abundance of rice at home. The story is the same with sugar. Why was it necessary to introduce sugar ration cards cutting the average per capita consumption in half, if there was a tremendous increase in production? The estimates for 1940 reveal a sharp fall.

In 33 years the area under sugar cane increased almost four times, total production twelve times, and the yield per ko 2.7 times.

4:Grajdanzev--59-60 S-4 (no date) 1942 Formosans-3
116, 249, 311

In 1939 the Japanese Empire occupied seventh place (1) among [60] producers of sugar

1. Others in order of importance were Cuba, India, U.S.S.R., Germany, U.S.A., Java.

and fourth place among producers of cane sugar. The Japanese sugar industry became a factor of world importance. It is true that Japan exports very little sugar, but her absence from the world market as a purchaser is of considerable importance."

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-1-2
116, 249, 433, 458, 654, 177.24 Japan
636.24

"There can be no doubt as to the importance of sugar cane cultivation and of the sugar industry in Taiwan and the degree of success achieved by the Japanese government and Chinese cultivators.

However, a close examination of the table [See page 59, category 116--analyst] reveals some interesting features. It was pointed out how much effort was expended by the officials on the improvement of sugar cane culture. But in spite of all the efforts of the government and of the experimental stations the yield per ko did not show any signs of improvement during the first fifteen years. If the development was as steady as is officially described, why then was the increase of production up to 1921 taking place exclusively as a result of the increase in the planted area?

Further, the increase in sugar production may also come through the increase of sugar content in the juice of the sugar cane. It is interesting to note that in this respect too, little, if any, improvement is noticed up to 1922, but that after that year the sugar content rose from 9.5 per cent in 1922 to 13.2 per cent in 1935 and in this year was considerably higher than in Java or Cuba (12.3 and 11.6 per cent respectively). Finally, the table shows that after the peak of production (and area) was reached in 1917-18, production fell, then rose slowly up to 1928-29, fell sharply by almost thirty per cent and then began to rise again.

The explanation of these fluctuations is that the Taiwan sugar industry (and, as a consequence, also the cultivation of sugar cane) passed through several crises of the most severe character. 'Overproduction' is a word familiar to this industry, and to the planters also. Of course, it must be emphasized that this 'overproduction' is of a special character, because the consumption of sugar in Japan is relatively low and, though physically the demand of the population for sugar [61] is not satisfied, there is insufficient purchasing power available to buy it.

All this is very important for the problem in hand. The government's efforts were probably as great from 1900 to 1922 as afterward, subsidies were given more lavishly than later on, but the results in the first twenty years were rather meagre. In other words, the development was due not so much to the government's and the manufacturers' efforts as to some other factors inherent in the development of the economy of Taiwan and Japan."

4:Grajdanzev--61 S-4 (no date) 1942 Formosans
116, 249, 423, 471, 177.47 Japan
636.47

"The old type of sugar cooperatives dominating the industry before 1895 disappeared with the advent of capitalistic forms of enterprise in Taiwan. Production of sugar is now carried on in modern mills which are the property of the Japanese sugar companies possessing tremendous amounts of capital (several hundred million yen). Step by step these companies acquired a huge area of cultivated land——from 63.2 thousand ko in 1925 this area increased to 93.2 thousand ko in 1935. The latter figure amounts to more than ten per cent of the cultivated area of the island, but in the regions where sugar cane is cultivated the companies own more than twenty per cent of the area under cultivation (1).

1. Actually their influence is greater than these figures suggest because they rent about 20,000 ko of land.

However, it would be a mistake to think that this huge area is used by the manufacturers for sugar cane plantations. They plant only about 18,000 to 25,000 thousand ko with cane, while all other sugar cane is bought by them from the small farmers, i.e. about three-quarters of the total sugar cane production is supplied by 127,000 to 130,000 farmers, each planting on the average only half a ko."

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--62 S-4 (no date) 1942 Formosans
116, 241, 477, 427

"More than 110,000 ko of land are under control of the companies which for the most part they lease to the tenants. As will be shown later there is strong competition between tenants in Taiwan, and if the company does not supply the tenant with land, he may be ruined. He must therefore get land from the company and raise sugar cane on the conditions dictated by it."

4:Grajdanzev--62-63 S-4 (no date) 1942 Formosans
116, 241, 312, 471, 177.24 Japan
636.24

"By putting irrigation works at the service of the farmers (at a price) the government, the local bodies, and the companies [63] impose a condition that a certain part of the newly-irrigated area should be devoted to sugar cane. This stipulation may be to the advantage of the farmer or to his disadvantage, but it is clear that he is not free to decide."

116, 241, 249, 435.

"Although we have no reliable data concerning the profitability of sugar cane in Taiwan as compared with other crops, we can make certain calculations which will help us to see what the farmer gained from its cultivation. The average holdings of farmers did not increase after 1913 and therefore a larger income in these circumstances could be secured in only two ways—through an increase in yield or a rise in the price of sugar cane or both. The improved yields came as a result of the use of better seedlings, earlier ploughing, more careful attention, greater use of fertilizers, better irrigation. Some of these items demand more labor on the part of the farmer; almost all demand a greater expenditure in money. Let us now compare the receipts of the farmer per ko.

Receipts of Sugar Cane Cultivators in Taiwan

	1921	1927	1935	1936	1937
Yield per ko (1,000 kin)	63.2	89.5	102.8	114.6	112.5
Price per 1,000 kin (yen)*	9.6	7.6	3.4	4.1	4.5
Value per ko (yen)	696.7	537.0	349.5	469.9	506.3
Value per ko at 1913 prices, yen (approximately)	330.0	310.0	220.0	290.0	270.0

* For 1921-27 for the price 'the cost of raw material for manufacturers of sugar in Taiwan' is taken (Takahashi, op. cit., p. 216); for the later years. the price as it is given in the value of total production of sugar cane in Nogyo nenkan; the actual price is probably smaller.

Great accuracy cannot be claimed for these figures but they may give an idea of the trend. The yield since 1921 was doubled, but the receipts in deflated money do not show any improvement. This may be partially due to the fact that the general index of prices should not be used to deflate values in this case; a special index of prices paid by the farmer might show somewhat better results. But the expenditures which the farmer now incurs in order to secure these increased yields—fertilizers, irrigation, etc.—were not deducted, and if they are taken into consideration, one is forced to the conclu-[64] sion that some one other than the farmer got the benefits of the better yields."

4:Grajdanzev--64 S-4 (no date) 1942 Formosans -1-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon.

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane

Culture in Taiwan	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

4:Grajdanzev--64 S-4 (no date) 1942 Formosans-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4:Grajdanzev--64-65 S-4 (no date) 1942 Formosans
116, 171, 263, 511

"As with rice it is interesting to note the per capita consumption of sugar in Taiwan. Although almost ninety-five per cent of the sugar output is exported, per capita consumption of sugar in Taiwan was 15.9 kin in 1938, as compared with [65] 23.5 kin in Japan. In other words Japan's consumption is forty-three per cent higher than Taiwan's (1).

1. These figures are taken from Keizai nenkan, 1940, of Toyo keizai shimposha, pp. 205, 206."

4:Grajdanzev--65 S-4 (no date) 1942 Formosans
116, 245, 177.24 Japan
636.24

"Tea is an old Taiwan crop brought by the Chinese emigrants from Fukien. It was flourishing before the coming of the Japanese and in 1893 about twenty-one million pounds of tea (about sixteen million kin) were exported. It is largely a plantation culture and is now almost completely in Japanese hands, but exports under Japanese rule have not shown improved results. The total area under tea is 45,000 to 46,000 ko. In 1927 the Mitsui Gomei Kaisha alone held 17,000 ko of tea plantations and the Taiwan Takushoku Seicha Company 1,000 ko (1). Japanese plantation holdings are now probably much larger.

1. Yanaihara, op. cit., p. 34.

Tea plantations, which are chiefly in Taihoku and Shinchaku prefectures, occupy hill slopes and generally do not compete with other agricultural plants for area."

116, 245, 439, 511

"Tea produced in Taiwan is chiefly of three sorts—black tea, oolong tea (famous for its aroma) and pouchong tea 'wrapped'—paochungch'a. Production is as follows:

Production and Exports of Tea in Taiwan

Quantity (1,000 kin = 600 kg.)

	1914	1934	1935	1936	1937	1938
Oolong tea	...	5,292	5,280	5,049	3,487	4,519
Pouchong tea	...	5,666	5,685	5,923	4,905	5,929
Black tea	...	6,021	5,490	6,508	10,562	9,835
Total production, incl. others	22,000*	16,997	16,468	17,486	18,955	20,285
Exports		16,641	15,768	16,741	18,604	19,057

Values in thousand yen

	1934	1935	1936	1937	1938
Oolong tea	3,562	3,538	3,571	2,871	3,715
Pouchong tea	3,075	3,086	3,394	3,163	3,677
Black tea	4,250	3,964	4,518	7,418	6,844
Total Incl. others	10,894	10,594	11,486	13,452	14,237
Exports	11,047	9,325	10,200	12,851	12,742

* Approximately

Sources: Keizai nenkan; Nogyo nenkan; Taiwan Jijo.

4:Grajdanzev--65-66 S-4 (no date) 1942 Formosans-2

116. 245, 439, 511

[66] Average production for the last five years was 18,038,000 kin, average exports 17,362,000 kin."

4:Grajdanzev--66 S-4 (no date) 1942 Formosans
116, 171, 272

"Average consumption [of tea--analyst] in Taiwan was 676,000 kin or one-eighth of a kin per capita—not much for a tea-drinking nation and for a tea-producing island. In Japan the average annual per capita consumption of tea for the same period was 0.76 kin, (1)

1. The figure is calculated from the data on tea as given in the International Yearbook of Agricultural Statistics, 1939.

or five times as much as in Taiwan."

4:Grajdanzev--66 [21 S-4 (no date) 1942 Formosans
116, 245, 439

"Another important product is the banana. The tree is indigenous to Taiwan, but only under the Japanese have bananas become an important export item. The growth of production may be seen from the following table:

	1909	1921	1935	1936	1937	1938
Area (thousand ko)	0.6	6.1	20.6	22.5	21.9	21.5
Production (million kin)	10.5	86.2	322.5	339.5	364.3	336.8
Exports (million kin)	...	...	231.9	228.7	261.3	222.5
Value of exports (million yen)	...	...	10.2	11.2	12.3	17.6

As the figures show, a considerable portion of the crop is consumed in Taiwan—18.5 kin (11.1 kg.) per person per year, a fact which may be partially explained by the perishability of the fruit. The total value of bananas produced in Taiwan in 1937 was estimated by authorities at ¥8,133,000, but exports comprising only about two-thirds of the crop for the same year, were valued at Y12.3 million, which means traders and carriers were getting more than half the value of exports.

This export is very likely to develop farther. Production is concentrated in Taichu, Tainan, and Takao prefectures. In Taichu the fruit is produced all the year round, but in Takao it ripens only from April to July."

4:Grajdanzev--66-67 S-4 (no date) 1942 Formosans
116, 245, 255, 464, 471, 177.24 Japan
636.24

"Pineapples were cultivated in Taiwan before the occupation of the island by the Japanese, but only after the introduction of canning did the industry begin to expand rapidly. The fruit is raised on the hill slopes and thus does not compete with [67] cereals or sugar cane. The authorities estimate that more than 20,000 ko can be used for pineapple plantations, but the area under cultivation is now only 9,000 ko. Data on production are given below.

Pineapple Production in Taiwan

	1921	1935	1936	1937	1938
Area under pineapples (1,000 ko)	1.3	7.0	8.0	8.9	9.9
Crop (1,000,000 kin)	8.9	87.1	110.2	107.8	116.0
Value (1,000 yen)	367	2,626	3,129	3,115	...
Value of exports of (¥1,000) canned pineapples	865	7,306	5,857	7,600	10,620*

* Exports of canned and fresh pineapples.

Sources: Nogyo Nenkan; for 1938, Taiwan Jijo.

Production, chiefly of the plantation type using hired labor, is chiefly in Japanese hands."

4:Grajdanzev--67-68 S-4 (no date) 1942 Formosans
116, 248, 433, 656, 177.24 Japan
636.24

"As will be seen, cotton does not occupy an important place in Taiwan's economy. But it does play an important part in Japanese imperial policy. As was mentioned, the Japanese authorities did not spare efforts to encourage the production of sugar cane and rice in Taiwan, not because it was in the interests of the island, but because it benefited Japan proper. Since 1927 the sugar industry has suffered from overproduction and in 1935-36 another spectre appeared on the Japanese horizon--the overproduction of rice. A discussion began as to how the production of rice in Taiwan might be limited. A rice monopoly was suggested and was later applied, but for a somewhat different purpose. Instead of rice, the authorities proposed to encourage the production of textile fibers and oilseeds in Taiwan and, partly owing to the shortage of foreign exchange in time of war, more attention was given to cotton than to anything else. A plan was worked out for the production of 100 million kin of cotton at the end of the ten-year period beginning with 1937, on an area of 100,000 ko, i.e. more than ten per cent of the cultivated area of the island. The first year's crop (according to the Japan Year Book, 1939-40 [68] is estimated at about 6 million kin, or, already six per cent of the goal. We do not know on what the data of the Japan Year Book are based, but in Taiwan Jijo, published in December 1939, the plan provided for an area of only 50,000 ko in 1946 and the production of only 35 million kin. According to the same source, there were 4,800 ko under cotton in 1938 and the crop was 1,816,983 kin--as one may see, very far from 6 million kin. The average yield was 2.26 quintals per hectare--a low figure for a region of intensive agriculture."

4:Grajdanzev--68 S-4 (no date) 1942 Formosans
116, 231, 492, 177.23 Japan
636.23

"Although it has been said that Taiwan is well stocked with domestic animals and fowls, this requires some qualification. The animals bred are for draft purposes and for production of foodstuffs. In Taiwan either the water buffalo or some type of cow is used for draft purposes. Horses, donkeys and mules are almost entirely absent. The immigrant from Fukien had no place for the horse in his economy, but the Japanese government, in its efforts to supply the army with horses, worked out a ten-year plan and a thirty-year plan for Taiwan. According to the first, the number of horses was to be increased to 9,000; according to the second presumably to be applied simultaneously, the number of horses was to be raised to 110,000 head. In a region where rice occupies sixty per cent of the area, horses cannot be used for work and it is hardly conceivable that the poor farmers of Taiwan will begin to raise Arabian and Anglo-Norman horses as the plan foresees (1). The actual number of horses in 1938 was rather more than 300 while forty

1. Taiwan Jijo, p. 479; figures for the plans are taken from Sekai Nenkan, 1939.

years ago there were two hundred to three hundred horses."

4: Grajdanzev--68 [2] S-4 (no date) 1942 Formosans
116, 241, 471, 656, 177.65 Japan
636.65

"These examples--the cotton plan and horse-breeding plan--are extremely significant. The government officials work out plans which can hardly be called realistic and yet the successes of agriculture in Taiwan are very frequently ascribed to the government's efforts and plans."

"The draft animals in Taiwan are the water buffalo and, second in importance, the 'yellow cow'. The water buffalo [69] is a strong animal, slow in movement, which likes to wade in water, and is satisfied with coarse fodder. Its meat is not very palatable. The yellow cow is less powerful but more alert, and its meat is much better than that of the buffalo. Milch cows in Taiwan are few in number—in 1938 they were estimated at 1,275. No statistics of the number of cows and buffaloes of working age are available, but the following total figures will suffice to show the trend (in thousands):

	1921	1932	1933	1934	1935	1936	1937	1938
Water buffaloes	307.9	286.3	302.2	306.9	305.8	292.3	282.1	259.7
Cows of all kinds	113.6	80.4	84.0	88.0	84.7	78.6	76.3	65.4
Total	421.5	366.7	386.2	394.3	390.5	370.9	358.4	325.1
Cultivated area (1,000 ko)	773.8*	839.7	845.5	851.3	856.8	872.3	883.3	884.4
Area per head of draft animals (in ko)	1.83	2.29	2.19	2.16	2.19	2.35	2.46	2.72

*1922.

The average number of ko per head of draft animals is therefore increasing and unless the quality of the buffalo is improving remarkably, the situation is becoming less and less

favorable. (1) Though official sources speak about improvement in the quality of pigs and

1. It is important to note also that the number of females among the draft animals is falling sharply: in 1921 there were 158,000; in 1933, 140,000; in 1937, 127,000.

horses, they are silent concerning the buffalo. In this respect Taiwan is worse off than the Philippines or the Netherlands Indies. In the table only cultivated land was taken into consideration; the crop area is in fact larger, and was growing faster than the arable area, so that the situation is actually worse than the figures suggest."

4:Grajdanzev--69-70 S-4. (no date) 1942 Formosans
116, 231, 492, 427, 422

"Official sources say that there is about one animal per farming family. (1) But this

1. Taiwan Jijo, p. 478.

is inadequate. According to the official statistics for 1937, the number of farming families was 427,397. If we take this figure (it was mentioned above that the actual number of families should be larger) for 1938, then only 0.76 animal was available for each family, if only farmers had cows [70] and buffaloes. This figure includes calves, is also an average figure, and it will be shown later that the wealth of the farmers, at least as expressed in land, is not concentrated around the average. The important conclusion which follows is that at least half the farmers in Taiwan have no draft animals, but are compelled either to work without them or to hire them from the richer farmers. Those who are acquainted with rural life know that dependence on one's neighbour for plough animals is likely to create very serious problems."

"The number of other animals in Taiwan may be seen from the following table (in thousands):

	1921	1932	1933	1935	1937	1938
Sheep	...	0.3	0.3	0.4	0.3	...
Goats	...	90.1	87.0	78.3	70.4	...
Pigs	1,281	1,754	1,807	1,873	1,849	1,827
Poultry	4,452	5,267	5,747	6,466	7,703	7,947
Geese	190	306.3	319.6	370.8	401.5	394.2
Ducks	890	1,379	1,496	1,772	1,958	2,225
Turkeys	...	9.2	11.2	18.5	30.8	35.3

As regards pigs and poultry the situation is more favorable: there was a considerable increase in pigs, poultry, geese, and ducks. On the average there are four pigs (including sucklings) and eighteen to nineteen hens per farming family (assuming that only farmers keep pigs and fowl). These are an important source of meat and income. (1) The develop-

1. The official estimate of an average per capita pork consumption of more than 28 kin a year (37 pounds) is probably an exaggeration. In 1938 one million pigs were killed. If consumption per capita averaged 28 kin, each pig must have weighed 160 kin, but the official estimate of the average weight is 130 kin.

ment is a consequence of the growth of the sugar industry—the cane waste can be utilized

on the farm as fodder. In this respect Taiwan is much better off than Korea. But one should not exaggerate the importance of these figures. It was officially estimated that in 1937 the gross value of products of animal breeding in Taiwan was ¥49.2 million or slightly more than twelve per cent of total agricultural production."

4:Grajdanzev--70-71 S-4 (no date) 1942 Formosans
116, 231, 177.23 Japan
636.23

"The government also expends much effort in encouraging sericulture. Its experts point out that conditions in Taiwan [71] are very favorable for this industry: the mulberry tree has leaves the year round, there are no pests as in Japan, and production costs are low. But the farmers do not seem to take willingly to this occupation, for in 1933 the value of raw silk produced in Taiwan was ¥74,000 whereas in 1937 it had fallen to ¥50,000."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages may be considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

4:Grajdanzev--72 S-4 (no date) 1942 Formosans
116, 127, 421

"In many cases it has been shown that the Taiwan official statistics are not entirely satisfactory. But the problems which we shall now discuss, important though they are, are given much less attention in the available official sources. These questions are: how many farmers own their land and how many rent it; how is the land distributed among the landowners and among the cultivators."

4:Grajdanzev--72-73 S-4 (no date) 1942 Formosans-1-2
116, 127, 162

"First of all, the total number of those occupied in agriculture should be known. It may be given as the number of families—the easiest and perhaps the best way for certain purposes, because in countries where agriculture is the most important economic activity it is usually the family which works as a unit. Another way is to give the number of active persons occupied in agriculture. This method is good for comparison with the number of persons occupied in other economic fields where the family does not play any part in production, but its application to agriculture encounters certain obstacles: it is not easy to determine the number occupied because some members of the family are only partially employed in agriculture and some only seasonally (e.g. children in harvesting). Finally, the total number of persons dependent on agriculture may be given—farmers and members of their families not occupied elsewhere. Current statistics in Taiwan use the first and the last methods; they give the number of families occupied in agriculture and the 'agricultural population'. The census statistics give the number of persons actively occupied [73] in agriculture or, as it is often expressed, the number gainfully employed in agriculture. Unfortunately, these statistics are not consistent. It was shown above that, according to the census of the population taken in 1930 (the latest in which the question of occupation was asked), 71.4 per cent of the Chinese and 67 per cent of all the population gainfully employed were occupied in agriculture and forestry. But forestry as a principal occupation gives work to very few; it is mostly a sideline occupation for the

farmer, and its part in the economy of Taiwan is very small. If one takes into consideration the fact that the families in rural localities have more children per family than families in the cities, then the 'agricultural population' in Taiwan should constitute about 70 or 75 per cent in 1930. Since that date no revolutionary changes have occurred."

"Industry has expanded relatively rapidly, but even in 1935 there were only 67,255 workers in industrial enterprises employing more than four workers each or having a prime-mover. Nevertheless, according to the current official statistics which follow, 'agricultural population' of Taiwan formed only about fifty per cent of the population in 1938.

Changes in Agricultural Population in Taiwan

	1935	1937	1938
Total families (1,000)	897.6	...	...
Families occupied in agriculture (1,000)	419.9	427.4	...
Agricultural families as % of total	46.7	...	...
Total population (1,000)	5,212.4	5,609.0	5,747.0
'Agricultural population' (1,000)	2,790.3	2,880.4	2,896.4
'Agricultural population' as % of total	53.6	51.3	50.4

As early as 1935, according to this table, the families occupied in agriculture made up only 46.7 per cent of the total, while the agricultural population made up 56.3 per cent in that year and only 50.4 per cent in 1938. According to the census statistics, in the 25 years between 1905 and 1930 the Chinese population occupied in agriculture fell

only from 75.5 per cent to 73 per cent of the total Chinese population, while the current statistics show a fall of 3.2 per cent (of the total population) in three years. Even before 1935 the number of [74] agricultural families showed a definite lag as compared with the growth of total population, as may be seen from the following table.

Comparison of Changes in Total Population and in Agricultural Families in Taiwan*

Year	Total population (1,000)	Index of growth	Year	Agricultural families (1,000)	Index of growth
1905	3,039.8	100	1903	383.1	100
1925	3,993.4	131	1924	390.2	102
1930	4,592.5	151	1929	407.7	106
1935	5,212.4	171	1935	419.9	109
1937	5,609.0	185	1937	427.4	111
1938	5,747.0	189	1938	424.5	111

*The years given for each category do not always coincide because of absence of data: we have taken the years for which the information could be found.

In thirty-three years the population of Taiwan increased by eighty-nine per cent while on the basis of these figures the number of families engaged in agriculture, increased

by only eleven per cent. Such changes are of course quite possible. The agricultural population might send its 'surplus' to cities, where they may find employment in industry, commerce, public services and so on. But as was mentioned already, the number of workers in industry was very small in 1935 and there is no indication that it has increased considerably in the last three or four years. The difference between sixty-five and fifty per cent is, in absolute numbers, about 900,000 persons, or between 500,000 and 550,000 gainfully employed persons--quite a considerable figure for even a great country."

4:Grajdanzev--74-75 S-4 (no date) 1942 Formosans
116, 162, 361

"Let us now consider some indirect evidence. In 1938 the urban population (i.e. of towns and cities having 10,000 and more inhabitants), made up 35.8 per cent of the total and the rural population 64.2 per cent. But in Taiwan, just as in China and Japan, towns with a population of 10,000 to 30,000 are mainly agricultural. Only cities with 50,000 inhabitants and over have few farmers (chiefly producers of vegetables on the outskirts of the city). In 1938 the population of the cities of over 50,000 in Taiwan amounted to 17.2 per cent. Thus [75] there is nothing in these statistics that contradicts our assertion that the agricultural population of Taiwan must amount to at least 65 per cent of total. But if one accepts the official figure of 50 per cent, it means first that there are no farmers in towns and cities with populations above 10,000, and secondly that about one-quarter of the rural population are not farmers, which seems hardly probable."

4:Grajdanzev--75 S-4 (no date) 1942 Formosans
116, 162, 178, 421, 651

"According to official statistics the number of payers of the agricultural land tax increased from 2,099,000 on January 1, 1938, to 2,112,000 on January 1, 1939—an increase of 13,000. How can this increase be explained when the number of families engaged in agriculture fell by 2,900? We must therefore conclude, either that official statistics are inaccurate, or that a rapid proletarization of the agricultural population is going on. It may be—although this is only a hypothesis—that the official statistics do not include sub-tenants, a very numerous class in Taiwan. But whatever the cause, the statistics give a distorted picture of land relations on the island."

4:Grajdanzev--75-76 S-4 (no date) 1942 Formosans
116, 311, 421, 427, 565

"Let us now turn to the investigation of the problem of tenancy. Its economic importance lies in the fact that (1) a large portion of the farmer's income is paid out for rent on land, and (2) the farmer is less interested in preserving the fertility of the land and in making improvements, because the land does not belong to him and may be taken from him at or even before the expiry of the lease. From the social point of view the phenomenon of tenancy is important in that it often creates an idle class of landlords or rich farmer-owners and a class of poverty-stricken tenants. The widespread existence of tenancy makes average figures for the agricultural population meaningless because on the extreme there are rich landlords and on the other poor tenants. In order to be able to judge more or less correctly the importance of tenancy we should know: (1) the number of farmer-owners, part-owners (i.e. those who own some land, but are compelled to rent additional acreage), and tenants; (2) the area which is farmed and the amount owned of that farmed by each of these groups; (3) the division of each of these groups into at least three [76] sub-groups—large, medium, and small—in order to see whether each of these groups is uniform since, for example, the tenant who rents one ko and the tenant who rents 50 ko belong to quite different groups; (4) the conditions of the rent. The available statistics for Taiwan throw light on but few of these elements."

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-1-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

"The division of families occupied in agriculture into owners, part-owners and tenants may be seen from the following table: (1)

1. Here and in the following tables the official figures of families occupied in agriculture are used, though, as was pointed out, they are probably underestimates. The statistics of landowners in Taiwan should be more or less correct because the land is surveyed and change of title involves a complicated procedure. The statistics may be incomplete only as regards tenants and agricultural workers (which they omit completely), and if one takes these into consideration one comes to the conclusion that official statistics probably give a brighter picture than is justified.

Division of Agricultural Families in Taiwan
(thousands)

	1932	1933	1935	1937	1938
Owners	132.2	129.4	132.1	131.1	130.2
Part-owners	119.3	121.7	128.4	134.8	135.6
Tenants (2)	152.4	155.0	159.4	161.5	158.7
Total	403.9	406.1	419.9	427.4	424.5

Footnote (2) on next page.

Division of Agricultural Families in Taiwan [Cont.]
(thousands)

2. Those who have read Japanese Rule in Formosa by Yosaburo Takekoshi may be astonished to discover that there are tenants in Taiwan. Takekoshi wrote in 1905 '. . . The tenants [in Taiwan, after the reform by the Japanese administration] came to enjoy the absolute ownership of the land they or their ancestors have been farming for three centuries. Such a change certainly amounted to a social revolution. Most of the revolutions recorded in history required sacrifices, but the present one was entirely bloodless. This change has given the tenant absolute ownership, thus insuring securing of property. . . . ' (p 132). But what Takekoshi described as a social revolution, was actually only a very modest reform: the government abolished the rights of the taiso--owners who had only doubtful title to land. This reform made transfer of real estate more secure and paved the way for Japanese penetration.

As percentages of total

Owners	32.7	31.9	31.4	30.7	30.7
Part-owners	29.6	29.9	30.6	31.5	31.9
Tenants	37.7	38.2	38.0	37.8	37.4
Total	100	100	100	100	100

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-3
116, 114, 178, 423, 427, 177.42 Japan
636.42

Source: Takumu Tokei, 1938.

[77] As this table shows, about forty per cent of all farmers in Taiwan own no land at all and must rent it from landlords and farmer-owners; about thirty per cent have plots so small that they are compelled to rent land, and barely thirty per cent of the farmers till only their own land. These figures are striking. Taiwan does not know rich tenants of the British type. Those who rent land are mostly poor farmers, but even those who cultivate their own land, are not all rich. As to the relative changes, there is a noticeable fall in the percentage of owners in six years--from 32.7 per cent in 1932 to 30.7 per cent in 1938. For the same period the percentage of tenants is the almost the same (37.7 and 37.4 per cent respectively), while the percentage of part-owners rose from 29.6 per cent to 31.9 per cent. It would seem that the farmer-owners are gradually losing their position and sinking to the level of tenants, but a six-year period is not a sufficiently long time to ascertain definitely whether such a trend exists.

However, it is not only the number of owners and tenants which is important, but also the area which they respectively till. Statistics of area are divided into only two categories—owned and rented.

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

Area Owned and Rented in Taiwan in 1932
(1,000 ko)

	Dry fields		Paddy		Total	
	Area	%	Area	%	Area	%
Owned	230.2	60.0	132.2	33.3	362.4	46.5
Rented	153.8	40.0	264.0	66.7	417.8	53.5
Total	384.0	100	396.2	100	780.2	100

Source: Nogyo Nenkan, 1939-40, p. 641.

In 1932 the area cultivated by owners constituted 46.5 per cent, the area rented by tenants 53.5 per cent. But it is important to emphasize that owners cultivated chiefly dry land while the tenants cultivated paddy. Paddy brings much higher yields than dry fields; in 1937 the average yield of rice per ko of paddy was about 14 koku while that per ko of dry land was only 7.8 koku, and, further, many paddy fields [78] produce two crops a year. In other words, one ko of paddy yields, on the average, more than twice as much as one of dry land, so that the tenants produce about sixty-five to seventy per cent of the total crop of Taiwan on rented land, and the owners not more than thirty-five to thirty per cent."

"As to the distribution of land between landowners by size of holdings, we have figures for 1930 and partial figures for 1932. We shall divide the farmers into four groups: (1) landowners with holdings of less than half a ko (less than 1.2 acre); (2) landowners with holdings of half a ko to one ko; (3) landowners with holdings of one ko to five ko; (4) those with holdings above five ko (above 11.9 acres).

Distribution of Landowners by Size of Holdings, 1930

Size of landholdings (ko)	0-0.49	0.5-0.99	1.0-4.99	5.0 and over	Total
Number (1,000)	172.9	86.7	122.4	23.1	405.1*
Percentage	42.7	21.4	30.2	5.7	100.0
Area (1,000 ko)	41.0	62.5	258.6	359.2	721.3
Percentage	5.7	8.7	35.8	49.8	100.0
Average area per holding (ko)	0.42	0.72	2.1	15.5	1.78

* It is important to note that the number of owners as given here is considerably greater than the number shown in more recent statistics. For 1932 the earlier figure was 340,674, whereas the current statistics (Takumu Tokei, 1938, published in 1940) give the number of owners and part-owners for 1932 as only 251,300; this is another indication of our point that the current official statistics probably understate the number of those occupied in agriculture.

Source: Ibid.

We see from this table that 42.7 per cent of the owners are decidedly small owners: their average holding is only 0.24 ko or less than 0.6 acre. They cannot exist on such a strip of land but must rent some land from rich landowners. In other words, almost half of the landowners are such in name only; they have enough land only for a house, a yard, and a kitchen-garden. Another 21.4 per cent of the owners are in a better position but not much better. Thus 64.1 per cent of the total number of landowners in Taiwan in 1930 had on the average less than 2.4 acres each. At the other end of the social scale, 5.7 per cent of the landowners owned 49.8 per cent of land, [79] or one-half of the total cultivated area. We may go farther and say that 126 persons (or corporations), 0.05 per cent of the total number of landowners possessed 94,072 ko—or 13.1 per cent of the total cultivated area. (1) Only thirty per cent of the owners are in the middle category. As regards

1. These figures are probably now out of date. In Kabushiki Kaisha Nenkan, 1940, five sugar companies and one canning company are listed as owning 81,634 ko of land in Taiwan.

the distribution of land among owners, Taiwan is a country of contrasts. Rich owners, although outnumbered eleven times to one by small owners, had nine times as much land. Thus on the average a rich owner had one hundred times more land than one in the first

two groups. This is extremely important for it shows that the farmers in Taiwan are divided into groups of unequal economic strength with extremes prevailing, so that the situation of the masses of the agricultural population is less satisfactory than the average figures calculated above would suggest. The Japanese government has not solved this question in Japan proper and it has not solved it during forty-five years of its administration in Taiwan."

"The situation in the latter [80] country as regards land distribution is worse now than it was several decades ago and the large holdings are growing.

Distribution of Farmers and Land Tilled and by Size of Farms, 1930

Size of farms cultivated (ko)	Less than 0.5	0.5-0.99	1.0-1.99	2.0-4.99	5 and over	Total
Number of farmers(1,000)	128.0	96.9	100.4	78.9	19.0	423.2*
Per cent	30.3	22.9	23.7	18.6	4.5	100.0
Area of land tilled (1,000ko)	33.7	69.7	143.2	236.1	208.6	601.3
Per cent	4.9	10.1	20.7	34.2	30.1	100.0
Average for groups (ko per farmer)	0.26	0.72	1.43	2.99	11.0	1.63
Average in acres per farmer	0.62	1.71	3.39	7.11	26.15	3.87

*In Nogyo nenkan, 1940, from which we quote, the total is 433,300 but this appears to be a misprint. Even so, it is less than the total should be because, as was shown in the preceding table, there were in the same year 405,181 owners and the number

of tenants was not less than 150,000. In other words this investigation evidently covered only a part of the cultivators. This is proved by the figures of the area of land cultivated.

Source: Ibid."

"The figures given above refer to landownership. But the owners of small plots may increase their holdings by renting land. Some economists see the chief advantage of tenancy in the fact that it permits a capable farmer to get as much land as he is able to utilize. We give above the statistics of the size of the farms as actually operated in 1930 [See p. 79, category 116--analyst].

The picture is about the same as that of ownership. More than 30 per cent of the farmers till on the average less than 0.5 ko each (0.62 acres); 53 per cent till on the average less than one ko (less than 1.71 acre) and 77 per cent of the farmers till less than 2 ko (less than 3.39 acres). But 4.5 per cent tilled 30 per cent of the total area, while 579 farmers (or corporations) tilled 66,410 ko. There are therefore a considerable number of very large plantations in Taiwan, chiefly of sugar cane, bananas, pineapples, and tea. These are figures for 1930 and it is quite possible that even then the investigation did not cover all farmers. (1)

1. An indirect proof of this is that a similar investigation made in 1932 covered 340,000 farming families as compared with 405,000 in 1930.

Since 1930 the plantation area has increased sharply, so that the picture should be by now even less favorable. We have no statistics of land ownership by nationalities, but it is well known that all, or almost all, plantations belong to big Japanese companies.

4:Grajdanzev--80 S-4 (no date) 1942 Formosans-2
116, 241, 311, 427, 565

However, it is clear that among Chinese farmers too, there is a sharp division in respect to landownership—there are wealthy Chinese owners, who though few in number, are very important by virtue of the power they wield."

4:Grajdanzev--80-82 S-4 (no date) 1942 Formosans-1- 3
116, 427, 466, 675, 177.42 Japan
636.42

"The tenancy contract in Taiwan, as it was a few years ago, had the following features: (1) (1) It was a short-term contract—for the most part for one year only and cases were

1. For a more detailed description see K. Takahashi Gendai Taiwan Keizairon, pp. 293-303.

frequent where the landlords broke the contract before its expiry. It is possible for them to do this because the tenants are more numerous, there is stiff competition among them, and they cling to the plots which they are able to secure. There have [81] been cases when the term was six years and even ten years (opening of new land or reclaimed land), but these were exceptional. (2) It was almost exclusively an oral contract and in case of conflict the landlords were more successful than the tenants in securing their own interpretation of it. (3) The landlord usually received security from the tenant in money or in kind, amounting to from forty to sixty per cent of the rent, deposited with the owner at the time the contract is made. No interest is paid on this amount. This deposit represents a heavy additional burden on the tenants, who, as a rule, have no cash and are compelled to borrow the money at high interest rates while they themselves do not receive any interest on it. In many cases this results in sub-tenancy—a rich farmer renting land and sub-letting it to poor tenants.

Through the efforts of the government these general features were somewhat changed. The government policy was as follows: (I) the term of tenancy should be five to six years or more; (2) if, after the expiry of the contract, the contracting parties do not denounce the contract within six months, it must be regarded as automatically renewed; (3) in time of crop failure the rent is to be reduced by mutual agreement; (4) in case of arrears (without a justifiable reason) or misuse of soil, the contract may be voided by the landowner; (5) no transfer of land by the tenant can be made without agreement and approval by the landowner; (6) changes in the form of the plot and other changes influencing the productive capacity of the land must be approved by the landowner; (7) if improvements are approved by the landowner, he must bear the expenses of the improvements fully or in part; (8) no contract may be declared void before expiry without sufficient reasons; otherwise compensation must be paid; (9) disputes are to be settled by special arbitration committees.

It is unwise to attach too much importance to these government efforts, however good their purpose may be. True, in 1935 sixty-eight per cent of all area leased was leased under written contracts, while in 1938-39 the percentage had risen to 76.6 per cent. Arbitration committees are established, as well [82] as societies of landowners and tenants, the purpose of which is to bring social peace to the relations between the landowners and tenants as well as to effect a change in the ideology of the farmers. Money

grants from the government-general are made to aid these societies and officials appointed to direct them. But all this does not touch the core of the problem. The problem of tenancy is not to secure the tenant in his lease for one year, or how to distribute the costs of improvements, as this touches chiefly the misuse of power by the landlord. With a secure contract for three or five years, the tenant must still pay the rent, and he has no assurance that the lease will be extended after expiry of the contract. The policy states that in case of crop failure the rent should be reduced by mutual agreement, but in Taiwan it used to be customary for the farmer to pay the rent whether the crop failed or not, and there is no guarantee that this custom will not form the basis of the 'mutual agreement'. In this agreement there is no equality between the opposing parties. The same should be said about the arbitration committees--everything depends upon the degree of influence of the landowners in these committees."

4:Grajdanzev--82-83 S-4 (no date) 1942 Formosans
116, 243, 427

"Nothing appears in the formulated [government--analyst] policy concerning the decrease of rent. According to an investigation by the government-general in 1927, rent amounts to about 27 to 29 per cent of the crop from dry fields, 43 to 45 per cent from paddy when one crop is taken each year, and 49.3 per cent in case of two crops. The low figure for dry fields is more than suspicious, for if the figures of the investigation are correct, the tenant cultivating the dry land is in a better position than the tenant of paddy with two crops.

Comparison of the Position of Tenants on the Best Lands in Taiwan, 1927.

Average figures	Dry field (yen)	Paddy with two crops (yen)
Value of crop (per ko)	366.4	517.7
Rent	100.5	255.7
Balance	265.9	262.0

It is well known that the amount of labor required to till one [83] ko of paddy with two crops is several times greater than the amount of labor necessary to cultivate one ko of dry field, and it is strange that the tenant of the dry land is at the end of the year in a better position than the tenant of the paddy."

4:Grajdanzev--83 S-4 (no date) 1942 Formosans
116, 171, 427

"Rent is paid chiefly in kind, though payment in cash is spreading. Where two crops are raised, a proportion of 7:3 is usual, i.e. the tenant pays seventy per cent of the rent from the first crop and thirty from the second. Rents in Taiwan are somewhat lower than in Japan, and Takahashi attributes this to the greater investments in the form of land improvements in Japan as compared with Taiwan."

4:Grajdanzev--83 [2] S-4 (no date) 1942 Formosans
116, 241, 361, 427

"Let us now consider the economy of the tenant. We saw that the tenants and semi-tenants make up about sixty-nine per cent of all the agricultural families. From the table on page 79 it appears that seventy-seven per cent of the farmers (the first three groups) cultivate on the average 0.75 ko each. These two groups should coincide approximately."

4:Grajdanzev--83-84 S-4 (no date) 1942 Formosans
116, 241, 427, 511, 556

"We have no recent figures of tenancy conditions but, according to an investigation made in 1927, the position of the average farmer-tenant appeared as follows (on land of average quality in paddy with two crops a year):

	yen
Value of crop from 0.75 ko	325
Rent	160
Balance	165

Thus his reward for his and his family's labor for the whole year was ¥165, minus the expenses of production apart from labor. From this sum house taxes, indirect taxes, etc. must be paid. This income of ¥165 may be compared with the income of a landowner who had 15.5 ko (the average for the upper group of landowners) and leased all this land to tenants. His yearly income would be ¥2,480.

These conditions may not exist now, since the above figures refer to 1927. Official sources do not give new figures, but a few calculations show that the situation has not greatly changed. As has been shown, the proportion of tenants to the total number of farmers has increased since that time, so [84] that competition among them must be stiffer, and there is no reason to expect that rents are lower. The value of two crops of rice from 0.75 ko of paddy in 1937 averaged ¥515 but prices general in 1937 were at least thirty per cent higher than in 1927. All this suggests conditions of poverty among the tenants and the position of even the majority of so-called owners may be not much better."

4:Grajdanzev--85 S-4 (no date) 1942 Formosans
116, 221, 226, 433, 471, 177.22 Japan
636.22

"Fishing, which did not demand an elaborate equipment, was an important auxiliary occupation for the Chinese farmers, especially in slack seasons. The sea around Taiwan is rich in fish and the Chinese are expert fishermen. It is natural, then, that fishing has become an important element in the economy of the coastal farmers. But at the time of their conquest of Taiwan the Japanese were not interested in the fisheries because at that time the seas around Japan proper and near Kamchatka had not been sufficiently utilized. Petty regulations, the taxing of fishermen, and other measures brought a decline in this ancient Chinese occupation and only recently, when the Japanese felt a need for more fisheries, and when their huge corporations with their mechanized equipment turned to the South, did the government become interested in fishing. The results were the same as in all other spheres of the economic life of Taiwan: Japanese fishing grew at the expense of Chinese."

4:Grajdanzev--85 [2] S-4 (no date) 1942 Formosans
116, 226, 228, 433

"The growth of fishing and of other occupations connected with it, such as the gathering of sea weeds, manufacturing of fish cakes etc., may be seen in the following table [see table on page 86--analyst]."

4:Grajdanzev--85-86 S-4 (no date) 1942 Formosans
116, 226, 474

"The growth was therefore slow. The part played by the fisheries in the occupations of the population is not great. The fishermen are either united into associations or are working for Japanese or Chinese entrepreneurs. There are no statistics showing the division of entrepreneurs into Japanese and Chinese, but the names of the firms serve as an unmistakable [86] guide. The various types of fishermen are united into sixty-two associations of 16,516 persons. The total products sold by these associations were valued in 1937 at ¥2,670,201 showing that for the members of these associations fishing is only an auxiliary occupation."

4:Grajdanzev--86 S-4 (no date) 1942 Formosans
116, 226, 228, 471

"Gross Value of Fisheries' Products
(1,000 yen)

	1919	1923	1928	1931	1934	1936	1937	1938
Value of catch	5,058	9,031	12,670	8,483	11,453	14,934	14,513	15,671
Value of manufactured products	1,424	3,304	2,706	1,525	2,291	2,500	2,324	2,359
Value of products of fish ponds	2,422	1,944	3,402	3,047	2,890	4,207	4,545	5,525
Total	8,904	14,279	18,778	13,055	16,634	21,641	21,382	23,555"

4:Grajdanzev--86 [2] S-4 (no date) 1942 Formosans
116, 228, 471, 473, 563

"As to the other fishing enterprises, their relative strength may be presented in the following manner:

Fishing Enterprises in Taiwan

	Number of firms	Nominal capital (1,000 yen)	Paid-up capital (1,000 yen)	Average paid-up capital per company (1,000 yen)
Japanese corporations with offices in Japan	2	101,500	65,500	32,750
Japanese corporations with offices in Taiwan	28	5,972	3,044	109
Other firms (mostly Chinese)	21	429	399	19

In this field the Chinese can hardly compete with the Japanese because of their lack of capital (1).

1. It is interesting to note that, according to the last census, out of 82,338 Chinese fishermen 16,382 were employers, while among 5,045 Japanese only 101 were employers. Evidently, the Chinese 'employer' had one to three workers, while the Japanese employer was a person or firm of considerable means."

"As to the general supply of fish for the population of Taiwan, the Japan Year Book has the following to say: '. . . The Taiwanese are a fish-eating people, but the annual catch is so great that a large quantity is exported to Japan proper [87] and other countries' (1).

1. P. 941, 1939-40 edition.

Statistics of the industry tell a different story. Compared with Japan the natives of Taiwan are poorly supplied with fish, for in 1937 the value of fishery products in Japan proper was ¥660,807 or about ¥9.3 per capita as compared with ¥3.8 in Taiwan. It is true that an important part of this catch is exported from Japan and a part is used as fertilizer, but the same is true for Taiwan. As may be seen from the following table, Taiwan is a net importer of fish:

External Trade of Taiwan in Fish
(1,000 yen)

Year	Exports to Japan	Exports to other countries	Gross exports	Imports from Japan	Imports from other countries	Gross imports	Net imports
1937	4,111	832	4,943	10,095	687	10,782	5,839
1938	3,006	491	3,497	11,535	405	11,940	8,443

The secret of this coexistence of exports and imports of fish does not lie in any overabundance. The Japanese in Taiwan export fresh fish to Japan which they sell for an average price of 26 sen a kin (0.6 kg.), and import two kinds of fish: (a) salted and dried fish at an average price of 12.5 sen a kin and (b) canned fish. It is clear that these two kinds of imported fish are not consumed by the same groups of the population.

We saw above that the population of Taiwan consumes more meat on the average than do the Japanese; now we see that the Japanese consume much more fish than the islanders (2).

2. It was mentioned above that the average consumption of pork in Taiwan is about 37 kin, while in Japan it is only 3 kin; but the average consumption of fish in Japan must be, on the most conservative estimate, 60 to 70 kin."

4:Grajdanzev--87-88 S-4 (no date) 1942 Formosans
116, 167, 313, 423, 659, 177.31 Japan
636.31

"When the Japanese occupied the island, the new administration immediately became interested in its forest resources. One part of forests was in the possession of the Chinese farmers, but the other, more important one was the area of the aborigines. The Chinese were required to register the documents of ownership of forest lands, and since in most cases they had no such documents—their possession and use of forests being based on [88] custom—this device enlarged the government forest reserves (1). It has

1. This is described in Section 3, Ch. 11, p. 1 of T. Yanaihara, Teikoku Shugishita no Taiwan, pp. 23-26.

already been mentioned that in order to use the forests, formerly occupied by the aborigines, the government began to settle the latter by force in the plains. It is said that the settlement of one family of aborigines on the plains cost only ¥70, and this may be compared with the ¥1,000 or more which are spent on the settlement of a Japanese family. Many hundred thousands of ko of forest were acquired in this way."

"The present distribution of forests and waste lands (i.e. formerly forest or which can be afforested) may be seen from the following table:

Forest Area in Taiwan, December 1936
(1,000 ko)

	On the plains	In the aborigines' territory	Total
State: forests	399,086	1,312,562	1,711,648
waste land	195,529	308,137	503,666
Public: forests	12,112	...	12,112
waste land	3,529	...	3,529
Private: forests	219,095	1,568	220,663
waste land	45,131	...	45,131
Total: forests	630,293	1,314,130	1,944,423
waste land	244,189	308,137	552,326

The Japan Year Book say: 'Reckless cutting of trees was done by Chinese immigrants and this . . . resulted in the devastation of forest districts.' But it is surprising to find that the forest area on the plains (excluding waste land) is about three-quarters of the area under cultivation. However, the exploitation of this tremendous area — 2,496,749 ko or about 5.8 million acres — leaves much to be desired. According to official

statistics. the total value of forest products in 1936 was only ¥15.1 million—much less than the value of fishery products or only two per cent of the gross value of the island's production. This sum was made up of the following items: [89] timber, ¥5.6 million; charcoal. 1.9 million; bamboo, 1.7 million; firewood, 2.7 million; and others 3.2 million. If these figures are correct, then of the 2,496,749 ko, one ko brings on the average only six yen, or less than half that in Japan."

"In order to see what place industry occupies in the life of Taiwan and what its size is by comparison with Japan, we give below the gross value of production of industry as compared with other branches of Taiwan's economy. We give figures only since 1914 because, as has already been pointed out, data for previous years are of doubtful value. To give but one example, the official sources put the total value of industrial production (1) in 1907 at only ¥273,128; but however primitive this industry may have been it is hardly

1. Sugar and tea industries excluded.

possible that on an island with a population of three millions the gross value of industrial production should be so small.

Thus the value of industrial products increased from ¥45.7 million yen in 1914 to ¥374.9 million in 1937 and at the same time the proportion in industry rose from thirty-four per cent to forty-four per cent of the total. This rise in value is, however, to a considerable degree illusory, reflecting only the rise in prices (the index of wholesale prices in 1937 was almost double that of 1914), but this factor alone could not account for an eight-fold increase. Again, the part of industry, as compared, for example, with agriculture, is exaggerated here because, for farmers, who buy very little from outside, the net value of production approaches seventy and may be as high as eighty per cent of gross value, while in industry the net value, i.e. the value created in industry itself, is

very often only half the gross value of production. This suggests that even now agriculture is responsible for about two-thirds of the [91] total value product. But the fact remains that the value of industrial production has increased greatly, that its part in total production of the island has grown, and that the tendency is for industry's share to grow at the expense of agriculture."

4:Grajdanzev--91 S-4 (no date) 1942 Formosans
116, 433

"Gross Value of Production in Taiwan

	1914	1919	1921	1929	1933	1935	1936	1937
	million yen							
Agriculture	80.5	252.4	201.3	301.9	237.9	361.0	388.3	403.0
Fishing	3.1	8.9	9.6	21.0	15.9	19.4	21.6	21.4
Forestry	0.6	9.5	10.7	13.9	10.5	12.7	15.1	16.7
Industry	45.7	130.0	130.9	246.8	209.6	264.9	310.0	374.9
Mining	4.5	10.3	10.3	14.8	15.2	22.8	28.7	36.2
Total	134.4	412.0	362.8	598.4	489.1	680.8	763.7	852.2
	Percentages of total							
Agriculture	60.0	61.3	55.5	50.4	48.6	53.0	50.8	47.2
Fishing	2.3	2.2	2.6	3.5	3.3	2.9	2.8	2.5
Forestry	0.4	2.3	3.0	2.3	2.2	1.9	2.0	2.0
Industry	34.0	31.5	36.1	41.3	42.8	38.9	40.6	44.0
Mining	3.3	2.7	2.8	2.5	3.1	3.3	3.8	4.3
Total	100	100	100	100	100	100	100	100

Source: Nogyo nenkan."

"Having established the absolute size of industrial production of Taiwan, let us now compare it with gross value of industrial production of Korea and Japan and reduce it to a per capita basis.

This table shows that in 1937 and 1938 per capita industrial production in Taiwan was only one-fourth as large as that of [92] Japan, but was higher than in Korea. If we compare 1929 and 1937 we see that the difference between Taiwan and Japan was smaller in the former year than now, both absolutely and relatively, so that in spite of all talk of the industrialization of Taiwan, the difference between Japan and Taiwan in this respect is increasing. (1)

1. In An Inquiry into National Income of Japan, published by the Research Division of the Japan Economic Federation in 1939, we read on page 90; 'The rates at which production has increased in the Dependencies have been greater than those which have been the case with Japan proper. This fact suggests the youth of industry in the Dependencies.' But, the following comparison shows that the conclusion in the text is correct and that the rates of growth at least in Taiwan are not greater than in Japan proper (based on the absolute figures taken from the Inquiry).

Gross Value of Industrial Production in Japan, Korea and Taiwan, 1929 and 1937 (2)

	Total gross value (million yen)			Per capital [sic] (yen)		
	1929	1937	1938	1929	1937	1938
Taiwan	263.8	360.1	386.4*	58	64	67
Korea	280.5†	927.3	...	14	41	...
Japan	7,716.8	16,412.5	19,667.2	122.5	230	272

Sources: Dainippon teikoku nenkan and Takumu tokei.
*Approximate, because data for machine industry is not abailable.
†1930, no figures are available for earlier dates.

2. These figures for Taiwan differ slightly from those given in the previous table above (taken from Nogyo nenkan), but they are comparable with those of Japan and Korea.

4:Grajdanzev--91-92 S-4 (no date) 1942 Formosans-3
116, 171, 433

Comparison of Rates of Growth
(1930 = 100)

	Industrial production alone	Total production
Japan, 1937	255	229
Taiwan, 1937	194	170 "

"Let us now analyze the composition of Taiwan's industry.

Development of Taiwan's Industry by Branches

Gross value of production (million yen)

	1929	1931	1935	1936	1937	1938
Textiles	3.0	2.1	3.6	4.4	5.0	...
Metals	5.2	4.9	8.8	10.9	12.0	20.9
Machinery	5.3	5.1	6.7	7.7	8.0	...
Ceramics	9.4	6.8	8.8	9.5	8.8	10.0
Chemical	23.1	13.3	27.2	28.5	33.7	39.7
Lumber	8.8	6.5	9.3	10.7	5.5*	6.5
Printing, binding	3.6	3.3	4.4	4.9	5.0	6.8
Foodstuffs	190.1	152.4	212.6	221.5	261.3	251.6 †
Others	15.3	10.6	12.1	14.5	20.8	22.2
Total	263.8	205.0	293.5	312.6	360.1*	

* The fall in value of lumber production is probably due to the change in nomenclature. In Kokusei gurafu, May 1940, the value of lumber production for 1937 is given as 11.8 million yen and total production as 374.9 million yen.

† For the sake of comparison 'reclaimed tea' is excluded.

Sources: Dainippon Teikoku nenkan; for 1938, Takunu tokei.

[93] As Percentages of Total

Textile	1.1	1.0	1.2	1.4	1.4
Metal	2.0	2.4	2.9	3.5	3.3
Machinery	2.0	2.5	2.3	2.5	2.2
Ceramics	3.5	3.3	2.9	3.0	2.5
Chemical	8.8	6.5	9.3	9.1	9.4
Lumber	3.4	3.2	3.2	3.4	1.5*
Printing	1.4	1.6	1.5	1.6	1.4
Food	72.1	74.3	72.6	70.9	72.5†
Others	5.7	5.2	4.1	4.6	5.8
Total	100.0	100.0	100.0	100.0	100.0

* The fall in value of lumber production is probably due to the change in nomenclature. In Kokusei gurafu, May 1940, the value of lumber production for 1937 is given as 11.8 million yen and total production as 374.9 million yen

† For the sake of comparison 'reclaimed tea' is excluded.

Sources: Dainippon Teikoku nenkan; for 1938, Takumu tokei."

4:Grajdanzev--93 S-4 (no date) 1942 Formosans
116, 241, 255, 257, 433

"Thus the predominant position in Taiwan's industry—from seventy-one to seventy-four per cent of the total—is occupied by the food industry. The latter consists chiefly of the production of sugar from sugar cane, and, to a lesser degree, of the canning of pineapples. In other words, Taiwan industry is closely connected with its agriculture and is largely the transformation of agricultural products into forms suitable for consumption or for storage and transportation. All other industries show little signs of growth. Ceramics and 'other industries' were at the same level in 1937 as they were in 1929, the lumber, textile, metal and machine industries show an increase, but in absolute amounts this increase is small, and only the chemical industry is of any importance, producing about nine per cent of the gross value."

"This predominance of the food industry, or, in other words, of the processing of agricultural products, may also be illustrated by the following figures of workers by industries in Taiwan for 1937 covering enterprises with five and more workers, (1) or with a prime-

1. Government enterprises are excluded.

mover. [94]

	Absolute figures	Per cent of total
Textile	3,951	4.5
Metals	2,884	3.3
Machinery	4,214	4.8
Ceramics	10,528	12.1
Chemical	4,988	5.7
Lumber	2,674	3.1
Printing	3,027	3.5
Food industry	48,615	55.7
Other	6,363	7.3
Total	87,244	100.0

Source: Dainippon teikoku nenkan, 1939.

4:Grajdanzev--93-94 S-4 (no date) 1942 Formosans-2
116, 171, 433, 463

"The total number of workers in 1937 was only 87,244, while in Japan in the same year it was 2,936,512, or 34 times as many, though the population of the latter in the same year was only 12.7 times as great as Taiwan's. The number of workers in the food industry made up 55.7 per cent of the total, a smaller proportion than that based on the gross value of production, while the proportion of ceramics in the total was unexpectedly high (12.1 per cent) and that of the chemical industry only 5.7 per cent. The divergence may be explained (1) by special conditions in the industries concerned (e.g. the relation between gross value and net value is different in different industries); (2) by the prominence of modern or of primitive types of industrial enterprises—those in ceramics, printing, bookbinding and the lumber industry, for example, are chiefly small enterprises without machinery where productivity per worker is small; but in the food industry as will be shown later on, and in the chemical industry new and efficient enterprises predominate; (3) by the monopolistic position in the market of certain industries, which permits them to exploit the consumers."

"Finally, we may compare these industries from the point of view of the amount of capital invested in them: (1) [95]

1. Only paid-up capital is included because data for the reserves of smaller corporations could not be found.

Capital Invested in Taiwan's Industry in 1937
(million yen)

	Corporations	Limited partnership	Unlimited partnership	Total
Textile industry	2.7	0.1	0.1	2.9
Machine	3.9	0.9	0.1	4.9
Ceramics	3.3	0.2	0.1	3.6
Chemical	9.6	0.3	0.2	10.1
Lumber	1.5	1.1	0.1	2.7
Food	113.1	4.6	0.4	118.1
Printing	0.5	0.1	...	0.6
Gas and Electricity	47.0	...	...	47.0
Others	1.0	0.3	0.3	1.6
Total	182.6	7.6	1.3	191.5*

Footnote on next page.

* The official estimate of the total capital of industry on Dec. 31, 1937, was ¥258.5 million but it is not clear whether this figure includes nominal capital or only paid-up capital and, whether it includes other investments, government enterprises etc.

Source: Taiwan Jijo, 1939.

Again the food industry is in first place. Actually its position is much more important because it has accumulated considerable reserves. Next in importance is gas and electricity because here investments play a greater part than the number of men occupied while ceramics and printing are poor in capital. It may be of interest to compare the average investment per enterprise for the same year:

Paid -Up Capital per Business Unit
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Textile	671	60	120	477
Machine	353	38	45	123
Ceramics	276	21	33	155
Chemical	387	37	115	289
Lumber	163	93	23	106
Food	1,509	78	44	832

Paid-Up Capital per Business Unit Cont.
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Printing	101	12	...	41
Gas and electricity	7,836	10	...	6,718
Others	76	13	68	38
All industry	1,127	51	54	578

[96] We see from this table that in Taiwan there are very large enterprises in the electric power, food, and textile industries, where capital per enterprise is relatively large, while enterprises in the printing, machine, lumber, ceramics and 'other' industries are very small in size. It should be pointed out that individual enterprises are not included here, (2) but both their capital and the value of their products are insignificant

2. The number of individual enterprises in 1934 were reported as follows: 62 in textiles, 91 in metals, 173 in machinery, 588 in ceramics, 428 in chemicals, 3,960 in foods, 256 in lumber, 126 in printing and 381 in others, a total of 6,065, almost all of them Chinese (Takahashi, op. cit., p. 438).

in comparison with those of the companies."

4:Grajdanzev--96-97 S-4 (no date) 1942 Formosans-1-2
116, 171, 454, 471, 473, 177.47 Japan
636.47

"It is also interesting to compare the size of the companies in Taiwan as regards capital with those in Japan proper and in Korea.

Industrial Companies, their Total and Average Capital in the Japanese Empire, December 31, 1937.

	Companies, number	Total paid-up capital and investments (million yen)	Capital per enterprise (1,000 yen)	Capital per capita of population (yen)
Japan proper	30,518	9,396.9	308	132
Korea	981	246.2	251	11
Taiwan	335	191.5	572	34
Kwantung	358	96.9	271	81
Karafuto	88	33.6	382	103

Source: Dainippon teikoku tokei nenkan, 1939.

It is clear that Taiwan and Korea are poorly supplied with capital per capita of population, but there is an important difference between them: the average capital per company in Taiwan is higher than in any other part of the Japanese Empire, including Japan proper. These are averages and include small as well as large companies, but behind them one may see the silhouettes of big corporations dominating the economic life of Taiwan,

corporations which have few equals even in industrially developed Japan (1).

1. By size of total paid-up capital the corporations and partnerships in industry in Taiwan were distributed as follows: [97]

Size	Number of companies	per cent of total	Total paid-up capital (1,000 yen)	per cent of total
Less than ¥10,000	50	14.9	253	0.1
¥ 10.000- 49,000	111	33.1	1,922	1.0
¥ 50.000- 99,000	34	10.2	1,276	0.7
¥ 100,000- 199,000	48	14.3	3,020	1.6
¥ 200.000- 499,000	40	11.9	4,878	2.5
¥ 500,000- 999,000	20	6.0	4,694	2.5
¥1,000,000- 4,999,000	25	7.5	24,077	12.6
¥ 5.000,000-9,999,000	2	0.6	5,700	3.0
Over ¥ 10,000,000	5	1.5	145,316	76.0
Total	335	100.0	191.1	100.0

Thus, 32 companies—9.6 per cent of the total number—had 91.6 per cent of the total capital of companies."

4:Grajdanzev--97 S-4 (no date) 1942 Formosans
116, 257, 377, 433, 473

"Our analysis has shown that in Taiwan only the electric power, chemical, and food industries are large-scale, and that among them the electric power and sugar industries tower far above the rest—in these the corporations would be huge even by the standards of industrially developed nations. We saw that in agriculture Taiwan is an island of contrasts—huge landholdings and poor 'independent' landowners and tenants. The same picture appears in industry and will become clearer on examination of some individual industries for which data are available. We saw that in Taiwan one should distinguish between the progress and prosperity of agriculture in general and of the agriculture of the small Chinese farmers. The same phenomenon appears in industry."

4:Grajdanzev--97-98 S-4 (no date) 1942 Formosans
116. 255. 257. 433

"As was shown above, the food industry occupies a dominant [98] position in the industry of Taiwan. Its composition is as follows: Sugar makes up seventy-seven per cent of the gross value product of the food industry, molasses and candy four per cent, canned pineapples five per cent, and tea five per cent. As will be seen, production of these is concentrated in a few companies.

Gross Value of Production of the Industry,
(1,000 yen)

Sugar	202,240	Fishery products	2,172
Tea	13,452	Soft drinks	1,639
Canned pineapples	12,197	Starch	1,561
Molasses	6,389	Ice	1,496
Flour	6,013	Miso*	789
Candy	5,315	Other foods	5,562
Soya	2,427	Total	261,252"

*Bean paste used as a food.

"Before the Japanese occupation sugar production was carried on in small Chinese enterprises. But these enterprises with their primitive technique, animal power and low-quality products, were compelled to give ground step by step before the modern mills constructed and operated by the Japanese companies. The rapid extinction of these small enterprises and the growth of production of the modern mills may be seen from the following table.

Production of Sugar in Taiwan
(tons)

Year (Nov.- Oct.)	In modern mills	In improved mills	In primitive mills	Total
1905	4,535	385	44,659	49,579
1915	187,839	11,166	9,463	208,468
1917	409,165	26,560	22,367	458,092
1921	241,169	5,217	6,348	252,734
1925	467,264	4,824	7,451	479,539
1927	402,611	3,343	5,186	411,140
1929	777,931	5,776	5,621	789,328
1930	798,304	7,050	5,130	810,484
1932	977,239	6,744	5,065	989,048
1933	616,840	10,070	6,814	633,724

Production of Sugar in Taiwan [Cont.]
(tons)

Year (Nov.-Oct)	In modern mills	In improved mills	In primitive mills	Total
1934	634,403	4,721	7,919	647,043
1935	942,712	9,994	12,946	965,652
1936	880,552	10,402	10,725	901,679
1937	987,451	10,423	9,478	1,007,352
1938	...	...	...	989,778
1939	...	...	...	1,377,000

From this it appears that while in 1905 only nine per cent of the sugar was produced in modern mills, in 1937 these produced ninety-eight per cent of the total. Primitive mills and the so-called 'improved' mills had inevitably to lose the position they occupied."

"Production of sugar in modern mills is concentrated in the hands of nine Japanese corporations, [99] and of these, six produce ninety-seven per cent of all the sugar produced in modern mills and ninety-five per cent of all that produced in Taiwan. In the table on page 100 information is given concerning each of these six largest corporations. Unfortunately this information is not complete. These corporations are closely connected with many other enterprises in Taiwan and also have enterprises in the Pacific Islands under Japanese mandate, in Java and in other southern colonies (1). Many of these enterprises have nothing to do with sugar. But even so, the information given is interesting because it does throw some light on their activities. The paid-up capital and reserves of three of these corporations is about ¥100 million each. The amount of reserves is explained by the remarkable rate of profit which they receive—34 to 40 per cent is 'normal' for them. A lower rate of profit, as in the case of Ensuiko Seito Corporation (20.2 per cent) may be explained by the fact that the corporation has recently doubled its capital, investing it in new enterprises which do not yet bring profit. Thus the rate of profit in the sugar industry is extraordinarily high for all companies. It was shown above that the farmers did not receive any benefits either from the increase of the sugar

1. They also have refineries in Japan proper. Sugar produced in Taiwan is not refined there.

content of the cane, nor from the increase of protection; it now becomes clear that these benefits fell to the manufacturers, for only in this way were these huge profits possible (2).

2. But a certain part of these profits is the result of higher prices paid by the Japanese population for the benefit of these companies, protected by the tariff wall."

Grajdanzev--99-101 S-4 (no date) 1942 Formosans
6, 433, 455

The value of sugar cane produced in the island in 1937 was officially estimated at ¥55 illion, while the value of sugar produced in the same year was estimated at ¥202 illion.

The high profits led periodically to feverish activity, investments in new and very often ghly speculative fields, followed by over-production, a fall of prices, reduction of area der sugar cane, reduction of the price paid for cane and attempts to market the surplus road at lower prices, chiefly in the Chinese market. This speculative activity brought a tremendous financial crisis in 1927 with the collapse of the Suzuki [p. 100 contains table on sugar corporations; see category 116--analyst] [101] firm, and the speculative tivity at the present time, based on expectations of continued war and demand for maments, may bring even more violent repercussions (1).

1. Toyo keizai, November 9, 1940, reports a sharp fall in production of sugar in 1940-41 and in the profits of the sugar companies."

4:Grajdanzev--100 S-4 (no date) 1942 Formosans
116, 257, 433, 473, 477

INFORMATION CONCERNING THE SIX LARGEST SUGAR CORPORATIONS OF TAIWAN 1939

	Taiwan Seito	*Dainippon Seito*	*Meiji Seito*	*Furuuchi Seito*	*Teikoku Seito*	*Showa Seito*
Established	1901	1896	1908	1908	1910	1927
Paid-up cap. (1,000 yen)	43,080	56,332	45,000	36,938	22,050	11,250
Reserves (1,000 yen)	47,138	23,093	41,500	3,430*	8,081	1,117(1937)
Principal shareholders:	The Emperor of Japan	Toyama-Seimei*	Daichi-Seimei*	Shinei-Sangyo	Yamaguchi	not published
	Mitsui bussan	Meiji-Seimei		Meiji-Seimei†	Nippon-Seimei†	
	Naikoku chokin Bank	Tokyo-Seimei			Meiji-Seimei	
	Mitsubishi-Shanghai	Kaijo-Seimei			Yasuda Bank	
		Nippon-Seimei				
		Yasuda				
Landholdings in Taiwan (ko)	46,630	17,900	13,569	...	3,274	...
Sugar production in 1937/38 (1,000 tons)	256.7	238.6	176.9	150.4	70.8	42.6
Production of molasses, 1936/37 (1,000 tons)	52.4	47.9	33.5	29.5	11.6	...
Other interests	65.7 km. of railways	1,000 km. of railways	118 km. of railways	Alcohol	30 km. of railways	...
	Alcohol	Alcohol	Alcohol	Pulp	Roads	Alcohol
	Refineries in Japan	Etc., etc.	Refineries	Railways	Alcohol	Forestry
	Etc., etc.		Rubber	Agriculture	Etc., etc.	Colonization
			Pulp	Mining		Etc., etc.
			Etc., etc.	Lumber		
				etc., etc.		
Rate of profit (%)	44.65	34.5	40.0	20.2	22.0	20.7
Dividend rate (%)	12	12	12	8	10	10

* Beside its own capital the company report mentions ¥40.6 million of borrowings.
† *Seimei* (life) are life insurance companies.
Sources: 1. *Kabushiki kaisha nenkan*, 1940; 2. *Toyo keizai, Kabushiki kaisha nenkan*, 1939; 3. Kono, B., *Seito kontsuerun*, 1938.

300

PROPERTY

4:Grajdanzev--101 S-4 (no date) 1942 Formosans
116, 433, 458, 477

"All this is mentioned here [see previous paragraphs--analyst] in order to remind readers that the development of Taiwan's sugar industry, as well as of industry in general, was not smooth and uninterrupted, but passed through booms, crises, depressions—phenomena well known from the history of other countries. Taiwan can now produce much more sugar than it actually does produce (as a comparison of figures for 1933 and 1939 indicates), but the small domestic market, combined with a desire to reap high monopoly profits, keeps production far below the level of capacity, while entrance into the international market for the protected Taiwan sugar is not easy. The manufacturers are organized into a cartel which regulates prices and production in order to avoid cut-throat competition and maintain monopoly profits."

4:Grajdanzev--101-102 S-4 (no date) 1942 Formosans
116, 288, 473

"The composition of the textile industry in Taiwan may be seen from the following table showing gross value of production in 1937 in 1,000 yen.

Silk goods	845
Cotton goods	898
Hemp and jute goods	2,497
Others	788
Total	5,028

Production of hemp and jute goods is the most important branch. The chief article made is bags for the trade in rice and sugar.

It was shown above [p. 95. category 116--analyst] that the total capital of textile companies in Taiwan in 1937 was ¥2.9 million. Now, in the same year one company alone—Taiwan Seima (Jute Dressing Company)—had a capital of ¥1.4 million. Its rate of profits was 48.5 per cent but only eight per cent was distributed, the [102] balance going into reserves and investments. It had 2,844 spindles. It is worth noticing that almost half its shares were in the hands of the Anda Corporation."

"In 1937 the gross value of products of the metal industry was made up of the following items (in 1,000 yen):

Gold and silver refining	4,101
Gold and silver goods	2,588
Alloys	1,710
Foundry	1,081
Tin cans	3,175
Construction and household goods	623
Total	13,278

As may be seen, this group consists chiefly of gold and silver produced and refined on the island--a branch of industry which has a very close connection with mining--and of tin cans manufactured for Taiwan's export industries. We do not know whether Taiwan's statistical service puts the production of aluminum in the metal group or in the chemical group, but it will occupy an important place in the war industry of Taiwan in the near future. The Nippon Aluminum Company was established in June 1935 with a capital of ¥30 million. Its 600,000 shares were divided between the biggest concerns in Japan: 83,500 shares went to Mitsubishi Kogyo, 45,000 to Mitsui Kosan, 44,000 to Taiwan Denryoku (described below), 30,000 to Mitsui Gomei, 15,000 to Mitsui, etc. Besides the paid-up capital there were reserves of ¥733,000, and borrowed capital amounting to ¥2,300,000 on September 1, 1939. The plants in Takao and Karenko use bauxite ore

from the Netherlands Indies and electricity is supplied by Taiwan Denryoku. Data on production are not published, but in one Japanese publication (1) it was stated that the

1. Kogyo nenkan, 1939.

capacity in 1938 was 8,000 tons, but that after expansion it will be 10,000 tons. Judging by the distribution of profits it went into operation in the second half [103] of 1937 and in 1939 profits amounted to seventeen per cent, of which eight per cent was distributed."

4:Grajdanzev--103 S-4 (no date) 1942 Formosans
116, 392, 439

"Machine and Vehicle Production in 1937 Consisted of These Items:

	(1,000 yen)
Agricultural machinery, including that for the sugar industry	730
Other machinery and apparatus	5,071
Vessels	730
Vehicles	405
Other products	1,656
Total	8,592

This production by no means satisfies the needs of industry and transport of the island, and the imports of machinery, vehicles and vessels are now valued at thirty to forty million yen a year."

"Composition of Ceramic Products by Value in 1937
(1,000 yen)

Bricks	3,063
Tiles	923
Cement	3,264
Cement tiles	503
Other products	1,075
Total	8,828

As may be seen from the figures quoted, this industry is practically limited to the production of cement and bricks. Production of cement in 1936 was equal to 143,076 tons and about an equal amount is imported from Japan."

"With the exception of paper, mineral oil and soap, all the products mentioned here represent the processing of agricultural products or else fertilizers for agriculture. The alcohol is chiefly a by-product of the sugar industry. Formerly all alcohol produced in Taiwan came from molasses, but now part of it is produced directly from sugar cane. The new product—[104]absolute alcohol—is suitable for use as a motor fuel, but no data on its production have been published.

In 1937 the products of this industry were as follows:

	Value (1,000 yen)	Volume (tons)
Mineral oil	1,094	
Soap	941	
Vegetable oils	2,149	3,721 (1936)
Oil cakes	2,382	
Paper	2,165	
Bagasse*	626	
Mixed fertilizers	7,450	67,841 (1936)
Other fertilizers	1,808	
Perfumery and essences	1,211	
Charcoal	1,970	

* Cake for fodder made of the remains from sugar

4:Grajdanzev--181-194 [illegible] [illegible] [illegible]
116, 278, 387, 433

cane after extraction of the sugar.

	Value (1,000 yen)	Subsidies (index)
Refined camphor	[illegible]	
Alcohol	[illegible]	
Other products	[illegible]	
Total	[illegible]	

4:Grajdanzev--104 S-4 (no date) 1942 Formosans
116, 371, 387, 439

"Taiwan is a heavy importer of fertilizers, because its domestic industry supplies a very small part of its needs. In 1936, for example, of 147,600 tons of sulphate of ammonia consumed, only 13,059 tons were produced in Taiwan. But this offers a promising field for development because Taiwan is rich in cheap water power (1).

1. In 1937 two large Japanese companies organized Taiwan Kagaku Kogyo Kaisha (Taiwan Chemical Co.) with a capital of ¥10 million, for the production of sulphate of ammonia. It was planned to increase production in the future to 100,000 tons of sulphate of ammonia; but data on the progress of the company are not available and, judging by the imports, production has not advanced to plan. The plant of the company was to be near Sinchiku."

4:Grajdanzev--104-105 S-4 (no date) 1942 Formosans
116, 289, 473

"Of the paper producers, the most important enterprise is the Taiwan Kogyo Corporation, established in 1935. Its paid-up capital amounts to ¥8 million and its bonded indebtedness to ¥9.5 million. The principal shareholders are Ogawa Gomei, Taiwan Shoken, and Matsumoto. The value of its production in 1938-39 was ¥3,538,000, and profits amounted to 12.5 per cent of its capital. Next in importance is the Taiwan Pulp Kogyo Corporation, established in February 1938, in Taichu. It has a capital of ten million [105] yen in shares and has borrowed about one million in bonds. Its shareholders are two sugar companies and the Kanefuchi Spinning Company. Up to 1939 the corporation had not paid dividends."

4:Grajdanzev--105 S-4 (no date) 1942 Formosans
116, 28, 433

"This group is made up of following gross values of Products for 1937: (1,000 yen)

Gold and silver paper	630	Needlework	2,360
Bamboo products	1,992	Hats	2,705
Straw goods	663	Other goods	5,209
Leather goods	1,576	Total	15,906 "
Sisal and hemp products	771		

4:Grajdanzev--105 [2] S-4 (no date) 1942 Formosans
116, 294

"In the sea-coast villages of the earthquake zone the production of panama hats is a household industry giving employment to tens of thousands, but it is gradually losing its foreign and domestic market."

4:Grajdanzev--105-106 S-4 (no date) 1942 Formosans
116, 376, 457, 177.71 Japan
636.71

"Cheap water power is an important asset to Taiwan in all plans for its industrial development. Prior to 1930 it was estimated that the twenty-three major streams can produce as much as 1,040,000 kw., but, according to Takahashi, recent estimates put the capacity at a much higher figure—about two million kw. Of this about 230,000 to 240,000 kw. was utilized in 1939. Development before 1933 was slow. In 1919 the capacity was 10,000 kw.; in 1933, about 40,000 kw. But in 1930-31 a project was worked out for the utilization of Jitsugetsutan (Lake Candidius), a lake in the mountains in the centre of the island located 726 m. above sea level. The project was elaborated chiefly for the purpose of creating an armament industry (1) but there was no money to finance it, so work on the

1. That the primary motives were military is definitely stated in Taiwan Jijo, 1939, p. 418, and Sekai nenkan, 1939, p. 177.

project stopped. Finally, money was found in the United States, where in July 1931 a loan of US $22,800,000 or ¥45,737,210 was arranged. In October 1931 work was resumed and in 1934 the project was completed. In July [106] 1937, a second project was finished at the same lake."

4:Grajdanzev--106-107 S-4 (no date) 1942 Formosans
116, 316, 433, 454, 177.31 Japan
636.31

"Mining occupies a relatively unimportant position in Taiwan. In 1936, the last year for which data are available, the gross value of mineral products was Y28,727,000, less than ten per cent of the value of industrial production and less than one per cent of total production. But as regards the capital invested, the attention given by the government to oil and, recently, to gold, and the subsidies lavished on actual and potential producers of oil, it occupies quite a prominent position. The caiptal of the mining industry at the end of 1937 was Y46,635,000 (1). There were twenty-four companies, [107] but, just

1. It is not clear whether this is subscribed or paid-up capital, or whether this sum includes reserves and other investments.

as in other fields, three companies dominated the field; Taiyo Kogyo, Taiwan Kogyo, and Keelung Tanko (coal), (2) each having capital of over Y5,000,000.

2. The paid-up capital of this corporation is Y7 million and out of 140,000 shares 43,473 are in the hands of Mitsui Kosan and 41,656 in the hands of Mitsui Bussan."

4:Grajdanzev--106 S-4 (no date) 1942 Formosans
116, 377, 473

"In February 1939 a large new station producing electricity from coal was put into action. There are now 158 private producers of electricity and 15 government stations on the island, but by far the most important producer is the Taiwan Denryoku Corporation, established in 1919, the capacity of whose stations is now 220,050 kw. Its paid-up capital is ¥45.8 million, its reserves, ¥15.1 million, and its debentures, ¥76.6 million. Its principal shareholders are the Taiwan government-general and Japan Life Insurance Company. Profits in the last few years have been seventeen per cent and it has paid seven per cent to its shareholders. The low rate of profits compared with other corporations is presumably to be explained by the fact that the company sells electricity to the armament plants, for example to the Nippon Aluminum Company, at a special reduced price of 0.5 sen per kwh. The same policy is pursued by Taiwan Denka Corporation, which sells electric current to a ferrosilicon plant at 0.6 sen per kwh. Another important company in this field is the Taiwan Dento Corporation, established in 1919, with paid-up capital of three million yen. It supplies electricity chiefly for domestic lighting and the capacity of its plant is 7,224 kw. Its rate of profit is about thirty per cent and it pays dividends of ten per cent (1).

1. Recent information from Taiwan (August 1940) tells of the merger of these companies, so that a huge monopolistic corporation will take their place."

4:Grajdanzev--107 S-4 (no date) 1942 Formosans
116, 315, 472

"There are also five companies engaged in gas utilization with capital above ¥500,000 each—Taiwan Gas, Tokokogyo, Taiwan Denka, Taiwan Kagaku, (chemicals) and Taiwan Menka (cotton), but it is not clear whether their capital is included in the ¥46.6 million mentioned above."

4:Grajdanzev--107-108 S-4 (no date) 1942 Formosans-1-2
116, 316, 433

"The relative importance of mining products produced in 1936 may be seen in the following table:

Metals or minerals	Value of output (1,000 yen)	Per cent of total	Volume
Gold	4,224	14.7	
Gold-silver-copper ores	5,881	20.5	
Placer gold	160	0.6	
Gold ores	2,078	7.2	
Total gold and gold ores	12,343	43.0	41,608 oz. (1936)
			50,000 (1937)*
Silver	17	0.1	
Copper	470	1.6	2,299 tons (1934)
			4,000 (1936)*
Coal	11,365	39.6	1,744,000 (1937)
Sulphur	87	0.3	1,071 tons (1935)
Phosphorites	1	—	
Petroleum	312	1.1	1,780 thous. gall. (1935)

* Approximate figures

Metals or minerals	Value of output (1,000 yen)	Per cent of total	Volume
Natural gasoline	456	1.6	1,480 thous. gall. (1935)
Carbon black	292	1.0	1,237 tons (1935)
Others	3,384	11.7	
Total	28,727	100.0	

As shown in this table, gold and coal make up about eighty-three per cent of the total value, and are thus of paramount importance. No explanation is available of the group 'others', [108] representing 11.7 per cent of the total. In 1935 this group made up only about four per cent and the sudden leap to 11.7 per cent is difficult to explain."

4:Grajdanzev--108 S-4 (no date) 1942 Formosans
116, 135, 316

"Gold mining was carried on in Taiwan before the Japanese occupation, but gradually, as the best areas were worked out, the amount of gold produced declined and remained low up to 1931, when the depreciation of the yen and the consequent rise in the price of gold made mining more profitable. At the same time the introduction of machinery in modern enterprises decreased costs and, as a result, in five years (1931-36) the value of gold produced was tripled. Since 1936 no data have been published, though the discovery of new ore deposits was mentioned in the newspapers (1). Placer gold is mined in

1. In the February 1940, issue, of Keizai Chishiki it is reported that in October 1939, in the eastern part of the island in the valley of the Takkiri (Keikoku), placer gold was discovered by a mining engineer. This placer deposit was estimated to contain one billion yen worth of gold. However, as early as 1907 Yokobori estimated the value of gold in placers and ores in Taiwan at four billion yen.

Taihoku and Karenko provinces, while ores containing gold in conjunction with silver and copper are found only in Taihoku province."

4:Grajdanzev--108 [2] S-4 (no date) 1942 Formosans
116, 135

"Coal is produced in two northern provinces only—Taihoku and Shinchiku. It is low-grade bituminous coal with heating power varying from 7,480 to 6,160 calories and with a sulphur content of 1.2 per cent to 4.45 per cent. One field in Taihoku contains as much as 64.8 per cent of volatile matter. The layers are from two to three feet thick, and reserves are estimated to amount to 400 million tons. This is less in proportion to the population than in Japan, but considerably more than in the Philippines. Only a part of island is geologically surveyed, so it may be that the estimate will be altered after the resources of the island have been more fully investigated."

Grajdanzev--108-109 S-4 (no date) 1942 Formosans -1-2
116, 316, 433, 439

"Actual production of coal reached its maximum in 1927, when 1,850,000 tons were produced. After that a decline set in, the lowest point occurring in 1932 (1,355,000 tons). With the general revival, production rose to 1,550,000 tons in 1935 and in 1937 to 1,744,000 tons. However, the low development of industry and the poverty of the population combine to [109] make the marketing problem difficult. Production capacity is considerably larger than actual production, and as may be seen from the following table, the market for coal is chiefly outside Taiwan.

Consumers of Taiwan's Coal 1932-34

	Quantity (1,000 tons)	% of total
Industry	399.7	27.6
Railways	150.5	10.4
Homes	48.8	3.4
Shipping	498.8	34.4
Exports	330.0	22.8
Other	21.3	1.4
Total	1,449.1	100.0

Source: Taiwan ginko chosa kacho, quoted by K. Takahashi.

Thus only slightly more than forty per cent of the output is consumed in the island

itself. Taiwan is capable of producing more coal than it does now, but the limiting factor is the smallness of the domestic market."

4:Grajdanzev--109 S-4 (no date) 1942 Formosans
116, 135, 315, 382, 177.31 Japan
636.31

"Since 1908 the Taiwan government-general and the Japanese navy have paid special attention to oil production in Taiwan, but up to now this branch of mining has been more productive of subsidies to oil producers than of oil itself. It was mentioned above that in 1936 the value of oil produced in Taiwan was ¥312,000 and that of gasoline, ¥456,000. However, in the 1937 budget of the government-general ¥1,005,000 was earmarked as subsidies for oil producers and prospectors. Daily production of oil in the last few years has been about 5,000 American gallons."

4:Grajdanzev--109 [2] S-4 (no date) 1942 Formosans
116, 135, 171, 315, 354

"From the local point of view the production of natural gas is more important[than that of oil--analyst]. The region richest in gas is Kinsui in Shinchiku province, and the gas is used for the production of benzine and carbon-black, as a fuel for sugar mills, and for domestic use. However, in 1937 only 7,411 families had gas facilities (as compared with 2,233,136 in Japan proper)."

4:Grajdanzev--109-110 S-4 (no date) 1942 Formosans
16, 135, 315

"Recently manganese ore was discovered in eastern Taiwan and plans were pushed for the production of magnesium from [110] sea water, but no concrete data are available as to the character of the deposits or the output."

4:Grajdanzev--110 S-4 (no date) 1942 Formosans
116, 315, 463

"There are no recent data on the number of workers occupied in mining but in 1930, according to the census of population, the number was 24,000 persons or about 1.4 per cent of the active population of the island."

"Our analysis of industry and mining must not be limited to a survey of present conditions and the plans of the government, etc. Properly speaking it should only begin here. The population of Taiwan is about five per cent Japanese and about ninety-five per cent Chinese and aborigines. In order to evaluate the place of these two groups in industry and mining we should know wage levels and working conditions as well as the all-important question of who are the entrepreneurs and who the wage earners. Unfortunately, some of these questions cannot be answered because of the absence of information.

The latest available report concerning the nationality of capital in Taiwan's companies refers to the years 1929.

Distribution of Corporate Capital in Taiwan by Nationality in 1929
(1,000 yen)

	Japanese	Chinese	Other*	Total
Agriculture	4,434	4,962	4	9,399
Industry	180,497	16,786	1,658	198,941
Commerce	23,128	28,082	2,033	53,242
Communications	3,186	2,571	25	5,781
Fisheries	2,258	1,190	20	3,467

Distribution of Corporate Capital in Taiwan by Nationality in 1929 [Cont.]
(1,000 yen)

	Japanese	Chinese	Other*	Total
Mining	12,243	3,441	1,422	17,107
Total	225,745	57,033	5,161	287,939

* Chiefly Chinese from the mainland, citizens of the Chinese Republic.

The share of the Japanese was therefore 90.7 per cent in industry and 71.6 per cent in mining, while the corresponding shares for the Chinese were 8.5 per cent and 20.1 per cent. It is true that these figures do not include individual enterprises, which are chiefly Chinese, but it is quite evident that their inclusion would not greatly change the picture because the average capital of such enterprises is very small. On the other [111] hand this table does not include government enterprises which should be considered for all practical purposes as Japanese enterprises (the managerial staff is Japanese and the profits may be transferred to Japan at any time), and the capital of these government enterprises is huge. As is seen from the table, the capital of all corporations was about ¥288 million in 1929, yet in the same year the capital of the state railways alone was ¥122 million. Beside railways the government has many enterprises of all kinds. Since 1929 the situation has further changed to the disadvantage of the Chinese group for in the

last few years, as was shown above, huge new companies have been established and the capital of old ones increased. The new companies are Japanese. In 1929, for example, the capital of the Japanese companies occupied in the fisheries was ¥2,258,000; in 1939 two Japanese companies with headquarters in Japan proper, whose capital is ¥65,500,000 were operating in Taiwan. Of course, only a part of this capital is sunk in their Taiwan enterprises, but it is clear that the situation in 1939, in this as well as in many other respects, is less favorable to the Chinese than it was ten years before.

The same thing has occurred in mining, where the total capital is now ¥46.6 million, instead of ¥17.1 million as in 1929. The increase is due to the activities of the Japanese Koyo Kogyo, Taiwan Kogyo, and Keelung Tanko corporations."

4:Grajdanzev--111-112 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 477

"A similar expansion [similar to that in mining--analyst] has taken place in industry, where all large new enterprises are owned by Japanese who make up only five per cent of the population, but now own at least ninety-five per cent of the capital in Taiwan's industry and more than ninety per cent of the capital in mining. But if one takes into consideration the fact that the Japanese enterprises are modern, while those of the Chinese are small and have more primitive equipment, (1) it becomes clear that the share

1. Compare the data on sugar mills given above.

of the Japanese enterprises in production is even greater than comparison of the respective holdings would indicate. Furthermore, the shares of corporations in Taiwan are not subject to free purchase and sale. These are monopolistic [112] organizations, and shares in them are not offered on the open market but are held by the big corporations of Japan."

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929 Per cent	Korea 1938 Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital. and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

4:Grajdanzev--112-113 S-4 (no date) 1942 Formosans
116, 171, 563, 471

"According to Takahashi, (1) industry in Taiwan [113] is chiefly in Japanese hands because

1. Op. cit. p. 434 et seq.

(1) the Japanese are able to organize modern enterprises; (2) the Chinese are chiefly concentrated in domestic industry; (3) the national characteristics of the Chinese are such that they are unable to organize corporations; (4) any accumulations of capital which they may have are small because they came to the island recently and their chief occupation is agriculture; (5) they cannot compete in the Japanese market with the Japanese because they do not know the market; (6) in those cases where they do organize a corporation their aim is to get profits quickly, and this brings ruin to the corporation. This is a familiar argument in colonial countries. We make only a few comments below.

It is argued that the Chinese do not have the accumulation of capital necessary for modern industry, that they came to Taiwan recently (!) and that their chief occupation is agriculture. But in 1900-05, when the Japanese began to build up the industrial enterprises of Taiwan, the chief occupation of the Japanese in Japan was also agriculture. It would be a mistake to suppose that they exported a huge amount of capital to Taiwan. This question will be touched upon in the chapter on the external trade of Taiwan, where we shall show that the capital of corporations in Taiwan was 'created' chiefly in Taiwan itself."

4:Grajdanzev--113 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 177.47 Japan
636.47

"Our first question is now answered: the Chinese as a group receive very little from Taiwan's industry and mining in the form of interest on capital or entrepreneurs' profits. Any advantages which they may derive from these industries arise then chiefly from their position as workers. Let us see now what they receive in this capacity. In 1936, out of 81,589 workers occupied in industrial enterprises with five or more workers or having a prime-mover, 76,251 (93.5 per cent) were Chinese—almost the same percentage as in the population of Taiwan. The remaining 6.5 per cent were chiefly Japanese."

"Japanese economists argue that the prosperous condition of the villagers makes it difficult for industry in Taiwan to secure female workers, so that in 1935, for example, women made up [114] only 30.6 per cent of all workers, (1) while in Japan the proportion

1. In 1936 women made up 32.6 per cent of all workers. Kagaku kogyo nenkan, 1939.

was 47 per cent. Let us make a closer examination of the figures.

Proportion of Women in Different Industries

	In Japan		In Taiwan	
	1935	1933	1935	1936
Textile industry	80.9	80.6	80.9	73.4
Metals	7.1	8.8	10.5	10.6
Machinery	8.5	0.5	0.7	1.2
Ceramics	20.6	13.7	15.2	18.6
Chemicals	35.1	23.4	23.4	26.4
Lumber	9.0	5.6	6.6	5.8
Foodstuffs	18.1	34.3	33.3	34.8
Printing	18.1	12.5	10.8	12.9
Gas and electricity	0.8	—	—	—
Others	51.4	66.0	62.2	68.2
Total	47.0	31.7	30.6	32.6

From this table it may be seen that in the textile and ceramic industries the percentage of women is about the same in Taiwan as in Japan; in metals, foodstuffs, and 'other' industries it is larger, while in machinery, chemicals, and printing it is smaller but is growing. The smaller percentage total (32.6 per cent in Taiwan and 47 per cent in Japan) is explained by the simple fact that in Taiwan there is no significant textile industry. If we exclude the textile industry, then in 1936 the proportion of women in industry was 30.6 per cent for Taiwan and only 18.7 per cent for Japan (2). It is no fault

2. The figure for Japan is calculated from the data of Nippon rodo nenkan, 1938.

of the Chinese women and it is not a sign of Taiwan's prosperity if the industries existing in Taiwan are less suited to women. To say, as Takahashi does, that the textile industry is absent in Taiwan because the women, being prosperous, do not want to work, is naive. Taiwan is in the sphere of the Japanese customs tariff and experiences all the pressure of Osaka and Nagoya competition; it has no cotton of its own, nor has it such good harbors and commercial organization that it could be supplied with cotton cheaper than Kobe. It is natural then [115] that the cotton industry has had no chance to develop. But, as was mentioned, in other branches of industry the proportion of women in industry is higher in Taiwan than in Japan."

4:Grajdanzev--115 S-4 (no date) 1942 Formosans
116, 461, 857

"There is no information concerning the number of children occupied in Taiwan's industry, nor of hours of work and leisure. Japanese Labor Year Books (Rodo nenkan) contain hundreds of pages on labor conditions in foreign countries, but not on the conditions of workers in Taiwan and Korea."

"Japanese authors complain that wages in Taiwan are high, and that they are high because of the prosperous condition of the farmers. The farmers are so well off that they do not want to leave the farms. Takahashi tells a story, for example, of how government officials were not able to hire a sufficient number of laborers for irrigation works at the rate of wages prescribed by these officials. The chief obstacle to the development of industry, we are told, is high wages. Moreover, these wages are rising continuously. The official Taiwan Jijo says: 'wages of the islanders up to 1920 rose by 200 per cent in comparison with the prewar level, while in comparison with the period before the Japanese occupation the increase is wonderful' (odoroku-beki) (1). Below we give wages per

1. Op. cit., p. 610.

day for corresponding groups of workers in Tokyo and Nagoya in Japan, and Taihoku and Taichu in Taiwan.

Wages per Day in 1939
(yen)

	Japan		Taiwan	
	Tokyo	Nagoya	Taihoku	Taichu
Turners	4.20	2.84	1.60	no data
Cement workers	2.36	2.58	no data	0.95

Wages per Day in 1939 [Cont.]
(yen)

	Japan		Taiwan	
	Tokyo	Nagoya	Taihoku	Taichu
Foundry workers	4.01	2.38	1.20	no data
Millers	2.93	2.45	1.15	0.70
Dyers	3.07	1.78	1.09	no data
Printers	3.33	2.12	1.80	1.00
Day laborers, men	2.10	2.20	0.85	0.74
Day laborers, women	1.24	1.30	0.60	0.55

Sources: For Taiwan, Taiwan Jijo; for Japan, Rodo nenkan."

"As is well known, Japan is not a country of high wages. Yet wages there are from two to three times higher than the wages of the Chinese in Taiwan and do not seem to have been an obstacle to the development of industry. The wage level is closely connected with the level of retail prices and this we give below.

Retail Prices in Taihoku, May 1939

		(sen)
Sweet potatoes	(per kin)	6.4
Rice, horai	(per kin)	11
Sugar	(per kin)	29
Pork, average quality	(per kin)	43
Miso, per 100 momme	(0.827 lb.)	8
Fish	(per kin)	18-22
Eggs, each		6
Soap, per piece		10-17
Matches, per box		1.4
Firewood, per 100 kin		180
Muslin (per yard)		134

Now, let us take two workers—one skilled and one day laborer. For the skilled workers the average daily wage in the second half of 1938 was ¥1.43 per day, (1) for an

1. This is a simple arithmetic average of 60 different

categories of workers in Taihoku; in so far as highly paid categories are small in numbers, the weighted average would be lower. The official estimate of the average wage for Taihoku is ¥1.27.

unskilled worker ¥0.85. The average family in Taiwan consists of five to six persons. According to the prices given above, the skilled worker can buy with his daily wages, for example, either 17.2 lb. of rice or 4.4 lb. of pork, or 6.5 lb. of sugar. An unskilled worker can make such purchases as 10.2 lb. of rice, or 2.6 lb. of pork, or 3.9 lb. of sugar. By whatever standards, it is evident that the wages of the workers are very low.

The wages of Japanese workers, on the other hand, are at least double those of the Chinese for the same job. For Taihoku the official estimate of the average wage for the Chinese is ¥1.27, for Japanese, ¥2.41 (2). It is thus not profitable for the Japanese

2. A simple arithmetic average for 25 occupations of the Japanese in Taihoku gives ¥2.65.

entrepreneurs to use Japanese workers extensively."

4:Grajdanzev--117 S-4 (no date) 1942 Formosans

116, 465, 472, 511, 563

"We saw previously that the development of modern industry in Taiwan did not benefit the Chinese as entrepreneurs. Now it becomes evident that it brought very little to them as workers. If we use Engel's ratio of sixty per cent as an estimate of the share of wages spent on food in low-wage countries, it appears that the wages of the unskilled worker in Taiwan can purchase about one pound of rice per day for each member of his family."

4:Grajdanzev--118 S-4 (no date) 1942 Formosans
116, 494, 496, 177.49 Japan
636.49

"All kinds of communications are in use in Taiwan—from the primitive sedan chair and jinrikisha (rickshaw) to the airplane, but modern means of communications are either in the hands of the Japanese government or of Japanese companies. There are 3,375 km. of improved roads. These play an increasingly important part in inland communications because the railroads do not link up the whole island in a complete network; the eastern part has no railroad connections with the rest of the island. The number of motor cars and buses is small (1). The buses on the roads are used by the government

1. No statistics are published by the government.

railways as feeders for the rail services."

4:Grajdanzev--118 [2] S-4 (no date) 1942 Formosans
116, 171, 496, 497

"Some Railroad Statistics of Taiwan and Japan for 1937

	Taiwan	Japan proper
Length of railroads (km.)	1,550	26,797
Same per 100 sq. km. (km.)	4.3	7.0
Passengers carried (1.000)	27,488	1,739,688
Trips per capita	4.9	24.1
Freight carried (1,000 tons)	8,187	130,813
Freight, per capita (tons)	1.5	1.8
Receipts from passengers (million yen)	11.2	391.1
Average cost per trip (yen)	0.41	0.22
Receipts from freight (million yen)	18.5	306.4
Average cost per ton (yen)	2.26	2.34"

4:Granjdanzev--118-119 S-4 (no date) 1942 Formosans
116, 454, 496, 655, 177.49 Japan
636.49

"In 1926 there were 950 km.(1) of government railroads in Taiwan; in 1938 there were

1. Taiwan. Its System of Communication and Transportation, 1929.

1,040 km. The lengths of private railways at the same dates were 525 km. and 521 km. respec-[119]tively—a slight decrease. In other words, in the last decade the construction of new railroads in Taiwan has almost stopped. At the end of 1938 the capital invested in the government railroads including expenditures on repairs and restorations was ¥172,499,691."

4:Grajdanzev--119 S-4 (no date) 1942 Formosans
116, 171, 496

"The table above [see preceding note page 118--analyst] compares railroad data in Taiwan and in Japan.

These figures may appear unimportant, but they are essential for our investigation because only in this way is it possible to discover certain important relationships. It was already mentioned that in the last eleven years the total length of the railways in Taiwan increased only slightly—by five per cent, while in Japan in the last nine years (1928-37) the increase was thirty-nine per cent. The network of railways in Japan is now almost twice as dense as that of Taiwan."

4:Grajdanzev--119 [2] S-4 (no date) 1942 Formosans
116, 171, 497, 511, 563, 177.49 Japan
636.49

"From the table given above [see table on page 118 under category 116--analyst] we see that a Japanese makes almost five times as many trips a year as does a Taiwanese --whereas the movement of the freight appears relatively as large as in Japan. The movement of passengers reflects the conditions of life of the natives while the movement of freight in Taiwan is the movement of Japanese freight to and from ports--coal, sugar, rive, fertilizer, lumber, and sugar cane (1) (in the order of freight carried)--

1. Sugar cane is in sixth place because the bulk of its [sic] transported on special railroads.

which, as will be shown later in more detail, serve chiefly the Japanese economic machine. The statistics of revenue show that the average cost per ton of freight in Taiwan is less than in Japan (¥2.26 as compared with ¥2.34). It may be said that this is quite reasonable because in Taiwan average distance over which the freight is moved is less. On the other hand, the average passenger cost per trip in Taiwan is twice as high. In spite of the smaller scale of operation, the railways of Taiwan bring a net return of eight to nine per cent as compared with six per cent in Japan (1937)."

4:Grajdanzev--119-120 S-4 (no date) 1942 Formosans
116, 463, 497

"Besides these railroads there are in Taiwan special roads for transporting sugar cane from the fields to the mills, the total [120] length of which in 1938 was 2,098 km. There is also a unique system of communication on the island, 'light railways', or very narrow tracks of light rails on which run 'push-cars' propelled from behind by Chinese coolies. They are used for both passengers and freight, but their importance is declining: even at Taiwanese wages a coolie cannot compete successfully with a locomotive.

Taiwan's 'Light Railways'

	1929	1938
Length of roads (km.)	1,022	806
Cars	5,645	3,545
Passengers carried (1,000)	5,251	2,002
Goods (1,000 tons)	803	503
Total receipts (1,000 yen)	2,419	1,153 "

4:Grajdanzev--120-121 S-4 (no date) 1942 Formosans-1-3
116, 439, 505, 705

"The products of Taiwan can be brought to Japan only by sea: it was pointed out above that air freight-transport is insignificant because it is too expensive. As will be shown in the next chapter, the external trade of Taiwan is chiefly with Japan. The following table gives information on the shipping line connecting Taiwan with Japan and the continent.

This table shows that coastal shipping in Taiwan is not developed. The only line of importance is Keelung--Karenko, which is a necessity because the eastern railroad is not connected with the railroad network of the island, freight being transported exclusively by ships. Information concerning the lines connecting Taiwan with Japan shows how close are the commercial relations between the two countries,.... Lines connecting Taiwan with Manchuria direct and via Korea (Takao--Seishin) are of recent origin, while it will be observed that there are many more lines connecting Taiwan with China and with Southeastern Asia than is commensurate with the trade of Taiwan with these regions. The lines connecting the island with China probably serve the army and organizations connected with it, for Taiwan is the supply base for the armies now operating in South China.

Taiwan's Shipping Lines in 1939

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Keelung--Kobe	6	84	8,000 tons or more
Takao--Tokyo	6	90	4,000 "
Takao--Tokyo*	2	24	2,500 "
Takao--Seishin (Korea)	2	12	2,000 "
Takao--Jinsen (Chemulpo) Korea	2	24	2,000 "
Takao--Dairen (Kwantung, Manch.,)	2	46	4,000 "
Takao--Tientsin	2	24	2,000 "
Takao--Shanghai	2	36	2,000 "
Keelung--Amoy	1	36	1,500 "
Keelung--Hongkong	2	48	1,500 "
Takao--Canton	1	24	1,500 "
Keelung--Java	2	12	3,000 "
Keelung--Philippines	3	24	3,000 "

Taiwan's Shipping Lines in 1939 [Cont.]

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Takao--Aparri (Philippines) since 1938	1	30	3,000 tons or more
Calls of Southern lines	2	24	5,000 "
Keelung--Karenko (Taiwan)	2	300	2,500 "
Coastal line, East of Taiwan	2	70	700 "
Takao--the Pescadores	1	156	700 "
Shinko--Koto†	1	60	50 "
Calls of European lines (Tokyo--London)	8	24	8,000 "

* Used for 'special purposes of the Army'

† Islands to the southeast of Taiwan, a part of the government-general. [Botel Tobago--analyst]"

4:Grajdanzev--121-122 S-4 (no date) 1942 Formosans
116, 504, 177.50 Japan
636.50

"The development of shipping demands good ports, and Taiwan is poor in natural harbors. But the government did not spare money or effort in the improvement of harbors, the best of which are Keelung and Takao through which most of the island's external trade passes. In 1929 Keelung's wharves were able to accommodate fifteen ships of 3,000 to 10,000 tons each and in addition six ships could be moored within the harbor, which was capable of handling 1,650,000 tons of cargo a year. Since that time considerable improvements have been made, and a plan of reconstruction, which [122] should be finished in 1943, foresees accommodation for forty ships at one time. Up to 1939, ¥36.4 million had been spent on the improvement of the harbor. In 1929 Takao harbor could accommodate seven ships of 5,000 tons each in berths, with seven more in the narrow but long harbor; recent construction permits accommodation of vessels of 10,000 tons, and, when the program is completed, it will be possible to accommodate twenty-nine ships at once. The cost of construction up to 1939 was ¥33.5 million. The other important ports which have undergone improvements are Karenko (east)--cost of construction ¥7.4 million; Bako (the Pescadores)--¥850,000; Soo (northeast)--¥669,000; Shinko (a fishing port in the east)--¥860,000; Shinko (west), where the works are to be finished in 1942 at an estimated cost of ¥15 million."

4:Grajdanzev--122 S-4 (no date) 1942 Formosans
116, 504, 712

"Anpin, the port of Tainan, and the canal connecting it with Tainan were to be finished in March 1940 at a cost of ¥778,000. All this does not include the considerable expenditures on naval construction in Taiwan. There are three large fortified zones on Taiwan and the Pescadores, and entrance to these is prohibited."

4:Grajdanzev--122-123 S-4 (no date) 1942 Formosans
116, 509, 177.50 Japan
636.50

"Taiwan is connected by regular airline with Japan proper and there is one air line which encircles the island. The first line connects Fukuoka (between Nagasaki and Moji, the centre of the Japanese lines radiating from Kyushu) with Taihoku (1,610 km.). Flights are made every day and, in 1938, 8,706 passengers were carried and 144,005 ton-km. of freight and mail were flown. The line is however not remunerative, although the flights of the Taiwan and Osaka businessmen and Japanese officials are subsidized by the government-general at the expense of Taiwan's taxpayers to the extent of ¥325,000 (1939).

The length of the island air lines in 1938 was about 600 km. Flights are made daily (only every second day to Pescadores) and stops are made at all important cities of the island. The number of passengers for 1937 was 6,450, but the movement [123] of freight in the same year amounted to only 570 ton-km. A subsidy of ¥360,000 was paid to these lines by the government-general in 1939, which means that each passenger was subsidized to the extent of ¥60 per flight."

"Although in comparison with Japan the island is rather poorly supplied with postal, telephone, telegraph, and radio services, the system of communications is in general well developed and reaches all important points. There are 194 post offices, 219 telegraph stations (most of them at the post offices), 222 telephone booths, and 120 telephone exchanges on the island. This represents an increase of about twenty to thirty per cent in twelve years, which corresponds roughly to the rate of population growth.

Communication Statistics for Taiwan
(Absolute figures)

	1921	1929	1936	1937	1938
Ordinary mail received (1,000,000)	60.1	66.3	91.7	82.3	81.8
Parcels sent (1,000)	784	695	726	783	855
Telegrams sent (1,000)	1,398	1,513	1,874	2,067	2,102
Telephone subscribers	8,948	12,122	16,371	18,674	20,251
Telephone calls (7,000,000)	38.3	56.2	113.9	129.1	136.3
Radio (sets)	...	9,152*	27,841	40,919	45,399

* Figures for 1931.

Per capita figures

	1921	1929	1936	1937	1938	1937
Ordinary mail	16.2	14.6	16.8	14.7	14.2	65.1
Parcels	0.21	0.15	0.13	0.14	0.15	0.13
Telegrams	0.38	0.33	0.34	0.37	0.37	1.03
Telephone subscribers	0.0024	0.0027	0.0030	0.0033	0.0035	0.1370
Radio listeners	...	0.0019*	0.0051	0.0073	0.0079	0.0577

* Figures for 1931.

Sources: Taiwan Jijo and Dainippon teikoku tokei nenkan."

"In seventeen years there has been no progress in the use of the means of communication by the population: the number of letters sent (per capita) fell from 16.2 in 1921 to 14.2 in 1938, while in Japan in 1937 the average was almost five times as great (65.1). In 1938 the population sent fewer telegrams [124] and parcels per capita than in 1921--only one person out of seven in Taiwan sending one parcel a year as compared with 1.13 parcels per person in Japan, and only one out of three persons in Taiwan sent one telegram a year. The number of telephone and radio users is small; there are in Japan forty times as many telephone users per capita and seven times as many radio listeners as in Taiwan. The difference may in part be explained by the absence of facilities, as may be seen from the following comparison:

Number of Inhabitants per Post Office in Taiwan and Japan

	Taiwan	Japan
1928	25,500	6,900
1937	32,200	6,200

The number of inhabitants per post office in Taiwan in the past ten years has increased from 25,500 to 32,200, while in Japan it fell from 6,900 to 6,200 indicating that the Japanese are five times better supplied with post offices. But the scarcity of facilities alone can not explain everything."

4:Grajdanzev--124-125 S-4 (no date) 1942 Formosans-1-2
116, 162, 205, 563

"On several occasions it has been pointed out that in Taiwan there are two groups of the population, Japanese and Chinese, with quite different levels of income. Let us compare these.

Use of Communication Facilities by the Japanese and the Chinese in Taiwan in 1938

	Total sent (1,000)		Per capita	
	By Japanese	By Chinese	Japanese	Chinese
Letters etc.	50,879	30,957	165.0	5.7
Parcels	681.2	174.0	2.20	0.032
Telegrams	1,736.2	366.1	5.560	0.068
Telephones	15,510 (units)	6,741 (units)	0.05010	0.00125

Source: Taiwan Jijo, per capita figures calculated.

It is clear that the average used in the table on page 123 are misleading, for the bulk of the letters, parcels, and telegrams are sent by the small group of Japanese living in the island, just as most of the telephones are used by them. On the average a Japanese sends 29 times as many letters, 69 times as many parcels, 82 times as many telegrams and has 40 times as many telephones as does a Chinese. An important [125] part of the letters, telegrams and telephones naturally serve official functions. It is now clear why the net-

4:Grajdanzev--124-125 S-4 (no date) 1942 Formosans-2
116, 162, 205, 563

work of post offices and telegraph offices is growing so slowly--65.4 per cent of all the Japanese on the island live in nine cities and 83 per cent in 57, all of which are well supplied with these facilities."

4:Grajdanzev--125 S-4 (no date) 1942 Formosans
116, 167, 171, 205, 563

"It is also noteworthy that the Japanese in Taiwan send on the average many more letters, parcels, telegrams and have better telephone facilities than the Japanese in Japan proper. This is an indirect proof that they are much better off than the average Japanese at home, a fact to be kept in mind when one is considering the causes for the failure of mass Japanese emigration to the island. The Japanese come to the island in order to secure a better living in Taiwan than they had at home, and not to compete with the low-paid Chinese."

4:Grajdanzev--126 S-4 (no date) 1942 Formosans
116, 453, 563

"The banking system collects the liquid funds of the inhabitants and transfers them to those who can put up security and are willing to pay a certain rate of interest. Besides the deposits which are brought to them the banks may to a certain degree 'create' deposits. These operations place them at the centre of economic activity and give them power far beyond that which their own capital could otherwise confer. All banks in Taiwan are in Japanese hands. On page 127 we give in tabular form some information concerning each of the banks operating in Taiwan."

4:Grajdanzev--126 [2] S-4 (no date) 1942 Formosans
116, 435, 453, 457

"The foremost position is occupied by the Taiwan Bank, a private corporation in charge of the monetary system of Taiwan. The great difference between the deposits of this bank and its loans is explained by the issue of banknotes, one of the many ways by which Japanese capital in Taiwan is created. The issue of notes, the reserves of gold and of foreign exchange kept by this bank, as well as the movement of wholesale prices in Taihoku. the capital, may be seen from the table on page 127.

In six and a half years the issue of notes increased three and a half times, the gold and foreign exchange reserve evaporated in the same period, and in the five years 1933-38 wholesale prices increased by about fifty per cent."

4:Grajdanzev--126-128 S-4 (no date) 1942 Formosans
116, 426, 453, 656, 177.42 Japan
636.42

"Another bank whose loans are far above deposits is Nippon Kangyo Bank, or the Japanese Bank for the Encouragement of Business. Actually this bank is a mortgage institution and [128] is in the forefront of the organizations which extend Japanese control over real property in Taiwan."

4:Grajdanzev--127 S-4 (no date) 1942 Formosans -1-2
116, 453

"Position of the Taiwan Banks on June 30, 1939

	Paid-up capital (1,000 yen)	Reserves (1,000 yen)	Rate of net profit in 1938	Deposits (1,000,000 yen)	Aggregate loans (1,000,000 yen)
Banks with head-offices in Taiwan:					
Taiwan Bank	13,250	8,200	19.5	109.4	233.4
Taiwan Shoko (Comm. and Indust.)	2,590	904	12.7	60.3	65.4
Shoka Bank	2,840	1,168	7.7	39.8	36.4
Kanan (South China) Bank	1,875	378	9.3	4.3	7.2
Taiwan Chochiku (Savings) Bank	250	132	15.6	20.1	17.8
Banks with head-offices in Japan:					
Nippon Kangyo Bank	116,213-	140,213	¥ 193,000*	3.9*	107.3*

Position of the Taiwan Banks on June 30, 1939 Cont.

	Paid-up capital (1,000 yen) -(1937)	Reserves (1,000 yen)	Rate of net profit in 1938	Deposits (1,000,000 yen)	Aggregate loans (1,000,000 yen)
(Mortgage Bank of Japan)					
Sanwa	72,200	35,710	¥ 955,000*	32.5*	18.6*
Total	20,680†	10,782†	¥ 4,300,000	270.3	486.1

* Branches in Taiwan alone.

† Excluding Sanwa and Nippon Kangyo Bank, which are domiciled in Japan."

4:Grajdanzev--127 [2] S-4 (no date) 1942 Formosans
116, 453

"Note Issue of Taiwan Bank and Wholesale Prices in Taiwan

	Notes (1,000 yen)	Subsidiary coins and notes (1,000 yen)	Total (1,000 yen)	Gold and foreign exchange reserve (1,000 yen)	Index of wholesale prices in Taihoku, 1914 = 100, Annual average
1933 end	48,994	6,518	55,512	15,885	148.6
1934 "	62,654	6,807	69,461	15,885	154.9
1935 "	70,191	7,163	77,354	15,987	157.6
1936 "	79,138	7,455	86,593	15,885	163.1
1937 "	112,033	8,634	120,667	21	188.7
1938 "	140,019	11,732	151,751	1,219	215.7
1939 "	171,169	14,596	185,765	...	238*
1939, May	140,195	12,750	152,945	...	219
1940, "	174,309	15,605	189,914	...	255

* In 1937 the base was shifted to June 1937, but we have converted later indices to the old base, assuming that the index for June 1937 is the same as the annual average index."

"The banks enumerated above [see page 127 in category 116--analyst] are Japanese, and the only institutions in which the Chinese have some measure of influence are the credit cooperatives, which will be discussed later. The table below summarizes information on deposits of all financial institutions of Taiwan.

Growth of Deposits of Financial Institutions in Taiwan
(1,000,000 yen)

	1926	1928	1930	1932	1934	1935	1939
Banks	102.9	111.9	101.2	133.2	152.2	173.0	270.3
Post office	9.1	13.3	16.5	18.1	21.4	23.7	34.8*
Credit cooperatives	28.0	34.9	34.6	47.7	65.5	77.9	118.2†
Total	140.0	160.1	152.3	199.0	239.1	274.6	423.3*†

* Post-office sävings deposits on Dec. 31, 1938.

†Of which rural credit cooperatives accounted for ¥87,230,000 on Dec. 31, 1938.

The amount of deposits in Taiwan has thus trebled in thirteen years. In order to judge whether this is a sign of a sharp improvement of the economic position of the islanders, it is necessary to know (1) whether the increase in deposits comes chiefly from Japanese or from Chinese sources, (2) whether the increase in deposits of the Chinese is a real

increase, or whether it only reflects a change of habit (it is evident that the transition from subsistence to money economy is bound up with the increase of deposits at the banks), (3) how far this increase may be ascribed to war-time inflation.

We do not have complete data on the distribution of deposits between Japanese and Chinese, but what is available throws some light on the problem.

Distribution of Deposits in Banks and Post Offices
(million yen)

	Banks		Post offices	
	Chinese	Japanese	Chinese	Japanese
1926	33.0	69.8	2.6	6.6
1935	51.2	121.7	4.9	18.8
1938	...	...	6.9	27.9 "

"Deposits in cooperatives belong chiefly to the Chinese, but no data are available either on the exact composition by nationality of the depositors or on their number. The table given above shows that between 1926 and 1935 the growth of Japanese banking and postal deposits was more rapid than that of the Chinese and that in 1935 about seventy-two per cent of all deposits in the banks and post offices belonged to the Japanese. But in order to see whether there is a real gain we should know the number of the depositors or the average deposit. We have such data only for the post offices.

Average Amount of Savings per Depositor in Post Offices
(in yen)

	1921	1929	1934	1938	
Japanese	33.3	51.0	146.5	89.5	(1937)*
Chinese	8.2	16.6	14.2	13.8	

* Data for the Japanese beginning with 1936 show a strange change: the number of depositors rises sharply without a corresponding increase in the total amount of the deposits. For 1938 the number of non-Chinese depositors is shown as 394,000, while the whole Japanese population in Taiwan is only 308,000. It may be that the increase of more than 100,000 Japanese depositors with a very small increase in deposits reflects the stationing of a larger number of troops in Taiwan.

Calculated from data given in Taiwan Jijo.

Comparison of the deposits of the Japanese and the Chinese shows (1) that the Japanese deposits are from seven to ten times larger on the average than the deposits of the Chinese; (2) that the average size of the Chinese deposits has not shown any increase since 1929, especially if we take the rise in prices into consideration; (3) that the absolute amount of Chinese deposits is so small that it hardly indicates any great prosperity. When the farmer buys fertilizers and sells a larger and larger part of his produce on the market, he will not keep his savings in the form of silver but will prefer to keep it in the bank where it is safer. This is, however, not necessarily a sign of economic improvement.

On the other hand, a comparison of the note issue and the index of wholesale prices suggests that a large part of the increase in deposits in the war years is purely illusory. If a [130] business man is compelled by the conditions obtaining in his business to have in his account a certain sum of money, then with the rise of wholesale prices he has to increase his deposits in order to be able to satisfy his needs to the same extent as before. But this again can hardly be considered as a sign of 'prosperity', at least for the society as a whole."

"The money which the banks and credit cooperatives collect is lent to the business men and farmers, and here one finds a great difference in the position of the big firms and the small farmers or artisans. The banks serve chiefly Japanese firms, and their credit requirements differ little from those in Japan. Small business men secure their credit in urban credit societies which sometimes charge as much as thirteen per cent and usually ten per cent, while rural credit societies usually charge twelve per cent and in the worst cases seventeen per cent. (1) But both urban and rural credit societies grant

1. These rates are taken from Sangyo kumiai nenkan, 1938, Tokyo. K. Takahashi asserts that the usual rate for mortgages on real property is 15 per cent, op. cit. p. 601).

such credit only on good security, so that the demand of many farmers for credit remains unsatisfied and they are compelled to apply for loans to private individuals who charge twenty to twenty-five per cent, and as Takahashi remarks, cases where more than twenty-five per cent is charged are not rare.

This brief survey is sufficient to show that the modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay.

4:Grajdanzev--130 S-4 (no date) 1942 Formosans-2

116, 426, 453, 563, 477

The importance of this fact cannot be overemphasized. The Chinese enterprises are unable to compete with the Japanese, not so much because the Chinese are 'unable to organize corporations' on account of their 'national characteristics,' [rationalizations given by Takahashi for the domination of industry by the Japanese see pages 112-113 in category 116--analyst] but because their financing costs them two to five times as much as it does the Japanese enterprises."

4:Grajdanzev--131 S-4 (no date) 1942 Formosans
116, 439, 652, 177.65 Japan
636.65

"It might seem more appropriate to examine Taiwan's public finances in a later chapter after a survey of the administrative machinery and its functions. However, one important consideration makes it necessary to consider them here. Our investigation of Taiwan's economy cannot be considered complete without an examination of its external trade. which plays a very important part in the life of the islanders. But the exceptionally heavy movement of goods from the island to Japan cannot be understood simply on the basis of trade or the structure of Taiwan's economy. Certain non-economic factors must be examined before a satisfactory explanation of the movement of commodities can be made. By far the most important among these factors is the government budget, which involves tremendous sums--judging by the standards of the islanders."

4:Grajdanzev--131-132 S-4 (no date) 1942 Formosans
116, 652, 177.65 Japan
636.65

"In 1937, ... the gross value of production of the island was officially estimated at 890 million yen, while the gross revenue of the state for the same year was 203 million yen. If one takes into consideration the fact that the prevailing standards of life in Taiwan are oriental and that most of the families have little, if any, surplus, then a system which succeeds in squeezing out a gross revenue of 203 million yen for the state should be recognized as a remarkable achievement which the administrators of other colonial possessions might well envy. The fiscal system in Taiwan is a powerful instrument with which to extract from the population wealth which cannot be got by ordinary economic means. Of course, if the sums received in this way are applied for the benefit of the subjects themselves, a redistribution of income which fol-[132] lows may in certain cases be recognized as beneficial. If, for example, money which would otherwise be spent by the taxpayers on liquor is spent on the education of the taxpayers' children the results will be recognized as beneficial by most people. Thus we should know not only how much money is collected by the colonial administration, but also how it is spent."

4:Grajdanzev--132 S-4 (no date) 1942 Formosans
116, 127, 652, 177.65 Japan
636.65

"Before giving tables of the revenue and expenditures of the government-general, a few explanatory remarks should be made. (1) We give only net revenue (or expenditures) for the fiscal monopolies (1), railway communications, forests, hospitals, etc., because

1. In Taiwan fiscal monopolies include salt, camphor, opium, tobacco, and alcohol.

gross revenue figures give an exaggerated value to these items; (2) on the expenditure side we have changed the classification according to the purpose of the expenditures and all 'extraordinary' revenues and expenditures we combined with ordinary ones in order to give a more complete picture. The official heading, for example, 'grants to the sufferers from natural calamities' is misleading. One might assume that this represents aid rendered by the state to the local population, but on closer inspection one sees that a greater part of this item in the last year was made up of grants to the railways. Under the heading of 'building and repairs' (eizen hi) we find expenditures on airfields (more than one million yen) out of all proportion to the number of passengers carried (about 40 passengers per day), not including subsidies to airlines.

Unfortunately we cannot disentangle many other large items in view of the absence of information, and consequently, the amounts given represent a minimum for certain expenditures (war, police, 'subsidies' to business men, etc.) and if data were available they might be of much larger proportions."

4:Grajdanzev--132-133 S-4 (no date) 1942 Formosans
116, 631, 652, 177.65 Japan
636.65

"First of all let us compare the gross revenue of the government-general, provinces and municipalities, in order to secure a clear idea of their relative importance. [133]

Public Revenues for 1939 (Budget Estimates) (1)

1. Of course, there are probably cases of double counting in this table, e.g. a grant-in-aid from the government-general to provinces may appear in the budget of the government-general and also in the provincial budgets.

	In 1,000 yen	Percent of total
Government-general	208,602	74.4
Provinces	34,610	12.4
Municipalities	36,961	13.2

Thus three-fourths of all revenues pass through the hands of the government-general; compared to it the local administration is of trifling importance, and we may therefore concentrate our attention chiefly on the budget of the government-general."

4:Grajdanzev--133-134 S-4 (no date) 1942 Formosans-1-2
116, 651, 177.65 Japan
636.65

"The sources of revenue of the government-general for the last five years are as follows:

Revenue of the Government-General in 1,000 Yen (1)

1. Including net income from monopolies, railways, communications, forests, textbooks, weights and measures, hospitals.

	1935	1936	1937	1938	1939	1940
	settled	accounts		budget	budget estimates	approx. budget estimates
Taxes(a)	53,978	64,173	72,567	81,873	78,170	93,000
Net Revenue from railways, commun.	12,395	12,888	13,296	16,904	15,250	—
Loans (b)	—	—	—	—	6,400	6,000
Others	5,834	7,007	6,564	9,397	8,420	—
Surplus from the preceding year	29,441	32,605	41,833	46,392	18,373	25,934
Total	101,648	116,673	134,260	154,566	126,613	—

a) Including net profits of monopolies and receipts of stamp duty.
b) Loans were often floated by the government-general before 1939, but were not

included in the general budget because they were made for special purposes. This item, however, represents a deficit. The debt of the government-general, at the beginning of 1939, probably stood at about Y 94 million.

Insofar as the 'surplus from the preceding year' cannot be considered as an independent source of revenue, it is clear that the greater part of the revenue of the government comes from taxes (including fees and fines). If we add the taxes to be collected by the provinces and municipalities, the total amount [134] of revenue from taxes was 124.3 million yen for 1938 and 122.5 million yen for 1939--large amounts for an oriental island, agricultural in character, and with a population of only six millions(2). Compared with

2. An official investigation of farmer's budgets made in 1936 revealed that direct taxation of farmers in Taiwan is twice as high as in Japan (Nasu, op. cit.).

1935 the amount of taxes to be collected from the population in 1938 increased by 52%, and this increase was resumed in 1940 and 1941."

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-1-5
116, 434, 565, 651, 177.65 Japan
636.65

"Taxes may be of different types--some falling chiefly on the rich, whose ability to pay is, of course, greater than that of the average farmer. We do not have necessary information for a detailed analysis of how the tax burden is distributed between these two groups, but what is available gives clear indications. We have divided the taxes into two groups: (a) taxes on the recipients of large incomes; (b) taxes on the masses.

Taxation and Net Monopoly Receipts in 1,000 Yen

A. Taxes on the recipients of high incomes:

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Income Tax	3,873	5,285	9,538	13,024	12,395
Tax on capital		5	189	352	855
Mining Tax	200	203	291	353	327
Special profit tax	1,016	1,575	2,761	4,979	2,444
Tax on distribution of dividends		335	425	394	850
Inheritance tax			105	279	305
Total	5,089	7,403	13,309	19,381	17,176

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-2
116. 434, 565, 651, 177.65 Japan
636.65

B. Taxes on the masses of the population:

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Land tax	7,492	7,742	7,938	8,342	8,342
House tax					1,312
Business tax a)			2,931	3,290	2,726
Tax on sugar	3,320	3,461	4,050	6,702	5,215
Tax on alcohol b)	3,698	3,845	2,913	169	100
Taxes on other commodities	2	177	275	393	826
Customs duties and other duties connected with them	2,611	3,326	2,574	1,846	1,817
Stamp duty	5,107	7,271	7,220	7,653	5,926
Monopolies, net receipts	24,555	28,968	29,652	32,845	32,568
Net profits from text-book sales c)	103	29	75	74	24

[135]

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Profit on weights and measures d)	179	209	206	331	341
Fines and confiscations e)	1,091	529	224	362	224
Tax on railway fares				205	202
Admission ticket tax				116	124
Tax on construction					152
Amusement tax					188
Other taxes	731 f)	1,213 f)	1,200 f)	164	907
Total	48,889	56,770	59,258	62,492	60,994
The same as percentages of total					
Group A.	9.4	11.5	18.3	23.6	22.0
	90.6	88.5	81.7	76.4	78.0

a) We include business taxes in this group because it is legitimate to suppose that they are shifted by the business men to the population.

b) The fall of receipts from the tax on alcohol in the last two years is due to the introduction of a state alcohol monopoly.

c) Formally this is not a tax, but a surplus remaining after deduction of expenditures on printing of textbooks from receipts. However, state profits derived from the sale of textbooks to school pupils hardly can be considered otherwise than a tax.

d) As in the preceding item this represents a surplus from a form of fiscal monopoly.

e) Formally fines and confiscations are not taxes. But their regularity (they are foreseen in the budget) and their amounts show they are not 'casual' receipts. They fall, mainly, on the Chinese population.

f) Chiefly receipts from the taxation of surplus issues of Bank of Taiwan notes.

From this table it may be seen that about 80 to 90 percent of the taxes fall on the masses of the population and only 10 to 20 percent on the wealthier groups. The percentage of taxes contributed by the well-to-do rose from 9.4 in 1935 to 22.0 in 1939, but it would be a mistake to suppose that this implies a change of policy: the exigencies of wartime and the already oppressive burden of taxes on the masses make it more and more difficult to increase that burden. Under these conditions, heavier taxation of the rich is a necessity, but the government prefers to borrow from them, not to tax them: the loans amounted to six million yen in 1939 and are expected to amount to 17 million yen in 1941.

The actual tax-burden on the masses as compared with the wealthy is considerably

greater if we include provincial and [136] local taxes. We have no data on the exact distribution of local taxes, but provincial taxes can be measured. Provincial taxes are surtaxes, calculated as a percentage of the corresponding government-general taxes. Their rates are as follows:

Surtax on income tax	18%	of income tax
Surtax on land tax	90-100%	of land tax
Surtax on business tax	70-80%	of business tax
Surtax on house tax	120-150%	of house tax

These rates show that surtax on income tax (which falls chiefly on the recipients of high incomes) is only 18%, while surtaxes on taxes falling on the masses of population range from 70 to 150%."

4:Grajdanzev--136 S-4 (no date) 1942 Formosans
116, 171, 565

"We have no data on municipal taxes, but judging by those of the government-general and the provinces, the system is the same as in Japan, where municipal taxes in the budget of 1939 were distributed in the following way:

Land tax	11 %
House tax	17.3%
Business tax	11.7%
Miscellaneous taxes	11.9%
Special tax	42.5%
Other Income tax	5.6%
Total tax receipts	100.0%"

"The special tax is a combination of property and income tax, but it cannot play an important part in local taxation in Taiwan because as a rule the recipients of large incomes in Taiwan do not live there--their residences being in Japan proper. Consequently this tax falls chiefly on the middle and lower brackets, so that the chief burden of local taxation falls on the masses to an even greater degree than in the case of the taxes of the government-general.

We cannot calculate the general incidence of taxation in Taiwan, but we can get an idea of the burden it represents in the following way: land taxes in the 1939 budget total about 22,350,000 yen (1). In this figure are included taxes on improved land, forest land, fish

1. This figure is arrived at as follows: (a) the land tax of the government-general is 8,342,000 yen; (b) the provincial land tax is 7,805,000 yen; (c) we have no figure for the local land tax, but we assume that the relationship is about the same as in Japan proper, which would give a figure of 6,200,000 yen. Thus the total amount of taxes on land is about 22,350,000 yen.

ponds, and other land to the amount of [137] 3,060,000 yen (2). Thus, 19,280,000 yen are

2. The taxes of the government-general on lands of this kind amount to 1,143,000

yen, but insofar as provincial and local taxes bear a definite relation to the basic tax, the total is estimated to be about 3,060,000 yen.

paid on 856,900 ko of taxable land, i.e. 22.5 yen per ko. Since the agricultural population of the islands represents about 60% of the total population, the average amount of land per person in the agricultural population of Taiwan is about 0.37 ko (about 0.9 acres). A tax of 22.5 yen per ko is equal to one and a half to two months' wages of an agricultural worker (3); and the levy on land is only one among many taxes.

3. Daily wages of an agricultural worker are about 0.80 sen; monthly, 8 yen to 18 yen. Source: Taiwan Jijo.

But as was mentioned above, it is important to know for what purposes the sums collected are applied. The harshness of taxation may be mitigated by beneficial ways of spending the revenue."

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-1-5
116, 465, 652, 177.65 Japan
636.65

"The expenditures of Taiwan government-general may be classified as follows:

Expenditures of the Government-General (1,000 Yen) (1)

1. Source: Okurasho Nempo.

Purpose [a]	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Government-general	1,758	1,939	2,289	2,232	2,416
Grants to local governments	14,704	14,985	15,733	16,171	16,648
Pensions	4,915	4,898	5,088	5,190	5,414
Public finance [b]	9,210	8,623	9,412	9,920	14,315
Police, court, prison [c]	4,474	4,547	5,437	5,534	5,342
General hygiene, hospitals [d]	716	572	833	978	1,204
Education	4,720	5,096	5,499	4,119	4,840
University [e]	295	322	349	3,236	3,797
Research and Investigations	2,630	2,570	3,055	3,186	3,929

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-2
116, 465, 652, 177.65 Japan
636.65

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
Railroads and roads (new construction)	7,136	8,537	8,475	9,839	9,588
Ports, rivers	9,113	9,625	10,669	9,120	13,327
Communications (new construction)	717	1,623	1,718	1,442	1,798
Help to sufferers in natural calamities	2,894	435	600	1,272	326
Development of State lands	204	193	335	445	497
Rice control	405	1,180	1,218	121	2,217
War	287	2,017	8,727	18,299	21,150
Meteorological stations [138]	73	94	278	507	890
Propaganda	146	155	427	1,228	1,957
of which for 'spiritual mobilization'			37	57	60

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-3
116, 465, 652, 177.65 Japan
636.65

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
'Expenses of establishments (shisetsu) in South China and the South Seas'	583	618	1,080	2,046	4,074
Secret funds	181	176	176	159	190
Encouragement of industry	3,969	5,707	5,873	9,058	11,468
Temples and shrines	709[f]	134	349	377	599
Total	69,839	74,046	87,620	104,479	125,986

a) The classification offered here is in most cases quite different from the official one; see below for explanations.

b) Chiefly debt service and the cost of tax collection.

c) Not including those paid from the budget of local governments.

d) These are net expenditures, receipts from the patients are deducted.

e) As will be shown later, the University serves chiefly the Japanese. It existed before 1938, but the expenditures were not disbursed from the budget of the government-general.

f) Includes expenditures on the memorial exhibition ('Forty years of Japanese rule').

To this it is useful to add the table of expenditures of provincial and local governments:

Expenditures of Provincial and Local Governments (1,000 Yen)

	1938 budget	1939 budget estimates
Cost of government, including police	8,289	7,630
Debt service	4,389	4,413
Education	13,177	14,144
Hospitals and hygiene	5,447	5,193
Encouragement of industry	5,172	6,488
Guards	757	1,110
Public Works	7,156	7,052
Repairs	6,796	4,361
Shrines	146	103
Other expenditures	19,827[a]	21,159[a]
Total	71,156[a]	71,653[a]

a) This includes several millions in cases of double counting

(grants from the provincial governments to local ones), but we have no means of tracing them."

"The expenditures on the government apparatus, including police, courts, prisons, and pensions are chiefly, in some cases [139] exclusively, expenditures on the Japanese staff and for the benefit of the Japanese. All important government positions are occupied by Japanese and their salaries are much higher than those of the Chinese. Expenditures on roads, railroads, and communications, of course, benefit the local population as well as the Japanese, but as was shown in preceding chapters, these improvements are used chiefly by the Japanese or for commerce with Japan which brings little net gain to the islanders. Expenditures on ports are out of all proportion to the needs of the island. Their function is, as the Japanese openly announce, to serve as a base for the advance to the South, and such expenditures have little to do with the welfare of the islanders. Expenditures on rice control are again expenditures in the interest of Japan proper for this system has in view simply the interest of Japanese. In the war expenditures we have included expenditures on airfields, on Red Cross activities, on air defense and contributions to the war chest of Japan. These expenditures grew from the modest figure of 287,000 yen in 1935 to 21,150,000 yen in 1939; thus Taiwan contributes to the conquest of China by the Japanese. In the war expenditures should be included expenditures on meteorological stations. Their remarkable growth from 73,000 yen in 1935 to 900,000 yen in 1939 is explained not by any interest in meteorological phenomena, but by the

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-2
116, 563, 659, 723, 177.65 Japan
636.65

needs of the Japanese military aviation. Taiwan lies in the path of typhoons and information on weather conditions there is of extreme value to the Japanese forces in China."

4:Grajdanzev--139 S-4 (no date) 1942 Formosans
116, 171, 208, 658, 177.20 Japan
636.20

"Analogous to the war expenditures are the related expenditures on propaganda. In this group we included expenditures on broadcasting, including construction of new stations, on 'social education,' and on the 'spiritual mobilization of the population'. There may be some who wonder whether the expenditures on radio-broadcasting stations may be properly considered as expenditures on propaganda. But while in Japan the users of radio receivers must pay a certain annual fee, in Taiwan broadcasting is free because the government considers it a powerful instrument for 'spiritual mobilization' and for the Japanization of the population."

4:Grajdanzev--139-140 S-4 (no date) 1942 Formosans
116, 648, 659, 177.72 Japan
636.72

"Expenditures for the penetration of Southern countries and [140] 'secret funds' are scarcely likely to benefit the Chinese population of Taiwan."

4:Grajdanzev--140 S-4 (no date) 1942 Formosans
116, 563, 656, 177.47 Japan
636.47

"'Encouragement of industry', on which the government planned in 1939 to spend 11.5 million yen from the general budget and 6.5 million from local budgets, consists of subsidies to Japanese industrialists and entrepreneurs in general. The budget for 1939, for example, provided for the following grants to Japanese companies: 1,743,000 yen to oil companies, 1,447,000 to shipping lines, 1,640,000 to airlines, 72,000 to private railways, 629,000 to gold producers. It is clear that these expenditures enriching the Japanese entrepreneurs give at best, as was shown above, low-paid work for the Chinese."

4:Grajdanzev--140 [2] S-4 (no date) 1942 Formosans
116, 346, 563, 659, 177.65 Japan
636.65

"The shrines and temples mentioned above are not Chinese temples, but Japanese shrines, including a shrine to the spirits of the war-dead on which 100,000 yen was expended in 1939. It may be interesting to note that construction of Japanese shrine in Taito (1937-1939) was to cost 1,078,000 yen, while the appropriations for the Chinese temple of Confucius in Taihoku (1935-1936) amounted to only 20,000 yen."

4:Grajdanzev--140 [3] S-4 (no date) 1942 Formosans
116, 652, 657, 177.65 Japan
636.65

"Expenditures on the health and education of the population occupy a rather modest place in the budget of the government-general, and their part in total expenditures is falling, as the following figures show: (percentages of total expenditures)

	1935	1936	1937	1938	1939
Education[a]	6.8	6.9	6.3	4.5	3.8
Health	1.0	0.8	1.0	1.1	1.0

a) Expenditures on the University are not included here as before 1938 they were not included in the general budget, and we have no data on them.

However, it should be pointed out that the bulk of these expenditures passes through local budgets--14,144,000 yen on education and 5,193,000 on health in 1939."

4:Grajdanzev--140 [4] S-4 (no date) 1942 Formosans
116, 654, 177.81 Japan
636.81

"Attention should also be paid to the considerable amounts spent by the government on research and investigation. A special institute has been established, which centralizes the research on the island and considerable sums are spent on research into new uses for natural gas, on sugar and sugar cane research, and on war industries."

4:Grajdanzev--140-141 S-4 (no date) 1942 Formosans
116, 648, 652, 659, 723, 177.65 Japan
636.65

"The large expenditures on railways and communications, on research, on investments in the South Seas, etc., show what importance the Japanese attach to the part of Taiwan in the schemes for an advance to the South. The money [141] collected in the Taiwan budget--almost 200 million yen--is thus mainly used, on the one hand, for the construction of the all-important base for Japanese penetration in the South Seas, on the other, for the purchase of Taiwanese products to be sent to Japan (1).

1. In the last few years the Japanese government has started the practice of direct contributions by the Taiwan Treasury to the Japan's Treasury. The sum appropriated in Taiwan's budget for 1941, for example, is 24.5 million yen."

4:Grajdanzev--142 S-4 (no date) 1942 Formosans
116, 439, 177.43 Japan
636.43

"We use the term 'external trade' of Taiwan because trade with Japan, cannot from the legal point of view be considered as 'foreign' trade. Throughout the following pages 'external trade' includes the trade of Taiwan with all other countries (including Japan)."

Taiwan's External Trade (In Million Yen)

	Export	Import
1896-1900 average	14.6	18.1
1901-1905 "	20.9	22.1
1906-1910 "	39.4	36.6
1911-1915 "	63.0	56.6
1916-1920 "	158.1	117.0
1921-1925 "	205.3	136.5
1926-1930 "	252.0	186.8
1931-1935 "	273.3	194.7
1936 "	387.9	292.7
1937 "	440.2	322.1
1938 "	456.5	366.7
1939 "	592.9	408.7

In 42 years exports increased from 14.6 million yen (average for 1896-1900) to 592.9 million in 1939, and imports from 18.1 million to 408.7 million for the corresponding dates, an increase of 41 and 23 times respectively. This trade is distributed among countries as follows: [143]

4:Grajdanzev--142-144 S-4 (no date) 1942 Formosans-2
116, 439

Exports

	1896-1900 average	1911-1915 average	1926-1930 average	1936	1937	1938	1939
Great Britain	1	877	1,053	1,372	2,095	1,499	817
France		539	289	241	250	221	194
Germany		978	76	84	83	239	329
Italy			777	2	0	8	279
U.S.A.	659	5,689	4,866	6,146	6,420	4,141	9,365
Br. India	2	129	13	221	175	36	29
Australia		46	35	421	569	282	220
Canada		299	10	117	224	67	114
Dutch East Indies		880	4,103	370	325	246	259
China	9,182	3,864	19,529	7,879	5,575	7,972	33,840
Hongkong	1,869	419	4,553	2,667	3,333	700	142
Manchoukuo				851	1,356	5,180	8,703
Kwantung		59	938	4,008	4,903	14,144	27,417
Japan	2,860	49,122	215,210	358,895	410,259	420,104	509,745
All others	6	120	518	4,675	4,608	1,615	1,216
Total	14,579	63,020	251,970	387,949	440,175	456,454	592,939

4:Grajdanzev--142-144 S-4 (no date) 1942 Formosans-3
116, 439

	1896-1900 average	1911-1915 average	Imports 1926-1930 average	1936	1937	1938	1939
Great Britain	1,326	2,340	3,083	392	792	204	146
France	7	25	57	51	96	131	
Germany	212	998	7,213	3,327	1,203	1,165	1,585
Italy		5	86				18
U. S. A.	957	1,252	3,413	2,908	2,934	2,550	1,750
Br. India	407	1,876	8,475	3,199	2,957	3,206	3,853
Australia	71	35	471	234	4		57
Canada		3	499	446	281	18	155
Dutch East Indies	37	311	2,365	1,843	3,282	2,101	4,529
China	6,771	6,970	25,893	8,622	6,201	1,954	4,253
Hongkong	536	100	76	126	95	6	7
Manchoukuo				19,618	17,185	17,817	22,082
Kwantung		494	2,352	6,878	7,088	7,891	10,299
Japan	4,888	40,071	127,666	243,832	277,895	327,950	357,608
All others	2,878	2,128	5,188	1,210	2,111	1,666	2,308
Total	18,090	56,608	186,837	292,686	322,124	366,659	408,650

[144] Trade By Countries In Percentages of Total Exports

	1896-1900	1926-30	1936	1937	1938	1939
Great Britain	0.0	0.4	0.4	0.5	0.3	0.2
France	0.0	0.1	0.1	0.1	0.0	0.0
Germany	0.0	0.0	0.0	0.0	0.1	0.1
Italy	0.0	0.3	0.0	0.0	0.0	0.0
U. S. A.	4.5	1.9	1.6	1.5	0.9	1.6
Br. India	0.0	0.0	0.1	0.0	0.0	0.0
Australia	0.0	0.0	0.1	0.1	0.1	0.0
Canada	0.0	0.0	0.0	0.1	0.0	0.0
Dutch East Indies	0.0	1.6	0.1	0.1	0.1	0.1
China	63.1	7.8	2.0	1.3	1.7	5.7
Hongkong	12.8	1.8	0.7	0.7	0.2	0.0
Manchoukuo	0.0	0.0	0.2	0.3	1.1	1.5
Kwantung	0.0	0.4	1.0	1.1	3.1	4.6
Japan	19.6	85.5	92.5	93.2	92.0	86.0
All others	0.0	0.2	1.2	1.0	0.4	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

4:Grajdanzev--142-144 S-4 (no date) 1942 Formosans-5
116, 439

Imports

	1896-1900	1926-30	1936	1937	1938	1939
Great Britain	7.3	1.7	0.1	0.2	0.1	0.0
France	0.0	0.0	0.0	0.0	0.0	0.0
Germany	1.2	3.9	1.1	0.4	0.3	0.4
Italy	0.0	0.0	0.0	0.0	0.0	0.0
U. S. A.	5.3	1.8	1.0	0.9	0.7	0.4
Br. India	2.3	4.5	1.1	0.9	0.9	1.0
Australia	0.4	0.3	0.1	0.0	0.0	0.0
Canada	0.0	0.3	0.2	0.1	0.0	0.0
Dutch East Indies	0.2	1.3	0.6	1.0	0.6	1.1
China	37.4	13.8	2.9	1.9	0.5	1.0
Hongkong	3.0	0.0	0.0	0.0	0.0	0.0
Manchoukuo	0.0	0.0	6.7	5.4	4.9	5.4
Kwantung	0.0	1.3	2.4	2.2	2.2	2.5
Japan	27.0	68.3	83.4	86.3	89.4	87.6
All others	15.9	2.8	0.4	0.7	0.4	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0"

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-1-3
116, 439, 656, 722, 177.43 Japan
636.43

"These tables [pages 143-144 in category 116--analyst] are of some value beyond the topic of immediate interest. Elaborate theories of international trade have been constructed, the purpose of which is to explain the movement of international trade as distinct from internal trade, but these theories pay little or no attention to factors of political control which are so often of paramount importance in this sphere. Before the occupation of Taiwan, Japan occupied a very modest [145] place in the trade of the island and even after the conquest, her share was at first small; in the period 1896-1900 imports from Japan made up on the average only 27 percent of the total and exports to Japan, only 19.6 percent. It is true that these figures are rather too low because of the absence of data on Japan's trade in 1896, but if these data were available, they would probably increase Japan's share by only 4 or 5 percent. The fact is that even after the occupation of the island, and in spite of the presence of large detachments of troops and swarms of Japanese officials and adventurers, trade continued for some time to flow chiefly in the old channels. However, this situation was soon changed. In 1926-1930 exports to Japan amounted to 85.5 percent of total exports and in 1937 reached a maximum of 93.2 percent, a figure probably unsurpassed in the history of other colonial countries. The same development was achieved in imports. In 1926-30 Japan's share was 68.3 percent, in 1931-35 it was 83.4, and in 1938 it reached a maximum of 89.4. The slight fall

in Japan's share in 1938 and 1939 is apparent rather than real, for in these years Kwantung, Manchoukuo, and maritime China became to all intents and purposes Japanese colonies and for the Japanese in Taiwan it makes no difference from the point of view of profits and foreign exchange whether they trade with Japan or with these regions. In 1939 the share of this 'yen bloc area' of Taiwan's trade was 97.8 percent of her exports and 96.5 percent of her imports. For comparison let us look at the share of China. In 1896-1900 her share in Taiwan exports averaged 63.1 percent, in 1926-30, only 7.0, in 1936, 2.0, and in 1937, 1.3. The same picture appears in the case of imports, for which the corresponding percentages are 37.4, 13.8, 2.9, and 1.9. China is near, --just across the Taiwan Strait, her population is vast her cities are growing, her products are held in high esteem by the Chinese population of the island, she is in great need of Taiwan's products, and yet the trade between these two regions continued to fall catastrophically. But in 1937-1938 the most important points on the Chinese coast were occupied by the Japanese. By 1939 the area under the latter's domination has increased further, and a surprising change is occuring [sic]--the trade of Taiwan with China now shows a remarkable increase.[146]In 1937 exports from Taiwan to China were valued at 5,575,000 yen, but by 1939 they had risen to 33,840,000. Imports from China in 1938 were valued at 1,954,000 yen, in 1939, at 4,253,000. Although China experienced war in the last three years, though many of her cities were ruined, and the purchasing power of the population has fallen, the trade is better than at the start of the conflict. The reason for this reversal

lies not in the economic situation; it is rooted in the change in the political conditions for now maritime China is virtually a Japanese colony.

This will help us to understand why the foreigners--British, Americans, and others--were gradually ousted from Taiwan. Before 1895 British and American trade with the island was larger than that of Japan, the most important branches of trade, as well as shipping, were in British hands. The British owned Douglas Co. monopolized shipping, the Hongkong and Shanghai Banking Corporation dominated the financial sphere, Jardine Matheson, Dent, and Samuel Samuel traded in camphor, sugar, tea, and other products, while the trade in rice was chiefly in the hands of Chinese. Mitsui Bussan--the pioneer Japanese firm--did not appear on the island till 1898. The share of Great Britain in Taiwan's imports fell from 7.3 percent in 1896-1900 to 0.1 in 1936 and to almost zero in 1939, while in the same period that of the United States fell in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. from 5.3 to 1 and to 0.4. [sic] In 1896-1900 Taiwan's average annual imports from Great Britain were valued at 1,326,000 yen, in 1926-30 (in depreciated yen) at 3,083,000 yen and in 1936, at 392,000. The imports from the U.S.A. amounted to 957,000 yen in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. (The purchasing power of the yen of 1939 is probably not more than one-fourth of what it was in 1896-1900.)"

"Independent trade and foreign business are at an end (1) and the handful of foreigners

1. Identical amounts of foreign trade may mean different things for a nation; thus if an American firm buys tea in Taiwan, transports it to the United States in an American ship and sells it to retailers, the net result for the United States is very different from the case where a Japanese firm buys tea in Taiwan, brings it to the United States in Japanese bottoms, and sells it to American retailers.

in Taiwan are in a precarious position. In his [147] book 'Taiwan under Imperialism' Tadao Yanaihara explains this in the following way (2): in their competition with foreign

2. Yanaihara, op. cit., pages 48-49.

and Chinese merchants the Japanese traders had great capital; they also entered the sphere of production; they had the advantage of the cooperation of the Taiwan Bank; they were helped by state monopolies; they enjoyed subsidies from the state; they were protected by the tariff wall. But nowhere in his book does Professor Yanaihara give proof that the Japanese merchants had greater amounts of capital when their enterprises were organized. The huge capital funds were not brought from Japan; they were created in Taiwan itself. Neither can any reason be found for combination of trade and production

as a cause of their success. According to his own statement (op. cit., page 48), the foreign traders and shipping were almost completely driven out (hotondo kuchiku serarete) by 1907. But at that time no Japanese took any part in the production of rice, whereas in tea production Mitsui Bussan Co. and Nozawa have participated only since 1907. As late as 1905 about 90% of the sugar was produced in primitive mills and only 4,535 tons in the mills of the newly-established Japanese enterprises, while the total exports of sugar for 1905 were but 42,600 tons. Pineapples and bananas were unimportant as articles of export in these early years: bananas appeared in the custom reports in 1907 (valued at only 44,129 yen), pineapples to the value of only 18,639 yen were exported in the same year. Since camphor became a monopoly, there is no question of competition with respect to it; while alcohol was practically not exported."

4:Grajdanzev--147 S-4 (no date) 1942 Formosans
116, 171, 477, 656, 177.47 Japan
636.47

"The establishment of a Japanese bank does not of itself mean that Japanese merchants would enjoy privileges in it in comparison with other clients. There remain then monopolies, subsidies, tariff walls and--we add--taxation policy, administrative pressure and other similar measures as causes of the Japanese commercial success. The same measures were applied in Korea, later on in Manchuria and are now being used in China."

4:Grajdanzev--148-149 S-4 (no date) 1942 Formosans-1-3
116. 439

"Exports By Commodities, (1,000 Yen)

	1900-4 average	1925-29 average	1936	1937	1938	1939
Rice	3,975	67,157	124,318	126,193	128,784	128,502
Sugar	3,234	117,562	166,116	191,546	189,258	259,827
Bananas		9,310	11,166	12,335	13,283	17,006
Tea	5,691	11,035	10,270	12,852	12,742	12,424
Canned Pineapples		2,785	7,244	9,220	10,412	13,342
Camphor, crude	2,912	4,036	5,333	4,476	4,066	6,010
Camphor oil	1,112	2,509	853a	1,063a	3,152	4,030
Alcohol		5,806	5,841	5,765	9,773	16,528
Fresh fish		1,303	3,277	3,268	2,233	3,719
Salt	91	985	1,103a	1,096a	2,259	1,252
Cotton tissues	23	4,010				
Hats, caps	21	2,969	2,453	3,270	2,989	4,829
Coal	25	7,098	2,254	3,932	7,986	9,167
Ores		1,943	15,637		unreported	
Timber			2,075	2,137	3,257	5,106
All others	1,932	17,817	30,009	63,022	66,460	102,197
Total exports	19,016	256,325	387,949	440,175	456,654	592,939

a) Exports to Japan only, other data could not be obtained.

Exports As Percentages Of Total

Rice	20.9	26.2	32.1	28.7	28.2	21.7
Sugar	17.0	45.7	42.9	43.5	41.4	43.8
Bananas		3.6	2.9	2.8	2.9	2.9
Tea	30.0	4.3	2.6	2.9	2.8	3.6
Canned pineapples		1.1	1.9	2.1	2.3	2.3
Camphor, crude	15.3	1.6	1.4	1.0	0.9	1.0
Camphor oil	3.9	1.0	0.2[a]	1.3	2.1	2.8
Alcohol		2.3	1.5	0.2[a]	0.7	0.7
Fresh fish		0.5	0.8	0.7	0.5	0.6
Salt	0.5	0.4	0.3[a]	0.3[a]	0.5	0.2
Cotton tissues	0.1	1.6				
Hats, caps	0.1	1.2	0.6	0.8	0.7	0.8
Coal	0.1	2.8	0.6	0.9	1.7	1.6
Ores		0.8	4.0			
Timber			0.5	0.5	0.7	0.8
All other	10.2	6.9	7.7	14.3	14.6	17.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

a) Exports to Japan only, other data could not be obtained.

1. Source: for 1903-1929, Takahashi, op. cit.; for 1937, An Inquiry into the National Income of Japan (Economic Federation of Japan, Tokyo, 1940).

4:Grajdanzev--148-149 S-4 (no date) 1942 Formosans-?
116, 439

From the above table it is apparent that first place in Tai-[149]wan's exports is occupied by sugar, its value in 1939 being 260 million yen. Second place is taken by rice, the exports of which increased from 4 million yen in 1900-4 to 129 million in 1939, and next in order of importance, though far behind come tea, bananas, alcohol, pineapples, and camphor. In 1900-4 the island exported chiefly tea and camphor, and these two products alone made up more than half the total exports."

4:Grajdanzev--149 S-4 (no date) 1942 Formosans
116, 314, 439, 655, 177.31 Japan
636.31

"The government, desiring to utilize the unique position occupied by Taiwan in the supply of camphor, made it a government monopoly. However, in the last few years synthethic camphor production has made striking progress and the monopoly is now definitely broken. This does not mean that natural camphor will lose its market for the expanding celluloid industry can successfully absorb the surplus, but the former advantageous position of the Japanese government is lost."

4:Grajdanzev--149 [21 S-4 (no date) 1942 Formosans
116, 433, 439, 177.24 Japan
636.24

"In 1939 about 81 percent of Taiwan's exports consisted of agricultural raw materials and products manufactured from them such as sugar, tea, and tobacco. In fact the island is practically an agricultural appendage of the Japanese economy."

4:Grajdanzev--149-150 S-4 (no date) 1942 Formosans-1-2
116, 171, 435, 439, 177.43 Japan
636.43

"Two other aspects of Taiwan's exports should receive our attention. First, it is interesting to compare the gross value of Taiwan's production with its exports, keeping in mind that the gross value is considerably larger than its net value, i.e. by the cost of materials, fuel used in production, etc.

Comparison of the Gross Value of Production and Exports

	1903	1922	1929	1937
Gross value of production, million yen	84.5	354.2	598.6	890.5
Exports, million yen	20.7	158.4	272.0	440.2
Exports as percent of gross value	24.5	44.7	46.3	49.4

From this table it appears that in 1903 about one-fourth of the gross value was exported, while in 1937 the amount had risen to 49.4 percent. This probably means that in 1937 not less than three-fourths of the total net value of production of production[sic]of Taiwan was exported. Such a high ratio of exports to gross value of production is probably approached only [150] by Korea (1).

1. If Taiwan were to receive the equivalent in imports, the large exports would not constitute a problem. But we shall see later that this is not the case.

To see how far this situation was to the mutual advantage of the natives and the

Japanese, one should compare not only the ratio of exports to total production but also the absolute amounts which are not exported. In 1903 there remained 63.8 million yen worth of unexported goods, while in 1937 450.3 million were left. Let us now examine these figures in the light of price-changes. We have no index of prices for Taiwan in 1903, but we do have prices of rice--the most important product of the island--to which the authorities in 1937 gave a weight of 31 percent in the general index (2). A picul of

2. Actually it should be about 40 percent because the authorities gave sugar a weight of 25.3 percent, unduly large in view of the fact that more than 90 percent of the production is exported.

rice in 1903 cost 2.36 yen; in 1937, it cost 9.32 yen, or almost 4 times as much. If we also take into consideration the growth of population, the residual per capita gross production 'in rice prices' was 21.8 yen in 1903 and 19.8 yen in 1937. These are gross values of production, and since industry played a much greater part in 1937 than in 1903, the per capita net 'real' values in 1937 must actually be much smaller than in 1903. This is a startling conclusion. We emphasize again that these figures can only be approximate, yet they are sufficient to indicate the trend of events."

"The other matter of great importance is the sharp increase of exports from Taiwan since the start of the present Sino-Japanese war, without a corresponding rise in imports. In 1937 the increase of exports over 1936 (a year of peace) was 52 million yen, in 1938, 68 million, in 1939, 205 million, while imports increased by only 116 million yen between 1936 and 1939. To such a degree were Taiwan's reserves depleted that in spite of the great rise in prices the external trade shows a fall of 7 million yen for the first five months of 1940 as compared with the first five months of 1939. A brief analysis of Taiwan's imports follows. [151]

Imports by Commodity Groups (1,000 Yen) (1)

1. Source: Keizai Nenkan of the Oriental Economist, based on the data of Taiwan boeki geppo.

	1900-4	1925-29	1936	1937	1938	1939
Cereals, starches seeds	1,615	22,939	14,655	15,341	17,168	21,239
Foods and beverages, tobacco	3,788	33,249	45,031	15,341 47,001	17,168 54,214	21,231 66,679
Oils, fats and mfrs. thereof	1,276	7,490	13,877	17,623	19,386	20,593
Chemicals, drugs, dyes, explosives	3,203	9,530	15,586	17,643	18,980	28,096

4:Grajdanzev--150-151 S-4 (no date) 1942 Formosans-2
116, 439

	1900-4	1925-29	1936	1937	1938	1939
Threads, cords	215	3,930	4,568	4,850	4,648	5,214
Tissues, clothing and other textiles	3,175	29,528	38,417	40,888	52,303	48,566
Pulp, paper, books	841	5,257	7,937	9,015	10,008	11,860
Mineral and mfrs. thereof (cement, tiles, sand, etc.)	339	2,536	7,054	9,344	9,075	10,723
Ceramics	333	2,571	3,830	4,097	4,182	5,074
Ores, metals and mfrs.	1,126	15,711	33,553	43,853	48,721	45,909
Vehicles, machinery, arms, precision and scientific instruments	667	10,222	28,319	26,013	29,236	40,478
All others	4,924	47,196	79,859	86,456	98,738	104,227
Total	21,502	190,159	292,686	322,124	366,659	408,650"

"In return for exports to the value of 593 million yen in 1939 Taiwan received only 409 million yen worth of imports (69 percent). In order to move these exports to Japan certain conditions are obviously necessary. Taiwan must import rails, railway equipment, harbor equipment, bags for rice and sugar, fertilizers, etc. Taiwan's exports--rice, bananas, sugar, tea, pineapples, fresh fish, etc.--are foodstuffs. But most of the imports enumerated are of no direct use to the islanders themselves; they are beneficial only insofar as they help them to secure other goods. They are really costs of production. In 1939 at least 60.7 million yen worth of fertilizers, including bean cakes and other cakes, (included in 'all others' in the table above) and about 8 million yen worth of gunny sacks were imported. Another group of imports is connected with the effort to turn the island into a powerful base for further advances into China [152] and the Southern countries. Port facilities far beyond the needs of Taiwan itself, powerful radio stations, fortresses, strategic railways, factories producing war materials are being built. Again we cannot determine exactly how great this group of imports is, though we can guess its growth by following the growth of 'ores, metals and manufactures thereof', etc. These two groups, which in themselves contribute little to the welfare of the islanders, increased from 28 million yen in 1925-1929 to 62 million in 1936, to 70 million in 1937, to 78 million in 1938 and to 86 million in 1939. To some extent this growth is purely illusory since it reflects the rise in prices in these years, but we know that in the Japanese colonies, just as in Japan, the consumption of metals, machines, for peace time uses,

4:Grajdanzev--151-152 S-4 (no date) 1942 Formosans-2
116 439, 722, 177.43 Japan
636.43

etc., was reduced or stopped completely, so that the greater part is now available for military purposes."

"The remaining imports —— imports for consumption —— should be divided, wherever possible, into two parts —— consumption by Japanese and consumption by Chinese. Without attempting any detailed analysis we may make a few remarks on the basis of the material available. In 1939, for example, 2 million yen worth of condensed milk was imported, as well as 7 million yen worth of sake and 5 million yen worth of beer, not including local production of sake and beer. Neither sake nor beer are Chinese drinks; they are consumed chiefly by 100,000 Japanese male adults and by the troops stationed there. To take another example, in 1939 48.6 million yen worth of fabrics and clothing, including shoes, hats, gloves, buttons, pearls, combs, bracelets, laces, etc. were imported into Taiwan. From this amount 8.1 million yen worth of gunny sacks should be deducted, leaving a balance of 40.1 million. If Japanese residents were able in 1939 to spend 12 million yen on drinks (not including locally produced and consumed beverages), they probably spent not less than double this sum on clothing, shoes and other personal articles (1) which—with a [153] few unimportant exceptions—are imported from Japan.

1. That this is not an overestimate may be judged from the following figures: 77.2 yen per person per year or about 25 yen per family per month can hardly be considered as excessive for clothing (including shoes, etc.) in a country where, for example, one yard of muslin cost 1.34 yen. In a special investigation conducted in 1937-1938, which covered 355 Japanese families with 1,397 members, the average

monthly income of a family was 184.6 yen, of which 23.6 yen was spent on food, 16.9 yen on lodging, leaving an ample margin for clothing and other expenditures. (Data on budgets from the Toyo keizai tokei geppo, July, 1940). An investigation conducted in Japan proper in 1936-1937, only one year earlier than the investigation in Taiwan mentioned above, gives the average expenditure on clothing of 10.18 yen per month for persons with an average salary of 88.37 yen; for the low income brackets it was 3.43 yen, for higher (about 100 yen), 12.18 yen. In our case the average salary is 184.6 yen, so that an expenditure of 25 yen on clothing is quite probable. See Kakei chosa hokoku, (Naikaku tokei kyoku) Tokyo, March, 1938.

If this is true , then not more than 3 yen per capita were spent on imported clothing by the Chinese in 1939 (2). But, as was pointed out in the preceding pages, the Chinese

2. The correctness of our estimate is supported by the budget estimates made by the government officials in 1936 and quoted by Nasu (op. cit.). According to them, the per capita annual expenditure on clothing of a representative Taiwanese farmer was 6.02 yen in 1936. This figure includes imported and locally produced clothing (shoes, hats, etc.) whereas our estimate is for the imported textiles only.

society in Taiwan is not uniform. Its wealthier members spend on clothing many times more than the small farmers, workers, or tenants."

4:Grajdanzev--154 S-4 (no date) 1942 Formosans
116, 127, 471, 661

"We have now come to a point where some estimate may be made of what the Japanese are getting from Taiwan (1). It is important to emphasize that all that follows is based,

1. Such questions as how many among the Japanese receive benefits from Taiwan and whether these benefits are distributed equally among recipients, do not concern us here.

with few exceptions, not on more or less exact official figures, but only on estimates. All those who have worked on colonial problems know how difficult it is to get certain data. This does not mean, however, that we should give up the idea of forming an opinion concerning, for example, colonial profits, for many facts are available which help us to make estimates. These are not therefore based on intuitive guesses, but are all founded on certain facts supplied by official and unofficial Japanese statistics."

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans -1-3
116, 171, 465, 511. 556, 563, 177.43 Japan
636.43

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

4:Grajdanzev--155 S-4 (no date) 1942 Formosans
116, 434, 556, 177.43 Japan
636.43

"The amount of profits collected [by the Japanese--analyst] may be calculated more or less precisely. We know that the exports from Taiwan are greater than the imports into the island and there can be only one explanation: considerable real wealth is transferred from Taiwan to Japan each year, wealth which represents the profits and savings of the Japanese in Taiwan."

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year—a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

4:Grajdanzev--156 S-4 (no date) 1942 Formosans
116, 453, 457, 563

"We have statistics of domestic and foreign postal money orders for Taiwan. Without exception each year the amount of money orders issued in Taiwan is above the amount of money orders paid in Taiwan. The difference indicates approximately the net remittance by the Japanese in the case of domestic money orders (an order on Japan is regarded as a domestic order in Taiwan), and by the Chinese in the case of foreign money orders. The average amounts for the last 5 years (1933/34-1937/38) are as follows:

	Issued	Paid	Balance
Domestic money orders (1,000 yen)	32,207	19,880	—12,327
Foreign money orders (1,000 yen)	467	96	— 371

Source—Financial and Economic Annual of Japan, 1938.

For the last 5 years the average balance of postal money orders in favor of Japan was 12,327,000 yen while that to the advantage, presumably, of China (1) was only 371,000

1. We say 'presumably of China' because it is difficult to find any other foreign country to which an average of 16,000 remittances are made annually from Taiwan.

yen. There is nothing astonishing in this because the Chinese working in Taiwan who are the citizens of China are either workers or petty traders and, of course, none of them are employed in governmental service. These are statistics of postal money orders, not of bank remittances, but there is no reason to suppose that the situation with respect to the latter is different."

"The trade balance of Taiwan with all countries other than Japan is usually 'passive', but this trade also does not present a special problem. If Taiwan, for example, bought beans from Manchuria for 20 million yen and sold goods to Japan to the [157] value of 80 million yen, we may consider that this means that value of 80 million yen worth of goods were sold from Taiwan to Japan. The freight payments which accrue chiefly to the Japanese need not trouble us because they are included in Taiwan's statistics of imports and excluded from the statistics of exports. Thus we find the commodity balance of trade almost exactly measures the amount of profits and other earnings of the Japanese individuals, companies, and the government-general which they put at the disposal of Japan proper(1). Invisible items of the balance of payment with foreign countries do

1. Actually the profits derived by Japan from Taiwan are even greater, because (a) the gold produced in Taiwan and sent to Japan is not included in the trade statistics and (b) there was very active smuggling by Japanese of goods from Taiwan to Chinese ports, estimated by Japanese authors at several million yen a year.

not complicate the picture. Naturally, there is not an exact correspondence between the amounts transferred to Japan and the balance of payments from year to year and especially from month to month; more goods may be sent this year than there are

profits and savings transferred, but in the following year the situation will be reversed if the normal functioning of the financial mechanism is to continue.

Let us now look at the balance of payments of Taiwan. In the first thirteen years of the Japanese administration (1896-1908) the balance was usually passive and the net aggregate amount of these passive balances was 31,655,000 yen (after deduction of active balances). It is fair to assume that this sum approximately represents net Japanese investments in Taiwan—a sum for which no equivalent was received up to 1908. Since that time the balance has been active. Admittedly, these investments do not include Japanese expenses of military occupation. But these were taken care of by the huge indemnity paid by China to Japan after the war of 1894-1895. This indemnity, as is well known, was in excess of the cost of war to Japan.

Active Trade Balance of Taiwan (1,000 Yen)

	Aggregate	Annual Average		Aggregate	Annual Average
1909-1913	26,384	5,276	1929-1933	354,672	70,934
1914-1918	167,117	33,423	1934-1938	481,642	96,328
1919-1923	212,148	42,430	1939	184,289	184,289
1924-1928	382,971	76,594			
			Grand Total	1,809,223	

[158] Thus from an annual average of 5.3 million yen in 1909-13 the active balance of Taiwan rose to 96,328,000 in 1933-1938 and reached a peak of 184,289,000 in 1939. In

many cases the trade balance cannot serve as a good indicator of what a country pays to others for foreign investments. However, the case of Taiwan is different. The items complicating the balance of payment as apart from the commodity balance are almost absent here. There are few islanders abroad and there are few foreigners (except the Japanese) in Taiwan. There are no other foreign investments (other than the Japanese) on the island worthy of consideration. The islanders do not travel abroad, the foreigners do not travel in the island. Almost all economic relations are with Japan; the economic relations with other countries, insofar as they exist, are taken care of in the balance of payments."

4:Grajdanzev--158 S-4 (no date) 1942 Formosans
16, 457, 563, 661, 177.43 Japan
36.43

"Of course, some part of the [trade--analyst] balance is made up by the remittances of the Japanese on the island to Japan-proper, remittances which may be presented as 'earned income' and not an income from investment. However, the thousands of Chinese citizens who reside on the island remit home to China only paltry sums. They are unable to earn as much as the Japanese, mainly because the privileged position of the Japanese is the result of the colonial status of the island. The services performed now by the Japanese in most cases could be as well performed by the islanders, but their part is to be servants of the ruling nation. It should be clear than that this 'earned income' can be considered as a special form of the general income from the colonial exploitation of the island."

4:Grajdanzev--158-159 S-4 (no date) 1942 Formosans
116, 171, 457, 477, 661, 177.43 Japan
636.43

"The usual explanation of Japan's ability to obtain year after year tens of millions of yen worth of goods over and above what is sent from Japan to Taiwan is that this balance represents the interest on Japanese capital invested in Taiwan and the profits of the Japanese businessmen there. But a closer analysis of the figures given above reveals that this explanation is not satisfactory. It is important to understand that we are concerned here with investments and the returns on them, not from the point of view of an individual, but from the point of view of two regions——Taiwan and Japan. From 1896 to 1908. [159] inclusive, Japan sent goods to the value of 31,655,000 yen over and above her imports from the island and this represents her real outlay in the colony. She now receives from Taiwan sums which in every year since 1914 have been greater than this original 31,655,000 yen; which in every year since 1924 have been more than twice as great; and which in every year since 1934 three times as great, and in 1939 were six times as great as the original sum. Is this the legitimate interest on capital and profits of the entrepreneurs which are due to their energy, foresight and managerial ability?

Of course, we know that high profits are made not only in Taiwan, but, say, in the United States as well. Does this fact refute our thesis of exploitation? In no way. The existence of monopolies in the United States is a fact known to all. However, these monopolies are not permanent. Some of them appear, some disappear, every year."

4:Grajdanzev--159 S-4 (no date) 1942 Formosans
116, 457, 652, 661, 177.43 Japan
636.43

"For our purposes it is irrelevant whether all or only a few of the Japanese firms on the island make high profits; whether there are bankruptcies among them or not. We are concerned here with Japan's position in Taiwan as a whole. The existence of the Japanese firms on the island which make less than 10 percent on the invested capital, of the Japanese entrepreneurs who fail and the Japanese adventurists who return to Japan disappointed and disillusioned does not refute our thesis. It was shown in some detail above that beside investment profits as such there is derived from Taiwan the income of Japanese officials, and income originating in taxation, monopolies, fines, etc., most of this due in the last analysis to one source—Japan's colonial power. All this brings us to the conclusion that the active balance of Taiwan's trade represents mostly an unusually high degree of exploitation of the Chinese on the island by the Japanese government and industrialists.

To those who ask whether the colonies are profitable or not, it may be said that the ruling group of Japan knows that they are. They are able in Taiwan to support 300,000 Japanese on a much higher level than those Japanese would enjoy in Japan and in addition to extract profits of more than 100 million yen a year."

4:Grajdanzev--160 S-4 (no date) 1942 Formosans -1-2
116. 643, 177.64 Japan
636.64

"The administration of Taiwan is entrusted to the Taiwan governor-general, who is appointed by the Emperor of Japan. Before 1919 only generals or admirals could occupy this post (1) and nowadays, if the governor-general is at the same time a general or

1. Recently the opinion was expressed in the Japanese press that, in view of the importance of Taiwan as a base for the advance to the South, this practice should be restored.

admiral, he is also commander-in-chief of Japanese forces on the island. If, on the other hand, he is a civilian, he may demand from the commander of the army the use of troops for the maintenance of order. His powers are extensive. He supervises the work of all administrative machinery, promotes the officials, dismisses them from service, though in respect to certain ranks his action must be approved by Tokyo. He has a right to suspend or cancel any order or any administrative measure of provincial governors under him and he can impose on any person on the island, without recourse to the courts, a fine up to ¥200 and/or a prison term up to one year. Under him are his Secretariat, the Departments of Home Affairs, Education, Finance, Colonial Development, Police, Communications, Monopolies and the Research Institutes (Central, Sugar, Aquatic). His actions are supervised by the Japanese Minister of

4:Grajdanzev--160 S-4 (no date) 1942 Formosans-2
116, 643, 177.64 Japan
636.64

Colonial (Overseas) Affairs, but as regards special branches of his administration he is also responsible to the Ministers of Finance and Communications."

4:Grajdanzev--160-161 S-4 (no date) 1942 Formosans
116, 563, 646, 177.64 Japan
636.64

" 'For the consulting of the people's opinions' there is an advisory body to the governor-general, Hyogikai (1), established in June 1921. Only government-general

1. Usually translated 'council.'

officials, civil and military, and those private persons 'rich in knowledge and [161] experience' whom the governor-general choses to appoint have a right to represent the people's opinions; but all high officials, civil or military, are Japanese, and, as was mentioned, they are appointed as well as dismissed at the representation of the governor-general. This advisory body, consisting of a chairman, vice-chairman, and forty members is thus made up of persons whom the governor-general finds it convenient to appoint. The chairman is the governor-general himself, and the vice-chairman is his secretary-general. Each member is appointed for a two-years period, but with the permission of the governor-general may be released from duty before the expiry of that period. Clearly, this is a purely bureaucratic institution."

4:Grajdanzev--161 S-4 (no date) 1942 Formosans
116, 641, 643, 177.64 Japan
636.64

"The people of Taiwan have no representatives in the Japanese Imperial Diet, they have no representative body which takes part in the legislation or administration of the island.

Under these conditions the position of the governor-general acquires a special importance, and yet if we exclude Kodama, who spent eight years at his post (from February 1898 to April 1906), the average length of tenure is two years and one month, too short a time for a good knowledge of the local conditions. The tenure of the government-general is evidently subject to the vicissitudes of political conditions in Tokyo and has little to do with Taiwan."

4:Grajdanzev--161 [2] S-4 (no date) 1942 Formosans
116, 631, 177.63 Japan
636.63

"Let us now examine the local government administration of Taiwan. It is divided into five provinces, three districts, fifty-one counties and nine cities. Districts are formed in less developed regions—Taito, Karenka (in the East) and Boko (the Pescadores)."

4:Grajdanzev--161-162 S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"The most important person in the province is the governor, and in the district, the chief of the district. Their powers and position are similar to that of the governor-general but on a smaller scale. They can impose upon any person without recourse to the Courts a prison term of two months and/or a fine of ¥70. They may ask military force for the maintenance of order, they supervise all administrative bodies in their respective provinces or districts, etc. These bodies are: the secretariat, the bureau of Internal Affairs, [162] bureau of Police Affairs, Police Headquarters, Taxation bureau, agricultural experimental stations, etc."

4: Grajdanzev--162 S-4 (no date) 1942 Formosans
116, 563, 642, 177.64 Japan
636.64

"The officials of the Japanese Empire are divided into three groups--chokunin, appointed by the Emperor, sonin, highest officials, appointed with the Emperor's approval, and hannin, lower officials, for whom the sanction of the Emperor is not necessary. In the government-general there were in 1938 7 chokunin officials, 119 of sonin rank, and 648 of hannin rank, while in the provinces and districts five persons were of chokunin rank, 94 of sonin and 1,523 of hannin.

These numerous high officials are exclusively Japanese and in the counties and municipalities there are hundreds more. Lower positions are occupied not only by Japanese, but also by Chinese, but as it is pointed out in Sekai nenkan; 'from the political point of view all administrative organisations are almost exclusively (hotondo zembunga) staffed with Japanese, while from the economic point of view everything is under the domination of the Japanese economy' (1).

1. P. 179."

4:Grajdanzev--162 [2] S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"Since 1920 there has been an advisory body for each provincial governor or district chief, consisting of 20-40 members, half of whom are appointed by the governor-general and half chosen (by indirect election) by the municipal and county council. The governor of the province is the president of the provincial council. The officials administering the counties and whose duties are chiefly of a police character, the mayors of the cities and of rural communities are not elected, but are appointed by the government."

4:Grajdanzev--162-163 S-4 (no date) 1942 Formosans
116, 171, 632, 641, 177.64 Japan
636.64

"The municipal or village councils have from 8 to 40 deputies (according to the population), half of whom are appointed by the government and half elected. The electorate is made up of male Empire subjects who have attained the age of twenty-five years, who are not dependent, who have lived continuously for at least six months in that particular locality and pay at least five yen in municipal or village taxes (house tax, land tax, or business tax). [163]

Thus it is clear that the only places in which there is some semblance of elections are the cities or villages. As has already been pointed out, the small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko. But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote. We have no data for Taiwan, but the example of Korea shows that by this device two per cent of the population—the Japanese—form the majority of the electorate."

4:Grajdanzev--163 S-4 (no date) 1942 Formosans
116, 625, 642, 177.64 Japan
636.64

"Since the mayor and half the members of the Council are appointed by the government, since the mayor and all higher officials have the right to reject the decisions of the councils, since the provincial councils are appointed or elected indirectly and since the advisory council to the governor-general is appointed directly, we may say that after forty-five years of Japanese rule, Taiwan is a colony in the government of which the islanders have no voice whatsoever and in which the Japanese themselves as citizens have little or no influence. The island is ruled by the governor-general with the help of the army and police."

4:Grajdanzev--163 [21 S-4 (no date) 1942 Formosans
116, 171, 625, 659, 871.177.62 Japan
636.62

"Many times on the preceding pages it has been shown that Taiwan is more poorly supplied with this or that commodity than is Japan proper. But in one respect Taiwan is better supplied——with policemen. According to Dainippon teikoku nenkan (Statistical Year Book of the Japanese Empire) for 1937, there was one policeman for every 1,052 persons in Japan proper in 1937, while in Taiwan there was one for every 580 persons. According to the same source there were more policemen than teachers in Taiwan—— 9,972 policemen in 1937 as compared with 9,651 teachers of all kinds in 1936——while in Japan proper the number of teachers was almost six times as large as the number of policemen. The number of policemen in Taiwan is almost three times the number of physicians."

4:Grajdanzev--163-164 S-4 (no date) 1942 Formosans-1-2
116, 563, 625, 177.62 Japan
636.62

"Besides having this regular police force the whole country is organized for police purposes through the revival of the old Chinese system of paochia. As we saw, the Chinese of the island have no voice in the government of the island, but they [164] are widely used for police purposes through the paochia system, which is obligatory for the Chinese, but from which the Japanese are free. Ten Chinese families form a chia and ten chia a pao, so that a pao comprises one hundred families or about 500-600 persons. At the end of 1938 there were 53,876 heads of chia and 5,648 heads of paochia (called paocheng in Chinese or hosei in Japanese). All these persons are elected by the members of the chia or pao, but they must be approved by the governor (or the chief of the district). It should be noted, however, that although they have no right to elect their own representatives for the self-government, the members of the pao and chia have the right to elect their own policemen. This paradox is due to the fact that the duties of the chiachang (the head of the chia) and the paocheng are heavy, unpleasant, sometimes dangerous, and completely unpaid, while any expenditures which may be incurred are covered by a tax on the members. Only relatively prosperous men can afford to do this work and even they do it for the most part unwillingly. They police their community under the guidance of the professional policemen, report the number of residents, new arrivals and departures (very severe punishments follow failure to

report), organize groups to pursue 'bandits', take precautionary measures in case of epidemics, repair the roads and bridges, fight insect pests, collect the taxes, etc., etc. If a crime is committed or the chiachang neglects his duty, he is the first person to be held responsible, but he along with the whole group is also held jointly responsible. This system was established by the Japanese government at a time when in spite of all governmental efforts, the island was not pacified, and some extraordinary measures were necessary to bring peace. But now, after more than forty years have passed since its inception, the system is a sign of weakness on the part of the government; it shows its distrust of a people conquered so many years ago and a belief among the rulers that only through this system can peace and order be maintained on the island."

4 Grajdanzev--165 S-4 (no date)1942 Formosans
116, 208, 563, 658, 871, 177.87 Japan
636.87

"In the sphere of education the island has passed through two periods, one before 1919 and another since that year. Before 1919 the policy of the government with respect to the Chinese of the island was vacillating. It was ready to recognize the existence of the Chinese in the Japanese Empire as a separate entity, and was ready even to help them preserve their Chinese character. A special society was created to investigate Chinese customs and habits and these were to be taken into consideration in court practice. Later, the failure of this policy was recognized and the avowed end became the japanization of the inhabitants of the islands in order to make them loyal subjects of the Empire. The elementary school was to become the chief instrument in this japanization. While before that period the education of the Chinese was completely neglected, since then school expenditures have grown and the number of pupils has increased from year to year. But this does not mean that there is any equality between the Japanese and Chinese as regards education. A literate population is necessary for the japanization of the islanders. Knowledge of the Japanese language is indispensable for workers, policemen, for the paocheng, for clerks, for all who work for their Japanese rulers. It does not mean, that there is any intention of raising the Chinese to an equal position with the Japanese."

4:Grajdanzev--165-166 S-4 (no date) 1942 Formosans
116, 208, 871, 876

"The school is considered the best instrument for turning the islanders into docile, law-abiding, hardworking servants. As may be seen from the following table the results, before 1930, were hardly impressive:

Number of Chinese on Taiwan who Understand the Japanese Language
(census data)

	1905	1915	1920	1930
Women	469	4,194	11,168	70,750
Men	10,801	50,143	87,897	294,677
Total	11,270	55,337	99,065	365,427

Source: Kokumin nenkan, 1940, p. 665.

[166] If we look at the rate of growth these figures may appear imposing. But actually the results can hardly be considered satisfactory since by 1930, after thirty-five years of Japanese rule over such a small area, only about ten per cent of the population understand the language of the rulers—and the degree of understanding required by the census-takers was small."

4:Grajdanzev--166-167 S-4 (no date) 1942 Formosans-1-2
116, 563, 872, 177.87 Japan
636.87

"The growth in the number of pupils in elementary schools may be seen from the following table:

Primary Schools in Taiwan

	1935	1936	1937	1938	1939
Number of schools	781	783	789	796	812
Number of teachers	6,255	6,659	7,239	7,888	8,718
Number of pupils, 1,000	373.9	407.6	450.0	505.5	557.1
Number of pupils as percentage of children of school age	41.5	43.8	46.7	49.8	...
Graduates, 1,000	42.3	45.7	50.3	59.0	...

Source: Taiwan Jijo.

From this it appears that in five years the number of pupils in primary schools increased from 373.9 thousand to 557.1 thousand. About half the Chinese children of school age (8-14) are now in primary schools. This increase is partially due to the absorption of new pupils by schools, and partially to the fact that the schools have been increasing the length of the courses they offer from four to six years. If one takes into consideration the fact that during these six years the pupils must master thousands of characters as well as a foreign language and that most of the teachers are foreigners

4:Grajdanzev--166-167 S-4 (no date) 1942 Formosans-2
116, 563, 872, 177.87 Japan
636.87

(to them), it is clear that a six-year course is not a long one. These statistics do not include the schools for Japanese children. Theoretically there is complete equality in Taiwan and there are no special schools for the Japanese, but there are schools where instruction is carried on in the Japanese language. With the permission of the governor of the province Chinese may also be admitted to such schools, even if they do not know the Japanese language, but this permission is not given willingly. Many parents among the lower groups of Chinese [167] officials want to send their child to a Japanese school so that he or she will have a thorough knowledge of the language of the rulers and a better chance to get a higher paid job. But in 1936, out of 42,576 pupils in these schools, there were only 2,975 Chinese. There is another important fact with respect to the Japanese pupils; while in 1938 only fifty per cent of the Chinese of school age were in school, 99.4 per cent of the Japanese of this age were attending school in 1936."

4:Grajdanzev--167 S-4 (no date) 1942 Formosans
116, 563, 875

"Whether or not the Japanese and Chinese children in their respective schools receive the same kind of education may be inferred from the following fact. In 1936 the maximum monthly salary of teachers in the schools for Japanese children was ¥82 for men and ¥70 for women and the minimum, ¥40 for men and ¥30 for women. But in the public schools (i.e. for the Chinese) the maximum salary was ¥50 and minimum ¥10, and this difference was not due chiefly to nationality, for the majority of teachers in the public schools are also Japanese, but to the calibre of the teachers (1).

1. On the average the expenditure per pupil in 1936 was twice as high in schools for the Japanese as it was in schools for the Chinese."

4:Grajdanzev--167 [2] S-4 (no date) 1942 Formosans
116. 563, 873, 177.87 Japan
636.87

"A further important test of any system of education is the number of students in secondary schools and in universities. As was mentioned, literacy is a necessity under modern conditions, even in the colonies. But to give a secondary education and especially a university education to the colonial peoples en masse is quite a different proposition. On April 1, 1939, there were 5,125 Japanese and 4,117 Chinese in the Taiwan secondary schools for boys. It will be recalled that the number of Chinese on the island is almost twenty times as great as the number of Japanese, and the proportion between the children of the two groups is even greater. In the girls' secondary schools the situation is even less favorable to the Chinese—5,312 Japanese pupils as compared with only 2,541 Chinese (1939)."

4:Grajdanzev--167-168 S-4 (no date) 1942 Formosans
116, 563, 874

"In the specialized schools the situation is similar—[i.e. proportionally fewer Chinese than Japanese students--analyst] in the industrial schools there are 963 Japanese boys and 460 Chinese; in the commercial schools, 1,791 Japanese [168] boys and 724 Chinese. The agricultural schools form the only exception, but even here there are 588 Japanese to 1,426 Chinese pupils though there are at least 300 times as many Chinese farmers as Japanese."

4:Grajdanzev--168 S-4 (no date) 1942 Formosans
116. 563, 873

"The fact that in 1936, for example, there were 5,576 applications for entrance to secondary schools, but only 1,622 boys were admitted (29.1 per cent of the applicants) and most of those were Japanese shows that there is an ardent desire to study on the part of Taiwanese youth. In 1936 there were 985 Japanese students and 384 Chinese in the teachers' colleges (which prepare teachers for the Chinese schools)."

4:Grajdanzev--168 [2] S-4 (no date) 1942 Formosans
116, 563, 658, 873

"In discussing the public finances of Taiwan, it was noted that the expenditures on the only university in Taiwan. which is in Taihoku, cannot be considered as expenditures purely for the education of the Chinese population. In 1939 there were 192 Japanese and 90 Chinese students in this university."

4:Grajdanzev--168 [31 S-4 (no date) 1942 Formosans
116, 563, 871

"School Enrolment in Taiwan, April 1, 1939

	Japanese	Chinese
Youth of school and college age (8-22)	88,000*	2,000,000*
Pupils in primary schools	44,000*	557,135*
Pupils in secondary schools	10,437	6,658
Pupils in special secondary schools	3,343	2,610
Students in teachers' colleges (1936)	985	384
Students in the university	192	90
School Enrolment per Thousand Children of School Age		
Pupils in primary schools	500*	278*
Pupils in secondary schools	118	3.3
Pupils in special secondary schools	38	1.3
Students in teachers' colleges	11	0.2
Students in the university	2	0.05

* Approximate figures."

"It may be thought that the figures of students in secondary schools and colleges[see table on page 168, category 116--analyst] are not complete because they do not include those who are studying in schools and colleges in Japan proper. It is quite natural that those who have the means prefer to send their children to Japan to get their education at the centre of the Empire. We know that many Japanese from Taiwan are studying in Japan; probably their number far [169] exceeds the number of those who study in Taiwan, but unfortunately, we have no statistics. However, we have complete statistics of the Chinese from Taiwan who are students of Japanese colleges and universities. In 1936 there were in Japan 1,113 Chinese pupils from Taiwan in secondary schools of all types and 952 students in colleges and universities. These students studied: law 204 persons, medicine 507 persons, literature 27 persons, political science and economics 66 persons, commerce 71 persons, music 3 persons, art 7 persons, religion 6 persons, housekeeping 13 persons, physical culture 3 persons, all other subjects 45 persons, or a total of 952 persons.

These figures reflect the views of the students as to their future chances in life. The corresponding figures for the university in Taiwan are not so instructive because there the choice is very limited, while in Japanese they may choose in accordance with their future plans. The great majority of the students select courses leading to liberal professions—law, medicine, etc. They do this because they know that all other roads in

Taiwan are closed to them. These figures show also that the inclusion of those who study in Japan in the number of pupils and students in Taiwan does not materially change the picture."

"Let us now consider briefly other cultural institutions in Taiwan. Below we give the data on libraries in Japan and in Taiwan.

Libraries in Japan and in Taiwan, 1936

	Japan	Taiwan
Number of Libraries	4,730	86
Books	12,647,973	369,961
Readers	24,124,344	886,084
Readers per year per capita of population	0.34	0.16

Source: Dainippon teikoku nenkan.

The libraries in Japan are not visited very often—on the average only one out of three persons visits a library once a year—but in Taiwan only one out of six persons finds his way to a library once during the year. There is nothing astonishing [170] in this when we recall that there are only eighty-six libraries for a country with a population of six millions; it means that only the cities, where the Japanese are concentrated, are supplied with them."

4:Grajdanzev--170 S-4 (no date) 1942 Formosans
116, 171, 345

"In Japan there were 32,338 theatres in 1937 and 94,853 cinemas (including temporary ones). In Taiwan there were only 120 theatres and 19 cinemas."

4:Grajdanzev--170 [2] S-4 (no date) 1942 Formosans-1-2
116, 204, 563, 656, 177.20 Japan
636.20

"Now let us turn to another important sphere of cultural activities—newspapers. In Taiwan no newspaper can be published without the permission of the government-general, and the government-general has established a 'custom' of permitting only one newspaper to a city, so that up to 1932 there were only four newspapers in Taiwan, all in the Japanese language, though they sometimes carried a column in Chinese (1). Five

1. In 1937 a fifth one was permitted for Takao.

million Chinese in Taiwan had no newspaper of their own. In 1932 permission was granted to a Chinese weekly to appear as a daily, so that for the first time since the Japanese conquest the Chinese could read their own newspaper—Taiwan Shin-minpao. However, this experiment was short-lived. In 1937 it was decided that the people now know the Japanese language so well that no obstacles should exist to the japanization of the islanders. On March 1, 1937, all Japanese newspapers and the Chinese one carried a notice to the effect that after April 1 (for the Chinese newspaper, after June 1,) they were to cease publication of columns in Chinese (2).

2. Information on the newspapers is taken from Nippon shimbun nenkan, 1939, pp. 143-145. It is confirmed also by Sekai nenkan, 1929.

4:Grajdanzev--170 [21 S-4 (no date) 1942 Formosans-2
116. 204. 563. 656, 177.20 Japan
636.20

Thus after 1937 five and one half million Chinese could not read a newspaper in their own language, though most of them do not know Japanese."

4:Grajdanzev--170-171 S-4 (no date) 1942 Formosans
116, 175, 114, 204, 177.72 Japan
636.72

"Tadao Yanaihara, writing in 1929 when no Chinese newspaper was published, tried to find the cause of the difference between Taiwan and Korea (in the latter newspapers in Korean language are published). He thinks that the cause lies in the former independence of Korea and a resulting [171] Japanese deference to world public opinion, whereas Taiwan was a former Chinese colony and thus Japan did not have to make the same concessions to world opinion (1). We believe that this explanation is inadequate. The Japanese government had few scruples concerning world opinion for example in 1919 when it brutally suppressed the national movement of the same Korean people. The explanation is simpler. Korea was sold out peacefully by her rulers to Japan and at the time her people acquiesced in this sale. whereas the people of Taiwan did not recognize the cession of Taiwan to Japan. It is important to note that the act of cession took place not in Taiwan, but on the sea. The representative of the Peking government transferred Taiwan to the Japanese plenipotentiary on the open sea because Taiwan was in a state of turmoil. Abandoned by the government, betrayed by militarists, the islanders continued the unequal struggle for several years."

1. Page 229. op. cit.

4:Grajdanzev--171 S-4 (no date) 1942 Formosans
116, 208, 641, 625, 177.66 Japan
636.66

"Taiwan was conquered by the Japanese army. The regime which was established there was a military regime, and with few modifications it continues to be a military regime today. The government does not trust the Chinese, spies upon them, and is afraid of any movement which does not emanate from the government-general itself. Suppression of the Chinese culture and forcible japanization of the islanders is considered by the government as the best means of turning the islanders into loyal subjects of the Empire."

4:Grajdanzev--171-172 S-4 (no date) 1942 Formosans-1-2
116. 452, 476, 563, 661, 177.47 Japan
636.47

"The growth of Taiwan's cooperative societies of all kinds is good testimony to the ability of the Chinese population to organize and to manage quite successful enterprises. The growth of the cooperative movement in Taiwan may be seen from the following table:

The Cooperative Movement in Taiwan

	1913	1918	1930	1935	
Number of societies of all types	18	171	407	462	
Number of members	2,760	70,428	265,248	342,122	
Paid-up capital 1,000 yen	484	4,455	13,949	15,250	[172]

In 1936 the urban credit cooperatives had deposits of 20.7 million yen, while the rural cooperatives had 64.3 million yen. In May, 1940 the corresponding sums were 36.4 million yen and 122.7 million yen. All this is the more remarkable because the cooperatives were developed by the Chinese with little help from the Japanese or from the cooperative associations of Japan (1), and because the government put so many obstacles

1. This does not mean, of course, that the Japanese cooperative associations were unfriendly to the Taiwan cooperative movement. Quite the contrary. Throughout the history of the Taiwan cooperative movement the Chinese received every encouragement from the Japanese societies and from the certain Japanese individuals; but this help could not be great because of the conditions existing on the island. It is

important to emphasize that many individual Japanese physicians struggling with epidemics, teachers bringing education to far-away villages, political organizers helping the Chinese to organize their fight for freedom, and many others whose services to the Chinese were great and whose relation to the conquered people was that of sympathy and often of self-sacrifice, deserve the highest praise. However, it is not the individuals who count most, but the system, and however good the intentions of particular individuals might be, they could not and cannot change the governmental system existing on the island.

in the way of the development. The managerial and controlling staffs of the cooperatives in Taiwan must be approved by the government-general, so that 'undesirable' elements can be eliminated from the movement. The active members of the societies were often arrested and imprisoned and obstacles were put in the way of the creation of a powerful central body for the cooperative movement. But in spite of all obstacles the population of the island succeeded in building up a strong and useful organization."

4:Grajdanzev--172-173 S-4 (no date) 1942 Formosans
116, 452, 241, 476, 563, 177.47 Japan
636.47

"Since the start of the present war, however, through increasing supervision and various regulations, the government has turned the cooperatives into a piece of bureaucratic machinery, rather like the paochia. The chief function of the agricultural cooperatives, which form the backbone of the movement, has become the collection of rice and other products and their transfer to the government. According to the declared rations (1), the farmers in Taihoku province, for example, are to have only from two to

1. The ration figures are taken from the Ekonomisuto, Tokyo July 1, 1940.

two and half go of rice per day (0.6-0.75 lb.). But this is considerably below the usual consumption of [173] the farming population, so the farmers will not willingly surrender their 'surplus' and the cooperatives have been turned into organs for the compulsory collection of grain and other agricultural products. The only organization created by the islanders which had some semblance of independent existence is thus becoming a mere cog in the Japanese military machine."

4:Grajdanzev--173 S-4 (no date) 1942 Formosans -1-2
116, 744, 759, 177.74 Japan
636.74

"In all books and articles published under the auspices of the Japanese government the remarkable successes of the Taiwan government with respect to the health of the population are described, and there is no doubt that improvements took place in Taiwan after 1896—it would be strange if this were not so. More than 300,000 Japanese live there now and their health depends to an important degree upon the health of the surrounding population, especially in case of epidemic diseases. First of all, for the sake of comparison, we give the basic figures for Taiwan and Japan.

Number of Physicians, Dentists, etc. in Japan and in Taiwan, 1936

	Japan	Taiwan	
	1936	1936	1938
Physicians	61,799	1,834	1,983
Dentists	22,072	402	407
Pharmacists (yakusaishi)	28,156	190	213
Nurses	124,402	...	170
Midwives	61,732	1,744	1,796
	Per 10,000 of population		
Physicians	8.8	3.4	
Dentists	3.1	0.7	
Pharmacists	4.0	0.3	

4:Grajdanzev--173 S-4 (no date) 1942 Formosans-2
116, 744, 759, 177.74 Japan
636.74

Nurses	17.7	0.3
Midwives	8.8	3.2

Source: Dainippon teikoku nenkan and Taiwan Jijo."

4:Grajdanzev--173-174 S-4 (no date) 1942 Formosans
116, 171, 278, 744, 759

"In the section on education it was shown that Chinese college students from Taiwan prefer to study medicine because this is a profession in which it is relatively easier to establish oneself than in others. Now we see that in spite of this attraction [174] there are two and a half times as many physicians per 10,000 population in Japan as there are in Taiwan. The same is true of midwives, though the need for midwives is greater in Taiwan, where the birth rate is one and a half times as high as in Japan. On the same per capita basis there are four times as many dentists and thirteen times as many pharmacists in Japan as in Taiwan. These and many other figures which could be quoted show that as regards health services Japan is several times better served than Taiwan. And actual conditions are even worse than these figures suggest because the equipment of hospitals is poorer and the physicians rely chiefly on advice and prepared drugs, which are sold by some 6,600 stores as well as 6,700 peddlers."

4:Grajdanzev--174 S-4 (no date) 1942 Formosans
116, 164, 171, 758

"In 1937 about 22 times as many cases of dysentery per 1,000 inhabitants, twice as many cases of typhoid fever, 9 times as many of paratyphoid, 17 times as many of scarlet fever, 3 times as many of diphtheria and 21 times as many cases of insanity were registered in Japan as in Taiwan. But this does not mean that Taiwan is a remarkably healthy place in which to live. There are more cases of epidemic diseases per 1,000 population in Taiwan than in Japan, but they are not registered because the masses of the population cannot afford to pay a physician, far less a hospital. From the official sources we know, for example, that each year out of 100-108 thousand deaths at least 9,000 are due to tuberculosis; probably far more because it is doubtful whether all cases are registered. According to the official estimates the number of tubercular persons is '80-90 thousand', but there are only 150 beds in the tuberculosis hospital for the whole island. Besides tuberculosis the island is ridden by trachoma, intestinal parasites, venereal diseases, leprosy, and malaria. Concerning the first two, official sources say only that they are 'widespread'. As to venereal diseases the chief means of their transmission is licensed and unlicensed prostitution."

4:Grajdanzev--174-175 S-4 (no date) 1942 Formosans
116, 164, 177, 548

"Before the coming of the Japanese. prostitution was practically unknown (1). In [175]

1 Franck, H. A., Glimpses of Japan and Formosa, 1924. pp. 178-181. The author quotes also the testimony of a Spanish missionary who spent many years in Formosa.

1938 out of 45,582 examinations of licensed prostitutes by the police 4.26 per cent were found to be victims of these diseases (2). Beside these licensed prostitutes (who do their

2. The officials mention that in Japan only 2.15 per cent of the prostitutes are infected.

part in contributing to the state treasury) there are an unknown number of unlicensed prostitutes who from times to time are caught and examined by the police. In 1938 more than one thousand of these were examined, 31.6 per cent of whom were infected. The difference between these two groups is explained very simply: those among the licensed who cannot be cured enter the ranks of the unlicensed."

4:Grajdanzev--175 S-4 (no date) 1942 Formosans
116, 164, 758

"According to the police investigation of 1930, there were at that time 1,084 lepers on the island, but the actual number is certainly larger. (In Korea there were 13,786 lepers in 1937, not including incipient cases, and probably this also underestimates the situation.) Only 700-800 of these are segregated."

4:Grajdanzev--175-176 S-4 (no date) 1942 Formosans
116, 276, 435, 733

"In the early days of British commercial domination Taiwan was notorious for the prevalence of opium smoking. When the Japanese conquered the island, they decided to apply a method of licensing opium smokers. Those who were addicted to this evil practice were permitted to continue it on payment of a certain fee for a license, but no new addicts were permitted. In 1898 95,449 addicts were licensed. However, some years later a more careful survey brought to light (1) as many as 165,752. In 1908 there were

1. Y. Takagi. Japan Magazine. 1930, pp. 244-248.

119,991 licensed opium smokers, in 1926 there were 31,434 and it was said that the majority of them were over 55 years age. However, in 1938 there were 10,788 opium smokers still alive. In 1906 when there were at least 130,000 licensed opium smokers, they bought 4,395,497 yen worth of opium; in 1938, when there were only 10,788 opium smokers, they bought 1,863,063 yen worth. The explanation is that in 1906 one kilo of opium was sold by the government for 23.0 yen, in 1938, it cost 120 yen, or five times as much. This reliance on price increases, however beneficial it may have [176] been for the Treasury. has unfortunately led some addicts to turn to other, cheaper substitutes, such as morphine and heroin."

4:Grajdanzev--176 S-4 (no date) 1942 Formosans
116, 177, 797

"There is a widespread but false belief that the Japanese lack the missionary spirit and that because of this, at least in the field of religion, the islanders may cling to the faith of their forefathers. The Japanese have their own societies for the propagation of the faith, missions and other implements of spiritual conquest, but the results are not very encouraging:

Number of Followers of Japanese Sects and Churches in Taiwan

	Japanese	Chinese
Various Buddhist sects (incl. nichiren, sodoshu, etc.)	73,504	27, 398
Shinto and other churches)*	18,159	13, 024
Buddhist churches †	40,025	17, 008

* But there were only 5 Chinese as against 573 Japanese followers of pure shintoism.

†This does not include followers of Chinese Buddhism.

These figures show that the successes of the Japanese missionaries have not been conspicuous, especially if we compare them with the 41, 708 Chinese followers of the Presbyterian Church and 7,399 of the Catholic Church, neither of which have a state organisation behind them. But with the increasing pressure being put on foreign Christian churches in Japan. the work of the Taiwan Christian missions is now endangered."

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans -1-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

"Political Movements (1)

1. The information concerning these movements is taken chiefly from Yanaihara, op. cit., and from Sekai nenkan, 1939.

As was shown in the historical section of this book, the island was not actually acquired by the treaty of Shimonoseki, but was conquered by the Japanese. This conquest took seven years and the Japanese recognize that the island was pacified only about 1902. However, in 1907 the Peipu rebellion broke out, the immediate cause being an attempt on the part of the officials to use the paochia in the subjugation of the savages. In 1912 the Linchi rebellion broke out in connection with the felling of the bamboo forest by Mitsui interests, and in 1915 [177] there was a new rebellion at Hsilaian. All these rebellions were suppressed by the government. These and other spontaneous movements the information concerning which was withheld by the government, are classified by the Japanese as rebellions of the old type, to distinguish them from newer movements guided by persons with modern education and ideas. The first of these movements was led by a Japanese, Taisuke Itagaki, who came to Taiwan in November 1914 and organized Dokakai, the Assimilation Society. The purpose of Itagaki was not a revolutionary one; he wanted to see the Chinese of the island assimilated by the Japanese. He realized however, that this assimilation could not take place unless the Chinese of the island

were given equal treatment and equal opportunities in education. But such ideas appeared too dangerous to the government-general and the movement was suppressed in February 1915. Another stimulus to the awakening of political consciousness in the Chinese was given by Lin Hsien-t'ang, a wealthy Chinese who petitioned the government to permit him to open a private middle school in Taichu for the Chinese. The idea was evidently so strange and radical to the Japanese that they consider this application an important stage in the political development of the island. In 1918 the Chinese from Taiwan who studied in Tokyo organized the Domeikai, an organization the primary purpose of which was to effect the abolition of some especially harsh laws in Taiwan. In 1919 this organization started a monthly publication Taiwan Youth, which a few years later was changed into a weekly. At that time the attempt to transfer its publication to Taiwan failed, but the organ became the spearhead of the educational movement and in the 'liberal' years of 1927-30 this publication succeeded in moving to Taiwan and turned into a daily newspaper, the fate of which has already been described."

4:Grajdanzev--177-178 S-4 (no date) 1942 Formosans
116. 668. 177.66 Japan
636.66

"The World War brought in its wake unrest and political agitation. Lin Hsien-t'ang, together with many other Chinese, petitioned the Imperial Diet in February 1921 for the establishment of a parliament in Taiwan and for some kind of home [178] rule. The diet paid no attention either to this or to the following petitions, but the government-general arrested hundreds of persons in 1923 in order to stop the movement (1).

1. This is the Japanese version. Professor R. Goldschmidt, who visited the island in 1926 and who is in general an admirer of Japanese colonial methods, writes as follows: 'There are rumors that the movement was suppressed with 3,000 death sentences. But the notorious Japanese system of secrecy makes this difficult to verify.' (Translated from the German, Neu Japan, Berlin, 1927. pp. 109-110.)"

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -1-2
116, 467, 656, 668, 177.66 Japan
636.66

"In October, 1921, Lin Hsien-t'ang, Ts'ai Pei-ho (who was arrested in 1923), Chiang Wei-sui and others organized the Taiwan Bunkakyokai (Taiwan Cultural Society), which very soon became the centre of the national movement among the moderate elements. But in 1926 the Marxist groups made their appearance on the island for the first time when twenty Chinese formed the Taiwan Proletarian Youth League (Taiwan Musan Seinenkai). Since that time the political movement has separated into two branches—the Moderates centered around the Bunka Kyokai and were strongly represented in the Taiwan Agricultural Cooperatives, and the revolutionary Marxist organizations closely connected with the workers union (Taiwan Koyuso remmei), which in 1928 was reported to have had as many as 6,367 members and to have organized several successful strikes. However, after 1928 there began a new era of suppressions and arrests and one after another the Chinese organizations fell victims to it. The Marxist groups were the first to go. In 1931 the Taiwan Koyuso remmei was suppressed and finally in August 1937 even the most moderate movement of the right wing organizations, the purpose of which was the reform of local government, was dissolved on the claim that the government had already realized this reform.

This, of course, does not mean that all these movements were eradicated; they went underground, and continued their struggle, but the government suppression made even moderate groups more radical than they were before. In 1931 Taiwanese in Shanghai reorganized their Taiwan Youth Party into the Anti-imperialist League. It had close

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -2
116, 467, 656, 668, 177.66 Japan
636.66

connections with Taiwan, where its members from time to time were rounded [179] up by the police."

"That the struggle in Taiwan continues one may see from a dispatch from Chungking which reads in part: 'Great significance is attached here to the formation of a united front among the various Formosan revolutionary parties with the inauguration of the Federation of Formosan Revolutionists. The unification of the revolutionary parties is announced in the first issue of the Taiwan Hsienfeng, official organ of the newly-formed organization.

The Federation is composed of the Formosan Independence Revolutionary Party, The Formosan Revolutionary League and many other smaller groups of Formosan revolutionists, active throughout Formosa, in China and foreign countries. 'Since the outbreak of the Sino-Japanese hostilities Formosan revolutionists have started many uprisings in Formosa. Japanese-owned mines were bomed, oil wells set on fire, and railways wrecked.' (China To-day, September 1940, p. 19.)

Of course it is useless to try to find confirmation of this information in the official sources, which even before the war were so secretive about the nationalist movement in Taiwan. But those who are well acquainted with the position of the Chinese in Taiwan will not be astonished by this kind of information.

The immediate aims of the party in Taiwan are formulated as follows: (1) To disorganize Taiwan's production and communications. (2) To strengthen Alashan anti-Japanese guerilla forces in Taiwan. (3) To organize groups of volunteers for war with Japan in China. (4) To organize strikes of workers, municipal personnel, pupils.

4:Grajdanzev--179 S-4 (no date) 1942 Formosans-2
116, 668

(5) To spread anti-war and anti-fascist propaganda. (6) To unite all Taiwan revolutionary organisations. (Taiwan Hsienfeng, April 15, 1940, p. 31.)" .

4:Grajdanzev--180-182 S-4 (no date) 1942 Formosans-1-4
116, 113

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A:Grajdanzev--182 S-4 (no date) 1942 Formosans
116. 804

"Note on Weights and Measures

1 ko (chia)	=	2.377 acres or 0.961 hectares
1 koku	=	1.804 hectolitres or 5.119 U. S. bushels
1 kin	=	0.6 kg. or 1.32 lbs.
100 momme	=	0.827 lbs.
1 go	=	0.3 lbs."

4:Grajdanzev--185-187 S-4 (no date) 1942 Formosans-1-3
116, 453, 648, 177.64 Japan
636.64

"Taiwan 'the stone aiming at the south' was acquired by [186] Japan in 1895. The Bank of Taiwan, established in 1897, had among its tasks penetration of Southern China and Nan-Yo (1). In 1900 it established a branch in Amoy; in 1903—in Hongkong. In 1912 one

1. Nan-Yo includes Southeast Asia and the islands between Formosa and Australia. It is not clear whether the term includes Australia and New Zealand. Inclusion of Australia and New Zealand was denied by the former Minister of Foreign Affairs, Mr. Matsuoka, presumably to alleviate the fears of the Australians, but the maps published by the Japanese theorists of the southward advance include Australia and New Zealand.

in Bangkok. During the same period a well-planned net of agencies of the Bank was laid throughout the Malay archipelago. In 1919 with the assistance of the Bank of Taiwan the Chinese Southern (Hwa Nan) Bank was established with a capital of 10 million yen, and head offices in Taihoku, Taiwan. Its purpose was work among the Chinese emigrants in the colonial countries of Southeast Asia. In the same year the Bank of Taiwan established the South Seas (Nan-Yo) Warehouse Company with a capital of 5 million yen. As early as 1908 the government-general of Taiwan decided to earmark from its budget 700,000 to 800,000 yen annually for the purposes of education, health work, protection, cultivation

of friendship, and financial assistance to the Japanese in South China and Nan-Yo. But beside these purposes, about which some information will be given below, there was financial assistance not only to business men as such, but to business men of a special character. Malaya, Netherlands Indies, Australia, the Philippines, French Indo-China and Siam, not to mention South China, were systematically covered by a network of Japanese photographers, druggists, laundr[illegible]n and shopkeepers. There were hundreds of photographers who did not have as many as five clients a year; druggists who never sold any drugs to the natives or any one else; fishermen who were busy in surveying the coasts and taking soundings. We do not know how many of them were paid from the general budget of Japan proper; but we know that the sums appropriated annually by the Taiwan government-general were probably sufficient to support 3,000 such people throughout Southeast Asia (Y240 a year being enough for a frugal Japanese in [187] these southern countries.) To this network one should add the branch offices and agencies of the Bank of Taiwan, and the consulates of the Japanese Empire dotting the same area (2).

2. French officials in Indo-China complained that the Japanese knew more about Indo-China than they did. (Noted in Mirovoye Khozyaistvo, . . . , 1941). The same may be said about other countries of Southeast Asia.

The details of expenditures of the Taiwan government-general for this purpose

according to a Japanese source 'are not clear' (3), but it was said that 60% were spent

3. Taiwan Keizai Nempo, 1941, p. 778.

in South China and 40% in Nan-Yo."

4:Grajdanzev--187 S-4 (no date) 1942 Formosans
116, 208, 648, 177.64 Japan
636.64

"Under the auspices of the Taiwan government-general the Zenrin kyokai ('Good Neighbor Association') was established in 1917 and the Hakuai kai ('Philanthropic Association') in 1918. Their capital was supplied by the Government-General and the Bank of Taiwan; they opened schools and hospitals not only in South China, but also in Davao (the Philippines) and North Borneo. After 1918 the Zenrin kyokai started publication of newspapers for Chinese readers in Foochow, Swatow and other places."

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-1-2
116, 648, 177.64 Japan
636.64

"However, only after 1935 was the activity in Southeast Asia greatly intensified, the center, as before, being Taiwan. In 1935 the Government-General [of Japan--analyst] established a research institute for tropical countries. In 1936 a semi-private Taiwan Takushoku Kabushiki Kaisha (Taiwan Colonization Corporation) with a capital 30 million yen was organized, its purpose being not only the development of Taiwan, but also 'economic help' to the Japanese in South China and Nan-Yo and increase of trade with these countries. In 1936 the Japanese Overseas Minister, Mr. Nagata, answering an interpellation in the special session of the Diet, declared that 'the historical mission of Taiwan lies in the South, because of Taiwan's geographic position.' In 1937 the Government-General of Taiwan established a Foreign Affairs Division in charge of affairs of Kwantung, Swatow, Amoy, Hainan Island. The government stated the purpose as [188] being the spread of the knowledge of the Japanese language in South China and Nan-Yo through magazines, photographs, pictures, broadcasts, and in order—according to the statement of the Bureau of Information of the Government-General of Taiwan—to facilitate propaganda for the establishment of the East Asia Co-prosperity Sphere. In 1940 it established the Colonial Personnel Training School and rendered financial help to other institutions with similar purposes. The Bank of Taiwan was urged to give 'special loans' to the Japanese in South China (since 1935), in Nan-Yo (since 1936) and in

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-2
116, 648, 177.64 Japan
636.64

the Philippines (since 1938). On March 30, 1939 Shinnan Archipelago (Spratly Island and others)was annexed and declared a part of the Taiwan Government-General."

4:Grajdanzev--188 S-4 (no date) 1942 Formosans
116, 648, 652, 177.72 Japan
636.72

"All this [i.e. Japanese penetration to the South--analyst] required additional grants, and grants were forthcoming. In 1937 the Taiwan Government-General appropriated for the purposes of southern policy Y1,061,000; in 1938 Y1,552,000; in 1939 Y4,073,000; in 1940 Y5,387,000; in 1941 Y8,002,000. These figures may serve as an index of Japan's preparations for war in Southeast Asia. These sums were earmarked for work outside of Taiwan; but at the same time other amounts, enormous by Taiwan standards, were set apart from the Government-General budget for the construction of the base for southern advance in Taiwan. These expenditures from a minimum of 25 million yen in 1937 rose to a minimum of 50 million yen in 1941."

4:Grajdanzev--188-189 S-4 (no date) 1942 Formosans
116, 723, 177.72 Japan
636.72

"As for the future, the Japanese writers are not sure themselves whether Taiwan will not follow the fate of Okinawa Islands which, after the acquisition of Taiwan became a forgotten geographic name. But there is little doubt as to the importance of the island for the southern advance now and in the immediate future. First of all, the geographic position of Taiwan is favorable. Takao, in the southern part of Taiwan, is nearer to Manila than to Yokohama, and is just half way between Yokohama and Saigon, southern Indo-China. Takao is 1,495 miles from Yokohama and 1,800 miles from Singapore. [189] For certain purposes Hainan Island, seized by the Japanese in 1938-39 is an even better base for Japanese action in Southeast Asia, and there is no doubt that many of the transports of troops that are now attacking the Philippines came from Hainan. However, Haikow, the chief port of Hainan, was occupied by the Japanese only on February 10, 1939, and there was not time enough to make it a good modern base, especially because of the continued unrest and guerilla activities in the interior of the island. Taiwan for many years was being systematically prepared as a base for the army and navy operations in the South while the United States undertook an obligation not to fortify its bases in the western Pacific."

"A base of operations cannot be considered only as a port. It must have enough room for deployment of troops and for general defense purposes. Taiwan is excellent in this respect; its few defects will be mentioned later. Its system of communications permits the authorities easily to move troops to any threatened point. An attack on Taiwan can be only air-borne or sea-borne. The nearest place on the continent, Foochow, is 115 miles from Tamsui. Under existing conditions in China, (and they hardly can be greatly changed in the next two years) an air attack from this direction is unlikely. An airborne attack on a large island from an aircraft carrier cannot be decisive. Aside from long-range sporadic bombing, Taiwan may expect only a major seaborne attack, an eventuality foreseen by the Japanese and widely discussed on the island. To repel an invasion by sea a well-developed network of communications exists on the island. The state of railways and roads on the island was discussed earlier in this book. Here it is sufficient to point out one defect in the railway system of the island: the western longitudinal railway is not connected with the eastern longitudinal railway because of the prohibitive cost of construction in the mountainous districts. However the whole coastline is followed by a road and there are four good automobile roads connecting the east coast with the west, so that troops may be easily shifted to most of the points on the east coast. [190] The west coast of the island is largely flat and easy for debarkation, but on that side of the island the communications are best. The eastern shore presents a mountain barrier falling abruptly to the sea, except for mouths of some rivers where beaches are available. However, in one respect this mountainous character may be a help to the invading

4:Grajdanzev--189-190 S-4 (no date) 1942 Formosans-2
116, 487, 724, 496

party: in case of air superiority on its side the bombing of bridges, viaducts, etc., may prevent the arrival of reinforcements and will permit a landing party to consolidate its hold over some part of the shoreline."

4:Grajdanzev--190 S-4 (no date) 1942 Formosans
116, 504, 724

"The island has ten ports, some of which are very well developed (1). Large sums

1. There are also three ports on the adjacent islands, two of them of small capacity.

have been spent on improvements and installations. The military port is at Bako (Mako) on the outlying Pescadores Islands between Formosa and China, but this area has long been a prohibited area and no information concerning its facilities is available."

4:Grajdanzev--190-191 S-4 (no date) 1942 Formosans
116, 392, 724, 177.39 Japan
636.39

"Any good [Military--analyst] base must also have a well developed industry, especially a metal industry. Taiwan's supply of munitions, tanks, airplanes comes from the industrial centers of Japan Proper. It is, of course, impossible to change this situation. However, the more can be made or repaired, or assembled in Taiwan, the better. It was shown above that in spite of the rapid growth of industry in the last years the metal and machine industry of the island is small in size. We have no data on the years 1939, 1940 and 1941 when industrialization of the island was declared to be one of the basic policies in the construction of the base for southern advance. Yet indirect data (changes in bank credits, movement of railway goods, imports of the island, etc.,) do not suggest any very rapid change. Undoubtedly some growth took place, and it was well-oriented, but there were many obstacles to the realization of the plans: shortage of metals and machinery; shortage of labor, in some cases due to the unwillingness of the military authorities to pay higher wages; difficulties in the public finances of Taiwan [191] Government-General in view of the several bad harvests of rice and extraordinarily low production of sugar. All this suggests that by 1941 the development of machine and metal industry has hardly made great progress since 1938."

4:Grajdanzev--191 S-4 (no date) 1942 Formosans
116, 328, 724

"It should be pointed out also that since 1936 the government spared neither money nor efforts in development of gold production on the island, and, judging by the official reports, (which do not give actual figures of production) was quite successful. However, this success is hardly success in war-time, because of Japan's isolation and consequent inability to export the gold. Another important industry—production of aluminum—is dependent upon the import of bauxite from the Netherlands Indies."

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress. The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-1-3
116, 553, 563, 723, 177.65 Japan
636.65

"In any case. the Japanese government understands the abnormality of the situation [i.e. the unexpressed and expressed hostility of the people of Taiwan toward the Japanese--analyst] and the dangers connected with [192] it. To this 'domestic' consideration a special consideration of grand strategy is added. The militarists of Japan realize that the successful management of the Eastern Asia Co-prosperity sphere cannot be realized without the goodwill of at least some groups of the local population. They plan to retain the semifeudal organization of the Dutch Indies, Thailand, Malaya, etc., but to supplement it on the one hand with direct control over rajahs, sultans, chiefs and so on, on the other hand with an indirect control through the Chinese. In each country of Southeastern Asia there are millions of Chinese, chiefly of Kwangtung and Fukien origin. Their numbers could be easily increased, because through administrative measures their immigration has been kept down. In some countries only a very small number were admitted annually; in other permits to immigrate were given more or less freely, but on condition of payment of a very high head tax. The Japanese can easily double or treble the number of immigrants, putting as the only condition of migration a guarantee of the 'political reliability' of the emigrant. The Chinese have played an extremely important part in the economic life of the countries of Southeastern Asia. This part would be greatly increased on the one hand through repeal of certain limitations upon the activities of the Chinese, on the other hand through the systematic financial assistance given by the Japanese banks to the Chinese businessman, especially to middlemen. Of

course, the activities of the Chinese would be controlled by the Japanese, and here the Chinese from Taiwan come into the picture. Many of them beside their own native language speak Japanese also. The number of such persons can be easily increased, especially if the youth of Taiwan knows that lucrative positions will be opened for them. Thus, two lines of control can be used: on the political side—local population—rajahs—the Japanese commissioners—Tokyo; on the economic side—local population—Chinese middlemen controlled by the Taiwanese or with the help of the Taiwanese—the Japanese monopolistic concerns. The local population will be then thoroughly con-[193] trolled by the Japanese; on the other hand it will be racially divided and unable to present a united front against its masters. The Chinese will know that their interests and privileges depend upon the favor of the Japanese, their economic interests will oppose the interests of the local population. The Japanese militarists hope in this way to reconcile the native population of the island to alien rule. They declare that the greatest immediate problem in respect to the Chinese population of the island is kominka or turning them into imperial people, or more simply, some kind of assimilation. A campaign for the spread of the Japanese language is being conducted; the Chinese are encouraged to change their names into Japanese; various patriotic and chauvinistic societies have been established in order to influence the mind of the Chinese youth. One should not conclude from these facts that the Japanese want to establish a racial equality in this

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-3
116, 553, 563, 723, 177.65 Japan
636.65

'co-prosperity' sphere. The Japanese authorities complain that very few islanders change their names. Actually only a few hundred have used this privilege. However, this change of name is not so simple: each case has to be approved by the governor, and it is clear that approval is given only to those who can prove their complete fidelity to their masters."

4:Grajdanzev--193 S-4 (no date) 1942 Formosans
116. 177.65 Japan
636.65

"Thus, so long as the Japanese are successful in their aggression, their base in Taiwan is more or less secure; the experience which they have acquired in subdividing the Formosan people will help them considerably in Indo-China, the Philippines and other countries of Southeastern Asia. It is quite probable that some groups of the Chinese population of Formosa may be willing to 'cooperate' with their masters in subjugation of other countries. But if the victorious march of the Japanese is stopped or turned back; if the economic difficulties mount, as they certainly would in such an event, then Taiwan, with its restless and discontented population may become a base of doubtful value. But this will happen only when the military prestige of the Japanese has received a powerful blow from outside."

6: Kirchhoff--25 U-4 (no date) 1895 Formosans
116, 131

The oval area of Formosa, which is broader in the southern half and stretches out to form a narrow point of land at the extremity, measures 35,000 sq. km.* ... In length

* This figure is the result of a planimetric measurement which I based on the map of Formosa in the proportion of 1: 696,960, as given in the informative "Report by Alexander Hosie on the Island of Formosa, presented to both Houses of Parliament," London 1893. The figure that has usually been given up to this, estimating the area of the island at 34,550 sq. km. only, certainly falls short of the truth, while much more certainly exaggerated is the statement of Imbault-Huart that the island measures "approximately" 38,803 sq. km. ...

it measures about 380 km.; and at the broadest point about 150 km.

On the west coast [MC: of Formosa] the land is extending out into the sea with astonishing rapidity, so that the lagoons in the southwest frequently indicated on our maps became dry long ago. The site of the locality of An-ping, near the largest town on the island, Tai-nan (formerly Tai-uan-fu), formed a small island in the 17th century, according to contemporary Dutch maps, opposite the coast of the main island. Deposits made by the sea and the rivers will scarcely suffice to explain the addition of dry land to the consistently flat west coast, with sandbanks constantly arising afresh from the surrounding shallows; it probably depends, for the most part, on a slow but ceaseless uplift, for whose activity on the north coast we have the witness of von Richthofen (Zeitschrift der Deutschen Geologischen Gesellschaft 1860, Vol. 12, pp. 540 & 545). The east coast, mountainous almost everywhere, sinks steeply into the deep sea and shows no signs of growth.

The smaller western half of the island is for the most part low-lying, and is plain in part, but only to a breadth of between 32 and 40 km., and in part hilly country; the larger eastern half for the most part is filled with mountains.

6: Kirchhoff--25 [3] U-4 (no date) 1895 Formosans
116, 101

Formosa received its name ("beautiful") from the Portuguese who, in the 16th century, sailed by and saw the fine mountain chains rise above the luxuriant vegetation of the foreground.

The longest of the Formosan mountain chains is in the direction of the longitudinal axis of the whole land, that is from southwest to northeast. Generally one speaks of a "high central chain" said to run along the whole length of the island. But there is none of this extent. Only where the island attains its greatest breadth does there seem to be such a central chain, approximately equidistant from the two coasts and in the direction mentioned. It is designated by the name of Ta-schan ("Large mountain range") among the Chinese settlers (almost the whole of our nomenclature for the island coming from their language and not from that of the natives). Imbault-Huart was obviously systematizing far too much when he asserted that the central chain covered almost the whole island from north to south, the lateral chains joining it at right angles like fish bones, while the central chain broke up only in the north into several subsidiary chains equal among themselves and like crow's feet. Consequently he often uses the term "central chain" for the mountainous region filling all eastern Formosa. This is a misuse of the term. The other feature he indicates seems much more exact, [26] namely that the "central massif" (a very vague area of the "Ta-schan") consists of several chains of very unequal height throughout their lengths and divided by deep valleys, which present steep wall on the east coast and gradually sink down towards the western plain; in the north shorter and lower ridges running in various directions constitute the Formosan Switzerland (which has a very doubtful right to this name); along the coasts of the southern

tongue of land parallel lines of hills run along the coast to form two headlands between which there lies the bay of Kuei-leang, a much sought haven of refuge for ships during the northeast monsoon.

This latter description also corresponds rather better to the map Imbault-Huart provided with his book. On it the Ta-wu-man-schan ("Range of the Great Hero") comes closest to the notion of a central chain, for it represents a long-stretching chain in the position and direction already mentioned; these chains are said not to run at the same height, like walls, but to undulate greatly, varying between several thousand and a few hundred meters; the small Dragon Lake at the eastern base of the main chain is given a height of 1,000 m. The highest peak of the whole island, the Jü-schan ("Jade Mountain"), the Mount Morrison of the English, rises in a shorter eastern neighboring chain; since it remains covered with snow until late in the summer, it probably attains a height of at least 4,000 m.; it is credited with a height of 4,280 m. Farther to the north there follow tablelands "1,000 m. high," beyond which rises the majestic cone of the Thoa-sia, the Sylvia Mountain of the Europeans, to an alleged height of 3,766 m.* In

* According to the English coastal survey on the "Sylvia" (which gave its name to the mountain), the height is more than 13,000 feet, i.e., about 4,000 m.

the north, and close to the coast at the left side of the Tam-sui estuary, rises the Kuan-yn-soan (Soan is an alternate form of Schan ("mountain, Mountain range"), so often met with. So called from its resemblance to the sitting goddess Kuan-yn, it is surrounded by lower peaks, which are called Lo-han ("The Wise Men"), the retinue of the goddess. The Ta-tun Range rises higher on the right side of the Tam-sui estuary; it runs towards the northeast, and an S continuation of it is formed by the 1,000 m. high Ta-tun-soan, a volcano that apparently is not yet extinct; the crater at the peak, which is transformed into a lake in the rainy season, is 150 m. deep and about 300 m. in diameter; some decades ago it is said to have emitted a stream of sulphur to the accompaniment of earth tremors. Behind the Ta-tun chain the Tschao-soan ("Volcano Peak") rises quite isolated to a height of 1,330 m.; it has several extinct craters and is the highest peak in the north of Formosa, looking to the sea on one side and towards the Sylvia giant on the other. Along the northeast coast there runs the Ki-lung Range, with fantastic cliff shapes with obelisk-like and flattened tops, and through whose narrow gorges burble mountain streams; the bay of Ki-lung Harbor itself is formed by a gorge-like gap in this chain. The island of Ki-lung, which is a volcanic rock 200 m. high, stands like a watchman in front of the harbor entrance.

In the southwest of Formosa, the Chinese geographers include in the Ta-schan the Mu-kang-schan ("Forest Range"), a steep chain that rises into the clouds, and the

rampart-like Ta-kang-schan. Southwards from the latter lies the Siao-kang-schan ("The Small Range"), consisting of two mountains only, one an important landmark for sailors, when they wish to set out for Formosa from the coral Pescadores or Fisher Islands, the Pung-ho of the Chinese. In the neighborhood of the town of Fung-schan there rises the ridge to which the town owes its name ("Phoenix Mountain"); the Chinese see in it the shape of a flying phoenix.

Finally, in the southeast, there are two higher ranges: the Kuei-lei-schan (Kia-lo in the natives' language), between 1,200 and 1,300 m. high, and the Pi-nan-mi-schan, which is covered with firs.

6: Kirchhoff--26-27 U-4 (no date) 1895 Formosans
116, 133, 135

Slight and fragmentary is our knowledge of the soil composition and the geology of Formosa. The two coastal mountains at the mouth of the Tam-sui are trachytic, and the proof of considerable recent variations in elevation is given by layers of pebbles and mussel breccia on its slopes high above the actual sea level. The Ki-lung Range consists of sandstone with intercalations of extensive coal beds. The presence of Miocene and Pliocene Tertiary formations has also been shown, and particularly in the north of the island recent, indeed continuing volcanic activity. It still remains to be examined how much faith can be set on Chinese reports of "nightly gleams of fire" as phenomena of volcanic eruption, even in the mountains of the southeast. But Formos beyond any doubt, belongs to the great Eastern Asiatic Belt with still persisting volcanic phenomena. Deposits of sulphur and solfataras are found in considerable number in northern Formosa; in many places there steam forces its way hissing out of the ground, generally mixed with sulphur gases, at times as a steam hole. In addition to genuine geysers, [27] steam holes send up white pillars of vapor to a height of 8 to 10 meters from the fissures of the Tschao-soan.

6: Kirchhoff--27 U-4 (no date) 1895 Formosans
116, 133

Earthquakes are frequent, particularly towards the end of the year. The terribly destructive earthquake of 1782, accompanied by bad weather, lasted for 12 hours. The equally destructive earthquake of 1654 began with frightful shocks on December 14 and, with short intervals, lasted for three weeks, one witness assuring us that the ground trembled without ceasing for the three weeks, as could be easily seen from the oscillating of the water surface in filled vessels. According to Chinese statements, the district of Kia-y (in the southwestern part of the island) is now especially subject to earthquakes.

6: Kirchhoff--27 [2] U-4 (no date) 1895 Formosans-1-2
116, 103, 133

Formosa suffers from a shortage of large rivers that are always navigable; in Chinese all the Formosan rivers are called, not kiang or ho, but ki ("stream"). Most of them become a trickle in the dry season or dry up altogether, their beds then being used for land transport. Yet in the rainy season they carry such a mass of material in precipitation that their mouths are ever and again being blocked by shifting sandbanks. Consequently larger ships cannot travel up any river at all; even the keelless junks do not dare to risk crossing many of the bars; these are then crossed on curious bamboo rafts, called Katamarans.

The only better known river system is that of the Tam-sui, as Europeans say (in Chinese it is called Tan-tschui-ki, "Stream of Fresh Water"). It arises from the junction of the Tokoham and Sintiam Rivers and below this is navigable for larger junks; on the right it also receives the Ki-lung River, which has its source at the Ki-lung-schan and, in spite of its numerous rapids, is traveled on by curious boats with quite flat bottoms that are 10 m. long and 2 m. wide. *

* The branch of this river leading to the harbor of Ki-lung, and which looks like a bifurcation, does not exist, and was given on Imbault-Huart's map by mistake.

The name of Tan-tschui-ki is also borne by the only large river flowing towards the

south, and which enters the sea near Fung-schan. Near Tai-nan Ta-mu-ki makes its way to the sea through the stretch recently regained; it originates in several mountain brooks. But the largest river in the west is said to be the Niëu-tschao-ki which flows to the south of the town of Kia-y. It is quite broad, particularly towards the mouth, but is difficult of navigation because of its shallowness and many sandbanks. ** The

** Neither Imbault-Huart's map nor that of Hosie indicate this river.

rivers on the eastern side of the island are naturally only raging mountain streams.

Lakes are rare; yet the western low-lying land also possesses some, which we have not been able to enter on the map, owing to a lack of exact indications. There are also said to be small, cauldron-shaped crater lakes.

6: Kirchhoff--27 [3] U-4 (no date) 1895 Formosans
116, 132

Formosa is in the torrid zone, for even the north (Ki-lung) has an average temperature of 21.4° C., and an average variation of temperature of 14° (January 14.2°, July 28.2°). Lying in the Southeast Asiatic monsoon belt, the island occupies a very curious place with regard to the distribution of rainfall throughout the year. For the southwest monsoon of the summer alternates with the northeast monsoon of the winter, and the northeast monsoon, sweeping over the sea warmed by the Kuro-schio (which makes possible the continued existence of reef-building coral in the bays of Su-aô and Ki-lung) also brings rain, and indeed the principal rain, at least for the northeast coast, so that Ki-lung, for example, and perhaps also a large part of the island—the northern part, we may assume—has two rainy periods. One of these is in the winter and lasts until the spring, the other in late summer, lasting until late in the fall. This remarkable fact does not emerge when, like Wojeikof, only January is compared with July, the month with the lowest rainfall.

6: Kirchhoff--27 [4] U-4 (no date) 1895 Formosans
116, 132

Ki-ling has an annual rainfall of 3,050 mm., the heaviest rainfall occurring between January and May, and the next heaviest between August and October:

January	572 mm	April	292 mm	July	95 mm	October	206mm
February	301 "	May	302 "	August	219 "	November	130 "
March	272 "	June	113 "	September	384 "	December	164 "

But it would be a mistake if the greater rainy season were to be attributed to the northeast monsoon alone and the smaller to the southwest monsoon alone. The southwest monsoon predominates as early as May, and is much stronger in June and July; nevertheless these two summer months have only 7 rainy days each. August, with almost double the rainfall of July (with 95 mm.) on 16 days, is still under the sway of the southwest monsoon, while September, as all over the island, is the month during which the monsoons change.

The period from November to the beginning of May is given by Imbault-Huart as the rainy period for the town of Tam-sui. There as in Ki-lung the summer is oppressively hot; during the day the temperature is usually 30°; in the winter it sinks [28] rarely below 10°, and even in the neighboring mountains little snow falls.

On p. 7 of his report Hosie gives the following table, for four years at Tam-sui, of the rainfall and the extremes of temperature:

	1887	1888	1889	1890	1891	Average	Extremes in temp. 1887-91	
	Rain in mm.							
January	169	80	194	273	14	146	25.0°	5.0°
February	139	357	133	50	169	169	26.1	4.4
March	200	73	199	368	321	232	28.3	6.1
April	153	147	295	64	82	148	31.1	8.9
May	119	103	179	180	350	186	33.3	15.0
June	10	444	208	107	284	210	35.0	16.7
July	326	13	32	188	135	139	37.8	21.1
August	45	165	248	96	189	149	37.8	19.4
September	207	217	21	125	439	202	35.0	18.9
October	228	71	112	307	33	150	35.0	12.2

6: Kirchhoff--27-28 U-4 (no date) 1895 Formosans-2

116, 132

	1887	1888	1889	1890	1891	Average	Extremes in temp. 1887-91	
		Rain in mm						
November	56	70	237	52	118	107	30.6°	12.2°
December	44	172	64	104	60	89	27.2	5.6
Year	1696	1912	1922	1914	2194	1927	37.8	4.4

If we now compare the Ki-lung rainfall curve with that of Tam-sui, it appears that the latter town has a much more equable distribution of rainfall throughout the year, and the displacement of the chief maximum from January to March; December, in Tam-sui, appears as the driest month, the chief rainy season falling in spring rather than in winter. But here too the curve of rainfall sinks during the summer months as in Ki-lung, reaching the lowest summer level in July, just as it does there (though not quite so low a level as in December), and also reaching in September the highest level of the new rise that sets in in late summer.

While Tam-sui receives the heavy rains in the cool months, the closest mountains being hidden behind thick clouds, even the sun hardly appearing, in the southwest the situation is exactly reversed. Tai-nan has an agreeable, healthy climate in winter, especially in December and January, except that the northeast monsoon spreads a great deal of dust and sand from the great plain over the town (an indication of the dryness of the winter in this part of the island). But the summer brings tropical heat and tropical falls of rain, the latter in July and August especially;* for days on end the thermometer

*Heavy fall rains are also mentioned as occurring in the region of Kia-y, the mountain streams swelling so greatly that they often in places burrow out a new bed for themselves over stretches of the soft soil of the level ground at the foot of the mountains. (Imbault-Huart).

does not sink below 32 1/2°, the heat by day rises to 38°, and the sultry nights are hardly bearable.

6: Kirchhoff--28 [2] U-4 (no date) 1895 Formosans
116, 137

In general the flora of Taiwan is related to that of the Indo-Malayan region, and more distantly probably also to that of South China. Formosa is an evergreen land, the generally warm and humid air in the mountains feeding a thicket that can be penetrated only with difficulty; it is a land of palms, tree ferns and bamboo. The banana, i. e. the Musa textilis of the Philippines (Hosie, p. 6), thrives in the south at least, and also the Pandang, quite a number of tropical fruit trees, the climbing palm Calamus Draco, which festoons the thickets of the east in particular, and the betel-nut palm, both of them being found in the Malayan Archipelago and on Hainan, but the latter being unknown on the Chinese mainland (Hosie, pp. 5 ff). Even round the Dragon Lake one can see lofty palms raise their feathery crests; but the king of the Formosa forests is the camphor tree (Cinnamomun Camphora) with its imposing, oak-like form and its shiny, dark green leaves. In addition to this no fewer than 65 various species of building wood are counted in the forests. Indigenous are also the important fiber plant Boehmeria nivea, the so-called China nettle, a near relative of our stinging nettle, and the beautiful Araliacee Fatsia papyrifera, whose stem turns into wood and grows to the height of a man within one year, and which bears a chain of long-stalked leaves on its crest divided like hands, and whose unusually plentiful pith provides the valuable material for the manufacture of Chinese pith paper (incorrectly called rice paper).

6: Kirchhoff--28-29 U-4 (no date) 1895 Formosans-1-2
116, 136

The fauna of Formosa, as far as mammals and birds are concerned, was thoroughly investigated by Robert Swinhoe, English consul in China, who died at an all too early age in 1877. Wallace has already made use of Swinhoe's results in studies of animal distribution. The fauna of Formosa especially, it appears to me, prove that this is among the detached islands. While it does possess a number of species found there alone (14 of the 35 mammals, 43 of the 128 species of birds), these, too, are as a rule closely related to species living on the Asiatic mainland or in the other islands of Southeast Asia, and a large number of species both of animals and plants is common to these lands and to Formosa. Yet one is struck by a phylogenenetically very interesting fact! the Formosan fauna reveal much closer relations to Hither and Farther India, the Malayan Archipelago and even to Japan, than to China, which lies so near. The black bear of Formosa is the Ursus tibetanus or at least its close relative; the prettily marked dove of the island, [29] Palumbus pulchricollis, is the wood dove of the Darjeeling region of the Himalayas. Of the felines, the island has Felis chinensis in common with China, but F. Viverrina (the Asiatic wildcat) in common with the Himalayas and Malacca, F. macroscelis with Siam and the Malayan Archipelago. The orange-colored tree civet cat (Helictis subaurantiaca), which is found only in Formosa, resembles the Himalayan species (H. nipalensis) more than the Chinese (H. moschata). Swinhoe's goat antelope (Nemorhoedus) has its nearest relatives in Sumatra and Japan. The Formosan deer, also called after its discoverer Swinhoe, most closely resembles the Schka deer

of Japan, called Cervus Sika by the zoologists, while the island's wild pig also resembles the Japanese one. The pretty little Formosan flying squirrel (Sciuropterus haleensis) also points to a Nepalese relationship, and the island ape, (Macacus cyclopsis) which is not unlike the orang-outang, and after which is named the steep coral cliff at the entrance to the bay of Ta-kaô harbor, is closer to the Indian M. rhesus than the M. sancti Johannis of South China. There are said to be no parrots on the island.

6: Kirchhoff--29 U-4 (no date) 1895 Formosans
116, 133, 136

After all this [MC: evidence of the similarity between the fauna of Formosa and the mainland] one will probably agree with Wallace's final conclusion that while Formosa is an island detached from China, this separation from the mainland must have occurred pretty early, though certainly during the Tertiary period. Further, not only did many species of animal on the island vary, the insular isolation preventing cross-fertilization with unaltered species, these varieties gradually becoming new species, but at the same time great changes were experienced in South China with respect to fauna, so that the relations to the Indian domain were more and more obliterated. It would be of value to subject this explanation to a more searching test, by means ,for example, of paleontological discoveries in the soil of southern China. The beetles and butterflies of Formosa also diverge from those of the Chinese mainland, while they are related to and in part identical with those of Hainan and the Malayan island region; but these creatures might have been transferred by the typhoons that frequently blow over the island from a southerly direction (Hosie, p. 6).

6: Kirchhoff--29 [2] U-4 (no date) 1895 Formosans
116, 174

Formosa, whose northern heights can be seen on clear days from the Fu-kien coast, did not remain unknown to the Chinese throughout the Middle Ages. They then called the island Liu-kiu or Great Liu-kiu (Ta-liu-kiu). According to the Chinese Annals, it first became known in 605 A.D. They found there a strange people whose language they did not understand; one year later an expedition set out from China for the island, at the order of the Emperor, but the islanders defended themselves valiantly, and the only thing achieved was a campaign of destruction and the taking of a few thousand prisoners.

6: Kirchhoff--29 [3] U-4 (no date) 1895 Formosan Aborigines
116, 144, 171, 511

There can be no doubt that these Formosan natives belong to the Malayan race. Proof of this is offered by their language, their physique and many of their customs, such as headhunting and the community houses in the villages, where the youths and unmarried men sleep together.* Separated into many tribes divided by dialect and varying in

* Joest, "Beiträge zur Kenntnis des Eingebornen der Insel Formosa," Verhandlungen der Berliner Gesellschaft für Anthropologie, 1882, p. 61.

appearance, these Formosan Malays do not possess any common name. Today, insofar as they live untouched by the culture of foreign intruders, they lead a pretty rough existence, generally as hunters, although they live in small forest villages made up of wretched bamboo huts.

6: Kirchhoff --29 [4] U-4 (no date) 1895 Formosans
116, 175

In the course of the centuries, Formosa had quietly received settlers from the neighboring coasts of South China for pirates or anyone else who had had a rift with the Chinese Government, the island offered a place of refuge similar to that offered by Iceland and Greenland to the old Norwegians; but besides that, the amazing fertility of the island must have proved attractive to the inhabitants of the scanty and rocky soil of Fukien. But even after 1564, when an Imperial fleet, occupied in pursuing a bold pirate, had occupied the Pescadores, for which a Chinese Governor was thereupon appointed, Formosa remained untouched by any fresh attempts on the part of the Chinese Government to extend its power.

6: Kirchhoff--29-30 U-4 (no date) 1895 Formosans
116, 175

The 17th century brought the decisive turning point. After a Japanese attempt to colonize the Formosan coast (1620) had disappeared without a trace, the Dutch, who had become acquainted with the island on their journeys from Batavia to Japan, [30] established themselves on it. Their East Indian Company first took possession, in 1624, of the island in the sea where An-ping is now found, and there they built their fort of Zelandia. They soon established themselves in the southwest of Formosa also, and once again (1642) forced out the Spanish rival, who had set up the fort of San Salvador on the bay of Ki-lung in 1626. The Company now set up permanent establishments in the north of Formosa, at both Ki-lung and Tam-sui. The Dutch established satisfactory relations with the brown-skinned natives; every village chieftain within the area they controlled (this did not extend far inland, and never touched the east coast) was given, as a mark of the office he exercised in their name, a staff with a silver mounting on which the arms of the Company were engraved; thousands were won over to Christianity by the Dutch preachers, and in the village schools Dutch teachers taught the reading and writing of Dutch. But the Chinese settlers, on the other hand, were far from pleased by the demands of the "red-headed," as they called the Dutch, least of all by the poll tax laid on each of them from the seventh year on. At this very time thousands of refugees came over from South China (the figure of 25,000 is given for the period between 1624 and 1644); for the Manchus had broken through the Great Wall and had dethroned the Ming dynasty, an act that was followed by civil war lasting for decades.

6: Kirchhoff--30 U-4 (no date) 1895 Formosans
116, 175

The Dutch commercial company in the meantime busied itself with a profitable smuggling trade from Formosa to China. Their badly paid officials took an active part in this, for their own personal gain, making a clear profit of 100%. Raw silk was shipped to Japan, and silken materials via Batavia to the Netherlands. The average money value of this secret trade with China amounted to 4 million marks a year. And the colonial administration of Formosa did not cost the Dutch more than 357,000 marks a year, and brought in 142,000 marks in revenue. Admittedly, however, owing to the commercial economy practised in Batavia (not until 1660 did one proceed to raise the garrison of Zelandia to 1,500 men), the Dutch were in no position to withstand a serious attack from outside. And this was undertaken in 1662. The powerful opponent of the Manchu dynasty, whom we usually refer to by the Portuguese version of his name, Koschinga, saw the collapse of his ambitious plans in China, whose coasts he had threatened with a fleet of more than 3,000 junks. So now he hurled himself on Formosa, where he was naturally received with open arms by the Chinese population. After a valiant resistance, the fort of Zelandia fell on February 1, and with this there was an end to Dutch rule in Formosa.

Koschinga enjoyed this final triumph of his agitated life for but a few months. He died on July 1662. Several scions of his race successively wore the crown of Formosa, until in 1683 the Manchus seized both the Pung-hu Islands and Formosa, making them into a governmental district (a Fu) of the province of Fu-kien.

6: Kirchhoff-30 [2] U-4 (no date) 1895 Formosans
116, 175

For the last twenty years the assertion, constantly repeated among us, that China laid claim to the western part only of Formosa has been false. That changed, after the danger of a Japanese seizure of the east coast became a reality. The Butang, the Formosan natives living in the southeast of the island, had plundered Japanese ships forced ashore, and in 1873 a Japanese mission was despatched to Peking to ask for satisfaction. The reply of the Tsung-li-jamen that the Chinese Government did not feel itself responsible for misdeeds committed by savages it had not subjected obviously suited the cabinet in Tokyo. Under the pretext of punishing the Butang, a well equipped Japanese expedition put out to sea in March, 1874, landed on Formosa's Southeast coast and set up an encampment there. The Butang tribes soon submitted to the Japanese; but in China this turn of events attracted much attention, a sign of the importance the Chinese attached to Formosa. The hasty purchase of weapons and the speedy shipping of Chinese troops numbering between 8,000 and 10,000 to Formosa seemed to be the prelude to an armed clash. But this did not occur; repeated lengthy diplomatic negotiations in Peking, conducted by the Japanese with pride and energy, led in the Autumn of 1874 to Japan's expressing itself satisfied with a considerable financial indemnity and recognizing China's sovereign rights over all Formosa.

6: Kirchhoff--30-31 U-4 (no date) 1895 Formosans
116, 161, 177.63 China
636.63

The whole of Formosa, belongs only to the Chinese "sphere of interest," together with the islands off its coast. In reality only the western side is ruled by the Chinese, the north and, recently, a narrow strip of land along the eastern coast. Within this ruled region the Chinese Government is said to have carried out a census of the inhabitants, but [31] to have treated the results as an official secret. The assertion, made for a long time past, that Formosa has 3 million inhabitants, has thus practically no basis whatever. If this estimate were correct, it would enable one to conclude that the density of population attained the not inconsiderable figure of 90.

Already, there can be no doubt, the Chinese constitute the larger part of the population, for since the 17th century ever new droves have immigrated from Fu-kien and Kung-tung, and these have greatly increased, owing to the early marriages and the large numbers of children. The vigorous and enterprising tribe of the Hakka, from the latter province, has preserved its individuality on Formosan soil; its members are distinguished by their fine ironwork, and provide the natives with their knife blades and long flints. In North Formosa the Chinese settlers' wide open, sparkling black eyes attract attention, in contrast with the narrow slit eyes of the Chinese which are here quite general, otherwise; this is the result of unions of Chinese immigrants with native Malay women.

An important third element must still be mentioned. This is the Pepo-huan (also called Sek-huan or Schek-huan, i. e. "half savages"). The Pepo-huan are those Formosan Malays who accepted the fate of dependence on the Chinese intruders and gradually became Chinese in customs and outlook, without there being any mixture of blood. Yet they are distinguished physically as well as culturally from free natives living in the mountains (probably as the least numerous of the three elements making up the population of Formosa), the Tsche-huan or Tschin-huan, i. e. "complete savages," as they are called by the Chinese, who greatly fear their passion for hunting Chinese heads.

6: Kirchhoff--31 [2] U-4 (no date) 1895 Formosan Aborigines
116, 105, 177 Pepo-hoan

The Pepo-huan are big, bronze-colored men with shining eyes and bold looks who, like their women, of delicate build and a lighter skin color, have taken over much in clothing and dwellings from the Chinese, and who use the Chinese language, at least when dealing with the Chinese, although among themselves they usually talk their own Malayan dialect. Those of them living along the coast are fishermen; their women prepare salt from the sea water which they let run through sand and evaporate. The Pepo-huan of the interior are still fond of hunting, their hereditary occupation, but for the most part they are peasants. As though in imitation of the Dutch, the Chinese allow the peasants of each Pepo-huan village subject to them to choose a chief to settle quarrels among themselves, and appeal may be made from his decisions to the Chinese administration of the district. At his side the Chinese "interpreter" acts in the main as gatherer of the taxes imposed by the Imperial Government. The Pepo-huan are still distinguished by their bravery, dependability and hospitality, but they have been sadly reduced, economically, by the sly Chinese.

6: Kirchhoff--31 [3] U-4 (no date) 1895 Formosan Aborigines
116, 177, 426

The Chinaman misuses the unsuspecting nature of the brown "half savage," lends him money the latter needs in order to buy a wife, a cow or a shotgun, or to drink Samschu (rice brandy) or smoke opium. Thus he turns him into his debtor, who unsuspectingly pledges his house and possessions, until finally the Chinaman has him as his wretchedly poor tenant.

6: Kirchhoff--31 [4] U-4 (no date) 1895 Formosan Aborigines
116, 609, 721, 177.72 China
636.72

At times the Chinese do not fear, even today, to use open force, if it is a matter of forcing the Pepo-huan off better soil. This was done with the natives inhabiting the north of the island, who are called Kabaran. They finally withdrew to the other side of the mountains, to the fruitful plain of Komalan (more popularly, Kapsulan), which stretches out on the eastern coast of North Formosa as far as Su-aô; there 4,000 of them are said to live in flourishing settlements and to extend even farther south along the coast as far as Hua-lien. Unfortunately they are constantly at odds with each other, so that there can be no question of a united opposition against the Chinese. Nor can they take flight into the neighboring mountains on the west; for there they would be met by the free Tsche-huan, who hate them as renegades.

6: Kirchhoff--31 [5] U-4 (no date) 1895 Formosan Aborigines
116, 101, 563, 177.72 China
636.72

The geographical distribution of Chinese, Pepo-huan and Tsche-huan is not so simple as often described: in the plain, the hilly country and the mountains, respectively. The only thing right about this is the fact that the free savages live alone in the mountains, protected by the forests. The Chinese push on step by step even into the mountains of the interior and fell the forests.

6: Kirchhoff--31 [6] U-4 (no date) 1895 Formosan Aborigines
117, 101, 177 Pepo-hoan

We hear tell of a Chinese farm on the island in the Dragon Lake, and of the apparently near-by plain of Polesia, surrounded by mountains, that is said to be inhabited entirely by Pepo-huan who not only speak Chinese, but who have completely forgotten their own tongue (Imbault-Huart, p. 286).

6: Kirchhoff--31-32 U-4 (no date) 1895 Formosans
116, 241, 262

Up to the present only a modest portion of Formosa is cultivated, for the most part this being the coastal regions of the northeast and the western plain; from there only small cultivated strips [32] stretch out towards the east. The chief cereal is rice, which provides two and in some places three harvests a year. The careful cultivation of rice, like the use of the water buffalo, was naturally introduced by the Chinese. The rice fields are laid out on artificial terraces made in the lowest slopes above the valleys, and they are kept under water by means of skillfully constructed canals so that these areas, after the young plants from the seed beds have been laboriously planted, resemble great pools of mud traversed only by narrow paths. But just before the harvest they look like juicy green carpets. The first rice harvest, for which the seedlings are grown in March and transplanted to the fields in April, becomes ripe at the end of June or the beginning of July, the second (on the same fields) at the conclusion of October. The next most important crop in the people's diet is the sweet potato; two harvests are obtained from this also, at about the same time as the rice harvests. Wheat and barley are seldom planted, and always as a winter crop only.

After rice and sweet potatoes, sugar-cane and the tea plant are most frequently planted. The growing of sugar-cane extends over the whole western side of the island; it is found in enormous quantities in the surroundings of Ta-kaô and Tai-nan, but also upstream from Tam-sui, particularly on the flooded ground on either side of the Sintiam River, where the stalks attain the height of two men.

6: Kirchhoff-32 U-4 (no date) 1895 Formosans
116, 245

The tea plant appears to be cultivated only in North Formosa, to the 24th parallel. But there, in the course of the last decades, it has extended over enormous areas of hilly land, as on the heights round Tua-tu-tia and to the east of Bang-ka. When a fresh piece of forest land has been won from the original inhabitants, it is at once cleared; the tree stumps are taken out, the fallen trees are burnt and bushes cleared away in great bonfires, and then indigo is sown for a short while. Finally a tea plantation is laid out, either by sowing seed or by the use of shoots. May not the heavy rainfall, divided into the two rainy seasons that may be presumed to extend beyond Ki-lung, be the chief reason for the marked success enjoyed in the cultivation of tea in northeastern Formosa? The tea is very strong and aromatic. Without any manuring of the soil, the tea leaves are picked three times a year (in some districts as many as seven times). In addition to the heavy rains, especially in the winter, the early fogs that are the regular thing at this time in the mountainous regions favor the exceptional development of the leaves. On the other hand, attempts to grow tea in the southwest (around Tai-nan)have failed.

6: Kirchhoff--32 [2] U-4 (no date) 1895 Formosans
116, 137, 241

As well as indigo, there are grown ginger and plants providing oil, both sesame and peanuts (Arachis hypogaea), and also melons, pineapple, bananas and the South Asiatic tree fruits such as mango and the giant lemons or grapefruit (Citrus decumanus). The Chinese nettle (Su-mo in Chinese) need not be planted any more than the Fatsia papyrifera, since it grows wild in abundance, the latter especially on the mountains round Tam-sui.

6: Kirchhoff--32 [3] U-4 (no date) 1895 Formosans
116, 228, 262

Many thousands make their living along the western coasts by sea fishing and the apparently even more profitable cultivation of oysters, in part as "rock oysters" on stones and in part as "bamboo oysters" in planted areas of bamboo cane. The yearly return from this oyster cultivation is said to amount to 116,000 marks and nevertheless to be insufficient for the more wealthy Chinese who dote on them, so that large quantities of dried oysters from the mainland are imported also.

6: Kirchhoff--32 [4] U-4 (no date) 1895 Formosan Aborigines
116, 177, 286, 322, 412 Pepo-hoan

In respect to crafts also, the Chinese have stamped their individuality on the Pepo-huan. But the Pepo-huan continue to manufacture their wooden vessels in the traditional way, and the knife handles also, in which they insert the blades they buy from the Hakka. Their wives manufacture coarse materials from pineapple and nettle fibers.

6: Kirchhoff--32 [5] U-4 (no date) 1895 Formosans
116, 248, 286

This latter fiber [MC: nettle fiber] promises to become even more valuable when it proves possible to free it of the gummy substance that clings to it, makes it more difficult to use and prevents it from taking color evenly when, for example, it is woven together with silk. But even so the Boehmeria ("la ramie" of the French) provides a highly esteemed woven material that gleams like silk, so that it is grown in huge quantities in Ho-nan, Schan-tung, Hu-pe and round Nan-king. In Formosa the stalks reach a height of 3 to 4 m., and can be cut three times a year. In part the stalks are treated as follows: after they have been softened by soaking in water, the bark has been removed and they have been smoothed and dried, they are sent as raw material to China, where they are used to manufacture Schia-pu (summer material, the "grass cloth" of the English); in part the Chinese women and the wives of the Pepo-huan, in Formosa, spin the beautiful fibers to form a shining yarn, and from this they weave broad strips of material up to 30 m. long and 45 cm. wide, two women sitting at a primitive loom out in the open. Boehmeria fiber is already exported from Shanghai, in large amounts, for the world trade, and in London as much as 2,000 marks is paid for the ton.

6: Kirchhoff--33 U-4 (no date) 1895 Formosans
116, 249

The manufacture of sugar and the preparation of tea are altogether in Chinese hands. The first in particular represents considerable values, although the wares are of poor quality only, about half the raw juice remaining unused in the waste owing to the insufficient pressure (it is done between two stone cylinders turned by buffalo or oxen).

6: Kirchhoff--33 [2] U-4 (no date) 1895 Formosans
116, 244

The fine thin oil of the peanut is used for household purposes only where it is obtained; but what is left after extraction of the oil is sold in large quantities in Amoy and Futschau as food for cattle, in the form of cakes, or as a fertilizer.

6: Kirchhoff--33 [3] U-4 (no date) 1895 Formosans
116, 249

The indigo, which is grown for the most part in North Formosa, yields a dye by dissolving, and is exported in this state, but it is also used in Formosa as the source of a very fast dye for materials.

6: Kirchhoff--33 [4] U-4 (no date) 1895 Formosans
116, 314, 563

Camphor is obtained in a curious way. It is the result of a never ceasing guerrilla warfare on the forest border, where the region inhabited by the Tsche-huan begins. Risking his head in the process, the Chinese frontiersman either sets out at random with his axe into the woods or he deceives the unsuspecting savage, after having intoxicated him with Sam-schu, by swindling out of him a certificate or authorization to fell wood in his district. The greater part of the camphor tree is then used as a building wood and the rest is hacked up into chips, from which commercial camphor is obtained by moist distillation.

6: Kirchhoff--33 [5] U-4 (no date) 1895 Formosans
116, 135, 317

Among the minerals, there should first be mentioned the sulphur of North Formosa. The sulphur is broken into blocks or it is cut out of sulphurous earth by melting.

6: Kirchhoff--33 [6] U-4 (no date) 1895 Formosans-1-2
116, 135, 316

Petroleum is obtained in various spots, but is inferior. According to old Dutch chroniclers, gold was formerly mined in the northeast; it is also said that, in the trenches dug to receive it, quantities of gold were obtained at the foot of the hills in this region, when the August rains had swelled the rivers. The river of Su-aô actually carries down from the mountains particles of gold in the sand. Other regions of the island have also proved to contain gold recently. Thus, in the southern part of the country, near Liang-tschian (within the territory still left to the natives), a landslide caused by heavy rains is said to have revealed a considerable quantity of gold. Most surprising was the discovery of goldbearing river sand while building a railroad bridge over a tributary of the upper Ki-lung, in 1890. At once thousands of Chinese hastened thither who had learnt goldwashing in California or Australia; and in the course of the last years the stones carried down by the Ki-lung have been most industriously exploited by these goldwashers, and it would appear with considerable success. But in the fixed rock no gold has been discovered there (Hosie, pp. 23 ff.).

But much greater profit is promised by the extraction of coal, which is met with far and wide in extensive beds, both in north and south (Hosie, p. 21). Up till now the only extraction of importance has taken place in the beds that can be traced along the northeast coast, on the right side of the Ki-lung River, through the Ki-lung Mountains as far as the mountain spurs of Pi-taô. The coal mines there lie close to the coast near

6: Kirchhoff--33 [6] U-4 (no date) 1895 Formosans-2
116, 135, 316

the port of Ki-lung, and provide, in part, a very good anthracite; formerly the coal was extracted only in Chinese fashion in galleries that sank diagonally, but since 1875 machines have been used.

6: Kirchhoff--33 [7] U-4 (no date) 1895 Formosans
116, 439, 489

When four ports were thrown open in 1860 to foreign commerce (Tam-sui and Ki-lung in the northeast, Tai-nan and Ta-kaô in the southwest), in Europe excessive hopes were set on the commercial profits to be obtained from the natural wealth of the island. Nothing was known of the lack of communications in the interior, the utter absence of the canals which, in China, did so much to render easier the transport of goods, or of the poverty of the inhabitants. The sum at the disposal per day of the poor Chinese peasant for himself and his numerous family (the Chinese price of essentials being very low) is but 20 pfennigs! But since then many advances have been made in Formosa, and at least in some stretches the absence of roads has been made good. How much that has fostered commerce can be seen from the increase of total imports and exports for the two most important of these treaty ports. In the 15 years from 1868 to 1883, these figures rose from 7 to 18 million for Ta-kaô, and for Tam-sui from 5.6 million to 20 million.

6: Kirchhoff--33-34 U-4 (no date) 1895 Formosans
116, 252, 439

The main imports from lands other than China are cotton and woolen materials, and Indian opium; then follow metal goods, clocks, maize flour (used by Chinese settlers in baking cakes), boards, lamps, matches, dye for dyeing, umbrellas, needles and related articles. Even more variegated is the list of imports from China, embracing hemp sacks, peas, bricks and fans, jade bracelets, etc., but the value of this commerce which involves for the most part the ports of Amoy, Tsuan-tschau (Tschang-tschou on our maps) and Fu-tschau cannot be estimated. *

*The Europeans acting as customs officials in the treaty ports [34] note only the value of the goods imported from abroad and exported abroad, because they have to collect taxes for the Chinese Government from them alone. Consequently it is obvious that the value of goods from China and exported to China is not included in the sums quoted for Ta-kaô and Tam-sui.

6: Kirchhoff--34 U-4 (no date) 1895 Formosans
116, 439

The bulk of Formosan exports consists of sugar, coal from Ki-lung, tea, camphor, nettle fiber, indigo and wood for construction. Sugar constitutes roughly half of the total exports, indeed almost the total exports of the southwestern harbors, where the only other exports concerned, practically speaking, are sesame and turmeric root (for the manufacture of saffron yellow). The inferior brown kinds of Formosan sugar go to Japan and China, the white sugar is exported to Europe also.

6: Kirchhoff--34 [2] U-4 (no date) 1895 Formosans
116, 372, 439

The coal from Ki-lung might bring in tremendous sums, in view of the steadily growing demand for coal in the South Seas steamer traffic, which at present must be met by coal coming from such distant parts. And, in fact, in Hongkong for example Formosan coal can be delivered at a price per ton of 20.2 marks, so that it is at times cheaper than Japanese and Australian coal, and almost only half the price of English coal. But unfortunately this coal is too bituminous, and therefore burns too quickly, emits a great deal of smoke and deposits much soot in the chimneys. So the Chinese of the mainland prefer their own anthracite, while the foreigners in the Chinese coastal regions are quite willing to burn Formosan coal in stoves in the rooms. In view of the cheapness of the latter, its future seems assured, particularly when it is mixed with slower burning coal that is free of bitumen.

6: Kirchhoff--34 [3] U-4 (no date) 1895 Formosans
116, 501, 505

Although recently steamers have greatly limited the use of junks in Formosan commerce also, nevertheless the junks are able to maintain themselves against this superior competition for two reasons: the keelless junks of shallow draught are more easily able to enter and to leave the shallow harbors of Formosa, while on the other hand, in view of their smaller crews and the smaller cargo required, they can wait to load in the harbor without great expense. When the wind is favorable, the junks can cover the distance between Formosa and Fo-kiën or Ning-po in a surprisingly short time. The little junks of between 10 and 25 tons are also able to travel over very shallow regions of the coastal waters, and suspend service only in the most stormy winter periods. They are absolutely indispensable for transporting goods from the various coastal regions and from the interior of the island, by water, to the four large treaty ports.

6: Kirchhoff--34 [4] U-4 (no date) 1895 Formosans
116, 439

It must still be stressed that China and Japan naturally occupy first place in the export trade with Formosa, because of their proximity and huge populations, but that the European flags most often seen are the English and the German. Formosan tea is sent almost exclusively to North America, and the camphor is sent via Hongkong to Europe (the yearly value often amounts to 600,000 marks).

The more important localities in Formosa all arose as centers of the export trade, and are thus either harbors or at least are situated close to the coast.

The most remarkable degree of development has been attained by Tai-nan, formerly known as Tai-uan or Tai-uan-fu. It now lies more than 3 km. distant from the coast and away from the right bank of the Na-mu-ki. But as late as the 17th century the wide plain between the town and the sea, which is now traversed by creeks and in which there are many fishponds, was a stretch of the sea, and today it is still flooded every year by the southwest monsoon. At the place where nowadays the creek flowing westwards from the town widens out to form a broader stream, more resembling a river, there lies the rather higher ground that bears the village of An-ping, 2 1/2 km. from the town and close to the shore of this creek, which continues on in a southwesterly direction for another kilometer, offering anchorage to junks of shallow draught and finally joining the sea after traversing a shifting sandbank. This hilly ground on which is An-ping measures 1 km. from east to west and 1/2 km. from north to south; it still rises like an island amidst river arms and swampy plains, and is the already mentioned former coastal island of Tai-uan, its name then being given by the Chinese to the whole island of Formosa. At that time, when from 1630 to 1633, the Dutch built their fort of Zelandia, the longitudinal axis of the sandy islet (it was narrower also in those days) ran from southeast to northwest, forming the partial barrier against the open sea of a lagoon bay cutting more deeply into the body of the main island; in the north the entry

to the lagoon was always open, via a broader channel of the sea, and in the south a sandbank one could walk on at low tide already began to connect the isle to the main island.

6: Kirchhoff--35 U-4 (no date) 1895 Formosans
116, 133, 175, 361

On the eastern side of the lagoon of Tai-uan lay the small locality of Sakkam (in Chinese: Tsche-kan), a native village of about 100 houses. In front of this the Dutch erected another fort, called Provintia or Providentia, exactly opposite Fort Zelandia, so that the lagoon was dominated on either side. After the collapse of Dutch power in Formosa, Zelandia still remained the key to the entry of the lagoon, behind which little Sakkam had grown to be the most important trading center on the island. For this reason Koschinga made it his residence and the Chinese, when they took possession in 1683, made it the seat of government and consequently called it Tai-uan-fu. But the continued growth of sandbanks that gradually rose above sea level, to the west of Fort Zelandia, made this fort useless as a coastal protection, so that it was dismantled in 1874 and a new fort built of its materials 1 1/2 km. to the south, close to the present coastline. Fort Provintia, in which the consul Swinhoe saw the Chinese temple in 1863, and which was built as a protection against the maleficent influences of the wandering spirits of the hung maô ("redhaired," the Dutch), has also been demolished since that time. It had long before been absorbed in the big irregular rectangle of Tai-uan-fu.•

6: Kirchhoff--35 [2] U-4 (no date) 1895 Formosans
116, 361

This rectangle, [MC: i.e., Tai-uan-fu] like that of Peking, is roughly orientated with respect to the points of the compass, and is surrounded by a crenellated wall covered with slate about 9 km. in length, and pierced by eight gateways surmounted by rectangular towers. The town is built in Chinese style. The main streets cut each other at right-angles; most of the houses are built of bamboo or clay, only a few of brick. The roofs of the houses, which are without exception low, are of straw or slate, and cannot be seen for the seven or eight months of the worst heat, for they are then covered by the huge sheets of canvas that are stretched over the streets. In front of the western gate there is a suburb with narrow, dirty streets, and this is the business quarter. But the few foreign traders do not live here, they live in An-ping, and have their warehouses there; there the climate, in view of the marshy surroundings, is admittedly unhealthy, but the junks, as we have seen, anchor close at hand. Tai-uan-fu itself has long since ceased to be mainly a commercial town or even a harbor, it is the tranquil site of the administration and of the agency conducting the great state examinations for officials. Large areas within the town wall are occupied by cultivated fields, flower gardens and public squares planted with fine old trees, so that the German traveler Joest, who estimated at 200,000 the population of Tai-uan-fu (for a little while now called Tai-nan), is probably further away from the truth than the usual figure of 70,000. The population is even said to be declining sharply, since the constant sanding up of the entry near An-ping make things ever more difficult for the passage of junks.

It is therefore [MC: in view of the decline of Tai-uan-fu as a commercial city] natural that the greater part of the export trade of South Formosa should have gone over to Ta-kaô, 40 km. farther south, which has been connected telegraphically with Tai-nan since 1874. This small but important port is reached by passing between two precipitous cliffs that can easily be seen from far out at sea; on the left rises the Ape Mountain (of coral limestone) to a height of 400 m., and on the right there rises even more precipitously a cliff 120 m. high, called the Saracen's Head after the English cannonboat that surveyed the west coast of Formosa some decades ago. Between these two heights, which are occupied by forts, even smaller steamers can enter a bay which, however, is of very limited extent, and which is surrounded on either side by the installations recently constructed by the Europeans: immediately behing the fort at the foot of the Ape Mountain is the quay alongside which ships lay to, the customs, the English consulate and the dwellings of the foreign traders, while opposite (that is, behind the Saracen's Head) can be seen the hospital of the Presbyterian mission station, transferred from Tai-nan to Ta-kaô, the hospital doing a great deal of good, and the European warehouse. The very shallow lagoon, which stretches out from this harbor to the southeast, parallel to the coast, is separated from the sea by a sandy tongue of land (which first attached the Saracen's Head to the mainland). On this tongue of land is a fishing village with between 1,500 and 2,000 inhabitants, and called Ta-kaô after the harbor. Beyong the lagoon the glance passes over stocks of bamboo, palm and mimosa in the

foreground, and then over an intensively cultivated plain with small villages peeping from amidst the green sugar-cane fields, finally reaching the hazy blue mountains. In this coastal plain, which stretches out farther than the eye can see to the southeast, there lies the town of Fung-schan and, beyond the mouth of the Tan-tschui-ki, Pang-leaô, the center for the junk traffic of this southern region. When the southwest wind develops its full force, no vessel can lie to on this coast, which is most immediately exposed to this wind. The most southerly town on Formosa, which was founded quite recently, is Heng-tschun, the capital of the southern region of the same name, distinguished for its huge rice harvests. It lies at the foot of the western chain of the southern tongue of land.

6: Kirchhoff--35-36 U-4 (no date) 1895 Formosans
116, 133, 361

Rather farther inland is the group of towns of the North Formosan Tam-sui River region. The harbor [36] of Tam-sui consists only of the mouth of this river. The entry into the harbor over the constantly shifting sandbank, because of the strong surf this causes, is free of danger for steamers only in calm weather and when the tide is high. The channel of the river, which flows in a northwesterly direction at its mouth, is deeper on the right-hand side, while the bed is exposed at low tide on the left-hand side, for far more than half the width of the bed. Consequently all settlements are found on the right bank. Once the bar has been crossed there can first be seen, on the left, the Chinese fort, and then the former Dutch fort, built of red brick, where the English consul now lives, and after this the customs house and the open ground of Huëi or Ho-be, which only the foreigners call Tam-sui after the river. Busy as the port may be, the spot really consists only of a narrow street along the stream in which only two people can avoid each other. But it is adorned by a Chinese temple born on stone columns and is well situated. Close to the locality there rise amphitheater-like the slopes used as a burial ground. Behind this the sides of the Ta-tun bears peanut and sweet potato fields on the lower parts, among which are strewn Chinese farmhouses, and from a height of 500 to 600 m. forests consisting of bamboo and tree ferns.

6: Kirchhoff-- 36 U 4 (no date) 1895 Formosans
116, 361, 505

Upstream [VMM: from Tansui] on the right bank also, there follows the populous town of Tua-tu-tia, the chief center for the preparation and export of tea, and farther along Mang-ka or Bang-ka, important because of the fact that larger junks come up this far on the Tam-sui (which should really be called the Sintiam at Bang-ka); this explains the dense crowds in the terribly filthy streets of Bang-ka, where humans and pigs fight for room. In particular, the small vessels bring down camphor from the mountain streams to be reshipped here.

6: Kirchhoff--36 [2] U-4 (no date) 1895 Formosans
116, 133, 361

Bang-ka ceased to be a seat of administration since the foundation, in 1879, of Tai-pe (or Ko-ping) as the center of administration in North Formosa, in the densely cultivated plain between Bang-ka and Tua-tu-tia, and at almost equal distances from the two towns. The whole fruitful but marshy plain of the three towns has only unhealthy, brackish water, but it receives good water from the southeast from the mountains behind the village of Kieng-be, through an artificial connection that was laid down quite a long time ago.

Beyond this fertile plain there soon begins the still little known land of the "wild savages," the Tsche-huan. Here Sintiam and Tokoham are the most advanced posts of civilization. The two sources of the Tam-sui called after these towns rise in the wooded mountain regions not yet subject to China, but finally flow through rice, sugar-cane and sugar fields... The Tokoham River in particular forms a sharp line of cultural demarcation: to its left are vivid green tea plantations and rice fields along all the heights as far as the sea, and on the right stretches out dark primeval forest.

6: Kirchhoff--36 [3] U-4 (no date) 1895 Formosans
116, 133, 491, 493, 501

A much used road leads from Tam-sui to the most important port of Ki-lung. Although it is hardly half the distance as the crow flies, one travels 52 km. up the winding Ki-lung River on the flat-bottomed boats mentioned above (as in the Philippines the natives call them banka) manned by two rowers who are helped by a third for the stretch with rapids. A number of small localities border the river, whose lower course is so shallow that the rising of the tide in it can be distinctly seen. But then follows a series of rapids in the mountainous region. Travel by boat ceases where the river comes to within 5 km. of Ki-lung Port; one transfers to the sedan-chair used in Formosa, where there are no carriages, and via a pass 200 m. high one goes down the steep mountainside facing the sea to the ... bay with its coal-bearing surroundings. Here, by way of exception, the entry into this natural harbor is without danger even for ships of greater draught, in spite of its being hemmed in by coral reefs, and the protection against storms in this bay amidst mountains is almost complete on all sides. Nevertheless no steamer can reach the town of Ki-lung, for the shore in front of this locality, which is situated at the back of the bay, is extremely soft, forming a morass at low tide traversed only by a narrow channel leading from the anchoring place. This softening is steadily increasing, for here as in the other Formosan ports the Chinese Government is doing nothing to prevent the junks' evil practise of dumping their ballast right in the anchorage.

6: Kirchhoff--36 [4] U-4 (no date) 1895 Formosans
116, 361

Ki-lung is a locality of but 1,000 to 2,000 inhabitants; it owes its importance almost exclusively to the export of coal from the mines that lie a bare 1 1 /2 km. to the east-southeast; camphor and indigo play quite a subordinate part in its export trade.

6: Kirchhoff--36-37 U-4 (no date) 1895 Formosans
116, 311, 361, 487

To the northwest of Ki-lung the coastal village of Kimpaôli is of some significance because of the neighborhood of the solfataras of the Ta-tun Range. A road runs in a southwesterly direction from Kimpaôli and joins the so-called military road beginning opposite the harbor of Tam-sui, at the village of Pa-li-hun, and leading to Tai-nan and even farther along the coast to the southern point of the island.

In North Formosa the open place of Tiong-lek is situated on it, with heavy plantings of [37] rice, sweet potatoes, and turnips, and also the walled town of Teuk-tscham (now officially known as Sin-tschu). This is an important commercial center connected by water the nearby coast. Wide rice fields and luxuriant tea plantations surround it, but unfortunately it is not available for foreign trade, although an excellent market would be found here for materials and opium. Now loads of camphor are transported from here on the backs of bearers to Tam-sui, the nearest treaty port.

6: Kirchhoff--37 U-4 (no date) 1895 Formosans
116, 487, 493

The "military road" goes on from Shinchiku in a wide curve via the inland towns of Tschang-hua and Kia-y; in a sedan-chair the 300 km. separating Tam-sui and Tai-nan can be covered in 10 days, but it is hardly anything more than the linking of the ordinary field paths, on which the terribly creaky ox-carts bear home the rice harvest on their spokeless wheels, the fixed axle turning round also. There are no bridges at river crossings. In the rainy season this route cannot be used, for most of the stretches of road making it up turn into ditches of brackish water.

6: Kirchhoff--37 [2] U-4 (no date) 1895 Formosans
116, 175, 311, 361

Chinese settlement on the east coast is quite new, and so are the roads laid down on this coast and to the coast. Since the beginning of the 19th century Chinese settlers, for the most part people who had to expect punishment for some offense if they stopped longer in the region controlled by the Chinese Government, went round the northeast point of Formosa to the coastal plain of Kapsulan, now officially called Komalan. This plain is at most 10 to 12 km. broad. The fertility of this plain for crops of rice was soon recognized; so settlers came also who had not taken to flight, and here too, although in a hard struggle with the natives, Chinese villages gradually grew up, as far as the bay of Su-aô in the south. The favorable position of the little village of Su-aô (i.e., Su Bay), on this fine bay, was first recognized during the Japanese expedition of 1874, when it became the headquarters of the commander of the Chinese observation corps. Today Su-aô is a thriving town at the mouth of the river of the same name, whose valley forms a route for several kilometers to the southwest, towards the foot of the coastal range; all around are green rice fields, and the tea plant does well on the cleared forest soil of the surrounding heights.

6: Kirchhoff--37 [3] U-4 (no date) 1895 Formosans
116, 205, 487

A stretch of "military road" was at once built between Su-aô and the mouth of the Hua-lien, although malaria mowed down large numbers of the workmen. With this the arm of the Chinese Government, which had at once set up a postal service in this stretch, had already extended itself from the north to about the middle of the east coast. All that remained to be done was to establish contact with the east coast in the narrower southern part of the island. In the southern third of the east coast there lay the isolated coastal locality of Pi-lam. A route was laid down crossing the mountains and ending there. It begins 36 km. to the northeast of Ta-kaô on the Tsche-schan (i. e., at the Red Mountain), but it is very narrow and often uses the beds of streams, which naturally are more or less passable only in the dry season. Yet in the critical year of 1874 it proved very useful, when it was necessary to hold in check the native tribes during the Japanese invasion; for the route cuts through a number of the footpaths used by the natives.

6: Kirchhoff--37 [4] U-4 (no date) 1895 Formosans
116, 175, 563

So, at this time, the coasts of Formosa are practically in Chinese hands. About 2/3 of the whole island has become subject to China, and the fate of the native Tschehuan [MC: savage] appears to be sealed. Either their freedom disappears, for with their unceasing feuds, they are unable to protect it or like the proud camphor trees of their native woods they themselves fall beneath the murderous blows of the Chinese, who press them ever closer.

6: Kirchhoff--37 [5] U-4 (no date) 1895 Formosans
116, 177.65 China
636.65

Originally the colonizing zeal of the Hakkas and the people of Fokien had quite independently won the soil of the island step by step. Then the rule of the Imperial Government was proclaimed after the collapse of the Koschinga dynasty on Formosa, but until more recent times the central government paid no attention to the "island of the eastern barbarians." The extension of the area cultivated by the Chinese on Formosa remained the private affair of the settlers; the officials sent to the island felt as if they had been banished and used the years of their exile to enrich themselves.

The slow advancement made in the more careful treatment of Formosa by the Chinese Government is reflected in the divisions into administrative districts that grow smaller in extent. At first some importance was attached to the southwest alone, and it was superficially divided into the three districts (Hsiën) of Tai-uan (now Tai-nan) in the middle, Tschu-lo in the north and Fung-schan in the south. Subordinated were the Fisher Islands and the remote Tam-sui as ting, i. e., "sea district" or, probably more correctly, "district of inferior rank." The warning rebellion of 1722 brought about the splitting of the excessively large northern district into a northern half, administered from Tschang-hua, and a southern half administered from Tschu-lo. This latter administrative center received, as a result of the self-sacrificing defense offered the rebels in 1788, the honorable name of Kia-y, i. e., "praiseworthy love of the fatherland." Until 1875 this organization of the four Hsiën (each under a Tsche-hsiën, a district president) was allowed to go on pretty much unaltered, except that [38] a few Ting were added, these being Komalan, later called Y-lan, and even the region round Tam-sui.

Then the fear of a Japanese invasion induced important reforms. Two centers of administration were now set up, a northern one in the newly created town of Tai-pe-fu, which in accordance with the Chinese custom bears the name of the district it administers*

*Tai-pe-fu is a shortened form of Tai-uan-pe-fu, i. e., the northern prefecture of Tai-uan (or Formòsa).

and a southern one in Tai-uan-fu, which now received the corresponding name of Tai-nan-fu (southern prefecture). Each of these prefectures was governed by a higher official with the title of Tsche-fu (chief president). Subject to the president of North Formosa were the following districts, each administered by a Tsche-hsiën:

1) Tam-sui,
2) Sin-tschu (formerly Ting Teuk-tscham),
3) Y-lan (formerly Ting Komalan),
4) Tai-uan (i.e., Tai-nan),
5) Fung-schan,
6) Heng-tschun,
7) Pi-lam.

Similarly the districts of the same level subject to the chief president of South Formosa were:

1) Tschang-hua,
2) Kia-y.

The south of the former district of Fung-schan (from the stream entering the sea at Pang-leao down) had also received its own Hsiën administration, and was provided with the capital of Heng-tschun, founded for this purpose, and the same was done with the

greater part of the east coast, where the former village of Pi-lam became the administrative capital of an extensive district reaching from the north to the border of Komalan. Only the Schiffer Inseln (Pung-hu) remained a Ting.

The highest administrative chief of the island was appointed as the superior of the two chief presidents or prefects of North and South Formosa, with the title of tao-taï, and his official seat was at Tai-uan-fu (now Tai-nan). Every year he had to traverse the island once, and he was the highest court of appeal in all administrative and legal matters, being immediately subject to the Governor of Fo-kiën, who had to undertake a journey of inspection in Formosa every third year. But as a consequence of the Franco-Chinese conflict, the importance of Formosa as the "eye of the Southern Sea" increased in the eyes of the Peking cabinet to such an extent that, in accord with an Imperial Decree of October, 1885, the Provincial Governor of Fo-kiën was compelled henceforth to set up his residence on Formosa itself, so that he should govern the island directly. At his side a brigadier-general commanded the Formosan garrison, which was armed in European fashion and, even in peace, numbered 10,000 or 12,000 men.

6: Kirchhoff--38 U-4 (no date) 1895 Formosans-1-2
116, 631, 177.63 China
636.63

The administration of Formosa has become even more specialized and made even more independent in the last years. According to Hosie's report, the island has now been raised to the rank of an independent Chinese province under a governor directly responsible to the central government of the Empire. At the present he resides in Tai-pe-fu. At the same time the division of Formosa into three prefectures was ordered, each of them embracing a number of sub-prefectures (hsiën, ting, tschu). They consist of the following:

I. Northern prefecture (Tai-pe-fu).
   1) Hsiën Tem-sui,
   2) " Sin-tschu (or Hsin-tschu),
   3) " Y-lan (or I-lan),
   4) Ting Ki-lung.

II. Middle prefecture (Tai-uan-fu).
   1) Hsiën Tai-uan, *

* This district must consequently have its center of administration in a town called Tai-uan; we thought we should indicate this to be to the east of Tschang-hua, where Hosie's map shows a town called Tai-nan (obviously an error in lettering).

6: Kirchhoff--38 U-4 (no date) 1895 Formosans-2
116, 631, 177.63 China
636.63

2) Hsiën Tschang-hua,
3) " Jün-lin,
4) " Miao-li,
5) Ting Pu-li.

III: Southern prefecture (Tai-nan-fu).

1) Hsiën An-ping,
2) " Fung-schan (Feng-schan, as the English call it),
3) " Kia-y (or Kia-i),
4) " Heng-tschun,
5) Tschu Tai-tung (formerly the district of Pi-lam).

6: Kirchhoff--38 [2] U-4 (no date) 1895 Formosans
116, 206, 491, 496

But the most recent and most important advance has to do with communications. At least a beginning is being made with the construction of more substantial roads to connect the interior, the posts are being put on a systematic and unified basis and, under the first Governor, Liu-ming-tschuan, who lent an ear with unusual readiness to the counsels of foreigners, the first railroad to be approved by the Chinese Government has been built. It runs from the harbor of Ki-lung to Sin-tschu, and a continuation running via Tai-uan to Tai-nan is being prepared by means of alinement surveying (Tracenvermessung). In 1887 and 1888 the telegraph line running from Ta-kao to An-ping was carried on to Tam-sui, Tai-pe and Ki-lung, and at Tam-sui Formosa was connected by cable with the mainland, and at An-ping with the Fisher Islands.

7: Joest--54-55 E-5 (no date) 1882 Formosans
116, 101, 437

Formosa is divided lengthwise into two sections; the Chinese inhabit the western half of the island, while the natives live in the eastern half. [55] Along the boundary there is a stretch of land 10 miles wide which is considered neutral territory. Here there are several hundred Chinese settlements, ranging from single one-storied houses to villages; in this section the two groups meet for barter.

7: Joest--55 E-5 (no date) 1882 Formosan Aborigines
116, 361, 628

The eastern half of the island is mountainous and covered with dense forests; the natives of the island were pushed back into this region by the Chinese. Along the coast there are several tribes who live in great poverty as fishermen. Most of the natives, however, built villages in the forests so that each tribe has its own community; these live chiefly by hunting. There are constant feuds among them.

7: Joest--55 [2] E-5 (no date) 1882 Formosan Aborigines
116, 164, 273

The aboriginal population is also frequently decimated by smallpox epidemics. They suffer from the damp and cold; they produce few children and indulge in quantities of Chinese brandy, so that it is likely that they will soon either become extinct or be assimilated by the Chinese immigrants.

7: Joest--55 [3] E-5 (no date) 1882 Formosan Aborigines
116, 144, 437, 563 Pepo-hoan

Marriages between Chinese, especially the Hakkas, and Formosan women, occur frequently. Thus a distinct racial group, the Pepohoan, has been formed; they usually form the intermediaries in barter.

7: Joest--55 [4] E-5 (no date) 1882 Formosan Aborigines
116, 224, 286, 437

The chief articles of exchange are Chinese products such as rifles, powder, brandy, knives, glass beads, and sometimes red flannel, from which the native women pull out the threads to use in their own woven garments. In exchange for this the aborigines offer camphor, the skin of certain animals, dried and smoked meat from deer, boars, and bears, as well as antlers and their native woven cloth which is extremely durable.

7: Joest--55 [5] E-5 (no date) 1882 Formosan Aborigines
116, 314, 609

Camphor trees predominate in the forests on Formosa. The aborigines allow the Chinese, for a small payment, to come into their territory and fell camphor trees; often they also demand hostages.

7: Joest--55 [6] E-5 (no date) 1882 Formosans
116, 439

During the previous year [MS: 1881] about 12,000 Pikul of camphor, at a value of about 600,000 Mark, were exported from Formosa.

7: Joest--55 [7] E-5 (no date) 1882 Formosans
116, 167, 634

Every year several thousand Chinese migrate from the overpopulated mainland to the Chinese section of Formosa, much of which is still virgin soil. The district of Tai-wan is controlled by a Tau-tai in Taiwanfu; he has several privileges which date from the period of Coxinga's Privileges.

7: Joest--55 [8] E-5 (no date) 1882 Formosans
116, 162

There is no reliable information about the number of Chinese inhabitants on the island; in the city of Taiwanfu there are more than 200,000 inhabitants.

7: Joest--55 [9] E-5 (no date) 1882 Formosans
116, 648

In Taiwanfu there is a British consul who also manages the affairs of the German Consulate (during 1880, two German steamers and 64 German sailboats called at Formosa); most of the time, however, the consul lives in Takao, a small town 36 miles to the south.

7: Joest--55 [10] E-5 (no date) 1882 Formosans
116, 473

Three British and one German firm in China have branches in Takao and in Tamsui in the north.

7: Joest--55 [11] E-5 (no date) 1882 Formosans
116, 439

The total imports in the two harbors of Tamsui and Taiwanfu-Takao in 1880 were approximately 20 million Mark, and the total of exports was 30 million Mark, that is, 50 million Mark together. The chief articles of import are opium and Chinese articles of consumption such as European shirting, iron, bags, etc. The exports from the north consist chiefly of tea, camphor, and coal, and those from the south consist chiefly of sugar.

7: Joest--55 [12] E-5 (no date) 1882 Formosans
116, 316

Formosa has abundant deposits of bituminous coal, sulphur, and oil. The Chinese, however, have hardly exploited these at all.

7: Joest--55 [13] E-5 (no date) 1882 Formosans
116, 206

Formosa is the first ... region where the Chinese have established telegraphic connections; the line leads from Taiwanfu to Takao ....

7: Joest--56 E-5 (no date) 1882 Formosans
116, 133, 361, 504

Unfortunately, there are no large harbors on Formosa, or rather, there are none in those places where the Chinese companies have trading posts. Taiwanfu is situated two miles from the coast; the harbor, Amping, is situated at that point where Nova Zelandia was situated formerly, but even there landing facilities for passengers and goods are very poor.

7: Joest--56 [2] E-5 (no date) 1882 Formosans
116, 133

The entire western coast of Formosa has been raised; the process, which has been taking place for centuries, is slow but the differences may be clearly seen. In those places along the shore which are now dry the Dutch captains of former times anchored their ships; Nova Zelandia is now five miles from the sea, while formerly the waves had splashed against the walls of this fort, and on the marshy, sandy area of land formed since then there is now a fishing village. There is a dangerous coral reef in the harbor entrance at Amping and there are so many shoals that the passage is not navigable if there is even the slightest breeze; the passengers must land by means of small floats of a peculiar construction which the natives call Catamarans.

7: Joest--56 [3] E-5 (no date) 1882 Formosans
116, 501

The catamarans used for landing at Amping consist of 12 bamboo poles tied together; a board is inserted in the center to take the place of a keel. The passenger sits in a Chinese bathtub which is lashed to the float; strips of canvas are packed around him and he holds on to a rope which is attached to the aft end of the float in case the float turns over. One Chinese sailor stands on the fore end, one on the aft end of the float, their oars crossed. The float is so light that it is tossed by the surf over the sandbank to the coast.

7: Joest--56 [4] E-5 (no date) 1882 Formosans
116, 504

Since the roadstead of Amping does not offer sufficient protection, the small steamer on which I had arrived took refuge in the Pescadores.

7: Joest--56 [5] E-5 (no date) 1882 Formosans
116, 114

During the 21 days...before the steamer returned [MC: to Amping], I lived with a German in a Chinese house in Tainan; we lived on fish and crabs and were both ill with a fever. Being thus alone among 200,000 Chinese gave me an opportunity to study their way of life, and to observe the activities of the independent Tautai, who almost every day ordered people to be flogged, tortured, or beheaded and who often let his victims die of starvation.

7: Joest--56 [6] E-5 (no date) 1882 Formosans
116, 114

The real purpose of my stay on Formosa, however, was to study the life of the aborigines in the north; the following pages are the result of my observations.

7: Joest--56-57 E-5 (no date) 1882 Formosan Aborigines
116, 101

The natives live in tribal communities; [57] each tribe has a different name, and most of them have their own language. There is no common name for all of them, although they consider themselves autochtonous. I have...adopted Dr. Schetelig's method of dividing the natives into Shekwan and Chinwan (pronounced uan).

7: Joest--57 E-5 (no date) 1882 Formosan Aborigines
116, 101, 177, 721

The term Shekwan means half raw or half cooked. The Chinese apply this term to those aborigines who settled in the coastal regions or near the boundary. The Chinese trade with these people, among whom the custom of headhunting is practiced rarely or not at all.

The term Chinwan means raw. The Chinese apply this term to the aborigines who live in the forests and mountains of the interior.

7: Joest--57 [2] E-5 (no date) 1882 Formosan Aborigines
116, 101, 144

Schetelig believes that the Chinwan and Shekwan may be divided into two distinct racial groups according to the formation of their skull; according to his theory, the former are related to the Polynesians, the latter to the Malayan group. The two group do not seem to be related linguistically.

7: Joest--57 [3] E-5 (no date) 1882 Formosan Aborigines
116, 197

There are only a few traces of the Malayan language in the dialects of the Chinwans, while in the languages of the Shekwan the similarity is striking. Thus the numbers from one to ten in those languages correspond almost exactly to those in the Tagalog language; the languages of the Shekwan in the south, however, differ from those in the north. Thus, fire among the Shekwans in the north is ramár, among those in the south sabui; the word for stone is batu (Malayan) in the north, achilai in the south; moon is wulan (Malayan) in in the north, hélas in the south. Among 400 words which I studied there were, with the exception of numerals, only three that were similar in both groups, and those three words were found to be of Malayan origin.

7: Joest--57 [4] E-5 (no date) 1882 Formosan Aborigines
116, 197

I compared the language of the Shekwans in the south with that of the Chinwans in the north, basing my studies on a vocabulary compiled by Schetelig; Mr. Dodd, the only European familiar with the language of the Chinwans, was kind enough to check my work. After making this comparison I found only two words which seem to be related: the term for foot, χapul in the language of the Chinwans and kalup in the south, and for hand, kabbá among the Chinwans and gabi-an in the south. I was told that Mundt-Lauff had published a study based on his visit to Formosa.

7: Joest--57 [5] E-5 (no date) 1882 Formosan Aborigines
116, 127, 162 Chin-hoan

We have no information about the size of the Chinwan group; the estimates which have been made by the Chinese are not reliable.

7: Joest--57 [6] E-5 (no date) 1882 Formosan Aborigines
116, 141, 826 Chin-hoan

Since the natives will not allow anyone to touch their head, I found it impossible to take any measurements. I should say that most of the men are from 5'2" to 5'4", while the women are considerably smaller.

7: Joest--57 [7] E-5 (no date) 1882 Formosan Aborigines
116, 142, 609 Chin-hoan

They have straight hair, never frizzly or wavy, and apparently not so stiff as that of the Malayans. By a fortunate accident I was able to obtain two specimens of their hair. In Tokohan, a village not far from the border there were three natives who were awaiting execution for killing several Chinese. I offered them presents first, but without success. It took three Chinese to hold two of the prisoners who, in spite of their chains, resisted with the utmost force until I had cut off some of their hair.

7: Joest--57-58 E-5 (no date) 1882 Formosan Aborigines
116, 142 Chin-hoan

The men have an attractive, slim build; young people have pleasing, rounded contours. Their eyes are small, dark brown or black, with scant eyelashes and eyebrows; they have thin lips, beautiful teeth, and beautiful noses; some of them have aquiline noses. The color of their skin is a reddish brown; the [58] skin of the women is considerably lighter; some of them have yellowish white skin like that of the Chinese. If they are hot or drunk, both the men and women have flushed cheeks. In spite of their prominent cheekbones their facial expression is attractive; some of the girls were decidedly pretty. There are no traces of a resemblance to Negroes or Alfuros; I should say, without attaching any scientific value to the statement, that both men and women resemble the Japanese in respect to their features, the women even in respect to their figures. The women especially are strong and healthy; many of them have fat calves, which they protect from the thorny shrubs with a type of gaiters; the legs of the men are covered with scars.

7: Joest--58 E-5 (no date) 1882 Formosan Aborigines
116, 164 Chin-hoan

I saw no signs of scabies or syphilis or of any other skin disease among the natives.

7: Joest--58 [2] E-5 (no date) 1882 Formosan Aborigines
116, 142 Chin-hoan

The beard of the men is scant; they have just the hint of a mustache; there are some traces of hair on the armpits and on the genitals.

7: Joest--58 [3] E-5 (no date) 1882 Formosan Aborigines
116, 302 Chin-hoan

Chinwan children of both sexes have their hair cut off in the back of their head and above their forehead; later they let the hair grow long. The men part their hair in the center and tie it in a knot behind their head so that it hangs down to the shoulder blades. Usually it is held together with a red thread which they pass over the forehead and around the knot in back.

The women wear their hair in the same way; most of them wear a blue kerchief over it.

7: Joest-- 58 [4] E-5 (no date) 1882 Formosan Aborigines
116, 304, 721, 881 Chin-hoan

Both Chinwan men and women are tattooed, the women more frequently than the men. They are tattooed when they reach puberty. Tattooing is done with a thorn; after the process is completed they rub soot in the wounds.

The men tattoo their entire forehead, from the hairline to the bridge of the nose, with 20 to 25 horizontal lines, each one centimeter long. After a man has been thus tattooed, he is expected to begin headhunting.

7: Joest--58 [5] E-5 (no date) 1882 Formosan Aborigines
116, 171, 304, 881 Chin-hoan

The women also tattoo their face when they have reached puberty. The design covers the face from ear to ear; the line extends from the temples at the level of the ear across the cheek and the upper lip to the other ear, and the lower line runs parallel to this, passing just below the lower lip and up to the lobe of the ear on both sides. The design consists of long lines running parallel to each other and short vertical lines which cut through them. Only the lips are left free. The resulting pattern thus emphasizes the whiteness of the teeth and the healthy red color of the gums and lips. It is distinctly attractive, but gives a strange effect until one becomes accustomed to it; it is somewhat similar to the design of the Ainu women on Yesso, which gives the appearance of a blue moustache.

I was told that the women of central Formosa also tattoo their hands.

7: Joest--58 [6] E-5 (no date) 1882 Formosan Aborigines
116, 304, 827 Chin-hoan

At the same time that they are tattooed young girls also have the two teeth in the corners of the upper jaw removed. One girl told me that this was done so that they could breathe better and that they could inhale more wind.

7: Joest--58 [7] E-5 (no date) 1882 Formosan Aborigines
116, 151 Chin-hoan

Although the Chinwan language has the same word for blue and green, they were able to distinguish between these two colors when I showed them colored glass beads.

7: Joest--58 [8] E-5 (no date) 1882 Formosan Aborigines
116, 192, 201

To signify surprise the Chinwans put their hand in front of their mouth and say Wáō. They did this when I shot my revolver, which they called boom-boom-boom, or when I showed them lice, with which they were covered, under a microscope.

7: Joest--58 -59 E-5 (no date) 1882 Formosan Aborigines
116, 286, 291 Chin-hoan

During the [59] summer and in all the warmer areas, the natives wear nothing but a narrow cloth, about as wide as three fingers; they wear this around their waist and tie it in front so that the two ends hang down and barely cover the genitals. During the rainy season they wear a sleeveless jacket; some of them, especially the women, wear separate sleeves underneath. Sometimes they also wear skirts made of leopard skin, but most of them wear skirts woven by the women. These skirts are very durable; they are made of hemp which they themselves have cultivated and the women weave threads taken from European cloths into the design so that the total effect is very attractive. Most of the cloth woven by the women is about 1/2 meter wide and three meters long. They use the same simple hand looms which are found among nearly all primitive peoples.

7: Joest--59 E-5 (no date) 1882 Formosan Aborigines
116, 292 Chin-hoan

Some of the men also wear peaked caps made of the hide of deer or of plaited straw which resemble our caps worn for riding, except that they wear the peak in back.

7: Joest--59 [2] E-5 (no date) 1882 Formosan Aborigines
116, 291 Chin-hoan

The women wear more clothes than the men; most of them wear a kerchief over their head. They wear the same type of jacket as the men, but since they are so much shorter their jackets come down to their knees. Many of them wear a type of sarong, a short vest and separate sleeves, a square piece of cloth over their chest, and a piece of cloth wrapped around the calves of their legs and held in place with a thread.

Both men and women often wear a kind of toga which they tie around their neck so that it hangs down in back.

7: Joest--59 [3] E-5 (no date) 1882 Formosan Aborigines
116, 609, 834 Chin-hoan

Those Chinwans who wear more than the scant minimum are not motivated by modesty. On the contrary, the women and girls do not show a trace of modesty, especially when they squat down. They are not ashamed to show their genitals and many of them asked me to let them see or touch mine; this was done from sheer curiosity.

7: Joest--59 [4] E-5 (no date) 1882 Formosan Aborigines
116, 177, 411, 531 Chin-hoan

The weapons of the Chinwans consist of bows and arrows and of a spear 10' to 12' long; the latter is made of oak or ash wood and the spearhead consists of a small Chinese knife attached with a piece of string. Chinese rifles with matchlocks have now taken the place of these spears for the most part. These are six feet long and are made of an iron cylinder. The shaft is long, narrow, and crooked; they draw designs on it for ornament. The matchlock is inserted into the cock. Every warrior carried a second matchlock which is wrapped around the wrist of the left hand. They carry their powder in a horn which hangs from a string of beads around their neck, and the cartridge box is usually attached to their belt.

These rifles do not often hit their mark. From what I have seen I would say that the natives cannot hit the target if it is further than five or six feet away; every time they shoot, the rifles hit their cheek so that they bleed. They carry paper plugs in a special case. In their belt they wear a Chinese knife on which ornaments have been drawn.

7: Joest--59 [5] E-5 (no date) 1882 Formosan Aborigines
116, 415 Chin-hoan

All the Chinwans carry a pouch which they sling over their arm or shoulder. These are made either of raw hide or of strings in the manner of a net. In this pouch they carry everything they need during the day, their pipe, tobacco leaves, firestone, steel imported from China, food, and perhaps even the head of an enemy.

7: Joest--59 [6] E-5 (no date) 1882 Formosan Aborigines
116, 482, 562, 854 Chin-hoan

Carrying heavy burdens is a task which is scorned by the men; the women carry them by attaching them to a strap which is passed over the forehead. In this manner they carry firewood, game which has been killed, or bamboo filled with water; they carry their children in the same way. Sometimes they carry children on their shoulders; the children are secured by means of a strap which the mother ties around her chest.

7: Joest--59-60 E-5 (no date) 1882 Formosan Aborigines
116, 177, 301, 304 Chin-hoan

All the Chinwan natives, the men especially, love to wear [60] ornaments. For this they use chiefly the colored glass beads imported from Europe which they string up on chains to wear around their neck. They insert small bamboo sticks into the lobes of their ears and sometimes attach a tassel made of European wool, one of their favorite articles, to these ear pendants. Sometimes they wear small polished pieces of marble attached to chains in their ears, or pieces of shell and metal with a diameter of one inch or less; they enlarge the lobes of their ears for this purpose.

7: Joest--60 E-5 (no date) 1882 Formosan Aborigines
116, 301 Chin-hoan

Both men and women wear thin copper bracelets around their wrists and upper arms, narrow strips of flannel on which porcelain buttons have been sewn may take the place of these. They wear fillets on which shells or flat pieces of marble the size of a fifty-cent piece have been sewn. The necklaces may consist of a string of beads from which the tusks or tail of a boar are suspended, or of wreaths of flowers and oranges.

7: Joest--60 [2] E-5 (no date) 1882 Formosan Aborigines
116, 301, 554, 721 Chin-hoan

Boys are very proud if they can wear bracelets made of the pigtails of a Chinese whom they have decapitated.

7: Joest--60 [3] E-5 (no date) 1882 Formosan Aborigines
116, 534 Chin-hoan

The only musical instrument made by the Chinwan natives is the jew's harp. They are very fond of group singing. As far as I know they have no dances of any kind... [MS: Text of a native song omitted.]

7: Joest--60 [4] E-5 (no date) 1882 Formosan Aborigines
116, 241, 361 Chin-hoan

The Chinwans like to build their villages within the forest, preferably on a small hill so that they are protected from sudden attacks. They burn the trees around the settlement and the women plant rice, millet, hemp, and tobacco. Sometimes they harden pointed pieces of bamboo by holding them over a fire and placing these along the narrow paths which lead to their village.

7: Joest--60 [5] E-5 (no date) 1882 Formosan Aborigines
116, 342 Chin-hoan

The Chinwan houses are made of small pieces of slate piled on top of each other; these are supported by large flagstones which they lean against the houses from the outside. Some houses are made of bamboo poles; the spaces between the poles are filled in with rushes. The door is wide and high; the roof consists of straw or grass.

7: Joest--60 [6] E-5 (no date) 1882 Formosan Aborigines
116, 252, 323, 354 Chin-hoan

They keep a fire burning in the center of the hut day and night. Here they cook their food in clay pots which they themselves have made.

7: Joest--60 [7] E-5 (no date) 1882 Formosan Aborigines
116, 285, 513 Chin-hoan

They sleep on cots made of bamboo and mats; the women are famous, and justly so, for the attractive plaited mats which they make themselves.

7: Joest--60 [8] E-5 (no date) 1882 Formosan Aborigines
116, 354, 415 Chin-hoan

Instead of lamps, the Chinwans use torches made of bamboo or grass. Bamboo containers filled with water are placed along the walls.

7: Joest--60 [9] E-5 (no date) 1882 Formosan Aborigines
116, 462, 721 Chin-hoan

There is a fair division of labor between Chinwan men and women. The men go hunting and fishing and make their own weapons; since feuds with other tribes are traditional among the natives, they also consider fighting as part of their work. The women cultivate the fields, fetch water, chop wood, and mash rice; they also spin and weave and do the cooking. They go with the men when they are hunting so that they can carry home the game after it has been dried out over a fire.

7: Joest--60 [10] E-5 (no date) 1882 Formosan Aborigines
116, 226, 278 Chin-hoan

For fishing the Chinwan men use nets and fishhooks as well as a poison made from the root of a creeping plant which is called lo-tin.

7: Joest--60 [11] E-5 (no date) 1882 Formosan Aborigines
116, 501 Chin-hoan

In the south of the island there is a lake which the Chinese call Lake of the Dragon's Foot. Here the natives make dugout canoes by burning the tree trunks until they are hollow. Their oars have the shape of pointed spades.

7: Joest--60 [12] E-5 (no date) 1882 Formosan Aborigines
116, 262, 264, 562 Chin-hoan

The diet of the Chinwan natives consists of millet, sweet potatoes, rice of a poor quality, wild honey, dried meat of deer, boars, and bears, and dried fish. All the game, fish, etc. is carved and men and women receive an equal share.

7: Joest--60 [13] E-5 (no date) 1882 Formosan Aborigines
116, 231 Chin-hoan

Dogs, the only domestic animals of the Chinwans, are always treated well and get a portion of the meat.

7: Joest--61 E-5 (no date) 1882 Formosan Aborigines
116, 264, 462, 574 Chin-hoan

If there is a guest in a Chinwan household, the women usually feed him; the woman tastes each bite herself first.

7: Joest--61 [2] E-5 (no date) 1882 Formosan Aborigines
116, 177, 273 Chin-hoan

In former times the Chinwan natives distilled a beverage from fermented rice or millet. Rice meal took the place of yeast, this had to be chewed by a woman who was past her menopause. Today the Chinese Samshu has taken the place of the native drink and both men and women drink it in large quantities.

7: Joest--61 [3] E-5 (no date) 1882 Formosan Aborigines
116, 123, 273, 572, 609 Chin-hoan

I gained the confidence and friendship of the Chinwans through this brandy [MC: Chinese samshu] which they consumed in pailfulls until men, women, and children were lying unconscious on the ground; it was, however, considerably diluted. The Chinwan natives also have the custom of establishing the bond of friendship by drinking. They squat on the ground in the usual manner and put their arms around each other's shoulders; they make a short speech, vowing eternal friendship, and then drink together from the pumpkin shell which holds the brandy until it is empty. I drank in this way with both men and women.

7: Joest--61 [4] E-5 (no date) 1882 Formosans
116, 276

The Chinwan natives of both sexes are very fond of tobacco and almost always have a pipe in their mouth. When I made them a present of cigars, they cut these up and put them in their bamboo pipes.

In the south of the island the natives chew betel, and indulge in this habit in the same degree.

7: Joest--61 [5] E-5 (no date) 1882 Formosan Aborigines
116, 344, 872 Chin-hoan

All the unmarried Chinwan men and boys sleep in a community building. This is erected on poles several feet above the ground. Here they hang the heads of their enemies and hold festivals.

7: Joest--61 [6] E-5 (no date) 1882 Formosans
116, 628

There are constant feuds among the Chinwan tribes.

7: Joest--61 [7] E-5 (no date) 1882 Formosans
116, 175, 721

Often several tribes form an alliance against a common enemy, especially against the Chinese.

These feuds often result in bloody battles. In 1874-75 the Chinese sent an expedition of 9,000 men of which 2,000 were killed; many of the victims, however, died from the effects of the climate.

7: Joest--61 [8] E-5 (no date) 1882 Formosan Aborigines
116, 554, 581, 721, 727 Chin-hoan

The natives' favorite way of killing an enemy is to lie in ambush... near one of the enemy's villages and wait for someone, man, woman, or child, to pass; then they shoot an arrow at the victim's back and cut off his head. Then they put the enemy's head in the bag and return home in triumph. A headhunter is received with great honors; a banquet and drinking bout is held and he is popular with the girls, who will not turn him down if he proposes marriage.

7: Joest--61 [9] E-5 (no date) 1882 Formosan Aborigines
116, 583 Chin-hoan

It is not necessary, however, that a young Chinwan man kill someone to be able to marry; he may buy his wife by paying copper wire, flannel, etc.

7: Joest--61 [10] E-5 (no date) 1882 Formosan Aborigines
116, 563, 586, 595 Chin-hoan

There is no polygamy on Formosa. A man may have only one wife at a time, but it is not difficult to obtain a divorce and the Chinwans on the whole are not a jealous people. The girls often marry Chinese, although the men of their own tribe treat them quite well.

7: Joest--61 [11] E-5 (no date) 1882 Formosan Aborigines
116, 266, 273 Chin-hoan

I was not able to determine whether the natives are also cannibals. They did not, at any rate, eat the two Chinese which were killed during my stay. Mr. Pickering, however, who knows the customs of the Chinwans well, states that they mix the brain of an enemy with their brandy and drink it.

7: Joest--61 [12] E-5 (no date) 1882 Formosan Aborigines
116, 857 Chin-hoan

Even small boys play with wooden knives and small bows and arrows; they play at "decapitating."

7: Joest--61 [13] E-5 (no date) 1882 Formosan Aborigines
116, 526

The Chinwan men often amuse themselves with target practice; they aim at a leaf which is attached to the trunk of a tree.

7: Joest--61 [14] E-5 (no date) 1882 Formosan Aborigines
116, 628 Chin-hoan

Blood vengeance is...traditional among the Chinwan and is practiced constantly.

7: Joest--62 E-5 (no date) 1882 Formosan Aborigines
116, 202, 619 Chin-hoan

When a native approaches the village of a friendly tribe, he usually fires his rifle, and those in the village answer with smoke signals. At the same time both parties call out Wao.

7: Joest--62 [2] E-5 (no date) 1882 Formosan Aborigines
116, 151, 201 Chin-hoan

I was frequently struck by the excellent vision of the Chinwans. Once a native told me that he could see a large number of people from his tribe; I myself was not able to see a trace of this crowd. He told me this in sign language, by raising his hands and opening and closing them quickly several times.

7: Joest--62 [3] E-5 (no date) 1882 Formosan Aborigines
116, 765 Chin-hoan

If one of the inhabitants of a Chinwan village has been killed, the entire village is in mourning; no one may make a loud noise and there is fasting throughout the village.

7: Joest--62 [4] E-5 (no date) 1882 Formosan Aborigines
116, 77I, 778 Chin-hoan

The religion of the Chinwan natives seems to be on a very primitive level. I did not see any idols or temples. Every Chinwan tribe or village, has a sacred animal which is believed to protect the people in that village. These animals, snakes, leopards, etc., are kept in cages and fed by the natives.

7: Joest--62 [5] E-5 (no date) 1882 Formosan Aborigines
116, 192, 784, 826 Chin-hoan

The Chinwans seem to have some form of taboo. Thus no one may enter a village in which the inhabitants are fasting; to signify that an object may not be touched or that they do not want to give it away, they say hiang. It is for them a great shame to let someone even touch their head. The bags in which they keep the heads of their enemies, the pig-tails of Chinese, etc., are also haing.

7: Joest--62 [6] E-5 (no date) 1882 Formosan Aborigines
116, 437, 562, 791, 888 Chin-hoan

There are no priests among the Chinwans, but some women hold the office of soothsayer. Old women seem to have a great deal of influence. I often saw them giving orders even to experienced warriors or swearing at them if they did not demand enough red flannel as payment for an object. During my entire stay with the Chinwans, however, they never stole anything from me, although I had to pay a high price for everything I bought from them.

7: Joest--62 [7] E-5 (no date) 1882 Formosan Aborigines
116, 178, 787, 791 Chin-hoan

In former times soothsayers stayed in the public sleeping and assembly houses when they were consulted and wore no clothes. Today, however, they wear their holiday attire and all their ornaments and stay on a platform which usually consists of a few boards placed over a barrel. The women and girls of the village form a circle around her and join hands; they go around the platform, first slowly, and then faster and faster, and sing at the same time. The soothsayer begins to dance, slowly at first and gradually faster and more violently until she is attacked by a fit and falls off the platform. Then they catch her and carry her to the nearest hut where they try to make out, from her confused ravings, what the oracle signifies. This is often employed for less important occasions, to find out whether it will rain or whether it is time to cultivate the fields.

: Joest--62 [8] E-5 (no date) 1882 Formosan Aborigines
16, 787 Chin-hoan

Like almost all primitive peoples, the Chinwans believe in omens; the flight and call f certain birds are regarded as portents. If they have gone out to hunt and the omens ave been favorable they return home if they see a bird which signifies misfortune; they re convinced that some accident would befall them if they continued with the chase. Other signs of bad luck are stepping on a rifle, carrying a spear upside down, etc.

7: Joest--62 [9] E-5 (no date) 1882 Formosan Aborigines
116, 847 Chin-hoan

There is one ancient custom among the Chinwans which is said to be practiced to this day: the women practice abortion up to their 34th or even 37th year; they go to a soothsayer if they become pregnant and have her beat and massage the belly.

7: Joest--62-63 E-5 (no date) 1882 Formosan Aborigines
116, 164, 753 Chin-hoan

Added to this [MC: the Chinwan custom of abortion] is the high rate of infant mortality. The climate of the island is characterized by sudden changes from oppressive heat and humidity to cold weather. [63] The Chinese immigrants spread smallpox among the natives, and the Chinwans are even more afraid of this disease than the Chinese; a victim of smallpox is compelled to leave the village and live in the forest until he dies or recovers. Considering all these factors, as well as the harmful effect of brandy, we may say that it is hardly likely that the native population will increase.

7: Joest--63 E-5 (no date) 1882 Formosan Aborigines
116, 171, 181, 609, 857 Chin-hoan

The character of the Chinwans has been described by all who have come into contact with them as good-natured and unassuming; they have never killed a white man who has approached them in good faith. Although my appearance aroused great curiosity, I was never annoyed by the natives here as I had been among the Hakkas or the Chinese. While the children of the latter always ran away from me and cried, the children of the Chinwans were easily persuaded to make friends with me.

They did, it is true, touch me or pull my beard. One of the natives thought that the fork I had brought with me was a comb and used it to scratch the lice from his body, and sometimes the natives rubbed my body with a wet finger to make sure that this was my natural color, but there was always one among them who had known me longer and told the rest to desist, lecturing them about me...

"LAND UTILIZATION IN FORMOSA*

* Owing to limitations of space, the text of this article has been considerably condensed from the author's original manuscript, and several tables have been omitted. Also, the difficulties of time and distance have prevented the author from seeing galley proof. --Edit. Note.

Cheng-Siang Chen

Land utilization in Formosa is severely handicapped by the topography. Forest-covered mountains rising to impressive heights form a central range, which extends like a backbone the entire length of the island. Only 36 per cent of the land is utilized, and only 24 per cent of this is cultivated.

According to the comparatively reliable statistics of 1947, the total area of utilized land is 1,290,132 hectares, of which 66 per cent is cultivated (paddy fields, 41 per cent; dry fields, 25 per cent). Considerable changes have occurred during the last 20 years or so Table I (1). The percentage of paddy fields has increased, and that of dry fields

1. All tables are based on data contained in the Taiwan

Agricultural Yearbook, Dept. of Agriculture and Forestry, Taipei.

has decreased, as a result of the development of irrigation and drainage. The progress of economic forestation is reflected in an increase of the forested land; the growing popularity of cremation has reduced the burial ground. Land in railroads and highways has also increased, because of the expansion and development of communications."

8: Chen--438 [2] N-3 (no date) 1951 Formosans
116, 311

TABLE I—LAND CLASSIFICATION IN FORMOSA
(*In hectares*)

CLASSIFICATION	1920 AREA	1920 %	1930 AREA	1930 %	1940 AREA	1940 %	1947 AREA	1947 %
Paddy fields	354,885	34.7	392,176	31.8	527,192	41.5	524,253	40.6
Dry fields	353,581	34.5	388,083	31.5	316,030	24.9	318,985	24.7
Forested	121,408	11.9	268,424	21.8	273,776	21.6	260,748	20.2
Prairie	97,744	9.5	71,665	5.8	36,423	2.9	59,308	4.6
Building sites	34,521	3.4	36,674	3.0	41,496	3.3	43,325	3.4
Irrigation ditches	....	...	13,229	1.1	15,824	1.2	16,685	1.3
Irrigation ponds	13,838	1.4	13,003	1.0	12,073	0.9	12,167	0.9
Burial ground	15,575	1.5	12,819	1.0	11,624	0.9	11,371	0.9
Railroads and highways	....	...	2,710	0.2	9,349	0.7	10,688	0.8
Piscicultural ponds	24,710	2.4	21,558	1.7	11,820	0.9	10,431	0.8
Salt fields	1,385	0.1	2,054	0.2	4,878	0.4	7,101	0.6
Pasture	3,567	0.3	5,020	0.4	2,267	0.2	764	0.1
Temple sites	484	0.1	511	0.1	626	0.1	677	0.1
Miscellaneous	2,439	0.2	4,596	0.4	6,693	0.5	13,629	1.0
Total	1,024,137	100.0	1,232,522	100.0	1,270,077	100.0	1,290,132	100.0

8: Chen--439 N-3 (no date) 1951 Formosans
116, 133, 311

"The distribution of land use (exclusive of cultivated land) among the hsiens [EJ: i. e. the administrative districts of Formosa] is an index to their geographic characteristics. For example, 56 per cent of the irrigation ditches of the island are in Tainan, a percentage obviously related to the great Kianan irrigation system; and 70 per cent of the irrigation ponds are in Hsinchu, because the topography of the Taoyuan alluvial fan, in the northern part, makes it suitable for damming. Ninety-six per cent of the piscicultural ponds are in Tainan and Kaohsiung, because the waters off the southwest coast are shallow and there are many lagoons and narrow inlets that can be converted into piscicultural ponds; and 89 per cent of the salt fields are in Tainan, whose coastal plain, low, very dry, and with brilliant sunshine in winter, offers good natural conditions for saltmaking. And in Penghu hsien burial grounds occupy 10.3 per cent of the utilized land, both because the Pescadores Islands are the earliest-developed and most densely populated area and because the meager land is unsuitable for cultivation (more than 60 per cent of the inhabitants are dependent on sea fisheries for sustenance).

"CULTIVATED LAND

Formosa's 35,961 square kilometers may be divided into level land (administrative regions) and hilly land (aboriginal regions). The total area of level land is about 19,800 square kilometers; its index of cultivation (2) is [440] 43 per cent. The total area of

2. The 'index of cultivation' is the percentage of cultivated land in the total land area. The total land area of Formosa, including Penghu and other islands, is 3,596,100 hectares; the total area of cultivated land (10-year average, 1936 to 1945) is 846,552 hectares. Hence the index of cultivation is 23.5 per cent, which is higher than that for South China, Japan, or Korea.

hilly land is about 16,100 square kilometers; its index of cultivation is only 2 per cent. Ninety-four per cent of the cultivated land lies in the coastal plains of the five western hsiens; Hwalien, Taitung, and Penghu together contain only 6 per cent (Table II). The extensive mountainous interior is covered with forests, in which there is little farmland.

The amount of cultivated land increased rapidly from 674,100 hectares in 1910 (Table III)

to 860,439 hectares in 1940. But after 1940 there was a gradual slowing down followed by another increase, and the index of cultivation seems now to be approaching saturation. Among the hsiens, the index for Penghu is highest, 58 per cent; that for Hwalien and Taitung is lowest, only 5-6 per cent (Table II).

The cultivated land may be roughly classified into paddy fields and dry fields. In 1910 paddy fields occupied about 49 per cent of the total cultivated land, dry fields 51 per cent. In 1948, as a result of the spread of irrigation and [441] the consequent change of dry fields into paddy fields, the corresponding percentages were 61 and 39 (Table III).

The price of paddy fields differs greatly from that of dry fields, because of the difference in productivity. From 1938 to 1942 the average price of paddy fields was 3615 yen per hectare; that of dry fields, only 1748 yen. The price of both paddy and dry fields was higher in the five western hsiens than in the two eastern hsiens: respectively 3639 yen and 1815 yen per hectare in the west; 2996 yen and only 917 yen in the east. According to the 'Survey on Farm Rent Economy' published in 1937 by the Formosa government, the average rent for paddy fields is about 48 per cent of the value of the products; that for dry fields is 33 per cent."

8: Chen--439-441 N-3 (no date) 1951 Formosans-3
116, 311

TABLE II—CULTIVATED LAND BY HSIENS, 1940 AND 1948

HSIEN	1940 CULTIVATED LAND		1940 INDEX OF CULTIVATION	1948 CULTIVATED LAND		1948 INDEX OF CULTIVATION
	Hectares	%	%	*Hectares*	%	%
Taipei	93,657	10.88	20.39	90,389	10.47	19.68
Hsinchu	148,410	17.25	32.47	150,574	17.45	32.95
Taichung	172,058	20.00	23.30	175,511	20.33	23.77
Tainan	267,779	31.12	49.34	261,052	30.25	48.15
Kaohsiung	127,342	14.80	22.23	131,976	15.29	23.06
Taitung	17,376	2.02	4.94	20,701	2.40	5.89
Hwalien	26,803	3.12	5.79	25,582	2.96	5.53
Penghu	7,014	0.83	55.29	7,371	0.85	58.04
Province	860,439	100.00	23.93	863,156	100.00	24.00

TABLE III—CULTIVATED LAND AND INDEX OF CULTIVATION

YEAR	CULTIVATED LAND	INCREASE INDEX	INDEX OF CULTIVATION	PADDY FIELDS		DRY FIELDS	
	Hectares		%	*Hectares*	%	*Hectares*	%
1900	347,408	100	9.7	194,656	56.0	152,752	44.0
1905	624,501[a]	180	17.4	304,908	48.8	319,593	51.2
1910	674,100	194	18.7	332,372	49.3	341,728	50.7
1915	700,080	202	19.5	343,087	49.0	356,993	51.0
1920	749,419	216	20.8	367,177	49.0	382,242	51.0
1925	775,468	223	21.6	373,629	48.2	401,839	51.8
1930	812,116	234	22.6	396,670	48.8	415,446	51.2
1935	831,003	239	23.1	478,689	57.6	352,314	42.4
1940	860,439	248	23.9	529,610	61.6	330,829	38.4
1945	816,016	235	22.7	504,709	61.9	331,307	38.1
1948	863,156	248	24.0	526,391	61.0	336,765	39.0

[a] The sudden increase from 1900 to 1905 resulted chiefly from the discovery of unregistered land by the official survey.

8: Chen--441
116, 162, 241

TABLE IV-- FARM FAMILIES AND SIZE OF FARMS
(*In cha*[a])

DATE	TOTAL	0.5	0.5–1	1–2	2–3	3–5	5–7	7–10	10–20	20+
Oct. 1920	423,278	127,998	96,933	100,403	45,563	33,342	10,362	5,101	2,997	579
"	100	30.23	22.87	23.72	10.76	7.84	2.43	1.24	0.78	0.13
Apr. 1939	436,593	111,805	90,007	113,117	57,521	41,749	13,129	5,938	2,796	531
"	100	25.61	20.62	25.91	13.17	9.56	3.01	1.36	0.64	0.12

[a] 1 cha = 0.96992 hectare.

8: Chen--441 [2] N-3 (no date) 1951 Formosans
116, 162, 241, 311, 511

"SIZE OF FARMS

The agricultural population of Formosa is constantly increasing, though the percentage has fallen a little. But the area of cultivated land cannot be extended; consequently, the farms are generally very small, as in the provinces of China proper; moreover, the inheritance system breaks up the farms and further reduces the average size. From 1936 to 1945 the total area of cultivated land in Formosa averaged 846,552 hectares, the number of farm families 448,474; thus each farm family had only 1.89 hectares of cultivated land. Although this seems larger than the average farm on the mainland of China, Formosan farm families average 6.7 persons, as compared with 5.4 persons on the mainland.

In 1939 more than 85 per cent of the farm families had less than the three hectares estimated necessary to maintain a comparatively reasonable standard of living (Table IV); and at present, because of the usurpations and annexations of the landlords, about 46 per cent operate farms of less than one hectare, of which 26 per cent are less than 0.5 hectare. The poverty in rural districts and the hard life of farm families are plain. Those who operate farms of more than 10 hectares are less than 1 per cent of the total number of farm families."

"MULTIPLE CROPPING AND KINDS OF CROPS

The climate of Formosa is warm and hot the year round; rainfall is abundant, the growing season long. Therefore most of the cultivated lands have two harvests a year. In other words, the crop area is much greater than the cultivated area. From 1938 to 1942 the area of cultivated land averaged 858,355 hectares, the crop area 1,364,561 hectares; the multiple-crop index was 159 per cent. Among the hsiens, Taichung has the highest multiple-crop index (176 per cent), Hwalien the lowest (142 per cent).

Of all kinds of cultivated land, the double-cropped paddy fields have the highest multiple-crop index. These fields, which produce at least two harvests a year, occupy about 38 per cent of the total cultivated area. In addition, other crops are planted between the seasons or between the rows of paddy, so that there may be five harvests in two years or three harvests in one year. The multiple-crop index of double-cropped paddy fields approximates the average crop index of the lower Yangtze Valley. In view of the total area of cultivated land, Formosa has the highest multiple-crop index of the provinces of China. It is a compensation for the small size of the farms.

Temperatures permit the growing of many kinds of crops in all seasons, but it is mainly the uneven distribution and amount of the rains that set the agricultural season.

In the southern part of the island rainfall is concentrated in the summer; the winter is extremely dry. In places without irrigation, only one crop of paddy rice can grow, and the time for seeding and planting is fixed. In the northern part, though there is no dry season, the low temperatures and frequent rain in winter are not suitable for paddy rice, and there is a longer time for intermediate crops and fallow. The typhoon season and the length of day are also factors controlling the farming rhythm.

According to the Taiwan Agricultural Yearbook, more than 70 kinds of crops are grown in Formosa. However, three -- paddy rice, sugar cane, and sweet potato-- make up 70 per cent of the total value of agricultural products and occupy 72 per cent of the total crop area (Table V).

The crops may be divided into three kinds: food, cash, and horticultural. Among the food crops, paddy rice is first, sweet potato second. The chief cash crops are sugar cane and tea; tobacco and groundnuts come next. The horticultural crops include fruits and vegetables: banana is the most abundant fruit, with pineapple and citrus fruits next; among the vegetables, radish and mustard leaf are grown the most.

There is no obvious regional distribution of the food crops. For example, the area percentages of rice and sweet potatoes do not vary much among [443] the hsiens. (In Penghu, on account of the frequent gales, rice cannot be grown, and consequently the percentages of sweet potato and groundnuts are unusually high.) The distribution of cash

and horticultural crops is comparatively centralized. For example, in Taipei and Hsinchu the crop area of tea gardens exceeds 10 per cent of the total crop area of each hsien (average, 1937-1939); in the other hsiens tea gardens are insignificant or lacking. The total crop area of banana plantations in Taichung and Kaohsiung is 85 per cent, and that of pineapple plantations 83 per cent, of the provincial total. The sugar-cane fields of Tainan and Taichung together occupy about 69 per cent of the crop area of sugar cane of the whole province; the citrus orchards of Taipei and Hsinchu occupy 68 per cent of the crop area of orchards of the whole province. As vegetables are mostly consumed locally, their distribution is similar to that of food crops. Largely because of the widespread cultivation of paddy rice, green manure is grown in all the hsiens except Penghu, but in Taipei the interval between the two paddy crops is too short to permit cultivation of green manure, and its crop-area percentage is therefore unusually low."

TABLE V—VALUE OF AGRICULTURAL PRODUCTS AND AREA OF THE CHIEF CROPS, 1936–1945*

CROP	VALUE (*in yen*)	% OF TOTAL VALUE	AREA (*in hectares*)	% OF TOTAL AREA
Paddy rice	272,153,000	47.09	620,560	46.31
Sugar cane	92,704,000	16.05	143,430	12.65
Sweet potato	40,260,000	6.90	142,768	12.59
Banana	12,932,000	2.23	18,003	1.59
Tea	11,581,000	2.00	42,004	3.70
Tobacco	7,082,000	1.22	3,330	0.29
Groundnuts	5,288,000	0.91	25,906	2.28
Pineapple	5,013,000	0.86	8,128	0.72
Radish	4,798,000	0.83	7,709	0.68
Citrus	4,583,000	0.79	4,881	0.43
Jute	2,606,000	0.45	11,167	0.98
Leaf mustard	2,044,000	0.35	3,178	0.28

* The total value of agricultural products includes the value of animal products, and the total crop hectare area includes green manure.

"ROTATION

Formosa enjoys the peculiar advantage of tropical and subtropical agriculture -- year-round rotation. The cycle of rotations for paddy fields ranges from one to four years, but one-year and two-year cycles are comparatively prevalent. The rotation cycle for dry fields is mostly limited to one or two years, except on sugar-cane plantations, where it runs into more than two years. [444]

The popular rotations and their cycles are as follows:

PADDY FIELDS

a) Paddy rice (Mar., Apr.-July) → Paddy rice (July, Aug.-Nov.) → Green manure (Dec.-Mar.)

b) Paddy rice (Mar., Apr.-July) → Sweet potatoes (Aug., Sept.-Jan. and Feb.)

c) Paddy rice (Mar., Apr.-July) → Paddy rice (July, Aug.-Nov.) → Vegetables (Dec.-Jan., Feb.)

d) Paddy rice (Mar., Apr.-July) → Paddy rice (July, Aug.-Nov.) → Overlapping sugar cane (1) (Oct.-Jan., Feb.) → Green manure (May-Nov.) → Sugar cane (Dec.-

1. 'Overlapping sugar cane' is so called because the young

sugar cane is planted between rows of the second crop of paddy rice when it is nearly ripe.

Mar., 3rd year)

DRY FIELDS

a) Groundnuts (May-Sept.) → Sweet potatoes (Oct.-Mar.)
b) Upland rice (Apr.-Aug.) → Sweet potatoes (Sept.-Mar.)
c) Green manure (May-Nov.) → Sugar cane (Dec.-Mar., 3rd year)

Paddy rice is generally the first crop. The growing season is usually four months; that for the second paddy crop, about three months and a half. Between the two growing seasons there is a so-called 'summer intermediate crop' season of one to two months; between the second season of one year and the first season of the following year there is a so-called 'winter intermediate crop' season of three to four months. The distribution of these seasons through the year varies according to the region. The first paddy crop is planted and harvested much earlier in the south than in the north. The second paddy crop is also planted and harvested much earlier in the south, but the difference in time is not so great. Thus the summer intermediate crop season begins earlier in the south

and lasts longer, but the winter intermediate crop season, though it begins earlier, does not last as long as in the north, because the following first paddy crop is planted much earlier.

The summer intermediate crop season, because of its short length and overabundant rainfall, is suitable only for green manure and two or three kinds of vegetables. On the other hand, the longer duration and better weather of the winter intermediate crop season make possible the cultivation of many kinds of crops. The duration of the winter intermediate crop season and the intensity of land utilization increase progressively northward; however, north of Hsinchu city the winter intermediate crops are usually delayed by the rainy and chilly weather. As a matter of fact, the middle part of the island, in spite of its rather dry winter, is the best area for winter intermediate crops, because of the development of irrigation; that is why Taichung has the highest multiple-crop index.[445]

Sugar cane is the second crop of Formosa. Since autumn planting became popular, the space left by the young sugar-cane crop has been utilized for sweet potatoes, groundnuts, cotton, wheat, and vegetables. In the paddy fields of the middle part sugar cane and paddy rice are alternately grown. Thus all the cultivated area of the island is utilized to the utmost."

"INTENSITY OF LAND UTILIZATION

If compared with the agriculture of the Philippines and Siam, Formosan agriculture can be called 'intensive'; but in comparison with the agriculture of Japan, it is somewhat extensive. Moreover, rice is the staple crop of Formosa, and its chief production factors are manpower, fertilizer, animal labor, and implements.

To maintain the productivity of the land and increase crop yields, great quantities of fertilizer are needed. After the middle 1920's the use of fertilizer gradually increased—to 133 per cent of the 1924 amount in 1930, to 173 per cent in 1935, to 202 per cent in 1940, and to the peak of 410 per cent in 1943. From 1936 to 1945 the consumption of commercial fertilizer averaged 4,293,000 quintals a year, of which rice and sugar cane consumed the largest amounts (about 50 and 35 per cent respectively). But after the outbreak of the Second World War importation and use of fertilizer decreased, and consequently, fertilizer consumption and crop yield being closely related, the yield of rice and sugar cane also decreased.

Among the rice crops, the Ponlai rice, though its fertilizer and labor needs are greater than those of the native rice, is more commercial, and the method of cultivation is comparatively more progressive. But the intensity of Ponlai-rice cultivation is far

behind that of Japan, and only on the same level with that of Korea. For example, Formosa uses (1935) 34.6 per cent of the amount of natural fertilizer used in Japan, though it uses 119.3 per cent of commercial fertilizer; with respect to the cost per hectare, Formosa spends only 83 per cent as much as Japan. The number of manpower days per hectare is only 49.1 per cent of that in Japan, the amount of wages only 47.4 per cent. The number of animal-labor days per hectare is as much as 97.3 per cent of that in Japan, but the expenses for animal labor are only 57.1 per cent. The expenses for farm implements per hectare are only 28.7 per cent of Japan's. In short, the intensity of land utilization in Formosa is about 57.3 per cent of that in Japan and 95.4 per cent of that in Korea.

From 1931 to 1934 the cost of fertilizer used per hectare in Formosa averaged 51 yen a year; in Japan, 81 yen. However, Formosa's multiple-crop index is about 20 per cent higher than Japan's; consequently, the per [446-453 contain maps] [454] hectare cost of fertilizer must be reduced 20 per cent, to 40 yen—about half the cost in Japan. (Table VI).

The intensity of land utilization of a region is reflected in the unit-area production of the farmland. The intensity of land utilization in Formosa being lower than that in Japan, the average per hectare production of many crops is only 50 per cent of the Japanese production and approximates the average of the provinces of South China (Table VII)."

8: Chen--446
116, 132, 133

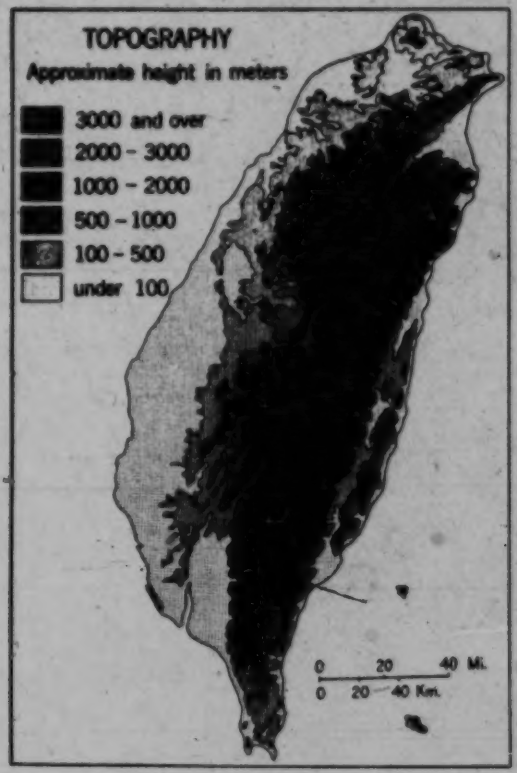


FIG. 2

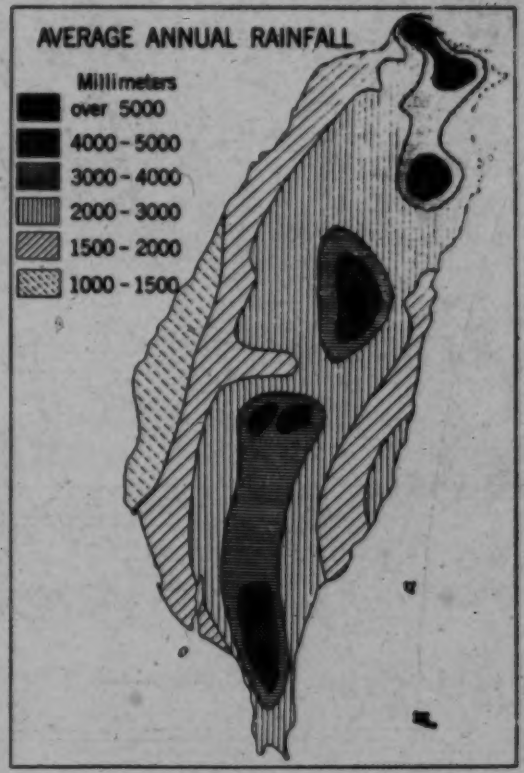
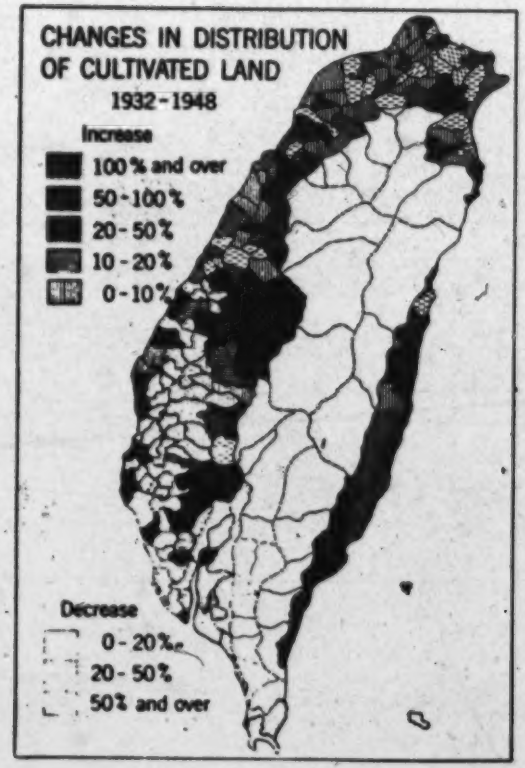


FIG. 3

8: Chen--447[2]
116, 241, 311



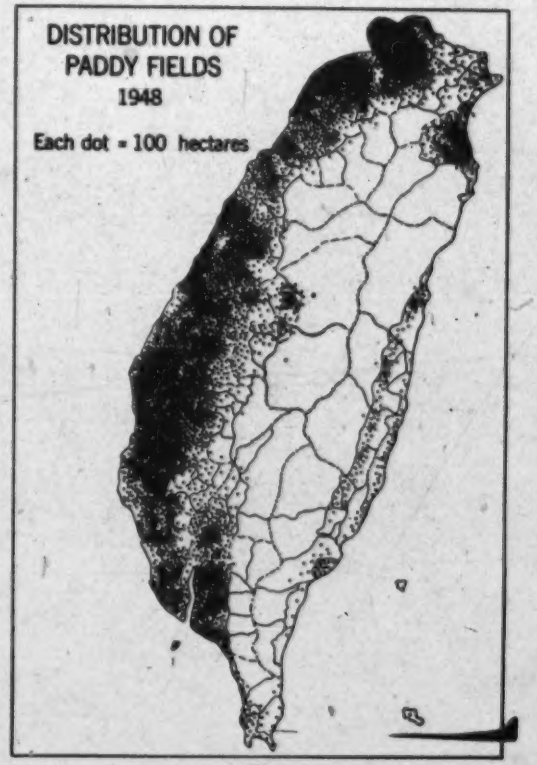


FIG. 8

8: Chen--448
116, 241, 311

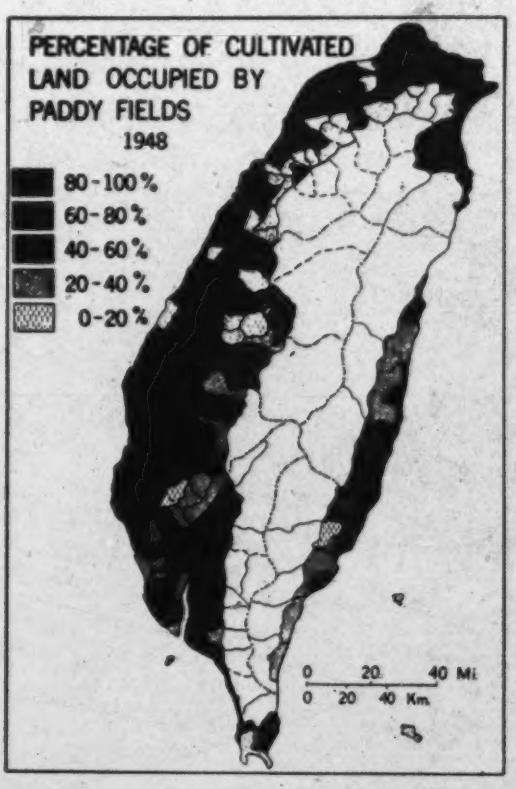


FIG. 10

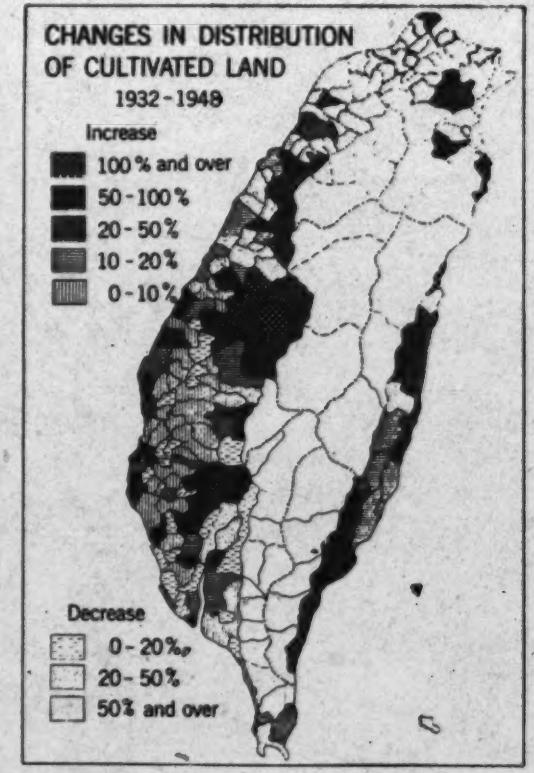


FIG. 11

8: Chen--448 [2]
116, 241, 311

N-3 (no date) 1951

Formosans

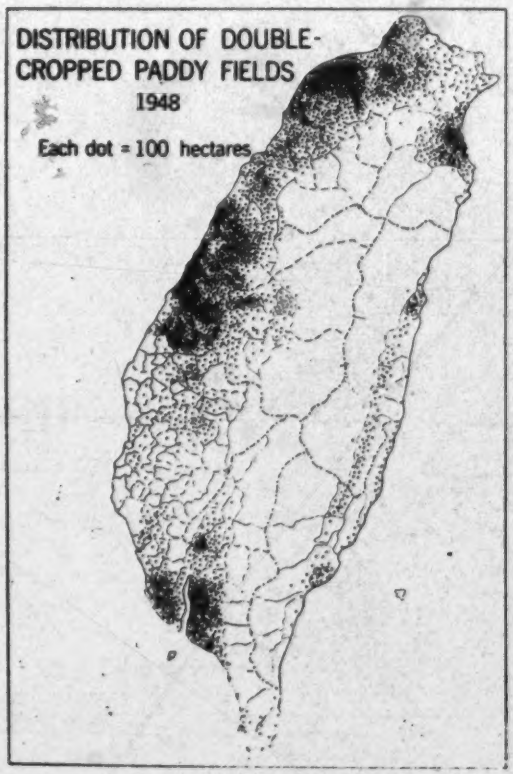


FIG. 12

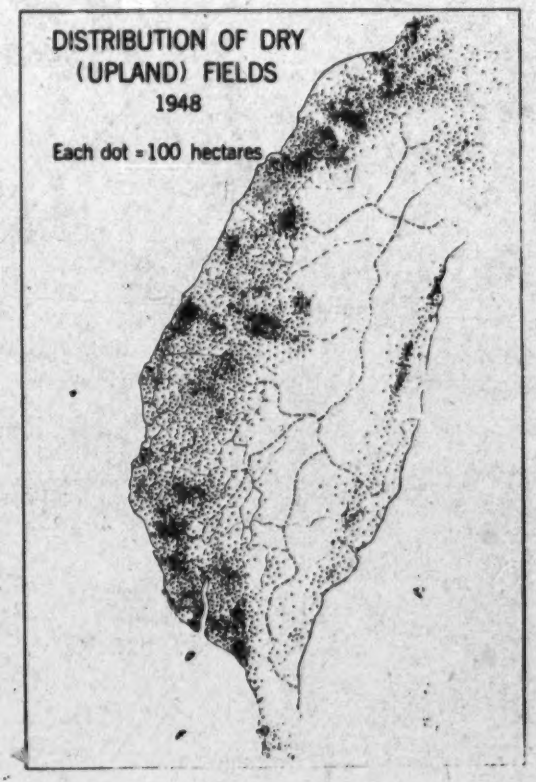


FIG. 11

8: Chen--449 N-3 (no date) 1951 Formosans
116, 241, 311

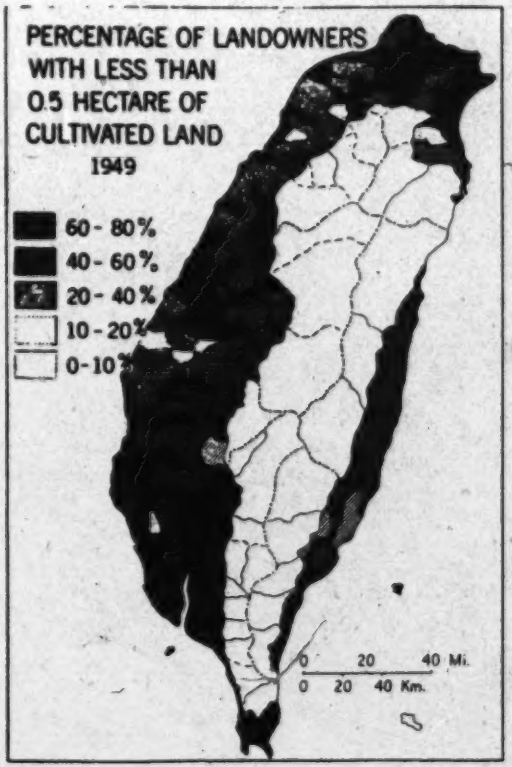


FIG. 14

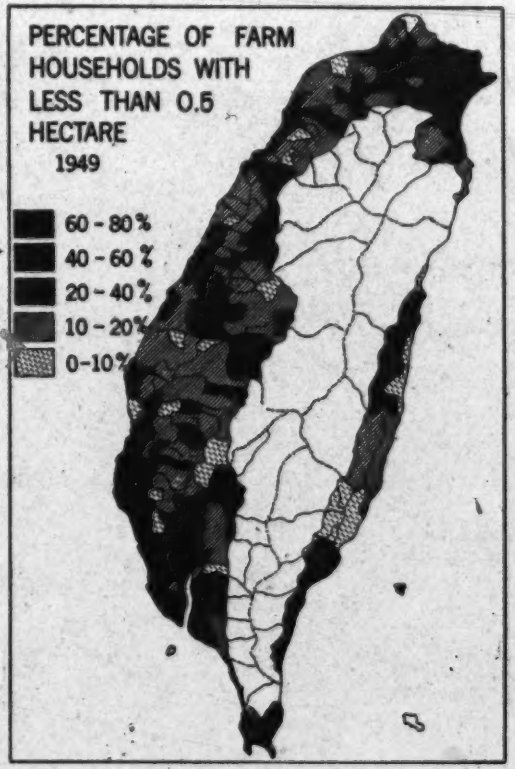


FIG. 15

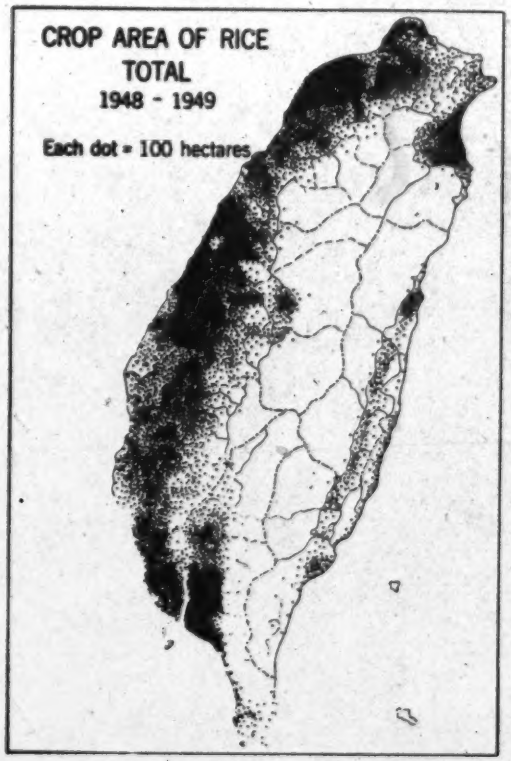

CROP AREA OF RICE
TOTAL
1948 - 1949
Each dot = 100 hectares

FIG. 16

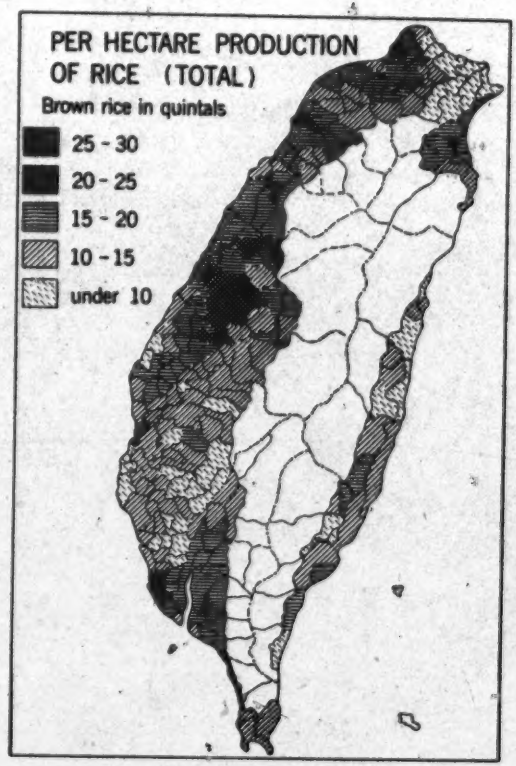

PER HECTARE PRODUCTION
OF RICE (TOTAL)
Brown rice in quintals
25 - 30
20 - 25
15 - 20
10 - 15
under 10

FIG. 17

8: Chen--450
116, 243, 311

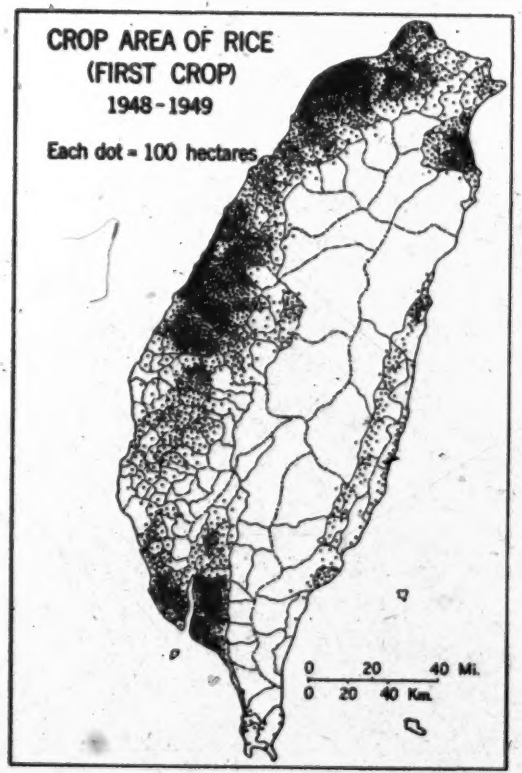


Fig. 18

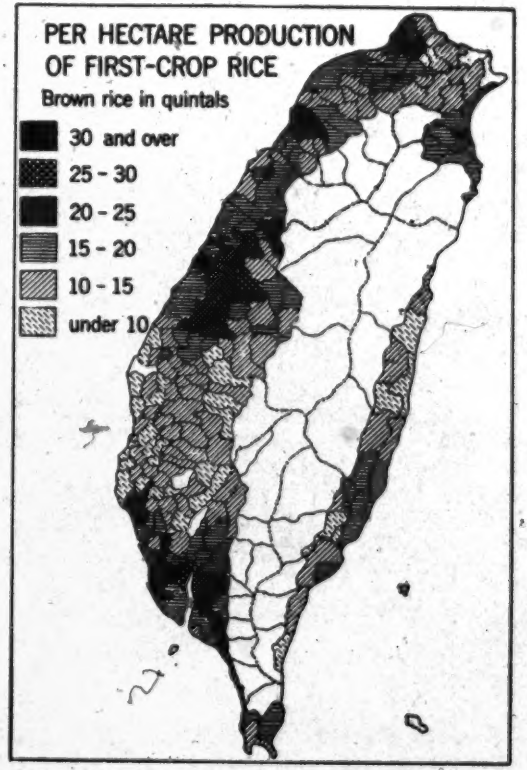


Fig. 19

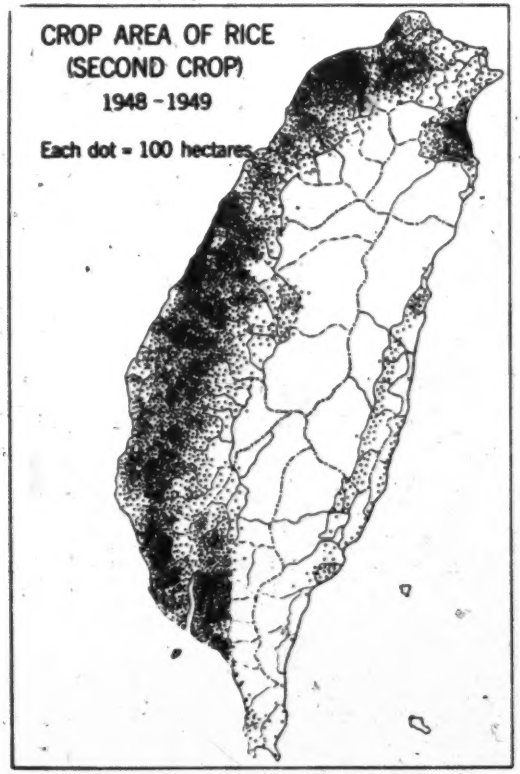

CROP AREA OF RICE
(SECOND CROP)
1948 - 1949
Each dot = 100 hectares

FIG. 20

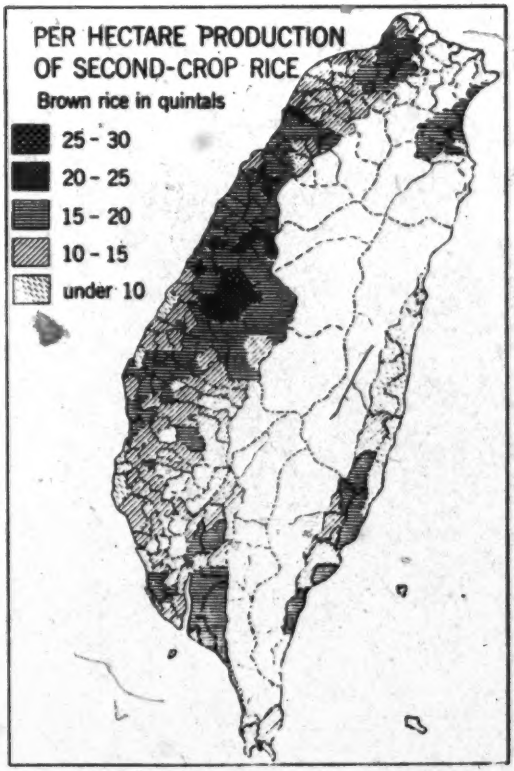

PER HECTARE PRODUCTION
OF SECOND-CROP RICE
Brown rice in quintals
25 - 30
20 - 25
15 - 20
10 - 15
under 10

FIG. 21

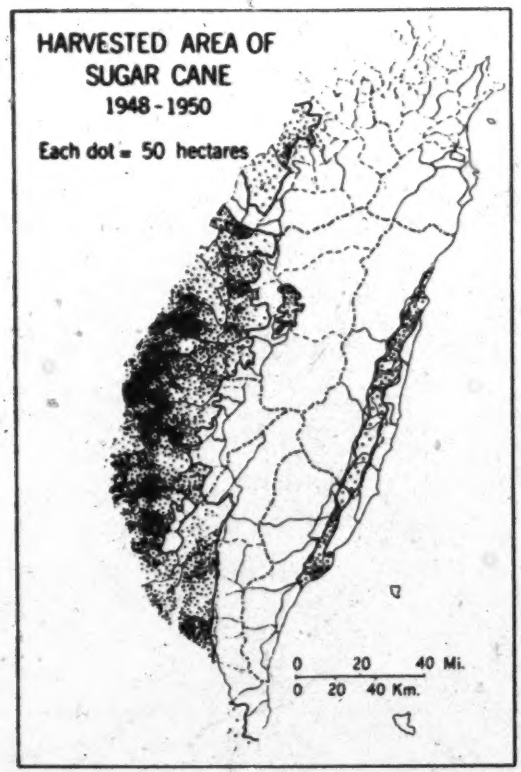

HARVESTED AREA OF
SUGAR CANE
1948-1950
Each dot = 50 hectares
0 20 40 Mi.
0 20 40 Km.

FIG. 22

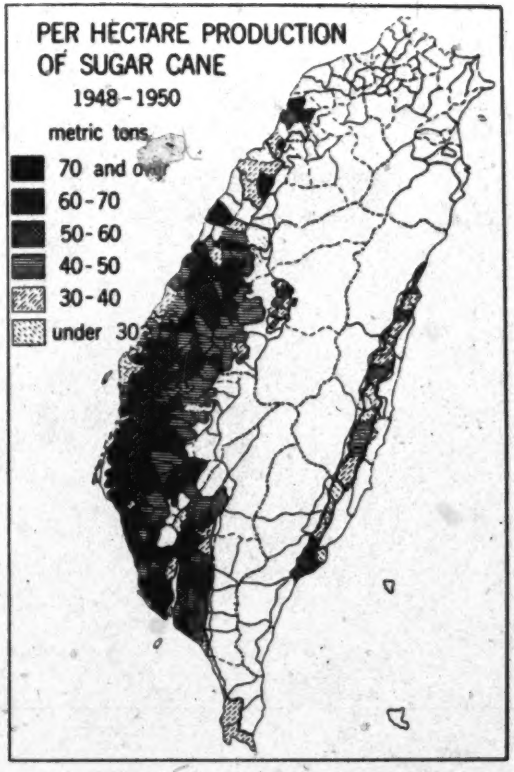

PER HECTARE PRODUCTION
OF SUGAR CANE
1948-1950
metric tons
70 and over
60-70
50-60
40-50
30-40
under 30

FIG. 23

8: Chen--446 [2]
116, 175, 312

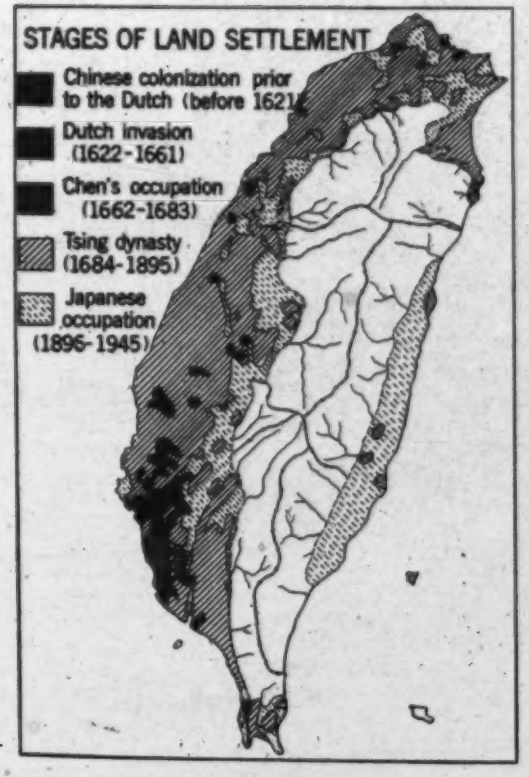


FIG. 4

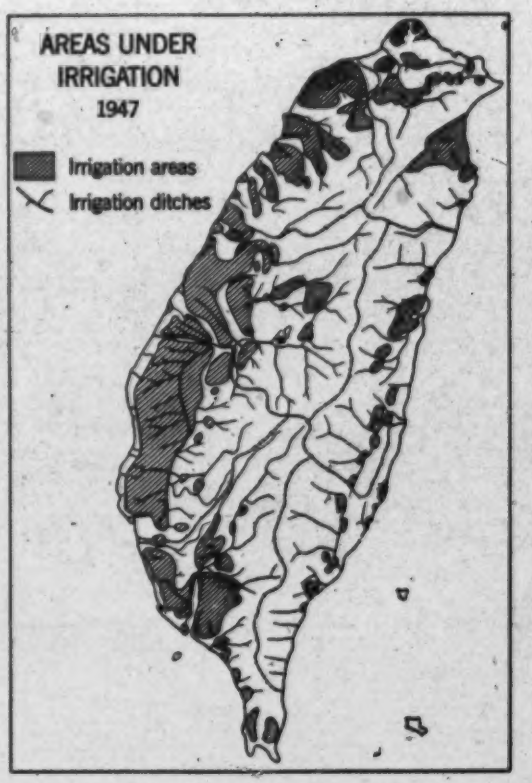


FIG. 5

8: Chen--447
116, 311

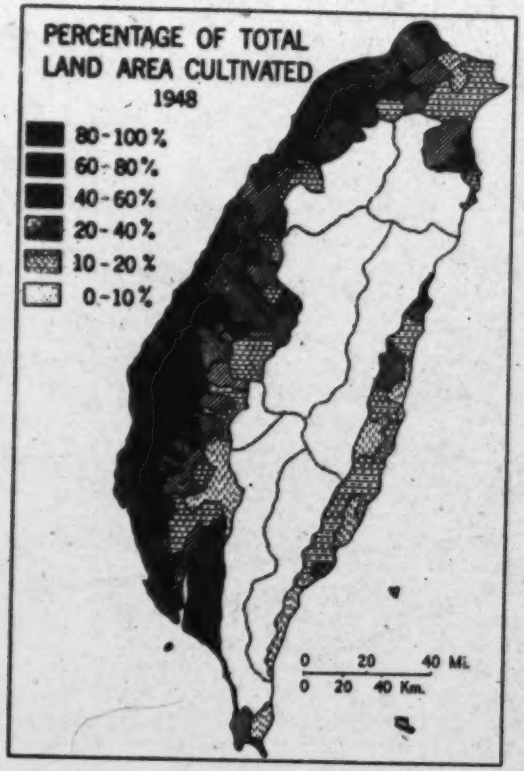


Fig. 6

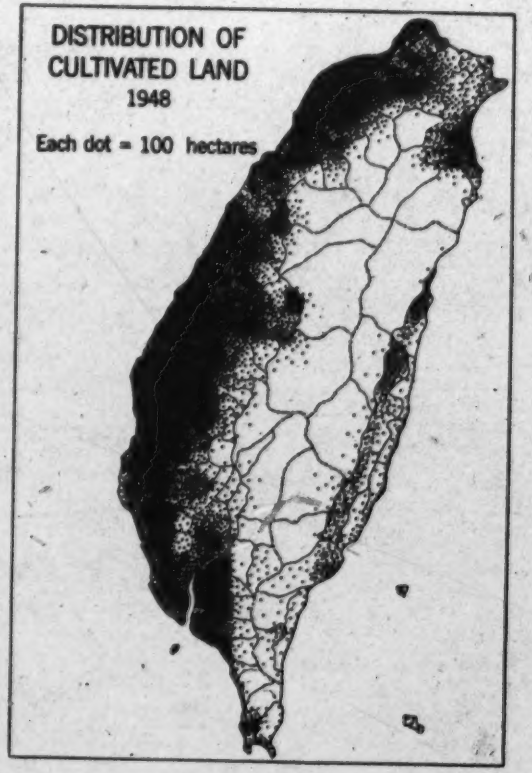


Fig. 7

DISTRIBUTION OF
TEA GARDENS
1936-1940
Each dot = 10 hectares

FIG. 24

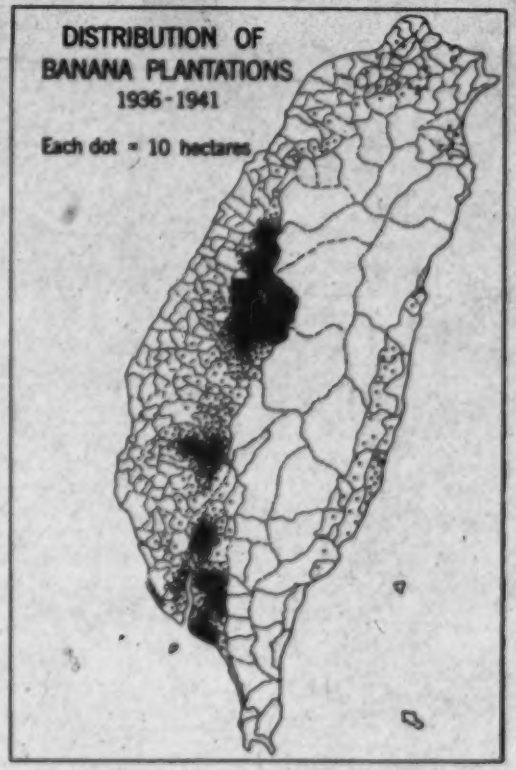

DISTRIBUTION OF
BANANA PLANTATIONS
1936-1941
Each dot = 10 hectares

FIG. 25

8: Chen--452
116, 245, 311

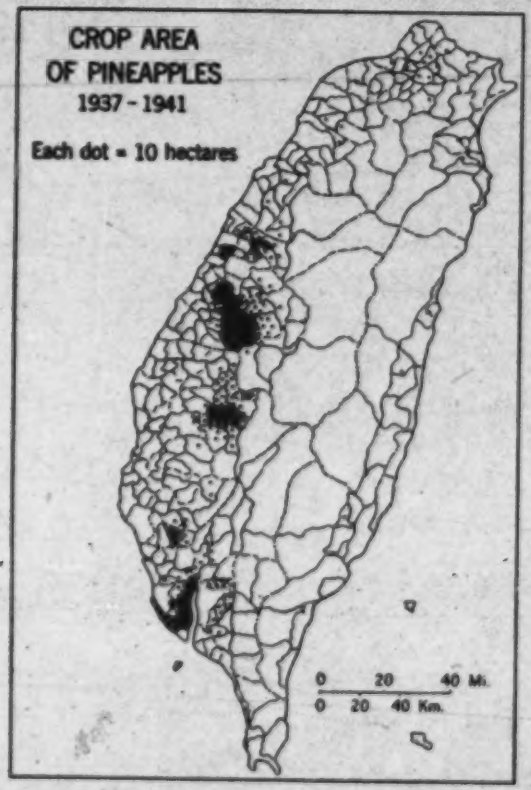


FIG. 26

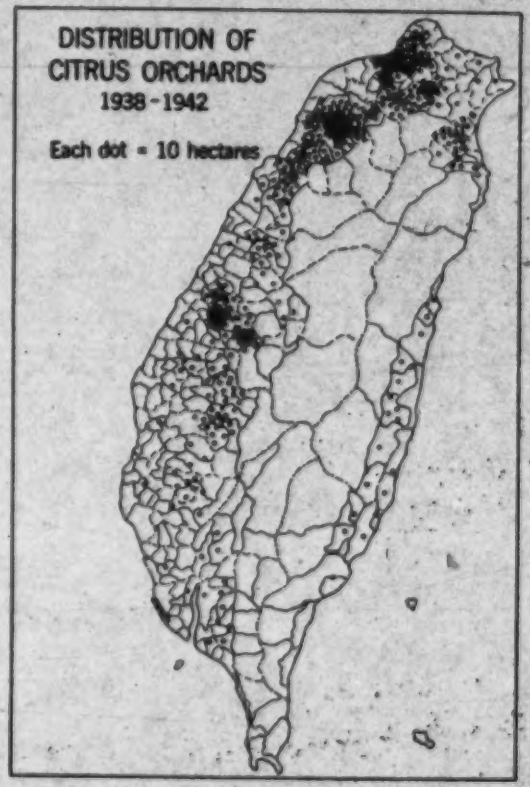


FIG. 27

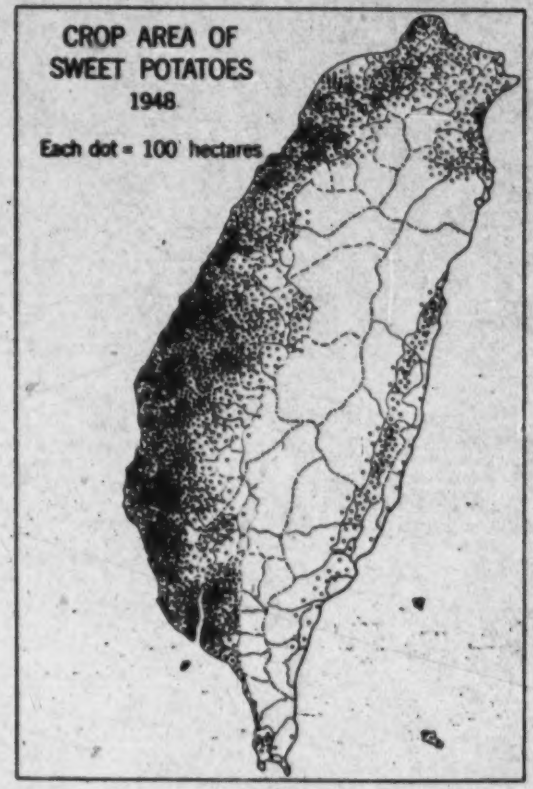

CROP AREA OF
SWEET POTATOES
1948
Each dot = 100 hectares

FIG. 28

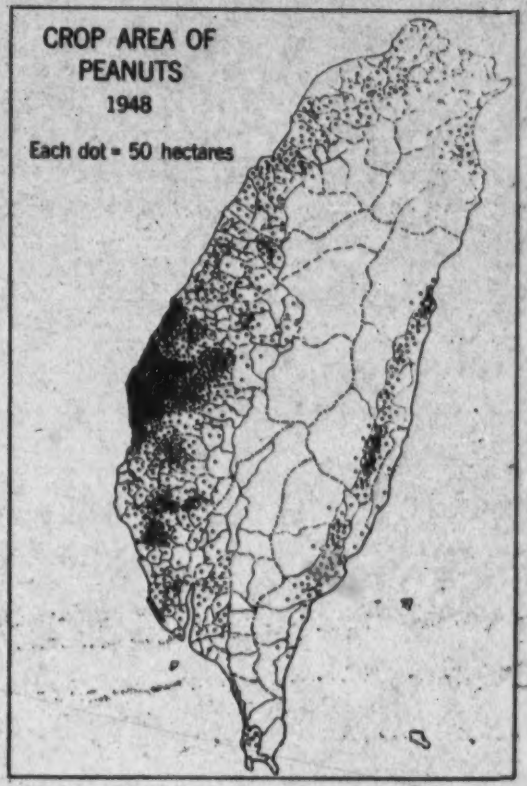

CROP AREA OF
PEANUTS
1948
Each dot = 50 hectares

FIG. 29

8: Chen--453
116, 249, 311

N-3

(no date) 1951

Formosans

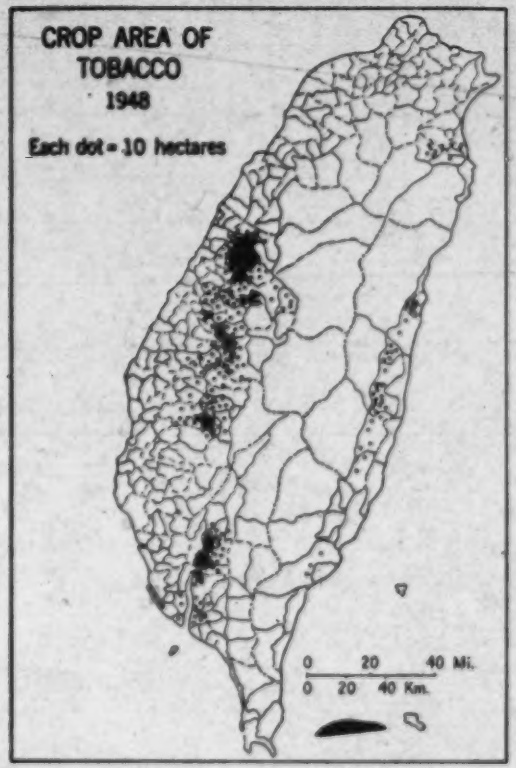


FIG. 30

FIG. 31

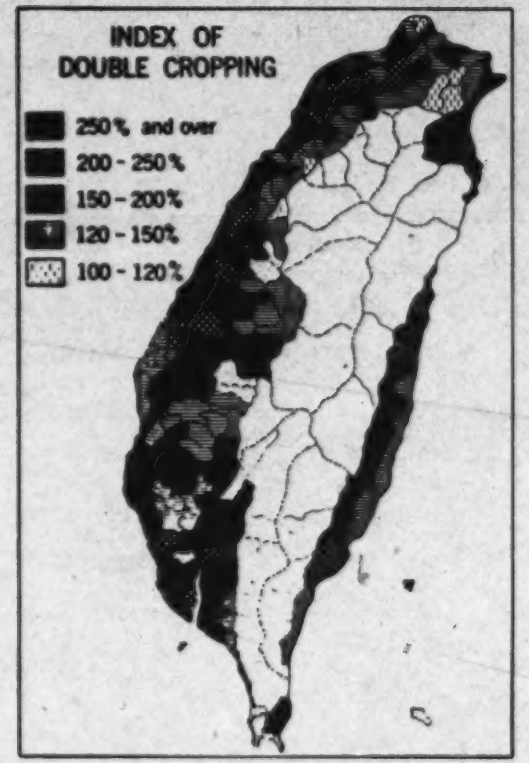

INDEX OF
DOUBLE CROPPING
250% and over
200 - 250%
150 - 200%
120 - 150%
100 - 120%

FIG. 32

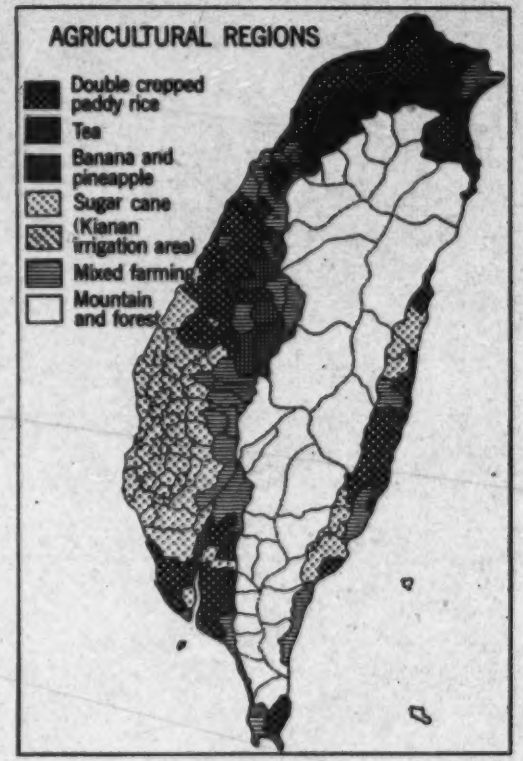

AGRICULTURAL REGIONS
Double cropped paddy rice
Tea
Banana and pineapple
Sugar cane
(Kianan irrigation area)
Mixed farming
Mountain and forest

FIG. 33

8: Chen--454
116, 241

TABLE VI—PER HECTARE COST OF FERTILIZER IN FORMOSA AND JAPAN
(*In yen*)

	1931	1932	1933	1934	AVERAGE
Formosa					
Commercial	21	25	33	41	30
Natural	20	21	21	23	21
Total	41	46	54	64	51
Japan					
Commercial	31	33	37	38	35
Natural	42	43	49	50	46
Total	73	76	86	88	81

TABLE VII—YIELD PER HECTARE, FORMOSA AND JAPAN, 1938–1940
(*In quintals*)

CROP	FORMOSA	JAPAN	FORM./JAP.	CROP	FORMOSA	JAPAN	FORM./JAP.
			%				%
Sugar cane[a]	692.22	558.96	123.84	Wheat	11.04	20.99	52.60
Sweet potato	114.55	129.64	88.36	Radish	95.22	231.00	41.22
Sweet corn	12.94	16.05	80.62	Upland rice	10.45	26.03	40.15
Paddy rice	19.91	29.17	68.26	Jute	12.43	31.44	39.54
Soybean	6.36	10.64	59.77	Barley[b]	5.61	22.64	24.78

[a] Because of the incompleteness of the Japanese statistics of 1940, the yield of sugar cane is the average of the three years 1937–1939.

[b] In 1939 and 1940 the average per hectare yield of barley in Japan was extremely high, that in Formosa extremely low. From 1936 to 1938 the average yield in Formosa was 7.92 quintals, 37.77 per cent of the Japanese yield of 20.97 quintals.

8: Chen--454[2]
116, 132, 241, 312

N-3

(no date) 1951

Formosans

"IRRIGATION

The general increase in per hectare production in Formosa in recent years is largely due to the progress of irrigation and additional fertilization, as well as to improvement of cultivation and seeding. Because of the great variation in rainfall and the location of the main agricultural region on the western coastal plan, where the winter is extremely dry and the dry season is long, irrigation is necessary. On the other hand, in summer, especially when typhoons pass over the island, the precipitous topography results in floods. The northeast corner, facing the northeast winter monsoon, has plenty of rain the year round; in fact, in many places the winter rainfall is greater than that of summer, and floods are not infrequent. Consequently, drainage and flood control are as important as irrigation."

8: Chen--455
116, 241 312

TABLE VIII—AREA UNDER IRRIGATION AND DRAINAGE IN FORMOSA
(*In hectares*)

YEAR	CULTIVATED AREA	IRRIGATION AND DRAINAGE	%
1903	534,157	150,456	28.2
1910	674,100	226,706	33.6
1920	749,419	305,270	40.7
1930	812,116	441,477	54.4
1940	860,439	530,113	61.6
1948	863,156	505,933	58.6

TABLE IX—CULTIVATED LAND UNDER IRRIGATION AND DRAINAGE, BY HSIENS
(*In hectares*)

HSIEN	1940 AREA	1940 %	1948 AREA	1948 %
Taipei	43,801	46.77	47,728	52.80
Hsinchu	89,077	60.02	56,269	37.37
Taichung	120,323	69.93	102,654	58.49
Tainan	178,612	66.70	222,160	85.10
Kaohsiung	77,194	60.62	61,500	46.60
Taitung	7,508	43.21	5,907	28.53
Hwalien	13,598	50.73	9,715	37.98

8: Chen--455-456 N-3 (no date) 1951 Formosans--1-2
116, 241, 312, 177.31 Japan
636.31

"To a certain extent, irrigation in Formosa was well developed long before the Japanese occupation. As recorded in the twenty-seventh volume of the 'General History of Taiwan' in the later years of the Tsing dynasty, the total number of irrigation reservoirs and ditches was 234. After the occupation the Japanese paid considerable attention to irrigation and drainage. In 1901 'Regulations Governing Public Irrigation Systems' were promulgated, and since then the area under irrigation and drainage has increased annually (Table VIII). In 1903 the total area under irrigation and drainage was 150,456 hectares, 28 per cent of the total cultivated area; in 1942 it had increased to 545,094 hectares, about 64 per cent of the total cultivated area. In area under irrigation and drainage Tainan is first among the hsiens (1948); Taichung comes next; then follow Hsinchu, Kaohsiung, Taipei, Hwalien, and Taitung; Penghu has no irrigation (Table IX). In percentage of cultivated land under irrigation and drainage Tainan is again highest, Taitung lowest.

Among irrigation works in Formosa, the Kianan system, in western Tainan, is the most famous. Construction was begun in 1920 and was finished in 1930, at a total cost of 54,013,000 yen. Today 140,000 hectares of cultivated land are irrigated from the Chenven and Chuhsiu Rivers. Since completion of the Kianan system, land price and land rent within its irrigating area have greatly increased. In 1920 the average land price was

313 yen per hectare, in 1935 it was 1144 yen; land rent rose from an average of [456] 36 yen per hectare to 128 yen; and the value of the yield per hectare increased from an average of 90 yen to 361 yen.

Before the Kianan irrigation system was completed, the average per hectare yield of the rice grown in the western part of Tainan was only 19 quintals. After its completion, because there were still limitations on water supply, paddy rice was grown with sugar cane and sweet potato in a three-year rotation; the yield increased to 27 quintals per hectare. The annual profit on paddy rice, when grown alone, had been 194 yen, totaling 582 yen in three years, but the profit on the rotation was 524 yen for the first year, 272 yen for the second year, and 454 yen for the third, totaling 1250 yen — more than twice the original three years' profit."

: Yamasaki--221 N-5 (1896-1897) 1900 Formosans
16, 101

When the Portuguese voyagers pushed forward into the East China Sea, during the pening decades of the 16th century, they found a large island to which they gave the ame of Formosa ("beautiful"). It appears with this name, for the first time, on a map ublished in 1550. Until later than the middle of the century this name was used in Europe almost exclusively. Gradually there appeared beside it the Chinese name for he island, Taiwan, and when the island was taken over by the Japanese in 1895, this ame was taken over too.

9: Yamasaki--221[2] N-5 (1896-1897) 1900 Formosans
116, 175

The settling of the western half of Taiwan by the Chinese occurred in the 17th century. From that time on China, in her dealings with other powers, laid claim to the whole island, including the mountainous east, where Malayan clans nevertheless preserved their independence and no foreigner forced his way in, either Chinese or European. So our knowledge of the island also remained limited almost entirely to the low-lying western half cultivated by the Chinese.

9: Yamasaki--221[3] N-5 (1896-1897) 1900 Formosans
116, 114, 122

With the transfer of the island to Japan, it entered a new age, not only politically, but also with regard to its scientific investigation. This begins in 1896-97 with an expedition that was organized by the University of Tokyo. Among others, the Professor of Geology, Dr. B. Kotō, took part, and the writer of these lines had the good fortune to accompany him as his assistant.

9: Yamasaki--221 [4] N-5 (1896-1897) 1900 Formosans
116, 121

For five months, and starting from Kilung, we went round the greater part of the island, constantly pushing into the interior from various parts of the coast, as the red line on the accompanying map shows. [MC: see next slip for adaptation of map. For full scale map in color see source: page 298, plate 19] Only once, on the eastern side of Taiwan, did our paths separate, Professor Kotō starting from Pinan and following the longitudinal valley of the Pinan, Shūkoran and Karenkō rivers to the mouth at the locality called Karenkō, while I reached this place along the precipitous coast. In this way we got to know the western plain, the mountainous country between it and the central mountain chain, the rushing upper course of the Dakusuikei, the largest river on the island, the southern point of the island, a considerable part of the east coast and various regions inhabited by natives. Finally we made our way back by steamer from Karenkō to Kilung and on to Tokyo.

9: Yamasaki--221[5] N-5 (1896-1897) 1900 Formosans
116, 101, 131

The Taiwan island group embraces the chief island of Taiwan (Formosa), the Hōko-tō or Pescadores Islands and a number of accessory islets. To these last belong: Kōtō-sho (Botel-Tobago), Shōkōtō-sho (Small Botel-Tobago), Kashō-tō (Samasana), Shō-ryūkyū-tō (Lambay Island), Kisan-tō (Steep Island), Agincourt and some even smaller rocky islands. The group lies opposite the Chinese province of Fōkien which, in keeping with a treaty with Japan, the Chinese Government may not cede to other nations. The Taiwan Islands form the southern end of the three great Japanese island groups which, in three curves, cut off three of the eastern Asiatic bordering seas from the Pacific Ocean. In the north west we have the Ryūkyū (Riukiu) Islands. These form a whole with Taiwan not only geographically but also geologically, and in the south are separated by the Bashi Straits from the Batan Islands, the northernmost group of the Philippines.

9: Yamasaki--221 [6] N-5 (1896-1897) 1900 Formosans
116, 131

The chief island of Taiwan, which forms a longish oval, lies between latitudes N. 21° 54′ and 25° 18′ and longitudes E. 120° 45′ and 122° from Greenwich. The length from north to south is 395 km., and the greatest width in the middle of the island is 123 km. In the southern part the island narrows towards the 22nd parallel, which it crosses at two points. The total area is almost 34,700 sq. km., while that of the other smaller islands amounts to about 200 square km.

9: Yamasaki--221 [7] N-5 (1896-1897) 1900 Formosans
116, 161

In 1897 the first census of Taiwan showed a population of 2,584,365 inhabitants, excepting the savage natives.

9: Yamasaki--221-222 / N-5 (1896-1897) 1900 Formosans
116, 133

The topography of Taiwan isla[illegible] is pretty regular and simple. The chief watershed extends longitudinally from Bitōkoku or Cape Pitaûat at the northeastern end through the island as far as the southern point of Garampi, but does not always follow the crest of the folded mountain range, which takes the same direction. This range—we shall call it the Niitaka Chain after its highest peak and the Central Chain from its position with regard to two other smaller chains—begins at [222] the northeast coast near Dom-Kaku (Cathedral Spire) and first turns WSW towards Setsu-san (Mount Sylvia, 3424 m.) on the watershed, and then along this to the south as far as the southern point. It is not a volcanic formation, as was formerly thought, but a folded range, consisting chiefly of old schists and crystalline limestone. About halfway along the chain there rises Mount Morrison (4145 m.), which we now call Niitaka-yama. Its peak consists of dark clay slate and it is the highest in the Japanese Empire.

To the west of the Central Chain and parallel to it by tertiary formation there extends a second mountain chain, which begins at Bito-Kaku (Pitao Point) and stretches beyond the 23rd parallel to the south. We call it the Kali Chain, after the second highest mountain, the Kali-san (2142 m.). To the northwest of Niitaka-yama a Plutonic elevation reaches a height of 2830 m. in the Tōkan-san.

The third mountain chain also dates from the Tertiary age and extends in the same direction as the other two a distance of 60 km. along the east coast from Pinan to Karenkō. It is separated from the chief chain by the longitudinal valley of the Karenkō, Shūkoran and Pinan Rivers. We call it the Taitō Chain (East Taiwan Chain).

Strictly speaking, the Niitaka and Kali Chains, like the strike of the strata, run from ENE to WSW in the north, and then gradually change to run NE to SW, and finally from north to south. Consequently the chief range forms a curve whose inner or concave side is turned to the Pacific Ocean, while on Honshū (the chief Japanese island), the steep concave side faces the Asiatic mainland. The eastern side or inner declivity of the main chain is very steep, and the foothills of the chain sink rapidly to the plain of Taitō (East Taiwan) or directly to the sea. From here the limestone layers that form a mighty zone on the upper part of the declivity are an imposing sight, and this is enhanced, when, as often happens, a bank of cumulus cloud floats quietly in the air beneath it. At the place on the east coast between Soō and Shinjō, where the chain ends, it appears as a splendid cliff which rises precipitously out of the Pacific to a height of not less than 1,100 m., and is doubtless one of the finest sights on the island.

The chain has many high peaks, most of them not yet climbed. Among these there rise, on the southern side of the plain, Kapsulan, and, in the northeast of the chain, Taihaku-san (1,052 m.), Taigen-san (1,182 m.), Taiko-san (1, 431 m.,) Jūsampun-san

(1,432 m.). To the southwest of them is seen the Setsu-san or Snow Mountain, which is known as Mount Sylvia on European maps and is 3,424 m. high. Farther to the south there follow, on the watershed, the Piroku-san, Gōkan-san and Nōkō-san. Situated to the west-southwest of these, one branch of the Kantāban-san reaches the main chain at the middle course of the Dakusui-kei, with a height of 3,017 m. The connecting mountain of Bun-sui-rei or Chūkai-rei, which leads over the chain from Linkiho to Basshishō, is 3,240 m. high. The enormous, circus-shaped limestone crag on the western part of the crest of Basshishō rises to a height of 2,148 m. The crest extends rather in a southwesterly direction with the high peaks of Shūkoran-san, Tandai-san, Gundai-san to Niitaka-yama. The last attains a height of 4,145 m. and is the highest peak on the island. Formerly it was named Mount Morrison, after an English captain. As the highest Japanese peak it was given its new name, which means 'new high mountain,' by the Emperor himself. The geological specimens brought back from the peak in 1896 by Lieutenant Saitō and Dr. Honda, who were the first to climb it, showed me that it, too, consists of the excellent black clay slate that forms the main ingredient of the Central Chain. A path leads from Chinran-kei, a lateral valley of the Dakusui-kei, over the eastern declivity of the Hattsūkan, to Bokusekikaku in the longitudinal valley east of the folded range.

Farther to the south there is another pass on the Pinan-shusan. This is 2,925 m. high, and the route from Ban-shoryō to Shinkaiyen leads over it. Chiponshu-san,

Gadōsan (2,760 m.), Mutō-san (2,912 m.) are other imposing peaks lying farther south in the chain. But then the highest place on the connecting mountain (Übergang) between Hōryō and Parōye is only 1,405 m. high. Here the island is only 30 km. broad, and to the south it becomes even narrower; at the same time the range sinks gradually towards the south, to the sea. The clay slate disappears and is covered with Tertiary layers, in which Riryū-san (1,224 m.) and Rōbutsu-san (693 m.) rise. The southern end of the island consists of a hilly, coral limestone landscape, in which the prominent mass of cliff Tai-seki-sen ("large stone point," 296 m. high) is well known.

With regard to geological structure, the deepest part of the main mountain chain of Taiwan consists of crystalline slate, stretching out in the form of a long, narrow zone at the eastern foot. Thanks to the geologist Dr. Ishii, who made a cross-cut through this zone on the Basshishō, we learn that the lowest layer of these archaic rocks consists of sericite schist. Over this is graphite chlorite schist, which is covered in its turn by chlorite schist. In addition actinolite schist and graphite schist are found as gravel. These stones must be classed among the Japanese "Sambagawa" layers.[223] Over them come the mightly layers of crystalline limestone and clay slate, which are held to be Paleozoic because of their petrographic nature, although so far no petrifications have been found in them.

The western side of the chain is not so steep as the eastern side, with the exception of the places where it is cut across by deep valleys such as the Dakusui-kei. The schist range gradually, by means of ever lower ridges, changes into a Tertiary range, and towards the west this in turn changes into a rather wide plain, whose coast is often bordered by dunes. This Tertiary range stretches from Bitō-kaku along the outer side of the main chain towards the south. The northern end of the chain is formed by the Tertiary mountainous region of Kilung, in the northern part of which the eruption of volcanic rocks occurred. It is divided into four mountain ridges by the three longitudinal valleys of the Kilung-kei and the two tributary streams of the Shinten. The height of the two middle subsidiary chains varies between 500m. and 800 m., while the peaks on

the southern subsidiary chain, which stretches west southwest from Sanshō-kaku often rise to over 800 m. When I arrived on the steamer in Kilung Harbor, my attention was first attracted by the curious formation of this young range. The surfaces of the declivities frequently coincide with the surfaces of the layers, and the shape of the mountains is very regular, resembling volumes that have been tilted and shoved next to each other. The chain continues to the southwest via Saiten-san, Sempitsu-san, Goshi-san or the Five Finger Mountain, so called because of its shape (1,044 m.), and Gyūkoki-san (1,575 m.) with a precipitous crag on to the well known Kali-san (2,142 m.). This last is an imposing mountain rising far above the ridge. The Tertiary Kali Range stretches farther to the south with projecting peaks 1,200 to 2,000 m. in height. The continuation of the range in the Taichū or Middle Taiwan is formed by the two high peaks of Shūshū-san (1,396 m.) and Tōkan-san (2,830 m.), which are separated from one another by the gap of the Dakusui-kei, the largest river on the island. The Tōkan-san probably forms a diorite island amidst these Tertiary formations* and is the highest

* For the rivers coming from the Tōkan-san contain diorite rubble.

peak of the Kali chain. Farther to the south the range stretches out to the delta region of the Tamsui-kei. Two tributary streams of the Tamsui-kei form longitudinal valleys along the chain.

Between this mountain range and the low-lying land is to be found the hilly Tertiary region. In the north the Tertiary mountains appear as the western preliminary chain of the Kali Range. It is separated from the main Kali chain by a long and narrow tectonic valley, bestrewn with many Chinese villages. The Kantō-san (831 m.) is the highest peak here. In Middle Taiwan these mountains are sometimes jagged and bare, as a result of strong erosion. The inhabitants of the plain generally call this hilly region and part of the Kali chain Zen-soan or "foreground mountains," and the old high chain Au-soan or "background mountains." Naturally the boundary is not precise.

The rocks found in this Tertiary layer are chiefly sandstone, clay shale and conglomerate, while limestone containing fossils is also found in some places in North Taiwan.

Various kinds of Tertiary sandstone are met with. That occurring in the Kilung Range is coarse-grained, rich in quartz and rather hard, for which reason it is much employed in North Taiwan as a building material. In it have been found Pecten, Arca, Ostrea, Yoldia, Xenophorus, Scalaria, Tellina, Echinoids and Asteclypeus. Orbitoides are also met with in the sandstone of the Gyūto-san on the Kōrō-kei.*

* The following comments have been made on the fossil remains in the limestone collection of Professor Kotō from Reisuikō, Shatokò and Shinbokai in North Taiwan by Messrs. R.B.Newton and R. Holland (The Journal of the Geological Society of Tokio, June 1900, Vol. VII; No. 81):

"The most surprising organism in these microscopic sections is the fossilized seaweed (Kalkalge) Lithothamnium (Dr. Yoshihara found this Lithothamnium limestone also on the island of Yayeyama in the south of the Riukiu group). It appears in large quantities in almost all specimens and is obviously identical with Lithothamnium (Cumulipora) Rosenbergii Martin, from the island of Timor, which is attributed to the Miocene period. The next species of importance is that which Dr. Kotō provisionally described as a species of Linderina. Together with Lithothamnium it forms the great bulk of the limestone cliff, but to classify it definitely is

difficult, on the basis of the specimens available. One of the microscopic sections does indeed seem to show the typical tubular structure of Linderina, and thus Dr. Kotō may indeed be correct in attributing it to this genus. Of the other foraminifera the following may be mentioned: Orbitoides (Lepidocyclina) Verbeeki, N. et H., Heterostegina (?), Miliolina, Gypsina, Textilaria, Pulvinulina, Micheliniana, Globigerina bulloides, Bigenerina, Valvulina (?)."

9: Yamasaki--223 [2] N-5 (1896-1897) 1900 Formosans
116, 133, 135, 314

It is worthy of note that the wealth of the island depends chiefly on the Tertiary mountains. The most important minerals, such as gold, soft coal and petroleum, are found here. The camphor trees also grow in this region, for the most part.

9: Yamasaki--223-224 N-5 (1896-1897) 1900 Formosans
116, 133

In the plain of South Taiwan we notice here and there some small hills, flattened, domed or tabular in shape, which are quite independent of the neighboring Tertiary hilly country. They are old coral reefs, whose geological period, Tertiary or Quaternary, has not yet been determined. Among them we have the Taikō-san (310 m.) Shōkō-san (240 m.), Hampei-san or Pwapen soan (228 m.), Atei-san (54 m.) and Hō-san or Foan-soan (147 m.). The Takao-san (323 m.) on the coast also belongs to this formation, and Shōryū-kyūtō or Lambay Island, which is about 10 km. from the mouth of the Tamsui-kei, also consists [224] of coral formations, so that it would appear that the hills mentioned are recently raised coral reefs.

The third range, which stretches along the eastern coast of Formosa—we have already called it the Tai-tō Chain or East Taiwan Chain—is also very worthy of note. The peaks in this range often rise to more than 1,000 m. The highest mountain , to the east of Kompo, attains a height of 1,550 m., while the next highest, to the southwest of Seikō wan, is 1,440 m. high. This chain also consists of sandstone, clay shale and limestone of the Tertiary period, and, in particular, its chief constituents are volcanic agglomera and tuffs. Above this stand some peaksof andesite lava. This agglomerate range is very steep everywhere, as is the rule in many other volcanic regions of Japan, and the detached blocks lying on the coast are often picturesque in appearance, as for example the giant sea-washed black cliffs in Sansendai, designated on maps as "Black Rock Bay." This range is doubtless a small volcanic range, which pushed through a break on the steep side of the central chain. It is thought that it was at first a volcanic island chain which was raised gradually by a secular movement until it became connected with the main island. And there are indeed many indications of this. Together with the tuffs, o top of each other, this agglomerate not only forms a massive complex of strata with the coral limestone beneath and the Tertiary sea sandstone, as can be clearly observed at the mouth of the Shūkoran-kei, but we also find a distinct terrace formation on this east coast, so that the precipitous coast rises in three or more steps. One also notices, on the northern side of the little bay of Sansendai, a coral reef 50 m. above the actual sea level. All these facts show us a tectonic uplift since the Tertiary period, which has not yet ceased.

In addition to this volcanic chain, [MC: Tai-tō chain or East Taiwan chain] there is another notable volcanic group in North Taiwan, which also pushed its way up through Tertiary layers. In consists of some volcanic cones, among which some prominent peaks are to be found, the Taiton-san and the Shichiseiton-san or Paulon-soan, and consequently we call this group "the Taiton volcanic group." It forms the northern frontier of the Taihoku Plain. To the southeast it is surrounded by Tertiary hills, while in the north its declivities stretch out gradually and gently to the sea. The Taiton-san (1,045 m.), which is in the middle of the group and on the right bank of the Tamsui-kei, is a volcano, doubly conical in shape, whose ejections lie for the most part to the north. At its western foot lies the harbor of Tamsui, also on these layers of tuff. The volcano is no longer active; but the thick layer and the considerable extent of the lava stream and other ejections, which can be clearly seen at the northeast crags, reveal marked activity in earlier times. Another high volcano, almost perfectly conical in shape, is the Shichiseiton-san or Paulon-soan, which is 1,109 m. high. It forms a blunted cone and has a crater on top, surrounded by some small peaks of the broken crater wall. This volcano is not inactive like the preceding; there are many solfataras around it. I saw three of them on the western slope and one at the eastern foot. One of them, situated on the northwestern slope quite close to the peak and the Kimpoli Pass, forms a large horseshoe-shaped depression, which was not inappropriately described by the

term "side crater," and from which steam and sulphur gases are expelled with a loud noise. To the south of this volcano we find another, not so high as the preceding, but quite conical in shape, which is called Sabō-san, i.e. the "Cap Mountain" (711 m.).

In the valley of Kōkei, between the three volcanoes described above, there is a large solfatara. It is situated exactly on the border between the volcano and the Tertiary hill whose slopes rise very steeply opposite the former and rather gently on the other side. Here we are doubtless confronted with a break in the Tertiary range through which the solfatara made its way. It has a considerable area, and many people work there gathering sulphur. Not far off there is a bog from which many hot sulphur springs rise. These springs flow out through a gulley and form a cheerful brook with some water-falls, and here a spa has been built. The surroundings of the Hokuto spa are very pleasant and attractive, and it is now the favorite recreation center for the citizens of the capital of Taihoku, who can reach it after a journey of one and one half hours.

9: Yamasaki--224 [4] N-5 (1896-1897) 1900 Formosans
116, 133

To the northeast of the Shichiseiton-san I saw another cone, the Kōshi-san (890 m.), which is probably an isolated volcano. I was told that there are two solfataras on its northern flank and a hot spring at the foot, near Kimpoli.

9: Yamasaki--224-225 N-5 (1896-1897) 1900 Formosans
116, 133

All these volcanoes are situated on the right side of the lower Tamsui-kei. Near the mouth of this river, opposite the harbor town of Tamsui, there rises up on the left hand side the isolated volcanic cone of Kannon-san. It is only 566 m. high, and its shape is not so complete that its crater can be made out exactly. The lava in all this volcanic region is only andesite, very similar to that on the [225] other Japanese islands. The lava of the Shichiseiton-san is a rather pumice-like, light brown amphibole andesite, while all the others consist of pyrozene andesite, with structures and colors that differ from each other, as is usually the case.

9: Yamasaki--225 N-5 (1896-1897) 1900 Formosans
116, 133

Older, unstratified rocks are very poorly represented on the island. Granite is almost unknown; but Dr. Ishii writes that a small piece of this rock was found by his colleague to the north of Karenkō. Granite, which is frequently used as a building material in towns of the interior as well as in many harbors, is imported from China. Serpentine was found in some small areas in East Taiwan. Diorite gravel was collected on the Taikokan-kei (upper course of the Tamsui-kei) and also on some tributaries on the left side of the Dakusui-kei.

Quite a number of hot springs have been found in different parts of the island, and not only in volcanic regions. They are indicated on the map (Plate 19). [MC: see source, page 298, plate 19, for map]

9: Yamasaki--225 [2] N-5 (1896-1897) 1900 Formosans
116, 133

The large plain of Taiwan forms the western part of the island. The alluvial soil is fertile and there are many towns and villages in all quarters of the plain. With regard to situation and nature we must separate the narrow northern part of this coastal land from the southern. The former is a plateau and consists in the main of rubble, clay and laterite. On the east coast we have also seen its origin, on one occasion, by the direct alteration of clay slate.

9: Yamasaki--225 [3] N-5 (1896-1897) 1900 Formosans
116, 133

A remarkable terraced table-land joins the northern plateau on the south and stretches in the direction of the meridian, from about 60 kilometers' distance from the Taikō-kei, to the Dakusui-kei. On its western side the table-land rises rapidly over the plain to between 200 and 500 m., while on the eastern side there is a much lesser and a gradual decline to the foot of the Tertiary hills. From east to west it thus has a long, cuneiform profile, and it consists of an extremely plentiful Pleistocene deposition of gravel, which is covered by laterite. I consider it to be the old coastal terrace. The tributaries of the Taito-kei flow through this territory [MC: the terraced tableland in the south] like a network. The soil is very fertile; but the town of Taichū (Taiwan-fu) situated here is notorious for malaria.

9: Yamasaki--225 [4] N-5 (1896-1897) 1900 Formosans
116, 133, 361

The middle and southern parts of the western coastal territory of Taiwan begin at the lower course of the Hōri-kei and stretch to the little town of Hōryō towards the south. The whole length of this plain is 220 km, and its greatest width is 48 km. It is heavily populated and has many towns, e.g. Kagi (Kia-ji), Taikō (Taikia), Unrin (Jünlin), Shōka (Tschang-hwu), Rokkō (Lokiang), Tainan (Tainanfu), Hōzan (Föng-schan), Takao (Takau), etc. In the north there is the small basin-shaped plain of Taihoku, watered by the Tamsui-kei and its tributaries. The capital of Taihoku (Taipei), with its commercial suburbs of Taitōtei (Tautuatea) to the north and Banka to the southwest, lies in the middle of the plain. There is also a small plain with the little town of Kōshun (Höngschön) at the southern end of the island.

9: Yamasaki--225 [5] N-5 (1896-1897) 1900 Formosans
116, 133

On the east coast we first find the so-called Capsiulan Plain in the neighborhood of the town of Giran (Ilan). Between the central shale range and the volcanic coastal chain the longitudinal valley already mentioned forms a narrow, long plain, which widens out in the north to form the plain of Kirai and in the south to form that of Pinan. Lengthwise, it stretches from Shinjō to Chipon.

9: Yamasaki--225 [6] N-5 (1896-1897) 1900 Formosans
116, 162, 361, 563

The Capsiulan plain is naturally not so heavily populated as the western plain, yet on its fields and meadows the more cultivated Amis, a branch of the Malayan race, enjoy an unclouded existence.

9: Yamasaki--225 [7] N-5 (1896-1897) 1900 Formosans
116, 133

Finally, mention will be made here of an interesting depression in the middle of the island, where the 121st meridian crosses the 21st parallel. Through it flows the upper course of the Hokkō-kei, a tributary on the left bank of the Taito-kei. Probably it was formerly a lake basin. We shall name it the Horisha Basin, after the little town of Horisha situated there. To the south of this, in a wonderful landscape, lies the largest inland lake on Taiwan, called Suisha-ko, and for a long time past known to Europeans as "Dragon Lake." On the eastern shore there rises the thickly wooded Suisha-san, 1896 m. high.

Let us now cast a glance at the island's coasts. Taiwan is but little indented and consequently, in comparison with other parts of Japan, it has a modest circumference. For every 1 km. of coast in Taiwan there are 29.5 sq. km. of area (almost as much as in the case of the chief Japanese island, where the relationship is 1 km. to 29.7 sq. km.), while in Kiūshū, which is almost as large as Taiwan, there is a surface area of 10.8 sq. km. only for every one kilometer of coast. In order to consider the coast in a convenient way, we shall first travel from Kilung Harbor along the east coast, then round the southern cape and along the west coast back to the point of departure. The harbor of Kilung lies at the northern end of the island and is the most important for intercourse and trade between Taiwan and the rest of Japan. The harbor bay (Ria) of Kilung is surrounded by Tertiary sandstone hills, and the shore shows many curious small erosional formations, comparable to [226] earth pyramids, which are also formed by the ocean waves, for example the large cave near Image Point.* The harbor is about 3 km. long

*The name "Image Point was given it by an American voyager with the Perry expedition, because of the shape of the earth columns.

and is more than 18 m. deep in the middle. Here at least ten large ships of over 1,000 tons can lie unhampered. But, on the other hand, only small craft, and that only at high tide, can go on to the slimy bottom of the inner part, for at ebb tide this is

uncovered. Unfortunately the mouth of the harbor opens too widely towards the ocean in the north, and is thus not protected against the rolling sea waves, particularly at the time of the northeast monsoon. Apart from this, Kilung is the best harbor on the island, and a project for its improvement has already been submitted to the Government, great hopes being placed on the plan's execution.

9: Yamasaki--226 N-5 (1896-1897) 1900 Formosans
116, 133

A precipitous coast extends from Kilung round the Sanshō Cape as far as the Kapsiulan Plain. But along the plain there stretch dunes which prevent the river waters entering the sea directly. So one can find a river which flows along the inside of the dunes and parallel to them. At the southern end of this stretch there is the small, but deep, bay of Soō (Suao). It is the only good recess on the island's east coast, for in time of storm three or four large steamers can lie quietly at anchor here. Between this harbor and Shinjō, in the Karai Plain, there rise giant crags to a height of more than 1,000 m. ...The shore of the Kirai Plain is also bordered by dunes, and here is situated the harbor of Karenkō or Hōrenkan, which is quite open to the sea and offers no protection from the high waves; even in fine weather it is not easy to enter this harbor. I myself waited in vain for two weeks for a steamer to take me back because of bad weather.

9: Yamasaki--226 [2] N-5 (1896-1897) 1900 Formosans
116, 133, 361

Southwards from Karenkō to Pinan along the foot of the coastal chain, the coastline first proceeds for a few kilometers along the first low hills; then there follows a steep stretch near Kororan, and again a low section with a steep edge lying farther back. The precipitous coast is wonderfully developed between the mouth of the Shūkoran-kei and Pinan. But at times we go through sandy beaches at the foot of the terraces, which are only a few meters high. There are three steps in the coastal terraces, with a total breadth of 300 to 1,000 m., and on this are found the villages and fields of the natives and also of the Chinese who have settled there. Many coral reefs can be seen on the shore.

9: Yamasaki--226 [3] N-5 (1896-1897) 1900 Formosans
116, 133

Seikōwan or Chokonwo is a small haven for small ships and fishing boats only, on the Sansendai Bay. It is quite round, with an average diameter of about 200 m., and is surrounded on all sides by coral reefs. Only a narrow exit to the sea permits sea traffic. On the dunes of the Pinan plain there is a large village of the same name. This is the chief locality of the Taitō or of East Taiwan. As for the value of the harbor, it does not differ greatly from that of Karenkō. From the end of the plain to Hachiyōwan, there then lies a far-stretching beach with a steep border. But one always proceeds along a narrow and unpleasant terrain covered with sand and gravel. At times we could walk along the coast only in the short interval between two consecutive waves. Here and there in between, clay slate cliffs sometimes project boldly into the sea. In some instances we had to clamber over the large pieces of rock that had fallen down from the slopes. The southernmost parts of the island consist of hills formed by coral limestone of the Tertiary period (?), and the coast itself is here and there bordered by new corals.

9: Yamasaki--226 [4] N-5 (1896-1897) 1900 Formosans
116, 133

The southernmost point of Garampi and another point called Guswa enclose the bay of Nanwan or Kwaliang. On the west coast of the small Koshun Plain lies the not exactly good but well-known harbor of Sharyō (Shajō). From there to the village of Hōryō one again finds a long beach with a precipitous edge, which gradually flattens out to form a level coast, then stretching out almost the whole length of the island's west coast.

9: Yamasaki--226-227 N-5 (1896-1897) 1900 Formosans
116, 133, 361, 503

When we proceed northwards from Hōryō, we find a harbor, Tōkō, at the mouth of the Tamsui-kei, a large river in southern Taiwan with a fertile basin. In the harbor, at least twenty large Chinese trading vessels always lie at anchor. Not very far to the north is a lagoon harbor, Takao, which is very famous, both because of its trade and also for the beauty and salubriousness of its location. Between the lagoon and the sea there stretches out a 12 km. long tongue of land, called Haisa ("sea sand"), on which are many fishermen's huts. At the northern end of the Haisa there rises up a crag, called Saracen's Head by the English, which was doubtless separated from the "Ape Mountain" opposite it by erosion of the sea waves. The Ape Mountain is joined by the higher Takao-san (327 m.), which is an important landmark for travelers. A narrow channel between these two hills forms the mouth of the bay and the harbor. Unfortunately the entrance to the lagoon, like the lagoon itself, is shallow so that only small steamers and junks can enter, while the [227] larger ships must anchor outside the harbor. All official buildings and foreign concessions lie beneath the Ape Mountain, while the shops of the natives are grouped opposite, at the foot of the Saracen's Head. This locality is usually called Kigo. Many mangrove trees can be found in the lagoon. They are not so large as those I later saw in Singapore. At some distance from the lagoon shore is the town of Hozan (Föngschan), in much the same position as Königsberg on the Danzig Haff. The two hills mentioned, Ape Mountain and Saracen's Head, consist of old coral reefs.

9: Yamasaki--227 N-5 (1896-1897) 1900 Formosans
116, 133, 501

Farther to the north [MC: of Takao] the level coast has many dunes. The large town of Tainan also stands on an old dune. The sea bottom of the corresponding harbor, Anping, is not deep, as is usual in this region, so that wide stretches of the coast are dry at low tide. The large ships anchor 4 km. distant from the wharf and the bamboo rafts peculiar to South Taiwan, and called Katamaran or Teppai, provide for communication between the ships and the land. In addition, the harbor is quite open to the sea; consequently all landing is sometimes suspended at the time of the southwest monsoon. But since, nevertheless, it lies in the neighborhood of the large town and the fertile plain, its commerce has come to occupy the first place in southern Taiwan. This region was known to Europeans from early times.

9: Yamasaki--227 [2] N-5 (1896-1897) 1900 Formosans
116, 175

The Dutch, who at the beginning of the 17th century founded their commercial rule in the East Indian Islands, also traveled farther north to Taiwan. There they built two strongholds, Zeelandia in 1630 and Providentia in 1650. There remains can still be seen in the town of Tainan.

9: Yamasaki--227 [3] N-5 (1896-1897) 1900 Formosans
116, 133, 503

I have already referred to phenomena of elevation on the east coast; they are also to be seen on the west coast. Not only the presence of many old coral reefs and dunes in the Tainan plain, but other facts also offer proof of tectonic movement in quite recent times. On old Chinese maps we see that the harbor of Anping, which is now connected with the town of Tainan by a piece of level land, was situated on a small island almost until the beginning of the 18th century. It is also said that the Dutch ships, earlier, in the 17th century, lay to at the town wall of Tainan. This wall is now at least 8 km. from the actual anchorage.

9: Yamasaki--227 [4] N-5 (1896-1897) 1900 Formosans
116, 133

There are many other harbors on the long sandy and slimy coast of western Taiwan. They are all unprotected against the southwest monsoon and offer an unsafe anchorage. But Rokkō (Lokiang) in particular is the trading center in the Taichū Plain, for it is nearer than other harbors to the Asiatic continent, and there are piled up in bulk the products of the blessed Taichū Plain. To the northwest of Tonshō one can sometimes see the low edges of Tertiary hills and of even more recent formations on the strand. The northwest coast shows a great development of the dunes. Farther to the north, at the mouth of the Tamsui-kei, there is the famous harbor of Tamsui or, in Chinese, Hobe. Unfortunately the harbor is not good, on account of the many sandbanks which are quite dry at low tide. But since the river basin is an excellent production center for tea and the capital, Taihoku, also lies only 20 km. distant from the river mouth, trade and intercourse with many Chinese ports are in full bloom, particularly with Amoy and Futschu. On the coast we also notice coral reefs, which some people use for lime-burning. Northeastwards from Tamsui stretch out the gradual slopes of the Taiton volcanic group, with low cliffs at the end. Passing round the northern point, which is called Fuki-kaku or Foki, we come to Kilung along the strand which has steep edges lying farther back, this having been our starting point.

9: Yamasaki--227 [5] N-5 (1896-1897) 1900 Formosans
116, 133

The main watershed, beyond any doubt, is the central meridian chain, on whose two declivities the streams flow east and west. Most rivers, as on the other Japanese islands, are unsuited for shipping, the grade being too steep. Only two are suited for water transport, both of these bearing the name of Tamsui-kei ("freshwater river"); one is in southern Taiwan and the other in the north. The northern Tamsui-kei arises from the union of the Taikokan-kei with the Shinten-kei at Taihoku; the headwater regions of these two rivers lie in the mountains to the north of lat. N. 24° 30′ and west of long. E. 121° 30′, but are not known in greater detail. The Saiten-san separates the upper courses of the two rivers, these being also little known, that of the Taikokan pointing to the north and the other to the northeast. The first should be looked on as the main river.

9: Yamasaki--227-228 N-5 (1896-1897) 1900 Formosans
116, 133, 312, 505

The Tamsui-kei, which together with its two tributaries on the right-hand side, the Shinten and Kilung, flows through the fertile plain of Taihoku, is important not only for watering the fields but also in communications. At its mouth lies the harbor of Tamsui, already mentioned. From there there always travel many Chinese ships and river steamers 20 km. farther up the river to Tai-tō-tei (Tautuatea), which is the largest freshwater port of Taiwan and is quite close to the capital of Taihoku. The trading vessels [228] can travel another 20 km. to the southeast as far as Taikokan (Takoham), a small town on the border of the native territory. The surroundings of the town of Taikokan are well known for camphor and other forest products. So one can always see many small boats with these products traveling from there to Taitotei on the swift flowing Taikokan-kei. The largest tributary of Tamsui-kei is the Kilung-kei. It flows through a longitudinal valley in the Tertiary range of Sanshōrei, a famous battlefield and a difficult mountain pass. It is about 60 km. long and navigable over most of its extent. Along the upper course of the Tamsui-kei river there are gold fields and bituminous coal deposits. The port of Kilung also lies quite close to the side of a small hill on the river. Thus this small but voluminous river also has considerable importance for transport in this region, where the roads leading into the country are in a bad condition.

9: Yamasaki--228 N-5 (1896-1897) 1900 Formosans
116, 133

The Tamsui-kei of South Taiwan flows from the Central chain in a southern direction, through a large fertile plain on which rice and sugar-cane grow, to Tōkō, a port at its mouth. Small boats can travel pretty far up the river. Some smaller rivers in the southern plain and in the marshy region are navigable, but they have little importance in transportation.

The drainage channels on either side of the Central chain have their peculiarities, owing to the topographical conditions. The waters from the huge steep declivities of the eastern side form numerous but short transverse valleys. In the middle part of eastern Taiwan all the waters of these transverse valleys cannot flow directly through the meridian chain lying on the coast, but turn into the longitudinal valley between the two chains at a right-angle to north or south. The whole narrow Taitō Plain offers passage to these waters. The whole length of the plain is watered by three rivers flowing in opposite directions, their watersheds being only 200 m. above sea level. The river in the north is called Karenkō and the southern river Pinan, both of them having rather a large meadow plain at their mouths. The third, Shūkoran-kei by name, which is also the largest river in eastern Taiwan, has its source in the highest part of the Central chain. Like the Karenkō, it turns northwards into the Taitō Plain, flows along it for some distance and then breaks through the coastal range at Tsuibi and flows eastwards to the sea. The volume of water in this river is usually so small that the natives can drive their large buffalo carts right through the water. Only in the lower course of the Shūkoran-kei is some deep water to be found, on which there travel to and fro the curious little boats that can be carried on land by one adult. The river bottom is always covered by pebbles, with the sole exception of some streams on the northeast coast. The water is generally clear and flows swiftly.

9: Yamasaki--228 [3] N-5 (1896-1897) 1900 Formosans
116, 133

On the western side of the Central chain we notice that almost all the rivers reveal the peculiarity that the waters they have collected in their upper courses divide again after they enter the coastal plain and make their way to the sea in different branches. Thus we always find that the delta at the mouth of these rivers occupies a considerable extent of ground. The water level in these branches is usually very low and the whole area between them is covered with coarse gravel, which makes it very unpleasant for the traveler on the main routes there. In the rainy season, when streams rapidly swell into rivers, these beds frequently change, thus creating a great obstacle for intercourse between North and South Taiwan. The Hōri-kei, whose whole course is about 100 km. in length, has a gravelly area 10 km. wide on its lower course, and a much larger one at the mouth.

9: Yamasaki--228 [4] N-5 (1896-1897) 1900 Formosans
116, 103, 133

The largest river, the Dakusui-kei, has its source in a gorge on the southwestern slope of the Setsu-san (Mount Sylvia). Its clear, burbling water forms in the upper course, a longitudinal valley between the chains in front of and behind the highest range. Approximately in the middle of the island it turns west at a right-angle to its upper course. On the two steep sides of these transverse valleys one can find frequently landslides and falls of rock. Here the water, mixed with the fine particles of clay slate and schist, is very dark, so that the Chinese gave the river the name of Dakui-kei or "clouded water river." The dark grey, foaming water flows farther west to the neighborhood of Linkiho where the tributary of Seisui-kei, or "clear water river" flows in on the left. From there it suddenly spreads out over the level plain of central Taiwan and forms a complicated, fan-shaped network of branches, of which the Seira-kei is the most important, continuing in a westerly direction to the sea. The distance between the northernmost and southernmost mouths is estimated to be about 40 km. This is certainly a very curious phenomenon on such an island as Taiwan.

9: Yamasaki--228-229 N-5 (1896-1897) 1900 Formosans 116, 133

Terrace formations are very widespread on the island, and it can often be seen how they originate along rivers. Along the Taikō-kei in the Taichū Plain I noticed four steps, while Dr. Inonye has written about the five-stepped terrace on the Nan-a-kei in southern Taiwan. Imposing layers of gravel are found everywhere on the plateau, proving that [229] in previous times the flowing water had an even stronger effect than today.

9: Yamasaki--229 N-5 (1896-1897) 1900 Formosans
116, 131, 133, 361 Pescadores

Apart from the chief island of Taiwan, there are various subsidiary islands. Among these the Pescadores are the most important. This group consists of about eighty islets and cliffs, situated to the west of Taiwan in the Formosa Channel, between lat. N. 23° and 24°. The Portuguese called these islands Pescadores (Fisher Islands) because of the extensive fishing which the Chinese have practised there for many centuries. The largest island is called Hōkō-tō (Penghu Island). It consists of basalt and coral reefs. On its western side a bay is formed by the two islands next in importance, Hakusa-tō (Pehoe Island), or "white sand island" and Gyo-ō-tō (Fisher Island). This protected area offers an important haven in the stormy China Sea. The chief locality on the largest island, Makō or Mekon, is a small harbor on this bay with about 3,000 inhabitants, to which there must now be added a small Japanese garrison. The harbor is deep and quiet; always to be found there are some steamers and Chinese trading junks, together with a large number of fishing boats. The island is flat and poor in flora. The highest elevation is only 48 m. high. Other islands worthy of note in this group are Kitsubai or "Bird Island" to the north and the Pachan (Rover) group with Pachan and Tsiang, the Kitsu group (East group) with Tōkitsu and Saikitsu and Taisho or "Junk Island" in the south.

9: Yamasaki--229 [2] N-5 (1896-1897) 1900 Formosans
116, 131, 133

To the southwest of Taiwan lies the small coral island of Shō-ryū-kyū-tō or Lambay Island, while to the east of Taiwan the three volcanic islands of Kashō-tō or Samasana, Kōtō-sho or Botel-Tobago and Sho-kōtō-to or Small Botel-Tobago are also counted with Taiwan. Kisho or "steep island," is a small island on the coast of the Kapsiulan Plain. At the mouth of the port of Kilung there are two islands, Sai-rō-to and Kilung-tō; the latter, consisting of volcanic rock, rises steeply from the sea. Farther to the north lie Agincourt and two other islets.

9: Yamasaki--229 [3] N-5 (1896-1897) 1900 Formosans
116, 132, 654

Like the scientific investigation of Taiwan in general, the systematic examination of the climate also does not begin until the establishment of Japanese rule. In 1897 five meteorological stations were set up, in Taihoku, Taichū, Tainan, Kōshun and Hōko-tō. The organization of simultaneous and corresponding observations in these and other Japanese stations, as also in China and Korea, undoubtedly effected a new advance in East Asiatic climatology. Very carefully observed is the cyclone, which frequently every summer or fall begins in the neighborhood of Taiwan and gradually proceeds north to Japan, and in the regions it touches, precautionary measures are adopted, depending on the weather prospects.

9: Yamasaki--229 [4] N-5 (1896-1897) 1900 Formosans
116, 132

In the southern part of Taiwan there is naturally found, in view of its latitude, a tropical and sub-tropical climate. Apart from the geographic position, the climate of the island is determined chiefly by the influences of the warm Kurosiwo and the high mountain range, which runs along the whole island from north to south. In summer the temperature rises to 37° in Tainan, while in winter there is frost in the mountainous region and sometimes snow in North Taiwan. Heavy precipitations in North Taiwan and strong wind in Hōko-tō are peculiarities worthy of note. The material found in the following descriptions is taken chiefly from our recent observations.

9: Yamasaki--229-230 N-5 (1896-1897) 1900 Formosans-1-3
116, 132

Temperature. The following summary gives the average figures found in the five observation posts in 1897 and 1898.

	Average Temperature (Centigrade)				
	Taihoku	Taichu	Tainan	Kōshun	Hōkotō
January	16.2	16.5	18.2	21.3	16.3
February	14.7	15.6	17.7	21.1	15.8
March	17.9	18.9	20.5	23.5	18.2
April	19.3	21.1	23.0	24.9	21.3
May	25.1	26.9	27.6	27.5	25.9
June	26.4	26.8	27.5	27.0	27.1
July	27.8	27.1	27.8	27.3	27.7
August	27.3	26.7	27.4	26.9	27.2
September	26.5	26.7	27.9	27.0	27.4
October	23.4	24.3	25.4	25.8	24.7
November	20.5	20.9	21.8	23.5	21.6
December	16.0	16.5	17.9	21.0	17.5
Average	21.7	22.3	23.6	24.7	22.6

9: Yamasaki--229-230 N-5 (1896-1897) 1900 Formosans-2
116, 132

Average Maximum Temperature.

January	20.0	21.3	25.2	24.6	19.6
February	17.6	19.9	24.8	24.5	18.4
March	21.7	23.6	27.0	27.1	20.8
April	22.9	25.5	28.9	28.4	23.8
May	29.6	30.7	32.4	31.4	28.6
June	30.6	30.7	31.5	29.5	29.7
July	32.7	31.4	32.3	30.3	30.1
August	31.5	30.7	31.1	29.5	29.6
September	31.0	31.3	32.9	30.6	30.7
October	26.8	29.0	30.7	28.4	27.3
November	23.3	25.8	27.1	25.8	23.7
December	19.5	22.2	24.6	23.5	19.7
Average	25.6	26.8	29.0	27.8	25.2

[230] Average Minimum Temperature.

January	13.6	13.1	13.9	18.3	14.9
February	12.2	12.7	13.5	18.2	13.8
March	15.3	15.9	16.2	20.7	16.0
April	16.6	17.8	18.8	22.0	19.0
May	21.6	22.7	23.6	24.2	23.6
June	23.2	23.8	24.6	24.7	25.0
July	24.1	23.5	24.3	24.5	25.4
August	24.3	23.7	24.4	24.7	24.9
September	23.3	23.4	24.2	24.2	25.5
October	21.0	21.1	21.9	23.6	23.1
November	18.7	17.6	18.4	21.4	20.1
December	13.4	12.4	13.6	18.6	16.0
Average	18.9	19.0	19.8	22.1	20.6

9: Yamasaki--230 N-5 (1896-1897) 1900 Formosans
116, 132

The coldest month is February; only Kōshun can show an average temperature of 21.0° in December as compared with 21.1° in February. The average minimum is always found in February in all stations, and the absolute minimum temperature is 3.3° in Taihoku, 3.2° in Taichū, 3.5° in Tainan, 11.8° in Kōshun and 9.9° in Hōko-tō. The warmest month is July all over the island; but the maximum temperature is not limited to this month. In Taihoku and Taichū the average maximum temperature falls in July and at other stations in September. The maximum temperature varies between May and September. It rises to 34.6° in Taichū in May, 36.9° and 36.5° in Taihoku and Tainan, 33.4° in Kōshun in July, 33.5° in Hōkotō in September. The variation of temperature is greater in the north than in the south. In Taihoku the difference between maximum and minimum amounts to 33.2°, while in Kōshun it amounts only to 21.6°, where the lowest temperature in winter does not fall below 10°. The amplitude is also greater in winter than in summer. Taihoku can show the minimum temperature of only 3.5° in February, while the maximum in the same month is 31.3°.

9: Yamasaki--230 [2] N-5 (1896-1897) 1900 Formosans
116, 132

Barometric pressure and winds. The barometer reading is high in December and January and low in June, July and August. In winter, the pressure is higher in the north than in the south, while in the summer it is higher in the east than in the west. Observations reduced to sea level and 0° c., gave the following results.

	Average Barometric Pressure in:				
	Taihoku	Taichu	Tainan	Kōshun	Hōkotō
January	766.3	763.4	765.6	763.1	764.0
February	63.6	61.7	61.6	61.3	62.2
March	62.2	60.9	60.8	60.6	61.2
April	61.5	60.0	59.7	59.8	60.3
May	57.3	56.9	56.9	57.3	57.1
June	53.6	53.5	53.5	54.2	53.6
July	56.0	55.9	55.9	56.5	55.9
August	53.4	53.5	53.8	54.6	53.6
September	57.4	56.5	56.4	57.0	56.7
October	60.1	58.0	58.8	58.2	58.5
November	62.3	59.7	59.7	59.5	60.3
December	66.0	63.4	63.4	62.9	64.0
Average	759.9	758.6	758.6	758.8	758.9

9: Yamasaki--230 [3] N-5 (1896-1897) 1900 Formosans
116, 132

Since the island lies in the monsoon region, the wind is very regular. From September to April north and east winds predominate. The direction of the wind varies in every station as a result of the topographical conditions. Thus we have east wind in Taihoku, north wind in Taichū and Tainan and northeast wind in Hōkotō and Kōshun. Between May and September the direction of the wind is rather irregular in every station, but the south wind predominates. In Hōko-tō, an isolated level island in the open sea, the direction of the wind is very regular and always changes from NNE to SW during a year. The average velocity of the wind varies between 2.9 m. per second in Taichū and 11.1 m. in Hōko-tō. The northeast monsoon is much stronger than the southwest monsoon, and in Hōko-tō we have always a strong wind, 10 m. per second during the period of the northeast monsoon. The strongest wind so far observed is that of September 30, 1898, in Hōko-tō, which had a velocity of 56.4 m. per second. The frightful cyclone or typhoon which springs up two or three times every year in the China Sea often begins to the east of Taiwan or the Philippines region and travels north along the east coast of Taiwan, with its centers about 2 degrees distant from the coast.

9: Yamasaki--230 [4] N-5 (1896-1897) 1900 Formosans
116, 132

Humidity and Precipitation. The latitude of Taiwan in itself is sufficient to raise expectations of great humidity. The monthly average is over 80%, and varies between 93% and 73%. On the driest days the humidity is only 31%. In winter it is greater in the north and less in the south, while in summer the opposite holds.

9: Yamasaki--230-231 N-5 (1896-1897) 1900 Formosans
116, 132

The time and the amount of precipitation on Taiwan are very remarkable. The northeast monsoons of the winter, which blow over the warm current, the Kurosiwo, bringing with them much moisture, strike against the high mountains of northern Taiwan and fall down again on their northeast side. Consequently we have a rainy season in northern Taiwan during this monsoon. It is said that the precipitation in this region is the heaviest in the northeast monsoon region, and especially in Kilung, a port at the foot of the mountains on the island's north coast, it attained a height of 5238.4 mm. in 1898. An interesting view is obtained when one sees from a distance, on the western side of the Central chain, the thick layers of cloud which rise from the east to the mountain crest but then move on only a little farther, since the warmer...air on the western side dissipates them again. The phenomenon resembles that of the "tablecloth " of the Table Mountain, in South Africa. In Taihoku, [231] which is on the other side of the range and is only 40 km. distant from Kilung, the precipitation is less than half as heavy as in the latter locality.

When the southwest monsoon has begun, the southwestern part of the island has heavier precipitation than the northeast. Tropical storms often occur, and the rainfall during them often attains considerable proportions. Thus Kōshun, during June, 1897, had 1,535.7 mm. But this was probably a rare exception. The whole western side of the island, as the following summary shows, received by far the heaviest precipitation during the summer, the maximum being in August.

9: Yamasaki--231 N-5 (1896-1897) 1900 Formosans
116, 132

Average Rainfall

January	71.7	35.8	9.5	10.9	11.3
February	207.0	159.9	132.8	83.0	78.6
March	71.1	43.2	36.6	48.0	21.4
April	156.3	82.9	43.9	16.5	54.5
May	184.2	96.8	53.6	46.9	46.8
June	229.0	475.0	535.5	1345.7	155.3
July	178.5	296.8	206.6	239.9	203.9
August	690.0	866.5	676.9	482.1	549.5
September	273.3	96.5	54.4	129.6	17.0
October	179.0	18.7	56.6	241.6	55.1
November	114.9	20.8	34.6	154.0	43.5
December	80.3	8.6	3.8	13.8	3.0
Whole year	2435.6	2201.7	1835.0	2911.8	1240.2

9: Yamasaki--231 [2] N-5 (1896-1897) 1900 Formosans
116, 132

According to the observations conducted over a period of five years by A. Hosie, the English consul in Tamsui, the average rainfall in this port amounted to 1,927 mm.*

* Alex. Hosie, Report on the Island of Formosa, presented to both Houses of Parliament, 1893, p.6.

9: Yamasaki--231 [3] N-5 (1896-1897) 1900 Formosans
116, 137,. 313, 342, 501

As the name of Formosa shows, we find all over the island very heavy tropical vegetation.

.Bamboo. This grows everywhere on inhabited plains and hills. The useful species become much thicker and larger than in Japan. It is used for many purposes. In the mountains the inhabitants build their huts of it, and in South Taiwan the fishermen build of it their boats and Teppai or Takamalan. These latter are curious sailing boats with raft-like bottoms of bamboo stems laid beside each other.

9:. Yamasaki--231 [4] N-5 (1896-1897) 1900 Formosans
116, 137, 276

The betel-nut palm (Areca Catechu L.) is a common tree in the plains. Especially in South Taiwan it is planted in gardens. Slices of the fruit mixed with slaked lime and leaves of the betel-pepper are used on Taiwan, by both Malays and Chinese, as a stimulus and offer an agreeable refreshment, when placed in the mouth.

Ficus retusa L. and Ficus Wightiana Wall, are also found extensively on the island. In one pass between Teroso and Hachiyowan in South Taiwan I saw a dense wood of Ficus retusa, together with Calamus Rotang L., much intertwined. The first mentioned species of fig, with its far-spread aerial roots, also grows much on the tongue of land near Takao. Pan dangs (Pandanus odoratissima) is found extensively in the plain, particularly in the region of the coast. The tree fern (Cyathea spinulosa) is also found all over the island. The coniferous type of tree ends in North Taiwan. Here, as far as the Hachimantōge on the Hokkō-kei, there are still found beautiful woods of a pine very similar to the Japanese Pinus densiflora. One often encounters Acacia Rhichii in the woods and fields and along the routes. At first glance, from a little distance, it looks like an osier. The coral tree (Erythrina indica L.) flourishes in the plains. In general the primeval forests in the mountain ranges of Taiwan are very dense and impenetrable. Most trees are covered by uncountable varieties of parasites and various climbing plants wind around them. Where there are no trees there is a brush consisting of bamboo, banana palms or tree ferns. In clear patches, there are grass bushes of Kaya (Eulalia and Imperata species) over 3 m. high, which are often so thick that it is difficult to traverse them. In lagoons near Takao one finds the mangrove woods so typical of tropical regions.

9: Yamasaki--231 [6] N-5 (1896-1897) 1900 Formosans
116, 137

Concerning the flora of the woods, Dr. S. Honda, who climbed the highest mountain, Niitaka-yama, has made the following important observations:*

*Mitteilungen der deutschen Gesellschaft für Natur-und Völkerkunde Ostasiens in Tokio. Vol. VI, No. 60, July 1897.

"The Formosan lowland belongs, from sea level to a height of 1,700 feet (520 m.), to the area of tropical vegetation, and consists chiefly of Ficus, Pandanus, palms and pineapple. From here up to 6,000 feet (1,830 m.) there extends a sub-tropical evergreen forest, the camphor tree being found up to a height of 6,500 feet (1,980 m.); in addition we find evergreen oak species. From 6,000 feet (1,830 m.) there begins the coniferous region, first of all with Cryptomeria and Chamacyparis and then, between 7,000 and 8,500 feet (2,130 to 2,590 m.), with pines (a variety of Picea Glehni), between 8,500 and 10,500 feet (2,590 to 3,200 m.) with Tsuga (Tsuga diversifolia Max.) and finally, from 10,500 feet up to the peak of the Morrison (3,200 to 4,145 m.) with species of fir and juniper, and chiefly Abies Menziezii."

9: Yamasaki--231-232 N-5 (1896-1897) 1900 Formosans
116, 243, 311

The most important species of cereal on the island is rice (Orysa sativa L.). In the plains as on [232] the gentle slopes of the hilly regions, the rice fields occupy a great area. The basins of the two Tamsui Rivers, the Kapsiulan Plain near Giran, and the Taichū Plain are its chief centers. In East Taiwan we also find small rice plantations, as far as Chinese colonists have penetrated. There are usually two harvests a year: in South Taiwan even three harvests are obtained from the same fields.

9: Yamasaki--232 N-5 (1896-1897) 1900 Formosans
116, 249, 439

The second chief product is sugar-cane. It is noteworthy that sugar-cane in Taiwan is much smaller than in the Riukiu Islands. It grows in large quantities in the plain of Tainan. November is the harvest month. The raw sugar is manufactured with the help of a primitive mill in large, cone-shaped huts, of which many can be seen in the southern plain. The most important centers of the export trade in sugar-cane are Takao and Tainan (Anping), the trade being very lively between January and April.

9: Yamasaki--232 [2] N-5 (1896-1897) 1900 Formosans
116, 245, 311.

While we have seen sugar in South Taiwan, we find many fields with tea plants in the northern part of the island. The surroundings of the Taihoku Basin yield most of this third most important island product. Tōshien Tableland and the two slopes of the Kilung Valley are covered in the main with these beautiful tea plantations. There are two kinds of Taiwan tea on the market, Oolong tea and Pauchong tea. They come from the same plants, the difference depending on the method of preparation. Oolong tea, which is usually made from the better leaves, is rather weaker in taste and odor than ordinary black tea, while the other is made aromatic by mixing it with flowers, such as jasmine (Matsuri). The leaves of the tea plant are harvested seven or eight times a year; but the best quality is obtained only from the second Spring harvest.

9: Yamasaki--232 [3] N-5 (1896-1897) 1900 Formosans
116, 245, 439

Taitōtei is the only town manufacturing and dealing in tea. The tea is exported via Tamsui to Amoy, and from there the Oolong tea goes in the main to America, in part to England also, and the Pauchong tea goes to the Straits Settlements for the Chinese wl live there.

9: Yamasaki--232 [4] N-5 (1896-1897) 1900 Formosans
116, 244, 311

Sweet potatoes (Ipomea batatas Lam.) are one of the inhabitants' most important articles of diet for both the Chinese and the natives, and they are to be found growing on the island, wherever it is inhabited. In the mountain regions, as in Musha on the Dakusui-kei, which is inhabited by the wild aborigines, I have also seen fields of sweet potatoes on the rather steep slopes. There is also a double harvest in the western plain.

9: Yamasaki--232 [5] N-5 (1896-1897) 1900 Formosans
116, 243

In addition to the rice already mentioned, the species of cereals found are wheat, barley, millet and buckwheat (Fagopyrum esculentum M.).

9: Yamasaki--232 [6] N-5 (1896-1897) 1900 Formosans
116, 244, 264, 372

Also planted are various species of legumes and the peanut (Arachis hypogaea L.). Peanuts in part are eaten roasted, and in part are worked into cakes and made into oil, which is much used by the Chinese for cooking and illumination.

9: Yamasaki--232 [7] N-5 (1896-1897) 1900 Formosans
116, 137

Many species of edible fruits are found. Bananas (Musa chinensis) are found everywhere. Pineapple (Ananassa sativa Mill.), Euphoria longa, Mangifera, are tasty tropica fruits. Among the Citrus genus the large Citrus decumana L. (Yua) plays the chief part C. nobilis and C. medica being also found. I have seen persimmon (Diospyros kaki) in the aboriginal village of Hōgō in the Central chain.

9: Yamasaki--232 [8] N-5 (1896-1897) 1900 Formosans
116, 137, 248, 286

The pineapple (Hōri or Unrai) is an important plant for Taiwan, not only for its fruit, but also because the leaves have fine fibers from which thin summer clothing is woven. The fine cloth used for this is called Unrai-pu or "pineapple cloth." The most important textile plant of the island is, however, the China-grass (Boehmeria nivea Hook.), Tschumā in Chinese and Karamushi in Japanese, its fibers being exported in large quantities. It is also one of the chief articles of barter for the aborigines in the mountains. In Holisha I saw a large quantity of China-grass fibers, which had been taken there by the natives living on the upper course of the Dakusui-kei.

9: Yamasaki--232 [9] N-5 (1896-1897) 1900 Formosans
116, 137, 289

A curious and noteworthy plant growing on the island is the Fatsia papyri fera Miq. (Tsungtsau in Chinese and Tsūsō in Japanese). The Chinese cut out of the snow-white pith of Fatsia papyrifera Miq. thin strips like paper with such extraordinary skill that, from a cylindrical piece of pith about 3 cm. in diameter and 6 cm. long, they can make a strip about 5 m. long with one continuous cut starting from the surface and parallel to the axis. The dry strips of pith paper are then dyed various colors and worked into beautiful artificial flowers for the coiffure. To call this pith paper "rice paper" is no less wrong than to use the name "rice broom" or "root broom" for articles made from the panicles of the durra (sorghum vulgare).

9: Yamasaki--232-233 N-5 (1896-1897) 1900 Formosans
116, 137, 314

Camphor (Chang-nau or Nau in Chinese, Shōnō in Japanese) plays the most important part among the forest products, in fact the island is the largest provider of it. The camphor tree (Cinnamomum camphora Nees.) or, as one also says, the "king of the Formosan forests," is found in abundance in the luxuriant virgin forests of the northern half of the Kali chain and the neighboring regions of the Central Range, up to a height of 2,000 m. The trees attain an imposing height and sometimes, [233] with a diameter of 3 m., are between 40 and 50 m. high.

9: Yamasaki--233 N-5 (1896-1897) 1900 Formosans
116, 314

Here and there, on the border territories of the aborigines on the western slopes of the Central chain, there stretch out a number of devices for obtaining camphor, in which the Hakka, a hardy clan that formerly transferred themselves here from the province of Canton, prepare the raw camphor. The apparatus is very simple and not very well adapted to its purpose. Only the juicy roots and the lower pieces of the trunk are used, while the corona is thrown away.

9: Yamasaki--233 [2] N-5 (1896-1897) 1900 Formosans
116, 314, 655

The Japanese Government on the island has now made the camphor trade into a monopoly, like the obtaining of sea salt on the west coast.

9: Yamasaki--233 [3] N-5 (1896-1897) 1900 Formosans
116, 136

Our zoological knowledge of Taiwan is limited for the most part to the investigations of Swinhoe more than 30 years ago, for the Japanese accounts in this domain of natural history have not yet appeared. 31 species of mammals are known and about 150 bird species. The largest beast of prey is a black bear (Ursus Formosanus Sw.), which is close to the Japanese Kuma (Ursus Japonicus Schl.). In one village on the upper reaches of the Dakusui-kei I saw a chief wearing a cap made of the neck-piece of this bear. The fox (Canis vulpes) is also widespread, as in Japan. Flying foxes and bats, squirrels and other rodents are also found. In the woods there is a species of monkey (Innuus speciosus), and a species of wild boar (Sus taivanus) occur in large numbers. There are also many deer (Cervus Swinhoii), very similar to the Japanese Cervus sika, and also antelopes. The hides and antlers of the deer play a big part among the mountain dwellers as articles of barter. Of the tropical genus of the pangolin (Manis), the short-tailed Manis has been known for centuries.

9: Yamasaki--233 [4] N-5 (1896-1897) 1900 Formosans
116, 211, 262

The most important domestic animal is the buffalo (Bos chinensis). It pulls the plow, and its flesh, horns and hide are also esteemed. Ordinary cattle are also found, but horses are rare. Sheep seem to be lacking, but goats exist in fairly large numbers. The most frequent four-footed domestic animal, is however, as in China, the pig, its flesh being eaten gladly by both natives and Chinese. Generally liked and raised both for their eggs and their flesh are ducks, geese, and hens.

9: Yamasaki--233 [5] N-5 (1896-1897) 1900 Formosans
116, 136, 262

Fish naturally play an important part in the diet, especially among the dwellers on the coast. Among the many species of the Taiwan Sea that are favored, the Harder (Mugil cephalus) is to be named before all others. In the winter months the inhabitants of the southwest coast are kept very busy catching it. It is about 3/4 m. long and not only its flesh but also its milt provide an article of diet esteemed by both Chinese and Japanese. In the markets at Tainan and Takao I saw the following species of fish also: Pagrus sp., Peristethus orientalis, Trigon pastinaka, Tachiurus lepturus, Thynnus pelamys (bonito), Trachurus sp., various mackerels, flat-fish, squid, etc. Among freshwater fish Cyprinus carpio (carp), Cerassius auratus (crucian), a species of trout (Plecoglossus altivelis) and Anguilla bostmiensis (eel) are the most important. There are also various species of valuable crustaceans. The king crab (Limulus) is also found in the sea near Taiwan, close to Kilung, especially, and its shell, which is used for ladles, can be bought everywhere. On the southeast coast I have often seen large turtles and their old shells are also found on the shore.

9: Yamasaki--233 [6] N-5 (1896-1897) 1900 Formosans
116, 228

Many oysters are carefully raised on the southwest coast, particularly near Anping.

9: Yamasaki--233 [7] N-5 (1896-1897) 1900 Formosans
116, 135, 175

Important minerals found in Taiwan are gold, coal and sulphur. The chief sites are in North Taiwan, particularly in the surroundings of Kilung. Gold is found in two forms, as river-gold and in veins. It was first dound in Kilung-kei in 1890 by a Chinese workman who had formerly been in a Californian mine and who was occupied in constructing a railroad bridge over the river. From this time on, thousands of gold-washers have visited a long stretch of the Kilung-kei about 16 km. from its upper course at the Sanshōrei to the Shichito railroad bridge. Later gold deposits were also discovered in the mountains of Kyūfun-san and Kinkaseki, in the Zuihō region lying to the east of the port of Kilung. We learn through Dr. Ishii, the Taiwan Government geologist, that the metal is found in Kinkaseki in the zone of contact between Tertiary layers, in the main sandstone and slate, and the projecting volcanic rock, while in Kyūfun-san there are veins that are traversed by Tertiary layers. In addition gold-bearing sand was also found near Shinjō and in the Shūkoran-kei on the east coast.

9: Yamasaki--233-234 N-5 (1896-1897) 1900 Formosans
116, 135

There is a good deal of coal in the Tertiary Kilung mountainous region; but unfortunately its quality in general is not good. Many deposits can be seen on either side of the Kilung-kei. Denryōkō, Shikyakutei and Sanshōrei are the chief centers in this region, and here the quality of the coal is good compared with other places. There are three deposits in Shikyakutei, the thickest of which measures [234] 1.3 m. The Denryōkō deposits also consist of three beds, the thickest being 3 m.; but they gradually become narrower towards the west. To the north of this region are found the Nai and Gaihokusan, the Kakyaku and Kimpoli deposits, among which the Kakyaku fields belonging to the Imperial Navy have four deposits, the thickest of these being about 1.7 m. The continuation of the northern layers stretches out farther to the west in Kilon, on the tableland of Tōshiyen, while continuations of the Sanshōrei layers can be found only near Shinten to the south of Taihoku. The coal-bearing layers are always Tertiary sandstone and slate, as in other regions of Japan, and their line of strike goes from the northeast to the southwest. There are anticlinal and synclinal layers, and their angle of descent is often very great, being as much as 85°.

9: Yamasaki--234 N-5 (1896-1897) 1900 Formosans
116, 135

Sulphur comes from various solfataras in the Taiton volcanic group,...For the most part it comes from the large solfataras of Hokutō (Patau), Dairyūkō on the western declivity of the Shichiseiton-san, and Taikōshi, to the south of Kimpoli. The other five solfataras also yield small quantities. The total production varies between 300,000 and 420,000 kilograms annually.

9: Yamasaki--234 [2] N-5 (1896-1897) 1900 Formosans
116, 135

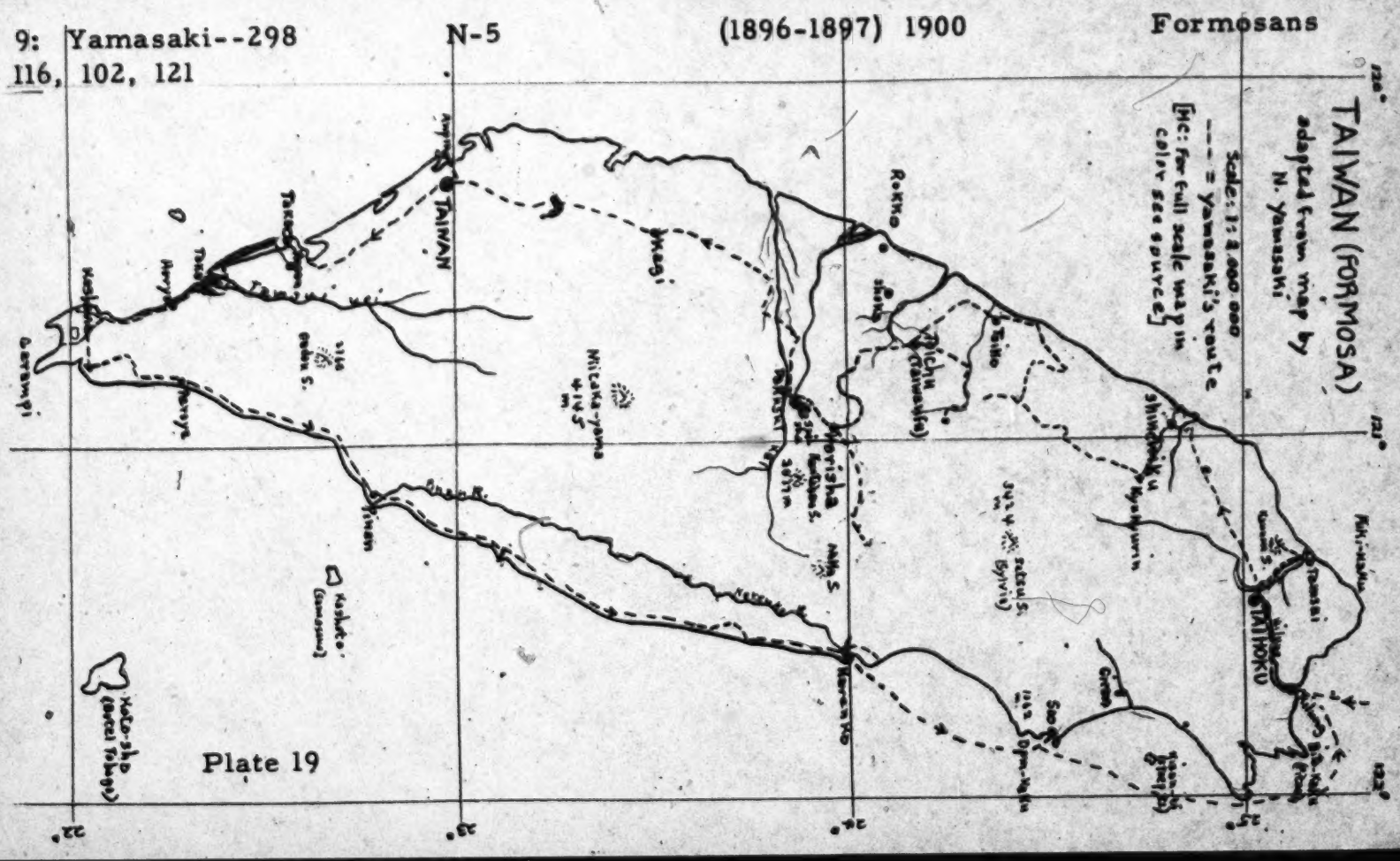
Petroleum. It is known to occur in various places. In Gyūtōkō, 15 km. to the southeast of Byōritsu (Mioli), where the middle course of the Kōrō-kei forms a gorge through the chain of Tertiary layers, it appears on its bank. Formerly 36 kilograms were obtained here every day. In addition it is found in two wells in South Taiwan, near Kōnaishō and Hōryō, 12 km. to the north of Banshoryō.

9: Yamasaki--234 [3] N-5 (1896-1897) 1900 Formosans
116, 439, 652

The total national income (Erträge) of Taiwan is estimated at over 40,000,000 yen per year. Of this, the total value of goods exported in 1896 amounted to 11,791,051 yen.

9: Yamasaki--298 N-5 (1896-1897) 1900 Formosans

116, 102, 121



10: Schumacher--222 T-1 (ca. 1896) 1898 Formosans
116, 114

...My information about the lowland area of Formosa is rather general...for my study was made at the time of a rebellion...

10: Schumacher--222-223 T-1 (ca. 1896) 1898 Formosans-1-2
116, 241, 311, 727

In the north of Formosa are cultivated a variety of products. The region from Kelung to Tamsui is the section that has most definitely been under the influence of Europeans because it is close to the port of Tamsui and the main settlement of the Europeans in Tuatutia. Here in the north all available land is utilized. The industrious people have even turned slopes into productive agricultural land. Yet only rice is cultivated on a large scale although there are indications that at one time in the past other less common products must have been grown. During war time [MC: 1895?] the sugar-cane fields were furrowed and ruined and the tea plantations were neglected. The land as far as Gosche is mainly used for fields of indigo and sweet potatoes; batatas and rice are rare. The region as far as Tschanghua, on the other hand, [223] is claimed almost exclusively by rice culture. It has escaped the destructive instinct of the Japanese because the Japanese troops wear straw sandals on their marches and would have dirtied their feet with mud and walked them sore on the irrigated rice fields; this would have been a definite impediment although it would not actually have been a danger. Economically the most valuable and the most beautiful part of Formosa extends from Tschang-hua to about 20 kilometers beyond Kia-y. The palm groves are rather clear in some sections and here one finds many remnants of protective shelters against the tropical sun where formerly the most precious products were cultivated. Here and there palm groves are lacking. It seems that for the last ten years the Chinese in these districts have confined themselves to a cultivation of rice or sugar-cane, because they required less capital and less

labor. In view of the political uncertainty and the greed of the mandarins it did not seem advisable to invest large sums for the cultivation of plants of the optimum state.

10: Schumacher--223 T-1 (ca. 1896) 1898 Formosans
116, 133

The torrential waters that come down from the mountains flow between Tamsui and Sin-tschu into the river system of the Tamsui which is controlled in various places and is nearly everywhere navigable for junks. In the rainy seasons the rushing Tyka river flows through hard areas of gravel between Sin-tschu and Gosche, but during the dry period its water is diverted into twenty-two shallow creeks and the bed of the river can be crossed on horseback without any danger. The sister-streams Ponkam and Lokkang flow from Tschang-hua to Kia-y; I assume their relationship from the fact that the right bank of the Lokkang and the left bank of the Ponkam are high and that they seem to constitute water-sheds. Between the Ponkam and Lokkang eighteen more or less connected river courses are found, e. g., we have here a system of crossing streams. In contrast to the Tyka they carry water at all times and, with the exception of the Ponkam, after rains they can be crossed on foot or on horseback; but in the rainy seasons they rise and flood all the intermediary land. Beyond Kia-y at almost completely regular intervals of ten kilometers smaller or larger independent creeks are found; neither are they torrential nor do they present special dangers or impediments. All these brooks and streams flow rapidly and partly forcefully over the firm, rocky ground.

10: Schumacher--223 [2] T-1 (ca. 1896) 1898 Formosans
116, 351, 361, 764

The Chinese villages in the lowland plain are mostly hidden in bamboo jungles. Some of them are situated at the foot of mountain spurs where they are well protected against the weather. They are surrounded by burial grounds and enclosed within high brick walls. Wide and swampy ditches gird these unimpressive places, whose inhabitants make a meager living. But for centuries the Chinese have preserved the ruins and trash with sentimental care.

10: Schumacher--223 [3] T-1 (ca. 1896) 1898 Formosans
116, 312

A good deal of stagnant water is found in all villages. Wells are located close to the dwellings which can thus easily be reached by the bacteria. The water of the wells is ordinarily clear but contains such a high percentage of animal salts that they are rendered unhealthy and disgusting.

10: Schumacher--223 [4] T-1 (ca. 1896) 1898 Formosans
116, 164, 175

I want to state that the extremely high mortality rate among the Chinese and the Japanese is not due to unalterable circumstances. The Japanese, to quote some figures, lost 66% of their men in the course of the campaign, who were simply victims of disease. The Japanese guard division left the rough climate of Korea in the spring equipped with winter-uniforms. This factor, combined with a scarcity of provisions following the capture of Kelung, resulted in a period of terrible suffering for the division. In spite of it all the men tried to deal with a task that was beyond their powers at this state of the game. Weakened by fevers, hunger, dysentery and long marches, the group had advanced to Tschang-hua, but was in such a pitiful condition that cholera, plague, elefantiasis, and small pox found easy victims.

10: Schumacher--223 [5] T-1 (ca. 1896) 1898 Formosans
116, 164, 361, 364

The origin, spread, and finally the endemic occurrence of illnesses are favored among the Chinese of Formosa by the layout of their towns, villages and dwellings. Nearly all the settlements have grown up in depressions which could be fed but not drained. It is true that sewers are found in all large settlements; they receive dirty water but there is no outlet for it. The water is left to evaporate and naturally infects the air. The sewers are deep ditches occupying the entire width of the narrow alleys; they are lined with tiles or planks. Add to that the fact that the Chinese are not very much concerned with bodily cleanliness, that individuals are not segregated in any way from a large group of people, that there is continued contact even at the time of contagious epidemics, and that they do not receive any medical attention, and then it becomes obvious that the origin of many illnesses should not simply be attributed to the climate of the island.

10: Schumacher--223-224 T-1 (ca. 1896) 1898 Formosans
116, 132

The climate of Formosa has not always been so dangerous as it is nowadays but conditions have become much worse. If a change has been brought about it should also be possible to find means to render it more bearable again. The sudden drop in temperature during the early hours of the morning is, however, [224] most dangerous and this problem can be solved only by a suitable method of house construction and manner of living.

10: Schumacher--224 T-1 (ca. 1896) 1898 Formosans
116, 241, 312

It has been mentioned that the agricultural population of Formosa is almost exclusively concerned with the cultivation of rice. It is indeed, the extensive cultivation of this product that has changed the character of the climate of Formosa. All the land utilized by rice fields is repeatedly flooded and very ingenious systems have been devised to assure an even distribution of the regularly flowing water of irrigation. The water trickles along in the most intricately arranged channels and often hydraulic engines are used in order to direct the water from one field to another. This continues until the heat of the sun has done away with all of it and the humidity of the air has been increased considerably. The Chinese bring all their manure and refuse to the area surrounding their settlements and therefore the air is most unhealthy and dangerous right there.

10: Schumacher--224[2] T-1 (ca. 1896) 1898 Formosans
116, 231

An interesting element is the assimilation of the domestic animals. Besides the water-buffalo, which looks rather antediluvian, and the Australian cattle which were imported not too long ago, goats, pigs, and last but not least dogs, ought to be mentioned. It is a question whether it is due to the climate and the soil consistency of Formosa or to the purity of breeding that all the goats, pigs, and dogs and also the buffaloes are black. And even in their build the domestic animals of Formosa resemble one another, owing to their square, thickset forms and their short, stout legs.

10: Schumacher--224 [3] T-1 (ca. 1896) 1898 Formosans
116, 361

Of the purely Chinese towns of Formosa the sea-port of Lokkang should be given the first place from the economic point of view. Lokkang is located approximately half way down the western coast of Formosa on almost the same parallel as Tschang-hua. Its hinterland is very extensive and extremely fertile. Lokkang is not only the most prosperous of the Chinese towns, but I am also inclined to give it first place from the point of view of hygienic and sanitary conditions. Lokkang is situated at the mouth of the river of the same name, sloping down towards it and to the sea which washes its beaches and receives refuse just like the Lokkang river.

10: Schumacher--224 [4] T-1 (ca. 1896) 1898 Formosans
116, 175, 226, 505

The Chinese fishermen of Lokkang are born on their boats and probably have never set foot in a town. They must be the direct descendants of the dangerous and powerful pirates who even hundreds of years ago were forbidden to enter Chinese ports and rivers. Now they are poverty stricken and on the way to becoming extinct because it is not quite so simple to seize ocean liners made of iron and steel as it was to catch barges and galleys. Now they sail along the coasts with their junks and pick up freight which must be unloaded the next day if they are eager to make a business of freight transportation. Carried by the flood they continue these voyages until the storm throws them on the beach or casts them adrift on the open sea where the waves are more regular than near the shallow shores, but still high enough to embrace the junks and to crush them like rotten match-boxes.

10: Schumacher--224 [5] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 101, 144 Chin-hoan

So far it has not been undisputably established to which population group the Tschin-Huan belong; they live in the almost inaccessible mountains of Formosa.

10: Schumacher--224 [6] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 141 Chin-hoan

The Tschin-Huan are tall people with good physiques. Their skin is not so dark as that of the Hacca [MC: Formosans of Chinese origin, originally from Kwangtung province] or the Peyo-Huan who live at the foot of the mountains.

10: Schumacher--224 [7] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 144 Pepo-hoan

The latter [MC: Peyo-Huan] seem to be products of cross-breeding between the Chinese and Tschin-Huan. Especially in the north of the island, they are the intermediate between the Chinese and the Formosans of the mountains.

10: Schumacher--224 [8] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 141 Chin-hoan

The facial expression of the men of the Tschin-Huan resembles that of the coarser types of the Indians of Arizona...

10: Schumacher--224 [9] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 302 Chin-hoan

The Tchin-Huan men wear their hair bobbed.

10: Schumacher--224 [10] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 171, 291 Chin-hoan

The clothing of the Tschin-Huan men consists of skins and jackets of the Chinese fashion made from pineapple or nettle fibers.

10: Schumacher--224-225 T-1 (ca. 1896) 1898 Formosan Aborigines
116, 141, 171, 562 Chin-hoan

The women can hardly be distinguished from the Chinese owing to the similarity of the shape of their faces, their delicate build, and their lighter skin. [225] In married life they claim a privileged position exactly like the Chinese women.

10: Schumacher--225 T-1 (ca. 1896) 1898 Formosan Aborigines
116, 171, 548 Chin-hoan

Village prostitutes or haischa are completely lacking among the Tschin-Huan in contrast to all the other population elements of Formosa.

10: Schumacher--225 [2] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 101 Chin-hoan

Many scholars, and especially members of the Academy of Science of San Francisco which had sent a fieldworker to Formosa, hold the opinion that the Tschin-Huan comprise various tribes.

10: Schumacher--225 [3] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 622, 628 Chin-hoan

In order to settle their disputes the Tschin-Huan elect chiefs and otherwise they maintain a continuous feud.

10: Schumacher--225 [4] T-1 (ca. 1896) 1898 Formosans
116, 596, 621

The Chinese live very much secluded by families, even in large towns, and have contact with other family units only through the official mediation of the head of each group concerned.

10: Schumacher--225 [5] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 342, 352 Chin-hoan

The dwellings of the inhabitants of the mountains are made of lattice frames and have either thatched or shingle roofs. In many instances they display a coating of mud plaster both on the inside and outside. The ground plan of every house contains three equally large rooms without window openings; they are connected by means of hanging doors. Along the rear walls raised sleeping benches are arranged in accordance with the Chinese pattern. The center room ordinarily contains a table with high chairs. Simple pottery of burnt clay can be seen standing on shelves and on the floors.

10: Schumacher--225 [6] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 342, 252, 354, 251 Chin-hoan

The third room [MC: of the Tschin-Huan dwelling] is almost completely dark and is used for the storage of products of the fields and the entrance section is used as a fireplace. Otherwise it is likely that meals were prepared over open fires, in earthenware pans made by the inhabitants, or iron pots that must have been introduced from the outside.

10: Schumacher--225 [7] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 133, 311

Hitherto scholars have started with the assumption that the entire eastern coast of Formosa was occupied by a single mountain chain. This is by no means the case, but a large and fertile plain stretches between the two parallel mountain ranges in the east of the island, and sugar-cane and rice are grown on the inner one of the two chains which has been cleared for this purpose.

10: Schumacher--225 [8] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 241, 314, 438 Chin-hoan

The inhabitants of the mountains subsist mainly by agriculture, hunting, the sale of camphor wood and the trade of camphor. The latter is obtained by means of extraction with water and a very simple system of distillation.

10: Schumacher--225 [9] T-1 (ca. 1896) 1898 Formosans
116, 228

Along the western coast of Formosa, thousands of Chinese make a living by ocean fishing and the cultivation of oysters. The cultivation of oysters is carried on partly on rocks and partly on bamboo poles laid out. It is said that the income is almost a [illegible]llion Mark annually.

10: Schumacher--225 [10] T-1 (ca. 1896) 1898 Formosans
116, 135, 214, 823

In the north of Formosa, sulphur is cut in large blocks. In the center of the island (Kagee) considerable coal seams are found and the same is true of the northern region around Kelung. The Su-ao river carried gold dust together with rubble as it flows down from the mountains, but the Chinese do not attribute special importance to the gold of the stream. Their interest in camphor is much greater.

10: Schumacher--225 [11] T-1 (ca. 1896) 1898 Formosans
116, 433

An English company offered the Japanese only 16 million Mark for the camphor monopoly exclusive of the high export duties; in reality the export value of the camphor forests, according to findings of the Chinese custom authorities, amounts to an export value of 1,200,000 Mark annually or represents a capital value of 25 million Mark.

10: Schumacher--225 [12] T-1 (ca. 1896) 1898 Formosans
116, 175, 652

Ten months after completion of the conquest of Formosa, the Japanese colonial budget showed an income of sixteen million Mark from the island at a time when no capital whatsoever had been invested... There can be no doubt that within the period of ten months mentioned Japan extended its control quite arbitrarily; and the mere sum of 16 million Mark that was added to the Japanese treasury proves the inexhaustible wealth of Formosa.

10: Schumacher--225 [13] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 177, 361 Chin-hoan

At first I was unable to judge from the type of settlements of the inhabitants of the mountains as to whether they were imitating the Chinese of the lowland plain, or whether their ancestors had known this type of settlement before they came to Formosa.

The great advantages which this form of settlement offers to the individual families are based on such thoughtful principles that they cannot have been discovered by people who were just turning to agriculture.

10: Schumacher--225-226 T-1 (ca. 1896) 1898 Formosan Aborigines
116, 174, 311 Chin-hoan

The scattered location of the cultivated fields belonging to one family insures them to the largest possible degree against damages from rains, insects, plagues, storms which might affect single units of cultivated land.

Furthermore we know that all groups of people who on their own instigation changed to agriculture began work on a few small plots which happened to be most conveniently at hand for them. [226] Our ethnographers can tell us with complete certainty from the traces of all the demarkation lines whether settled tribes or nomads were the first to cultivate the land.

I follow their ideas when I come to the conclusion that the inhabitants of the mountains cannot be the indigenous population of Formosa. Nowadays this idea seems to be gaining some ground with the Japanese explorers and scholars in whose background the Europeans function as counselors and directing forces.

10: Schumacher--226 T-1 (ca. 1896) 1898 Formosan Aborigines
116, 171, 174, 301 Chin-hoan

If we believe that the inhabitants of the mountains came to Formosa at a later time and were driven to the mountains by the natives they met at the time of their arrival, Chinese fanaticism would not have allowed them time to familiarize themselves with the Chinese system of economy. Both Chinese and Japanese priests following the field armies have unanimously assured me, after long questioning, that the Tschin-Huan have continued to be Brahmans until this very day and I now face the question of whether they are of Malayan or Mongolian descent. The mere fact that their hair-dress is different from that of the Chinese does not prove that they are not "Chinese". For the pigtail is not exclusively a Chinese characteristic.

Their dress, their houses and their manner of living is different from that of the Chinese; together with the fact that they are Brahmans, this may lead us to the assumption that at some time in the past they immigrated from India. But after all were not some of the Chinese Brahmans before the time of Buddha?

10: Schumacher--226 [2] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 174 Chin-hoan

The inhabitants of the mountains lived for centuries by themselves, completely secluded, because they did not share the material interests of the Chinese and because the climatic differences between the mountains and the lowland plains are so great that frequent changes proved truly detrimental and thus made contacts practically impossible.

10: Schumacher--226 [3] T-1 (ca. 1896) 1898 Formosans
116, 171, 174, 412

Several of the objects which I brought down from the mountains were thought to be old Chinese things even by some of the Chinese priests. I would not let the Chinese lie to me under any circumstances and asked them for proof of their statements, and they showed me pictures of objects on old temple decorations which showed definite similarity with my originals in spite of the fact that they had been strongly affected by the weather. I am referring to bamboo rakes, a wooden sprinkler which can be used simultaneously on two rows of plants in the field, and a device for lifting a primitive lamp of clay.

Is it not possible that the inhabitants of the mountains have, in the course of time, forgotten the things that keep them from being stamped as completely Chinese in the same manner as they adopted the elements which they have in common with the Chinese? In short, why would it not be possible that these inhabitants of the mountains be Chinese who have emigrated from the Chinese mainland and come to Formosa, where they found a new homeland and settled in the fresh air of the mountains.

10: Schumacher--226 [4] T-1 (ca. 1896) 1898 Formosans
116, 314

Many mountain spurs branch off the large inner mountain chain in the direction of the ocean. At one time all these heights were covered with camphor forests which were mostly exploited by the Chinese but partly by the Europeans. Today camphor is found only in the principal mountains and the increased demand for this valuable article of trade has induced the Chinese to search for new camphor forests.

10: Schumacher--226 [5] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 266, 582, 609, 721 Chin-hoan

The Chinese who thus penetrated into the mountain regions [MC: in search of camphor] may have met the earlier inhabitants of these areas as enemies, and from the initial disputes, all kinds of other difficulties could develop. It is reported, for instance, that the inhabitants of the mountains, who are naturally shy, obtain courage by catching Chinese persons and eating their livers raw. Furthermore, it is said that under penalty of death, the aborigines are forbidden to marry before they have killed seven Chinese and have proof of their deaths.

10: Schumacher--226 [6] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 411, 531, 285 Chin-hoan

A European had a good deal to tell from the time he spent in the mountains of Formosa. He mentioned fine matting, surprisingly beautiful carved work, gold ingots, and poisoned arrows.

10: Schumacher--226 [7] T-1 (ca. 1896) 1898 Formosan Aborigines
116, 273, 721 Chin-hoan

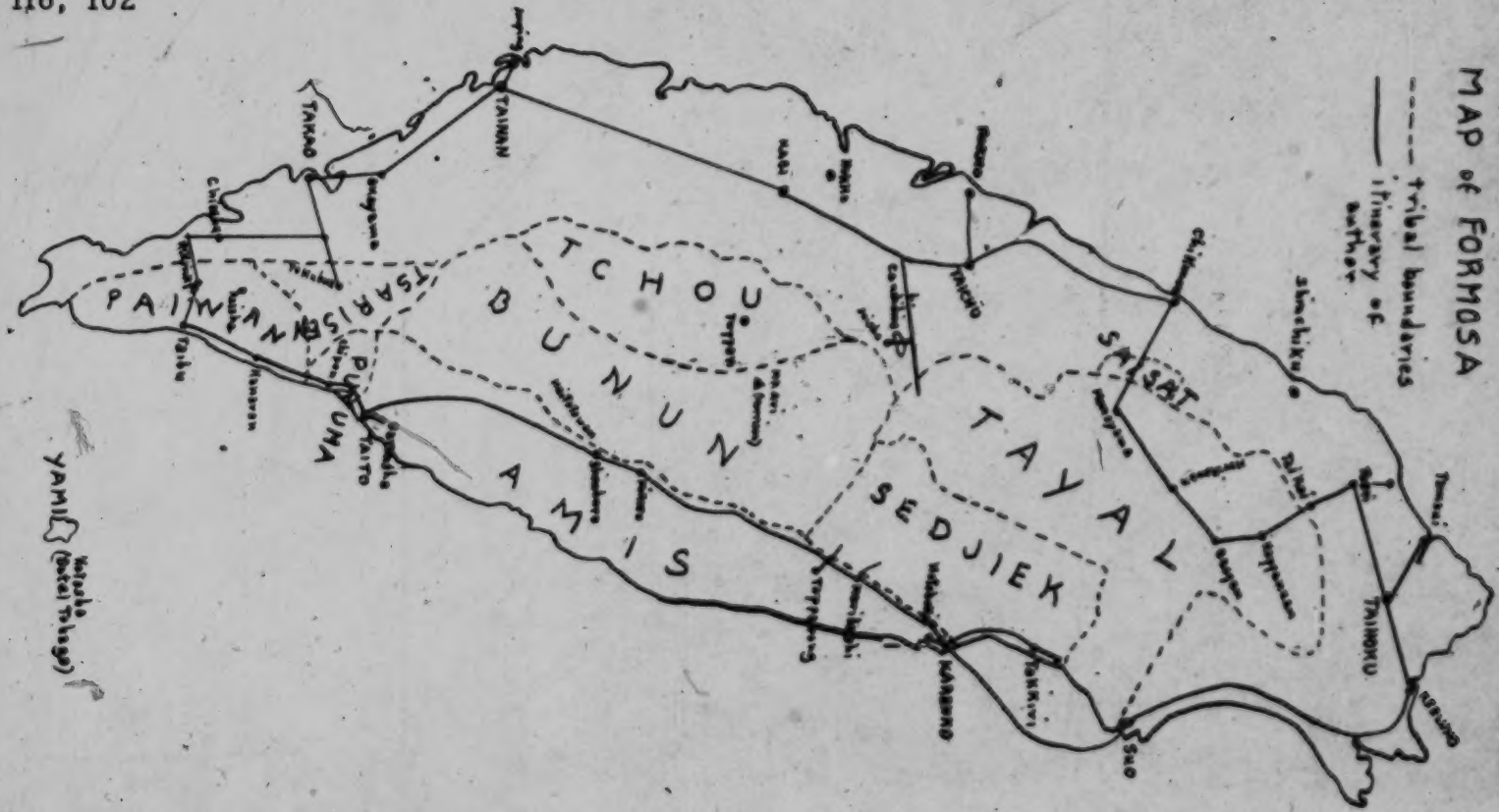
Another man who had spent quite some time in the mountains of Formosa told me that he and two of the chiefs had drunk to one another. On that occasion he had to take off some of his clothes and his back was rubbed with mutton fat, while he and his co-drinkers, and the others present, drank some intoxicating beverage out of the crania of some Chinese. I myself can only repeat that the inhabitants of the mountains appeared to me as peaceful and almost shy people and that I had no occasion whatsoever to get a glance of anything which would have incited the most vivid imagination to present such confusing statements.

10: Schumacher--226 [8] T-1 (ca. 1896) 1898 Formosans
116, 131, 133

Strategically Formosa is highly significant because from here insuperable obstacles may be imposed which would prevent passage through the Formosa canal.

On the other hand, Formosa does not have a single port which might serve as a base for maritime operations and which could shelter modern war-ships. Instead it has good natural fortifications which in the north protect the entrance to Kelung and Tamsui and, in the south, that to Takao. In addition the Dutch and the French have built forts in Amping. In case of war it might thus be possible to maintain traffic between Formosa and the Pescadores, or at least it will be facilitated to a great degree. And the Pescadores have a harbor which we should be inclined to judge one of the best and safest of the world.

11: Haguenauer--facing 25 T-3 (no date) 1929 Formosan Aborigines
116, 102



11: Haguenauer--26 T-3 (no date) 1929 Formosans
116, 361

Taihoku is the capital, and it is located about 25 kilometers from the harbor of Keelung. Taihoku is a modern city and a very clean one; it reminds you of the tropics, for it has palm trees and houses with arcades which are intended to protect the passers by from the burning rays of the sun. The Japanese sections are in the center of the city around the Government buildings and the Ethnographic Museum. The latter raises its imposing structure in the midst of a lovely park.

11: Haguenauer--26-27 T-3 (no date) 1929 Formosans
116, 361

The Chinese quarters Daitodai and Manka [MC: of Taihoku, the capital] are not nearly so neat, but they are very picturesque. As you visit them you can observe the life of the corporations, have fun deciphering the pompous meaning of the characters which compose the signs in front of the shops, and marvel at the things which a Chinese stomach [27] is capable of digesting. The street is full of people, the shops do a thriving business, and the temples are darkened by the fumes of the little sticks of incense, which burn on the altars of the gods.

11: Haguenauer--27 T-3 (no date) 1929 Formosans
116, 787

A Formosan woman scarcely ever passes the altars of the gods without stopping to ask for advice; she tosses two little crescent-shaped pieces of wood in the air, lets them fall and reads the horoscope. Then she prays, throws the pieces of wood and burns incense or "money for the gods" until the fates tell her something pleasant. All this is done to the accompaniment of the little firecrackers, which are the favorite form of popular amusement in Formosa, as they are in China.

11: Haguenauer--27 [2] T-3 (no date) 1929 Formosans
116, 545

If you leave the large arteries, [MC: of Taihoku] you hear the din of the restaurants and small theatres, and occasionally, in a side street, the monotonous chant of a singer who is accompanying herself on the p'i-pa.

The land around Taihoku is fertile. Our first excursion took us to Tamsui, and the landscape is so pretty that it is a trip well worth taking. Although the little city has declined in importance, it has an historic interest, for it was there that the Spaniards erected the Fort of the Holy Trinity in 1629, but the Dutch wrested it from them in 1641. They reconstructed the little fortress, making the walls eight feet thick and so strong that they withstood the shells which were fired by the battleships of Admiral Courbet in 1884. The "fort" contains the English consular offices today, and its roof is used as an observation platform for tourists. On the way back you visit the thermal spring of Hokuto, which is a kind of little Enghien for officials.

11: Haguenauer--27 [4] T-3 (no date) 1929 Formosans
116, 484

The railroad running south to Takao from Tansui passes through Itabashi. Tourists usually stop at this station to go visit the Chinese garden of Li Pen-yuan.

11: Haguenauer--28-29 T-3 (no date) 1929 Formosan Aborigines
116, 174, 177, 563

The center of Formosa is occupied by a broad chain of mountains. At the beginning the populations who reside here may have lived in the plain, but successive waves of invaders have driven them back gradually to the high plateaus. Today the aborigines, who refuse to have any contact with civilization, are the only inhabitants of the mountains. The others, who have abandoned their ancestral customs and language to adopt those of Formosa, are completely submerged among the Chinese; they are called "jukuban", [29] meaning those who have ripened by contact with civilization, and this distinguishes them from the real savages, the seiban, who are raw or green.

11: Haguenauer--29 T-3 (no date) 1929 Formosan Aborigines
116, 101, 161, 657

The seiban [MC: completely unacculturated natives] are divided into eight large tribes: the Tayal, Saisat, Tchou, Bunun, Paiwan, Puyuma, Amis and the Yami. The total population is only 134,000, and that is very small for such a large territory.*

* The map [MC: see category 102 page: facing 25] shows the location of these eight tribes. The Tayal are divided into the Tayal and the Sedjiek. The Tsarisen speak a language which is similar to that of the Paiwân.

The tribes that I have just named are distinguished by somatological characteristics, language, social organization and customs. They have nothing in common except the system of administration, to which they were subjected by the Japanese.

11: Haguenauer--29 [2]T-3 (no date) 1929 Formosan Aborigines
116, 628, 657, 728

The pacification [MC: of the tribes living in the mountains] came to an end in 1915, for most of the villages had surrendered at that time. Since then the savage zone has been tranquil, and head hunting will soon be just a memory. The electric current no longer runs through the wire barrier which was set up to keep the aborigines from entering civilized territory. And you can cross the island in two places at least. However, it is wise not to go too far from the lookouts elsewhere, for there are still quarrels between some of the tribes at rather frequent intervals.

11: Haguenauer--29 -30 T-3 (no date) 1929 Formosan Aborigines
116, 486, 625

How do you travel in the savage territory? You have to have a safe-conduct, which is supplied by the Chief of Police who is in charge of the savages. With this passport you can travel under escort along the trails which skirt [30] the "savage zone". You go from post to post. These are generally placed four or five kilometers apart, and they are guarded by Japanese policemen, assisted by natives, who can speak enough Japanese so that they can act as interpreters. Larger posts are placed at strategic spots. And there you find a large exchange post, a school and workshops.

11: Haguenauer--30 T-3 (no date) 1929 Formosan Aborigines
116, 437, 625

The policeman of the savage zone has an entirely different task than his collegues of the metropolis; he is essentially a director of public works, a professor of agriculture, a teacher and a councillor. The policeman even engages in commerce, but it is of a very special kind, for he does not deal in money; there is a fixed rate for bartered products, and according to that he takes the savage goods and exchanges them for sabre blades, knives, pieces of glass, sauce pans, thread, matches, and alcohol.

11: Haguenauer--30-31 T-3 (no date) 1929 Formosan Aborigines
116, 871, 887, 177.65 Japanese
636.65

In spite of what other people may have said, the Japanese are treating the savages in a very kind fashion today. The civilizing work is proceeding methodically and patiently. Most of the savages who are over fifteen have not as yet understood the usefulness of the teaching, however, and only the little ones are beginning to become Japanese. The elders get bored, live an idle existence, and die of illness or alcohol. Their only delight is to borrow a gun from the police station occasionally, and to shoot three or four bullets at the wild boars or the deer. The bow and arrow are enough to kill birds. However, there are fortunately some exceptions, and the teachers have obtained some very brilliant results. I talked Japanese to some savages who had become thoroughly Japanese; they had diplomas from a normal school, and were working as assistants to directors of the posts or teachers. I repeat that the [31] Japanese are treating the natives in a very humanitarian manner. And this should be more successful than in other places, for here in these poor regions there is nothing to attract the large commercial companies which are all too often the curse of colonies. The gentleness of the system may succeed in saving a part of the native population, possibly the Amis. The savages who will not be able to adapt themselves will probably disappear in the near future.

11: Haguenauer--31-32 T-3 (no date) 1929 Formosan Aborigines
116, 484

The best way of entering the Tayal territory is to take the railroad as far as Toen, and from there a country bus carries you to Taikei. The "car" is rather rickety, and it is full of chattering Formosan women. They put their hands up to protect their chignons, which are adorned with prized gold hairpins. Everyone is squeezed and tossed around. After an hour's ride we reached Taikei which is a little city set in a picturesque fashion on a hillside beside a broad torrent. You have to take a lorry to go on to Kappanzan. [AN: Kakupanzan] This vehicle consists of a rattan chair, which is perched on a heavy mobile car, that runs along a narrow railroad track. The trip lasts for four hours, and yet the two Chinese who push it scarcely ever stop to rest. At first the track rises as it skirts the western slope of the mountain. Then you reach a pass which is at an altitude of about 800 meters, and from it you can see the whole valley. We stop to rest for a time, and then start down the eastern slope....The almost naked coolies [32] give a good push to the car and then jump up on it. It goes careening down the side, making a noise like that of an express train, and this is very surprising for such a small vehicle. ...There are dangers, for the track has sudden curves, in places it crosses suspended bridges, and I seriously doubt whether the primitive brake would keep you from turning over in case the car left the tracks.

Finally we reach Kappanzan,[AN: Kakupanzan] which is the first large lookout post in the region....

11: Haguenauer--32 T-3 (no date) 1929 Formosan Aborigines
116, 177

The aborigines at Kappanzan[AN: Kakupanzan] have been under the influence of civilization for a long time....

We continue our trip to Gaogan, which is another large post that is twenty-five kilometers further on; and these twenty-five kilometers have to be covered on foot. A "savage" balances our light baggage on the two ends of a bamboo, places it on his shoulders, and takes the lead. We follow on foot, accompanied by an armed guard who is to take us to the neighboring post. The landscape becomes wilder as the trail ascends the mountain flank. And looking down at our feet we glimpse the torrent which we have been following ever since we left Taikei. It flows at the bottom of a narrow and winding gorge; there is little water at this season, and it is just a narrow green ribbon, which slips between the masses of rock. After five long hours we reach Gaogan. The post dominates the torrent which makes a broad curve at this point. The village, consisting of several huts, is on the mountain slope.

1: Haguenauer--32 [3] T-3 (no date) 1929

116, 721

Formosan Aborigines
Atayal

The Tayal are considered the most warlike people of the island.

11: Haguenauer--32-33 T-3 (no date) 1929 Formosan Aborigines
116, 301 Atayal

The Tayal are not nearly so fond of adornment as their [33] neighbors in the south.

11: Haguenauer--33 T-3 (no date) 1929 Formosan Aborigines
116, 142 Atayal

The Tayal are well-built, and quite slender. The eyes have nothing Mongolian about them, while the brown skin reminds you of that of the Malays. Physical beauty is rare, but some of the women are attractive.

11: Haguenauer--33 [2] T-3 (no date) 1929 Formosan Aborigines
116, 192, 194, 576 Atayal

The relations between the Tayal are not governed by a ceremonious code of etiquette. When one Tayal meets another, he does not bother about making any complicated salutations. The Tayal language does not have any polite expressions, or any honorific prefixes, and the intimate form of address is the only one known. "Musa su ino pe" (Where are you going?) replaces our Good Day. The pronunciation is energetic and harsh: ao (yes), yats (no), skuriek (man), reliax (mountain), bauniax (arrow), alakè (child), kesia (water), etc.

11: Haguenauer--33 [3] T-3 (no date) 1929 Formosan Aborigines
116, 342, 352 Atayal

The Tayal house is built of wood, and bamboo is used whenever possible; its roof is shaped like ours. The interior has just one rectangular room, and every corner contains a wattling bed with a cover.

11: Haguenauer--33 [4] T-3 (no date) 1929 Formosan Aborigines
116, 591 A tayal

The occupants of a Tayal house are not very numerous; they consist of just one family, according to our meaning of the term. Occasionally the parents live with a married couple, but that is not an obligatory rule. And you do not find several related couples living together, as is the case among the Tchou.

11: Haguenauer--33-34 T-3 (no date) 1929 Formosan Aborigines
116, 462, 562 Atayal

The Tayal woman works very hard. It is her task to go get the wood and the water, to cultivate the millet and sweet potatoes for the household; and it is also she who weaves the clothing. The husband fishes or goes hunting. He takes part in war expeditions and helps guard the village. However, the woman is not a slave, [34] and she is her husband's equal.

11: Haguenauer--34 T-3 (no date) 1929 Formosan Aborigines
116, 595, 837 Atayal

Polygamy among the Tayal is forbidden, and the husband must be faithful to his wife, and protect her.

11: Haguenauer--34 [2] T-3 (no date) 1929 Formosan Aborigines
116, 583, 584 Atayal

A Tayal marriage is arranged in this way: the girl is demanded by the man's family through an intermediary, who is usually the village chief. If she accepts, the man's family sends the girl's family some gifts, which are intended to serve as compensation to the parents for losing one member of the household. The father of the bride-to-be is anxious that these should be as valuable and as numerous as possible.

11: Haguenauer--34 [3] T-3 (no date) 1929 Formosan Aborigines
116, 585 Atayal

After the gifts [MC: by way of bride price] have been delivered, there is a festival in the house of the future husband. And during this feast the two families exchange a solemn marriage promise. The fiancé offers wine to all the close relatives of his wife, and the men of the two families form a real alliance. The girl's parents spend two or three days in the fiancé's house and then go home to make ready for the departure of their daughter. In certain clans the marriage vow involves an exchange of very significant gifts: the two families exchange implements of husbandry, food and tools for weaving.

11: Haguenauer--34 [4] T-3 (no date) 1929 Formosan Aborigines
116, 585 Atayal

The Tayal husband goes to get his wife on the appointed day, and brings her back to the house which he has built. Several days after the marriage, the couple pays a visit to the wife's parents, but this is not a definite leave-taking, as it is in China. Among the Tayal the wife's family keeps the right to protect her.

11: Haguenauer--34-35 T-3 (no date) 1929 Formosan Aborigines
116, 586, 627, 837 Atayal

If a Tayal wife is mistreated by her husband's family [35] she can go home to her parents. But this is a very serious act, for it entails not only a divorce, but a rupture between the two families. It is a case of vendetta, and the only way of avoiding a reprisal on the part of the wife's family is by paying an indemnity. Usually an unhappy wife just asks a third person to intervene, it may be the village chief, or some one else. If the husband is at fault, he is scolded. If the husband is guilty of adultery, the wife has the right to leave the house, and the husband cannot ask her family to return the sum that he paid in order to marry her. If the wife is guilty, her spouse has the right to repudiate her and to ask for the restoration of this sum. When the divorce proceedings are over, each family must kill a pig and distribute the pieces among the other families in the village. A Tayal woman who has been repudiated never goes back to her family; she has to marry again or live alone.

11: Haguenauer--35 T-3 (no date) 1929 Formosan Aborigines
116, 591 Atayal

There is another form of marriage among the Tayal in which the husband enters his wife's family, but this is only done in cases where the wife's family is short of men.

11: Haguenauer--35 [2] T-3 (no date) 1929 Formosan Aborigines
116, 845 Atayal

The Tayal are loyal to each other, and they are also good parents; however, they kill all twins for they believe that they bring bad luck.

11: Haguenauer--35 [3] T-3 (no date) 1929 Formosan Aborigines
116, 553, 844, 854 Atayal

The new-born Tayal baby is bathed at once by an elderly women, his grandmother if possible. Then he is named two weeks after birth. The Tayal baby stays with his mother until he can walk. Until that time she carries him wherever she goes, and he rides astride on her hip, with his mouth at the level of her breast.

11: Haguenauer--35 [4] T-3 (no date) 1929 Formosan Aborigines
116, 855 Atayal

When the Tayal child is about five years old, he begins to wander around the house, but he is still practically naked.

11: Haguenauer--36 T-3 (no date) 1929 Formosan Aborigines
116, 304, 857, 864 Atayal

When a Tayal child is five, his forehead is tattooed with the distinctive mark which is worn by all the Tayal. When a boy is seven, he begins to play with a bow. He sleeps with his parents until he is ten years old, but after that he has a place in the children's bed. Little girls never sleep beside the boys, for there is a very strict taboo which keeps brothers away from their sisters.

11: Haguenauer--36 [2] T-3 (no date) 1929 Formosan Aborigines
116, 883 Atayal

When Tayal boys are fifteen, they follow their fathers on hunting and fishing expeditions. They learn to use the bow and arrow, to set traps, to fish with the fish-gig, to handle the cutlass and sabre and to fight. Little girls follow the women to the fields, help in the housework and learn to weave.

11: Haguenauer--36 [3] T-3 (no date) 1929 Formosan Aborigines
116, 286, 304, 554, 581 Atayal

The Tayal woman prides herself on her knowledge of weaving, for it is only when she is a past mistress in the art that she can be tattooed on her cheeks and around her lips with the marks which will attract the young men to her.

11: Haguenauer--36 [4] T-3 (no date) 1929 Formosan Aborigines
116, 286, 301, 554. 721 Atayal

Custom decrees that a girl should wear a number of bracelets of brass wire which corresponds to the designs that she can weave. If a man wears these bracelets, they have a totally different meaning; if he has them on just one arm, they are simply ornaments, while if he wears them on both, it shows that he has taken part in a head hunting expedition.

11: Haguenauer--36 [5] T-3 (no date) 1929 Formosan Aborigines
116, 304, 554 Atayal

By looking at the face of the person to whom you are talking, you can learn much about his rank as a warrior; for the lucky hero has some additional tattooing under his lower lip.

A Tayal never went out alone in quest of a head; he was always accompanied. The little group did not start until it had consulted the omens; if one of the members of the expedition had had a bad dream, or if the augural bird, the silliok, had sung in the wrong way, the warriors did not leave the village. And even if all the signs were favorable, they did not venture very far. They built a little hut at the entrance to the forest, and arranged their weapons and food stuffs there. Then they purified their arms and provisions by sprinkling them with fresh water. When this was done, the head of the expedition purified himself, and then all of his companions in the same way. Then everyone went to bed. The next morning they examined the dreams and portents again, especially the bird songs. The hunt did not begin unless all of the signs were propitious. As you see, the change from ordinary life to the hunt was made progressively and in a prudent fashion. It was a matter of getting the support of the ancestors' spirits. In the village all taboos were enforced while the hunters were absent. The women did not weave, all useless activities were avoided, and the fires which were lighted in each house before the departures of the warriors were kept burning. The men walked until they found a good spot to lay a trap. The capture of a head was not an heroic combat, for the unfortunate victim was taken by surprise. One warrior shot, while the others rushed ahead to finish him off with lance thrusts. When the victim was prostrate, the warrior for whom the hunt had been arranged [38] drew his sabre and cut off the head of the dying

man at the base of the skull. The head was taken back in a special kind of net, or else it was fastened to a hook that was inserted into the scalp.

11: Haguenauer--38 T-3 (no date) 1929 Formosan Aborigines
116, 727 Atayal

The return[MC: of a headhunting party] to the village was accomplished as progressively as the departure. The warriors stopped at a certain distance from the houses and signaled their arrival by shouts and gunshots; the shouts betokened the number of captured heads, and there were as many gunshots as they had taken guns. But this ritual was only observed if the expedition had been crowned with success. If it failed, the warriors avoided any kind of noise, and they did not return to the village until nightfall; when they got back, they laid their weapons and clothing at the doors of their houses for they were not supposed to cross the threshold until they had disrobed completely. This precaution was taken to keep bad luck from entering. The arms were purified with water the next day.

11: Haguenauer--38 [2] T-3 (no date) 1929 Formosan Aborigines
116, 727, 766 Atayal

One important thing to note is that if a member of the [MC: headhunting] expedition was killed during the hunt, the head was not brought back to the village. It was abandoned with the victim's body in the forest. The reason for this was that the aborigines believed that the head had been taken against the wish of the spirits, and that consequently, it could not be offered to them.

Cries of joy welcomed the return of the fortunate warriors. The villagers went out to greet them, and accompanied them to the house of the murderer, who was the hero of the day. The village chief and the members of the expedition made a circle around the head. They apologized to it, and offered it wine. The head was placed above a receptacle, the jaws were opened, and it was given millet wine. When this fell into the receptacle, it was passed [39] around in a circle, and all the heroes drank it. But it was not drunk in any ordinary way; the warriors took it two by two, and from the same cup, so this rite was really like a vow, in which they pledged to fight together like brothers. Meanwhile, the inhabitants were almost delirious. The women had brought millet wine and food; a large feast was held, and the spirit of the dead was invited to share in it. They begged it to drink, feast, and to invite the spirits of its relatives to the party. This banquet was followed by a dance, in which the women participated as well as the men. Everyone joined hands, and made a big circle, then the dance consisted of turning around and singing. They circled three times from left to right, then three times from right to left, etc. The festival lasted until the supply of food was exhausted.

11: Haguenauer--39 T-3 (no date) 1929 Formosan Aborigines
116, 281, 411, 531, 727 Atayal

Meanwhile, [MC: during the ceremonies following a successful headhunting expedition] the head had been boiled, and the skin of the scalp and hair were removed. These were not discarded, for they became the property of the successful hunter, and he decorated his weapons with them.

The clean skull was placed in the midst of a collection of them which the Tayal kept on a special set of shelves that was erected a little outside each village. The new addition was covered with a little roof of leaves, and offerings of millet and millet wine were placed in front of it. The village chief and the members of the expedition gathered in front of the shelves and summoned the spirit of the victim. They asked it to descend by a "spirit ladder" which was placed at one of the ends of the shelves; it consisted of a short bamboo stem to which skeins of hemp had been fastened at various intervals to serve as rungs. When the spirit had come down, they invited it to eat and drink with them. And then they requested it to be kind to them, and to invite [40] the spirits of the members of its family to come and join it. In this way the warriors ensured the success of the next expedition.

So we see that the capture of a head was not an act of savagery, nor was it purely a matter of individual glorification. It is true that the successful hunter had a right to be tattooed as a warrior, or if he already had this distinction, he might give his head to a younger man so that the latter might have this signal honor. But head hunting was essentially an enterprise which was imbued with a very special kind of religious meaning. It was done with the approbation of the souls of the ancestors, and it was an affair which concerned the whole community.

11: Haguenauer--40 [2] T-3 (no date) 1929 Formosan Aborigines
116, 241, 695, 721, 769 Atayal

Head hunting was such a sacred practice that it could only be carried on under certain circumstances:

1. to please the spirits of the departed ancestors, and to ensure their protection;
2. to be able to enter the abode of the souls after death;
3. so that the community would have a good harvest;
4. to determine the innocence of an accused man, or to decide which one of two adversaries was right; the spirits will permit the innocent man to get a head while the guilty person will not succeed.

The Tayal have several legends which explain the origin of this custom. [MC: of head-hunting] Although they vary, they are all fundamentally the same: it seems that two clans were created by the original ancestor, and that on one occasion one of them was numerically inferior to the other. Accordingly it demanded the right of killing as many members of the other clan as would be required in order to reestablish the [41] original parity. The head of the clan which had the numerical superiority recognized the justice of this demand.

This legend is the best possible illustration of the social importance of head hunting. The native considers that it is a sacred command, and he believes that he must conquer as many spirits as possible in order to assure numerical superiority and the prosperity of his clan.

11: Haguenauer--41 T-3 (no date) 1929 Formosan Aborigines
116, 774, 775 Atayal

The Tayal believe that there is no complete separation between the worlds of the living and the dead. For the Formosan natives, the living man is characterized by the fact that he shelters one or several spirits in his body. But these spirits have a distinct life, and they may leave the body for a time or permanently. In the latter instance the body decays, and the individual dies. The spirit (or spirits) continues to live at liberty until it reincarnates itself.

11: Haguenauer--41-42 T-3 (no date) 1929 Formosan Aborigines
116, 602, 775, 842 Atayal

The Tayals' ideas about birth are no more scientific than their thoughts concerning death. However surprising this may seem, they do not look upon a child as the simple result of conjugal relations, for they believe that birth can only be achieved when a soul is reincarnated in the body of a woman in the tribe. Therefore the spirits are closely associated with the existence of the living. The community and the clan are literally a group of souls some of which are imprisoned in bodies, while others are free, but all of them are serving the clan. [42] The community increases in strength in proportion to the number of the souls who are interested in its fate.

11: Haguenauer--42 T-3 (no date) 1929 Formosan Aborigines
116, 602, 609, 721, 775 Atayal

The victim of a head hunt was always a stranger, and they cut off his head to liberate his soul. By apologizing to it and offering it wine and millet, the soul was enslaved so that it would serve the clan. And this conquered soul added one more unit to the community, which now had an additional voice in the kingdom of the spirits. This reasoning is also applied to animals. The savage collects the skulls of the beasts which he has slain; by doing this he believes that he increases his power over them, and that he ensures good hunting for the future.

11: Haguenauer--42 [2] T-3 (no date) 1929 Formosan Aborigines
116, 181, 186, 577, 609 Atayal

The Tayal race is a very proud one, much more so than you would suspect. It is industrious, but only in so far as the task concerns the whole community. The men are calm, but if they get angry nothing can stop them. An unbounded curiosity and feeling of suspicion with regard to all strangers are two more traits of the Tayal mentality. He has full confidence in his comrades, but as soon as he is with people of another tribe, he becomes suspicious and reserved. The Tayal have some fine virtues too; they have a highly developed sense of honor, are not greedy, do not steal and rarely tell lies.

11: Haguenauer--42-43 T-3 (no date) 1929 Formosan Aborigines
116, 212, 802 Atayal

The Tayal are practically uncivilized. The Tayal do not have any means of writing, and when they want to do some arithmetic, they use strings of knotted straw or little sticks; [43] addition, subtraction, multiplication and division are done by means of little sticks, which are laid on the ground.

11: Haguenauer--43 T-3 (no date) 1929 Formosan Aborigines
116, 821, 825 Atayal

The Tayal do not know how to reckon the lunar months, and only the regular recurrence of certain natural phenomena reminds them that there are certain tasks to perform. For example, the appearance of buds and the frequent thunder storms in March show them that it is time to sow. They recognize most of the birds by their cry, but do not perceive the beauty of their songs.

11: Haguenauer--43 [2] T-3 (no date) 1929 Formosan Aborigines
116, 533 Atayal

The Tayal men are like us in feeling that they have to laugh and sing. They sing while they are working, and you cannot walk through the mountains without hearing the voices of women in the fields, or of little boys who are gathering reeds in the mountains. Their songs are always improvisations. I discovered that after I had made several unfortunate attempts to transcribe them. It was impossible to make one of the savages repeat the same thing. He improvises on very simple subjects, such as a hunting incident, or a dinner that he is planning to attend. There are no poetic themes.

11: Haguenauer--43-44 T-3 (no date) 1929 Formosan Aborigines
116, 156, 183 Atayal

The savage does not reason to any great extent, although he shows initiative during a hunt or a battle. But his other actions are governed by tradition, or by the command of the village chieftain. The science of the Tayal is purely empirical, and it is limited to a few observations concerning atmospheric phenomena, the properties of certain plants and the habits of the wild animals. If the intellectual life of the Tayal is on such a low plane, it is not because they are entirely absorbed by the necessities of their vegetative life; it is rather that they do not see any need for thinking. If you ask a Tayal a question, he will give you the traditional [44] answer which he got from his ancestors. He never tries to explain anything.

11: Haguenauer--44 T-3 (no date) 1929 Formosan Aborigines
116, 773 Atayal

[MC: an Atayal myth] In the olden days there was no night. It was always light and very hot, so the dry bushes were dying. The men did not have any time to sleep, so the ancestors had a council and decided to shoot at the sun, so that it would not be so powerful. Two young warriors set out on the expedition. They took grains of millet for food, and they placed them in bamboo tubes which served as earrings. While they were travelling, they planted orange trees and wild peach trees. After several score years full of adventures, they reached the end of the earth, where the vault of the heavens joins the flat disk upon which we dwell. One of the warriors had a sunstroke, and he died, but the other one managed to shoot an arrow right into the solar disk. Something emerged from the wound, and later it was called the moon.

11: Haguenauer--44 [2] T-3 (no date) 1929 Formosan Aborigines
116, 773, 787, 825 Atayal

[MC: a Tayal myth] There was a very large stone on the seashore in a place called Binnox-bayan. One day the crow and the silliok met on this stone, and said: "The one who can move this stone will have the power to know what the spirits want, and he shall be their herald". The crow tried, but could not move the stone while the silliok did it without any difficulty. The men who saw this were very astonished and they praised the silliok . Then the bird said to them:" From now on, you must listen to my cry. When I cry at your right, it will be a good portent, and you will have good hunting. If I cry while I am crossing the road that you are taking, do not go on the hunt. And if I cry first at the right and then at the left, it will also be a bad omen. Do not forget what I have just told you."

11: Haguenauer--45 T-3 (no date) 1929 Formosan Aborigines
H6, 224, 773 Atayal

The Tayal stories explain everything, the origin of the animals and that of the various deeds of men. Here is the explanation of the hunt:

Formerly men did not need to hunt, and they simply called the animals. The latter approached, and permitted the men to cut a slice of meat off their backs. But one day a poor fool had the idea of killing an animal, and after that the beasts were suspicious, and so they refused to let men gash them. Ever since that time people have had to hunt.

11: Haguenauer--45-46 T-3 (no date) 1929 Formosan Aborigines
116, 775 Atayal

The soul is lodged in a part of the body, generally in the pupil of the eye, or in the shoulder, but at death it leaves the body. The corpse is buried in the house between the beds. The spirit flies west in the direction of the abode of the souls. The road leading there is a long and dangerous one, and on the way you have to cross a broad pond. It is true that there is a bridge, the rainbow (the "bridge of souls" in Tayal), but not all of the spirits are authorized to [46] cross it. Only those of the warriors who have taken heads and of women who know how to weave nicely are admitted. The other spirits have to make a long detour. The souls of people who died a violent death or who were drowned are never admitted, and they are condemned to wander through the forests. They attack the living, and make them sick, so to get rid of them you have to have recourse to magic remedies. Other mischievous spirits fly over the surface of the swamps; they are the "souls-fire", which are rather like our will-o'-the-wisps. Anyone who sees them will die. We should observe that according to the native belief, the fact that the abode of the dead is a long way away does not prevent these souls from coming back among the living; on the contrary, the aborigines think that the spirits who are attracted by offerings return very rapidly.

12: Garnot--13 G-3 (1884-85) 1894 Formosans
116, 133, 311

While the region near Kelung is very hilly, covered with trees and quite sparsely settled the section around Tamsui is quite different. Red dunes that are overgrown with bushes slope gently down toward the sea and the last mountain spurs give space to large low plains, which are fertilized by the alluvial deposits carried by a number of streams. These broad deep rivers run from one large city to the next and they are dotted with a good many boats. You see fine rice and sugar-cane plantations all through this area.

The mountainous massif between Tamsui and Syauki point and Kelung is clearly delimited by the course of the Tamsui river, which rises east of Kelung in the vicinity of the Sam-Tiao peak. Little is known about the interior of this massif for it has scarcely been explored.

Subterranean forces have been most active in this part of the island. The high ridge running from northeast to southwest between Kimpaoli and Tamsui is an eruptive upheaval which has several volcanoes that are still active; two of them Taitun and Chow-Soan or Vulcan's Peak are over 1.100 meters high.

There are a good many sulphuric springs and some geysers in this region; five of the latter are at the foot of Chow-Soan and you can hear their explosions several miles away. Between Patchina and Kantow [14] a hot river empties into the Tamsui and in some places the water reaches a temperature of almost 100 degrees. There are frequent earthquakes. During the one that occurred on December 18, 1867 the sea withdrew from the harbor of Kelung while parts of Kimpaoli and Patchina were ruined. Tamsui also suffered a great deal from this earthquake which killed several hundred inhabitants of the city. The one on the 25th of September 1881 was also very violent and it lasted over a minute.

12: Garnot--14 G-3 (1884-85) 1894 Formosans
116, 317, 361

There is a regular sulphur industry in the region around Masou and Kimpaoli. The population is very scattered in the interior of the massif but the largest centers are in the low area where the valleys open into broad plains which furnish the Chinese farmers with large fields for cultivation.

12: Garnot--14 [2] G-3 (1884-85) 1894 Formosans
116, 133

Three rather important streams feed the river that empties in the Tamsui estuary. The one coming from the Sam-Tiao peak passes near Kelung, and it is the main outlet from the east. As far as Loan-Loan it is a torrent with rapids here and there, but sampans can navigate the water from this point on. It passes through Niaka, Locktou, Switenka, Sikowdjou and Sikkow; then a mile above Patchina it absorbs the Sintiam and Tokoham rivers which have almost as much water as it does.

12; Garnot--14 [3] G-3 (1884-85) 1894 Formosans
116, 361

Large junks sail up the Tokoham River as far as Menka or Banca, which is a very industrious and productive city of 40,000 inhabitants. The little city of Sintiam gave its name to the river; it is a recent creation several miles above Menka and it lies at the spot where the river ceases to be navigable.

After the three rivers merge the alluvial plain broadens and the population increases rapidly. We come to Patchina and then to Taotutia, which is at the junction of the Tokoham and Sintiam rivers; it is the site of the foreign colony and the largest tea market in the region. A little farther upstream and between the two rivers we find the administrative center of Tai-Pak-Fou. Tokoham is rather far away in the mountainous area but it is the city which gave its name to the third river. Kantou or Kantow which is a little below the junction has become a suburb of Tamsui, the large commercial center of the whole area.

12: Garnot--14-15 G-3 (1884-85) 1894 Formosans
116, 133, 361

The Tamsui harbor is really only the enlarged estuary of the river. [15] It is the port of embarkation for all the Menka products and it has a population of 70,000. The entrance is blocked by a sandbar just two meters below the surface but as the tide rises from 2.10 to 2.60 meters ships that draw an average amount of water can cross it daily. Mountains rising to a height of 500 to 700 meters border the entrance to the estuary, which is marked by a beacon at the end of a rocky reef.

Several fishing villages are hidden in the little valleys along the coast: Alibong and Alilou, Kimpaoli and Masou. They are connected to the Tamsui valley by some mountain trails which have scarcely been explored and which are only known by hearsay.

12: Garnot--15 G-3 (1884-85) 1894 Formosans
116, 133, 503

Kelung is the center of a little coastal basin that has a radius of several kilometers. The watershed is very near the coast. Several more or less accurate maps that were drawn before the French occupation connected the Tamsui to the Kelung river at this point by a canal. As a matter of fact the watershed is more than 100 meters above sea level at its lowerst point near Loan-Loan.

11: Haguenauer--45 [2] T-3 (no date) 1929 Formosan Aborigines
116, 773, 825 Atayal

The flea and the louse are due to human laziness. In olden times neither one existed. Then men slept so late and became so lazy that there was not enough millet to eat. The chiefs were obliged to have a council to find some way of keeping their subjects from staying in bed so late. Fortunately, an old man remembered that he had heard that there were some beasts which attached themselves to the hair and the clothing of men and which tormented them. If they could be procured, this epidemic of laziness would be overcome. The proposition was adopted, people went after the flea and the louse, and since that time there have been a great many of them in the villages.

The Kelung roadstead is wide open on the northern side [16] and it is very jagged... Palm and Bush islands are hilly and covered with underbrush; they do not offer much protection from the swell that comes from the northeast so it is difficult and dangerous for boats to anchor there. The roadstead can hold about twenty vessels. Its bottom is not too good for it consists of mud and pebbles. The real port is so choked by alluvial deposits that only junks which draw a very small amount of water can enter it. In the middle of the port there are two little islands covered with dense vegetation, Harbor Island and Turton Island, and they conceal part of the city from the roadstead.

Five valleys run out to it. The first one which terminates at the base of Mount Clement begins three kilometers northwest of it.

The next three merge at the back of the harbor in an estuary which they fill with their deposits; they have formed a muddy delta which holds part of the Chinese city. Although the valleys slope a good deal at first they soon flatten out as their floors have been gradually leveled by the alluvial sediments. The tide is felt for a considerable distance so it is possible for small boats to go up into them.

Finally in the east and on the other side of the roadstead there is another valley placed symmetrically to the one running to Mount Clement; it begins near the northern coast and extends to fort Neuf.

The brook which forms the thalweg cannot be navigated at all.

All of these valleys are covered with rice fields that are dotted with groves of bamboo

Kelung stretches along the roadstead and it is marked off into several districts. In the northern part the European buildings form a line that follows the beach and they are backed by the last slopes of the Ber lines. There are two handsome buildings for the customs but the rest are uninteresting; they are simply ware-houses belonging to English or German companies from Amoy or Hong Kong. Farther south the Chinese district called Soo-Wan is connected to the citadel and the Chinese city by a narrow stone causeway bordering the beach. A native cemetery with cement tombs runs along this causeway and finally there is a porch with several steps leading up to the Yamen or citadel. It is surrounded by a [page 17-18 contains photograph, omitted] [19] wall of coarse sandstone that is irregular in its outline. About fifteen sheds of wood and mud with tile roofs are usually adequate for the barracks. They surround the governor's dwelling. On the southern side a wooden door opens out toward the city. It is separated from the mansion by a river that is crossed by a stone bridge; this was not finished when the expedition visited the island.

12: Garnot--19 [2] G-3 (1884-85) 1894 Formosans
116, 346, 361

On the outskirts of the city [MC: of Kelung] you see a few isolated pagodas which are surrounded by ancient trees; they are a delightful diversion from the filth of the Chinese streets. The city has a rather unusual pagoda, which is on the northern side across from the roadstead. On each side of the entrance you see two enormous granite dragons that have a strange appearance. Several feet away some finely carved bronze caruncles sleep in the dust of the centuries; they bear inscriptions dating from the time of Charles the Fifth.

In the vicinity of Kelung there is no road worthy of the name; instead you find narrow paths that are paved in some cases, and then staircases with hundreds of steps are used to cross some of the hills and ravines.

There is no need for winding roads because vehicles are unknown, and luggage is almost always transported on men's backs.

Three of these routes for pedestrians connect Kelung with its surroundings; to the east one goes to Port-Coal or Petao, to the west there is one to the Masou region and the third goes south to the Tamsui valley. Other paths which are more or less steep cut across the mountainous massif here and there but they are usually not permanent and are not kept in good condition. The winter rains make them impassible because the clay soil becomes so wet.

Kelung is important because it is near some coal deposits; it and Port-Coal which lies several kilometers to the east are the ports of embarkation for the mineral.

These deposits are about one league east of the city and about two kilometers south of the villages of Gia-Kow and Petao in the mountainous massif which borders the Kelung basin on this side.

The enormous elevation of the plateau is almost completely carboniferous. Coal comes practically to the surface and in certain spots you find it as soon as you begin to scratch the vegetable surface.

"The mammals so far discovered are more than 60 in number, while the species which appear to be peculiar to the island number 45, the majority of them being considered only varieties of the species found in the Oriental and Palaearctic regions. The species not found anywhere outside of the island are Formosa flying fox (Pteropus formosus), Formosa macaque (Paradoxuris larvatus), etc. The squamata are represented by a single ant-eater (Manis pentadoctyla).

Of birds we find more than 330 species and sub-species, of which 33 are common to the island, China and the Philippines, and about 87 belong to peculiar forms. One of the most notable species is the Mikado pheasant (Neocalophasis mikado) which lives in the central and eastern mountainous parts, 6,000-9,000 feet above the sea level. More than 65 species of reptiles and amphibians are known to inhabit the island, and very frequently to be met with is Trimeresurus gramineus, a poisonous snake, which is of an almost uniform green colour and widely distributed in tropical districts.

The insect fauna is exceedingly rich and varied. We are acquainted with about 319 forms of butterflies, most of which are known from the tropical countries.

Of freshwater bivalves and land snails we find such species as Corbicula maxima, C. fulmenea and Dolicheulota formosensis, Formosana taiwanica, Tortaxis matsudai, etc."

12: Garnot--15 [2] G-3 (1884-85) 1894 Formosans
116, 133

The Kelung region forms a very distinct massif whose waters flow to a central point at the back of the roadstead; its high summits often reach an elevation of 200 meters in a perfect tangle of ravines, crests and precipices which are covered with dense vegetation. On the other side there are high summits which are separated from the massif by deep valleys; to the east are the peaks called Sam-Tiao and Petao and you can see their rounded summits from Kelung in fine weather; in the south there are the lofty and unexplored mountains which send their waters to the Tamsui river, and in the west you find the long crest of the Taitun and Chow-Soan peaks.

This mountainous tangle is oriented in the same manner as the whole system so it runs from the northeast to the southwest.

The slopes rise in the form of inclined planes that drop steeply in the north or the west. They are so complex that they frequently tested the ability of the topographers of the expeditionary force.

12. Garnot--15-16 G-3 (1884-85) 1894 Formosans-2
116, 133

and areca trees. Fields of tea and sweet potatoes adorn the slopes while the rest is carpeted with dense vegetation.

12: Garnot--19 G-3 (1884-85) 1894 Formosans
116, 342, 363

Kelung is a city of 10,000 inhabitants that is squeezed between the roadstead and the mountain, but it resembles all Chinese cities in that it is simply an agglomeration of houses built of wood, brick and mud. The narrow fronts are carved and painted in various colors and they are crowded together in dark alleys which are paved with broad granite blocks. The upper floors project over the street ... until they touch in some places and they make it difficult to obtain any fresh air. Wooden bridges connect the various sections that were built on the little islands dotting the estuary.

Except for the important group of houses at Loan-Loan or Wang-Wang the dwellings in the region around Kelung are scattered here and there at the foot of the hills or in the groves composed of bamboo, banana or areca trees. Most of the houses are fairly neat and they are made of a bamboo framework that is covered with rice straw. The corner supports are made of several beams that were taken from the neighboring forest and planted securely in the ground. The skeleton is a bamboo wattling and the whole thing is solidly tied together with little cords and pegs of the same kind. A broad pent-roof runs around the dwelling and protects it both from the sun and the rain. Very few of these houses have windows and they are all equipped with movable doors which can be dropped at night. The floor is covered with a kind of concrete made of lime and sand.

The land around the dwelling is enclosed by a bamboo hedge [20] and it is an orchard as well as a vegetable garden; you see banana trees, arecas, oranges and lemons, then there are litchis and mangoes, sweet potatoes and the kind of taro that grows in swamps.

14: Tamai--93-94 J-2 (1896) 1896 Formosan Aborigines
116, 175 Chin-hoan

The treaty of Shimonoseki in April, 1895, ceded to Japan the island of Formosa and the Pescadores Islands, both of which had been Chinese possessions until that time. Thus Japan has added to her empire... another primitive tribe, but one from a differen racial group; these are the Tschinwans, the natives of Formosa. Since the Chinese had never been friendly with these natives and therefore had had no influence over them, th present Japanese governor-general, Count Shiki Kabayama, also experienced great difficulties in his administrative tasks. Kabayama used those of the Tschinwan women wh had married Chinese to act as intermediaries between him and the native chieftains. He asked them to call the chieftains and their families before him and received them with the greatest kindness; he served them Sake (Japanese wine made from rice) and meat or fish, [94] and when they returned home he gave them many presents, consistin chiefly of red cloth.

14: Tamai--94 [2] J-2 (1896) 1896 Formosan Aborigines
116, 175 Chin-hoan

The expedition [MC: of the Japanese to the Mareisha villages in February 1896] under First Lieutenant Okamura was accompanied by Chinese guides and interpreters. They started from the city of Shin-Ten-Gai, a distance of about 12 kilometers from Tei-pe-fu, and went directly to the Tschinwan villages of Mareisha. The lieutenant had brought a barrel of Sho-Chiu (a kind of brandy), 200 bags of Japanese tobacco, a roll of red cloth and a pig for the natives. After he had passed Kutsu-Shaku, crossed the Tai-Keika river and gone about two kilometers beyond, the ascent became very steep and he was unable to find a road; this entire region was overgrown with tall grass. The Chinese guides were afraid to go any further and had to be forced to proceed. Towards noon they came across some deserted huts and noticed smoldering ashes. Later they learned that the Tschinwan natives used these huts as a resting-place after hunting expeditions. But the Chinese guides declared that these huts were the houses of the Mareisha District, so that Okamura left all the presents there and, after a difficult march of nine hours arrived in Shin-Ten-Gai.

On February 10th [MC: 1896] Lieutenant Okamura together with 20 soldiers returned to the Sokei River and saw about 40 Tschinwans on the other shore. He gave them two bags of rice and a pig. The Tschinwans asked him whether he had also brought the 60 Taël; they said that if he had not done this for them they would not even speak to him or receive his presents and were determined to return home immediately. Since it would have been very difficult to make contact with the Tschinwans once they had returned to their villages, Okamura asked them [sic] wait one more day for a decision, and they finally agreed to this.

On the following day Lieutenant Hashikawa with ten men went over to the natives and tried to persuade them to send some of their men to Shin-Ten-Gai with him. They, however, were extremely stubborn and would not hear of anything but the money they had asked for. Finally, with great difficulty the Japanese were able to persuade two of the Tschinwans to accompany them to Shin-Ten-Gai. One of these natives was called Shiro. He had had a business in the city of Moko for five years and spoke Chinese quite fluently. He told the lieutenant that they would not be able to return home without the promised compensation, otherwise the Japanese would become the enemies of the native He said that they had no more food or drink with them and asked for more food. The lieutenant therefore took 13 of the others with him who were to carry the food.

When they arrived in Shin-Ten-Gai they asked Katsugase about the money. He answered: "We shall give you the 60 Tael, but from now on you may kill neither Japanese

nor Chinese. If you do we shall conquer you with our strong [95] troops and we shall no longer listen to your pleas."

After they had received their money they promised to treat all strangers well and to guide the Japanese troops as far as the main village, Togesha. Then the 13 Tschinwans returned to the Sokei river with their food, and Shiro and his companion remained in Shin-Ten-Gai. The next morning two relatives of Shiro arrived to make sure that Shiro had not been killed by the Japanese overnight.

14: Tamai--95 J-2 (1896) 1896 Formosan Aborigines
116, 175 Chin-hoan

On February 13th [MC: 1896] the Governor-General sent the second reconnaissance expedition to the villages of the Tschinwans. This consisted of a company of infantry and two police officials; First Lieutenant Matsuzaki was in charge of the expedition. They were accompanied by reporters, cameramen, carriers, two Chinese who were natives of Formosa, and four Tschinwans.

They started at eight o'clock in the morning and, after crossing the Tai-Keika river twice and climbing a steep mountain, they arrived in Kushaku. There they were received by a chieftain by the name of Watama.

14: Tamai--94 J-2 (1896) 1896 Formosan Aborigines
116, 175, 127 Chin-hoan

On February 3, 1896, Governor-general Kabayama sent an expedition from Kelung to the Mareisha villages, the villages of Tschinwan. The conquered Chinese had sought refuge in those villages and had made efforts to induce the Tschinwans to rebel against the Japanese rule.

Reporters from the most important Japanese newspapers accompanied the expeditionary forces. The reports of Mr. Michio Kurosaki, a correspondent of the Osaka-Asaki-Shinbun, a daily with a circulation of over 100,000, offer the most detailed account of this expedition. The following is my own translation of this article, to which I have added pertinent facts from other newspapers and periodicals.

...The Japanese governor, on February 5th, ordered Corporal Katsugase to proceed further inland with his company and to make a simple chart of the region between Kushaku and Kelung. He was to find out where the Chinese rebels had found refuge and whether the Tschinwan natives could offer a food supply. He was also ordered to find out the number of inhabitants as well as their customs and manner of life.

The preparations for this expedition were completed and a Chinese trader who was familiar with the customs and language of the Tschinwans had been hired as interpreter. Just at that time 40 Tshinwans came to the banks of the Sokeiko River which had overflowed. They sent a fisherman across the river to start negotiations with Katsugase. The latter agreed to this and sent presents to the natives, consisting of red cloth, rice wine, and a pig. Thus he had made contact with the natives.

On the other side of the river 13 chieftains from the Mareisha villages came forward; the Chinese trader came over to them and asked them to cross the river and meet the Japanese. They refused at first, saying "We do not know the Japanese and do not know whether they are traitors like the Chinese or honest men. But so that they may not attack us unawares we have brought along a hundred armed men who are lying in ambush. If the Japanese agree to come to us unarmed we shall be glad to negotiate with them, for we have a favor to ask of them." The Japanese agreed to this and as they came across the river they were greeted in the way that is customary on this island, by the "swinging of the swords": the chief went around with his sword drawn and cut off the points of the

blades of grass.

Another chief then told the Japanese: "In the huts we use when we are hunting, we found many Japanese objects and thus learned that the Japanese had been there. The eight Sha (villages) thereupon resolved to thank the Japanese for this in person and to ask them for another favor. In Kushaku the Chinese killed two women without cause and they are therefore our enemies and will remain so unless they pay us 60 Tael as a compensation. We now ask the Japanese to be our intermediaries in this matter and we shall remain forever grateful and obedient to them if they do this."

Katsugase promised that he would undertake this if they would guide him as far as Togasha. It was the [sic] decided that they meet again in the same place on the following day. Then the corporal gave the Tschinwan all the presents which he had brought along for them; they were very happy with these and had a round of drinks with the Japanese before they parted. They also asked Katsugase to bring more food and drink with him on the following day, since the 100 men who lay concealed behind the bushes had not received anything. They were very happy when the corporal promised them this also. The latter then returned to Shin-Ten-Gai...

14: Tamai--95 [2] J-2 (1896) 1896 Formosan Aborigines-12
116, 361, 175 Chin-hoan

The village of Kushaku is situated within a stretch of level land about three square kilometers in size; on three sides this plain is held in by high, steep mountains, on the fourth by the Tai-Keika River, which at the same time forms the boundary of the Tschinwan district. There are about 60 houses and over 600 inhabitants, Chinese who are natives of Formosa. The men... crossed the river in a Chinese fishing boat and reached the foot of the mountain. There they were met by a number of Tschinwans; they were wearing their short swords at their side and held rifles in their hands. They were on their way back from Kushaku, where they had bought a barrel of Sho-chin and a pig. The expedition then crossed the difficult mountain paths and reached the place where Lieutenant Okamura had left presents for the natives on February 3rd. From here a tunnel about one kilometer long, which the Tschinwans had built through the high grass, led to a large place in the valley where they found many water containers. This place is called Korehanan. Formerly the Formosans had a dyeing industry there but after bitter struggles with the Tschinwans they were killed or scattered. The Tschinwans burned all the houses and left only the containers for water. Since that time the Formosans have not dared to settle there again. Beyond this place the men again crossed a steep mountain and arrived in Tanku, where the Tschinwans had several hunting lodges. 16 Tschinwans, both men and women, were staying there. At the beginning the women seemed to be somewhat afraid of the Japanese. They went on together, however, stopping at a brook about 12 kilometers from Shin-Ten-Gai. It was raining and the troops

therefore experienced great difficulty in marching. They followed the course of the brook and crossed the steep mountain of Kremiuashuya, where there are large numbers of bears, deer, and monkeys; the hunt for these animals forms the chief occupation of the Tschinwans, and hunting lodges were seen everywhere along the brook. After they had climbed the Guane and crossed the Katsukaurio River the expedition arrived in Togasha.

14; Tamai--95 [3] J-2 (1896) 1896 Formosan Aborigines
116, 481 Chin-hoan

Togasha is situated a distance of about 16 kilometers from Kushaku; on this short stretch the men had to climb five steep mountains and crossed many brooks. While the Japanese found this route extremely difficult, the Tschinwans, who had to carry a barrel, a pig, and several other things, climbed these paths apparently without any difficulty.

14: Tamai--95 [4] J-2 (1896) 1896 Formosan Aborigines
116, 361 Chin-hoan

The name Marai designates the eight Sha, villages, of the Tschinwans. The names of these are:

1. Tagesha
2. Yukan yumui-Sha
3. Maraiakosha
4. Watanjurosha
5. Watan toyo-Sha
6. Watan taimo-Sha
7. Rhinhongan-Sha (or Watan toruku-Sha)
8. Ankiu-Sha (or Butanokan-Sha).

14: Tamai--95 [5] J-2 (1896) 1896 Formosan Aborigines
116, 175, 103 Chin-hoan

When, in 1886, the Chinese Governor-General of Formosa, Lin-Ming-Tschiang (Chief of the Black Flags) sent his son Rinchoko with 3,000 soldiers, to conquer the Tschinwans the chiefs of the eight villages in Togasha offered to surrender immediately. Rinchoko had guard houses set up throughout the eight villages at intervals of 1 1/2 kilometers and stationed his soldiers there. He made the chief of Togasha, Marai, the head chief of all the villages; since that time the eight villages have been called Maraisha. In 1889 Rinchoko and his soldiers left Maraisha. During the same year Marai, the chieftain, died; he was succeeded by his son, who, however, did not show the same administrative ability as his father.

14: Tamai--95 [6] J-2 (1896) 1896 Formosan Aborigines
116, 175, 609, 721 Chin-hoan

Between 1886 and 1889 when Rinchoko [MC: son of Chinese Governor General of Formosa] was in Maraisha, the Tschinwans, the Formosans and the Chinese, were in constant contact with each other, but since 1890 their friendly relations have ceased. In 1893 all the guard houses built by Rinchoko in Maraisha were burned down. During the night of May 20, 1895, about 150 Tshinwans made a sudden attack on the Formosans in Kushaku; 17 Formosans and 5 Tschinwans were killed. Four days later the Tschinwans renewed their attack and burned 37 houses. From that time on communication between the two groups ceased altogether and was not renewed until the arrival of the Japanese.

14: Tamai--95 [7] J-2 (1896) 1896 Formosan Aborigines
116, 171, 304 Chin-hoan

Nothing is known about the origin of the Tschinwans. They differ from the Formosans in appearance, language, customs, and manner of life; in many respects they resemble the natives of the Malakka Peninsula and those of the Philippines. They even show some similarities with the Japanese; thus the unmarried women among the Tschinwans are not tattooed. When they are wearing Japanese clothes and are seen together with the Japanese it is difficult to distinguish between the two.

14: Tamai--95 [8] J-2 (1896) 1896 Formosan Aborigines
116, 197, 212, 192 Chin-hoan

All the sounds of the Tschinwan language can be expressed by the Japanese Kana, alphabet, while the alphabets of European languages would not be adequate. The following are some words from the Tschinwan language:

Maraou (necklace)
Kaigai (ear ornaments)
Rafui (design tattooed on the forehead)
Raju (apron) [MS: loincloth?]
Wien (dog)
Saragui (cloth wrapped around the calves of the legs)
Patashi (design tattooed on the cheeks)
Tsuit (pipe for smoking)
Kuitsu (undershirt)
Nigao (cat)

The only Japanese syllables not found in the language of the Tschinwans are da, zi, zu, ze, and zo.

14: Tamai--96 J-2 (1896) 1896 Formosan Aborigines
116, 342, 513 Chin-hoan

The houses of the Tschinwans are very plain structures. They are made of crude timber and bamboo. The roof is covered with grass or straw. The entrance is only about one meter wide and about as high as a grown man. The walls consist of various types of leaves, among them banana leaves. Few of the houses have walls made of boards; only a few rich people in every village have these. The size of the houses varies the largest are about 6 meters long and 5 meters wide. The interior consists of a single room with a few windows. All the members of the household sleep in a sleeping compartment made of bamboo; each couple has its own bed.

14: Tamai--96 [2] J-2 (1896) 1896 Formosan Aborigines
116, 343 Chin-hoan

Next to the house of the Tschinwans there is a storage house 4 meters long and 2 meters wide; the floor of this house is raised about 2 meters above the ground so that the dampness cannot penetrate.

14: Tamai--96 [3] J-2 (1896) 1896 Formosan Aborigines
116, 562, 684 Chin-hoan

The Tschinwan woman is the slave of her husband, and it is considered below the husband's dignity to listen to the advice of his wife. If the Tschinwan woman has an affair with another man, both are supposed to be beheaded.

14: Tamai--96 [4] J-2 (1896) 1896 Formosan Aborigines
H6, 462 Chin-hoan

Hunting is the chief occupation of the Tschinwan men. The women work in the fields if the weather is good, and they weave or sew clothes if it rains.

14: Tamai--96 [5] J-2 (1896) 1896 Formosan Aborigines
116, 224, 281, 262, 437 Chin-hoan

The Tschinwans use the hide of the animals they eat as raincoats or for barter with the Formosans and Chinese. They cut off only the hair of bears and monkeys and eat the skin.

14: Tamai--96[6] J-2 (1896) 1896 Formosan Aborigines
116, 286, 531 Chin-hoan

The Tschinwan women make beautiful cloth with only a few simple wooden instruments and adorn them with various designs; these cloths are called Buanamoan.

14: Tamai--96 [7] J-2 (1896) 1896 Formosan Aborigines
116, 264 Chin-hoan

The Tschinwans usually have three meals a day consisting of meat, rice, and cereals. They seldom use a spoon; most of them eat with their hands.

14: Tamai--96 [8] J-2 (1896) 1896 Formosan Aborigines
116, 263 Chin-hoan

Instead of salt the Tschinwans use salt water to season their food.

14: Tamai--96 [9] J-2 (1896) 1896 Formosan Aborigines
116, 415, 412 Chin-hoan

Most of the Tschinwan implements used for eating are made of wood or clay and are very plain; the kettles are made of brass. Even the Tschinwan agricultural instruments such as plows are made of wood. There are hardly any iron tools such as sickles.

14: Tamai--96 [10] J-2 (1896) 1896 Formosan Aborigines
116, 293, 411 Chin-hoan

All the Tschinwan men carry a knife, a rifle, and bow and arrows wherever they go.

14: Tamai--96 [11] J-2 (1896) 1896 Formosan Aborigines
116, 291 Chin-hoan

The dress of the Tschinwans is very simple. The children wear a piece of cloth on their chest but they are nude otherwise. Among poor people even the adults go nude. The men wear only a very small loincloth; the women wrap a piece of cloth about 1/2 meter wide around their hips. Both men and women wear a kind of shawl around their shoulders, about 1 1/2 meters long and 1 meter wide. In spite of the rocky mountain paths the men never wear anything on their feet and legs, but the women wrap a piece of cloth around their calves.

14: Tamai--96 [12] J-2 (1896) 1896 Formosan Aborigines
116, 515 Chin-hoan

The Tschinwans never wash, and they eat their food with dirty hands.

14: Tamai--96 [13] J-2 (1896) 1896 Formosan Aborigines
116, 304, 386 Chin-hoan

The Tschinwan men tattoo their face with a dotted line extending from the top of the head to the bridge of the nose and from the lower lip to the chin. The women have only the line on the forehead; on the lower part of the face the design consists of horizontal lines. The dye used for tattooing is indigo.

14: Tamai--96 [14] J-2 (1896) 1896 Formosan Aborigines
116, 304, 554, 721 Chin-hoan

Tattooing is a mark of distinction. A man who has not killed anyone may not be tattooed, and if he is not tattooed he may not marry. The women, on the other hand, are not allowed to be tattooed until after they are married. Men who have many skulls in their possession are held in high esteem.

14: Tamai--96 [15] J-2 (1896) 1896 Formosan Aborigines
116, 292, 302 Chin-hoan

The Tschinwan men wear their hair either loose and down to their shoulders or tie it together on top of their head; sometimes they cut it very short. They wear caps made of plaited vines which resemble the European hunting-caps. The women tie their hair behind the head; married women wear a black cap, unmarried women wear a red cap.

14: Tamai--96 [16] J-2 (1896) 1896 Formosan Aborigines
116, 304, 301, 554, 721 Chin-hoan

The Tschinwans pierce the lobes of their ears; the men put a bamboo stick about an inch in length through the opening, the women use a stick three or four times as long.

Both men and women wear bracelets. The men, however, may wear a bracelet only after they have killed at least one Chinese or Formosan; for each man they kill after that they add another bracelet. Thus bracelets, like tattooing, are a mark of distinction.

14: Tamai--96 [17] J-2 (1896) 1896 Formosan Aborigines
116, 292 Chin-hoan

On rainy days the Tschinwan natives wear a short coat made of the hide of deer which resembles the Japanese Kami-Shinio, a garment formerly worn for holidays.

14: Tamai--96 [18] J-2 (1896) 1896 Formosan Aborigines
116, 293, 411, 858 Chin-hoan

The Tschinwan men always wear a sword on their left side, even when they are indoors. When they go hunting or are going away for another reason they also carry a rifle. Boys start to wear their sword when they are seven or eight years old.

14: Tamai--96 [19] J-2 (1896) 1896 Formosan Aborigines
116, 181, 577 Chin-hoan

The Tschinwans are a bold and courageous people; they always keep their promises and never cheat another man.

14: Tamai--96 [20] J-2 (1896) 1896 Formosan Aborigines
116, 628 Chin-hoan

The practice of blood vengeance is traditional among the Tschinwans. A Tschinwan will seek revenge for the murder of a relative all his life.

14: Tamai--96 [21] J-2 (1896) 1896 Formosan Aborigines
116, 533, 535 Chin-hoan

The Tschinwans are very fond of singing and dancing.

14: Tamai--96 [22] J-2 (1896) 1896 Formosan Aborigines
116, 435, 823, 822 Chin-hoan

The Tschinwans are extremely greedy. The objects they covet most are any article with a red color and articles made of metal. For that reason they value coins highly but paper money has no meaning to them.

14: Tamai--96 [23] J-2 (1896) 1896 Formosan Aborigines
116, 882 Chin-hoan

Boys live in the parent's house until they are 16; at that time they are considered to be of age and from that time until their marriage are called Mota. As Mota they must live together in a special house for bachelors; every village has one of these.

14: Tamai--96 [24] J-2 (1896) 1896 Formosan Aborigines
116, 556, 584, 585, 836 Chin-hoan

When a Mota has found a girl he wants to marry and she is willing to marry him, he sleeps with her immediately. The girl then tells her parents and the boy sends them presents through his relatives or friends; the presents consist of cows, antlers, the hide of stags, or other valuable objects. He either sends someone to announce the forthcoming marriage to the girl's parents or does it himself. He invites his relatives, friends, and acquaintances to the wedding, which is celebrated as sumptiously as possible; rich families celebrate a wedding for several days, poor families usually only for one day.

14: Tamai--96-97 J-2 (1896) 1896 Formosan Aborigines
116, 585, 609, 602 Chin-hoan

According to the last reports from Formosa (dated March 15th, 1896), a former member of the Japanese Diet, Tetsusáburo Hiyama from Tokyo, married the second daughter of the chieftain Shiro. Before his marriage, Mr. Hiyama sent two oxen and [97] a barrel of salt to the parents of his future bride. The parents are very pleased about their daughter's marriage to a Japanese. While other Japanese do not dare visit the villages of the Tschinwans, Mr. Hiyama may now visit any Tschinwan village with his wife and is received hospitably everywhere. This marriage seems to have been a clever move on Mr. Hiyama's part, since it gives him an opportunity to learn to know these people better.

14: Tamai--97 J-2 (1896) 1896 Formosan Aborigines
116, 757, 761 Chin-hoan

The Tschinwans have neither doctors nor any knowledge of medicine. If they are ill, they look death calmly in the face.

14: Tamai--97 [2] J-2 (1896) 1896 Formosan Aborigines
116, 165 Chin-hoan

There are few Tschinwans who live to be more than forty.

14: Tamai--97 [3] J-2 (1896) 1896 Formosan Aborigines
116, 764, 768 Chin-hoan

When someone dies, his body is wrapped in a loincloth and is buried in or near his house. All his possessions, such as his rifle, bow, sword, snuffbox, and pipe, are buried with him. If the deceased is buried in the house, the family leaves it and builds another house. After the funeral no one remembers the deceased or tends his grave.

14: Tamai--97 [4] J-2 (1896) 1896 Formosan Aborigines
116, 527, 585, 291, 556 Chin-hoan

While the Tschinwans have no festivals which recur on fixed dates, they do have occasions for holidays:

1. A wedding.
2. A day in November when summer garments are discarded and winter clothes are put on.
3. The day on which one first puts on a new dress.

These three holidays are celebrated with a great deal of ceremony, the extent of the celebration varying with the financial position of the family.

14: Tamai--97 [5] J-2 (1896) 1896 Formosan Aborigines
116, 805 Chin-hoan

The Tschinwans do not have a calendar. They know that a year has passed when they see a certain flower bloom again for the first time. A full moon marks the end of the month. Most of the Tschinwans do not know how old they are.

14: Tamai-- 97[6] J-2 (1896) 1896 Formosan Aborigines
116, 609, 721 Chin-hoan

In former times the Tschinwans were the only inhabitants of Taiwan (Formosa), but later they were pushed back by the Chinese and their territory was limited. For that reason the Tschinwans hate the Chinese and it became the duty of their men to cut off as many heads of the Chinese as possible.

14: Tamai-- 97[7] J-2 (1896) 1896 Formosan Aborigines
116, 353, 721, 773, 554 Chin-hoan

In every house there is a rack to hold these heads [MC: secured in headhunting expeditions against the Chinese], which are considered ornaments. There are among the Tschinwans six famous heroes. They are called Raushuu, Watsushinai, Maraiakao, Yuakanajo, Ocki, and Juwantschümoi. All of these have more than 70 heads on their racks. In three houses the Japanese found heads on these racks that had just been cut off and were still bloody.

14: Tamai--97 [8] J-2 (1896) 1896 Formosan Aborigines
116, 361 Chin-hoan

The Japanese expedition visited Togasha for one day. All the villages except Watan-Yuro are situated along a small tributary of the Tamsui. The main village is Togasha, which has 20 houses and more than 100 inhabitants. All the soldiers were quartered in these houses.

14: Tamai-- 97[9] J-2 (1896) 1896 Formosan Aborigines
116, 352, 721, 411, 574 Chin-hoan

Mr. Kurosaki writes in the Osaka-Asaki-Shinbun as follows: "When we arrived in Togasha we were completely drenched. The Tschinwans, according to their custom, built a fire in two places in their houses. The house in which we lived was very large. There was one bed in each of the four corners. In this house we also saw two baskets made of bamboo and filled with sugar cane, a wooden mortar, a pot which was placed on the floor, and several plates on a rack. Many braids of Chinese which had been killed hung from the walls. On one of the beds we saw three spears, three swords, and two rifles. A number of heads, bones, rifles, and hide of stags were suspended from the timber of the roof. Our host had two blankets which he very kindly offered to us.

14: Tamai--97 [10] J-2 (1896) 1896 Formosan Aborigines
116, 609, 562, 533 Chin-hoan

[MC: Mr. Kurosaki, a newspaper correspondent writes about his visit to the village of Togasha.] Although the women appeared to be afraid of us when we first arrived, they soon lost their shyness and were very friendly. When we were warming ourselves by the fire, for example, our hostess came in and played for us on a small, short flute; she played very well. Four young girls also came to us.

14: Tamai--97[11] J-2 (1896) 1896 Formosan Aborigines
116, 562, 276, 283, 574 Chin-hoan

All the women and girls, and even very small children, [MC: in the village of Togasha] smoke a great deal... Our hostess talked to us for several hours, and all this time she was spinning hemp...

Our host and interpreter, Shiro, had obtained the hide of stags for us to sleep on, but we were so cold that it was impossible for us to sleep.

Our hostess asked us why two of the soldiers (sentries) were standing outside in the rain and cold instead of coming in to get warm. The Lieutenant told her that this was a Japanese custom.

Since we could not sleep... our hostess again entertained us by playing the flute.

14: Tamai--97 [12] J-2 (1896) 1896 Formosan Aborigines
116, 534, 584 Chin-hoan

The flute is the only musical instrument of the Tschinwans. It plays an important role in courtship.

14: Tamai--97[13] J-2 (1896) 1896 Formosan Aborigines
116, 262 Chin-hoan

The following morning Shiro [MC: the Chin-hoan host of the Japanese in Togasha village] prepared Mochi for us; this is a cake made of rice which tastes like that made in Japan.

14: Tamai--97[14] J-2 (1896) 1896 Formosan Aborigines
116, 361 Chin-hoan

According to Shiro, [MC: the Chin-hoan host of the Japanese in Togasha village] there are 200 houses in the eight Sha (villages) and 800 inhabitants.

The other Tschinwan villages besides those in the Maraisha District are:

1. Takohaura
2. Beiwai
3. Takasau
4. Tonoba
5. Kajuizan
6. Tokurai
7. Kuro
8. Miniebu in Sasan.

14: Tamai--97 [15] J-2 (1896) 1896 Formosan Aborigines
116, 361, 609 Chin-hoan

The people of the eight Sha have no communication with those of other villages; if they do come into contact with them their relations are friendly.

14: Tamai--97[16] J-2 (1896) 1896 Formosan Aborigines
116, 361, 487, 505 Chin-hoan

The Tschinwans of Maraisha inhabit a strategically favorable position; it is difficult to approach their villages from any side. The Japanese expeditionary forces found no suitable roads; what the Tschinwans consider a road to us is barely a path.

Since the mountains are steep and rocky it is difficult to build roads. The best method of transportation is to make use of the rivers.

14: Tamai--97-98 J-2 (1896) 1896 Formosan Aborigines
116, 487 Chin-hoan

The Tschinwans are familiar with the following routes: [98]

1. The route across Kushaku and Shinten to Taipeifu.
2. The road to Taikokan, which was built by Lin-Ming-Tschiang and is therefore the best road.
3. The road to Sankakuto.
4. The road along the river which leads to Kelung; it is broad and very steep.

14: Tamai--98 J-2 (1896) 1896 Formosan Aborigines
116, 574, 609 Chin-hoan

As a result of the expedition of Japanese to Maraisha the Tschinwans became very friendly toward the Japanese. From that time on they received the Japanese officials hospitably and always offered them Sake and food.

14: Tamai--98 [2] J-2 (1896) 1896 Formosan Aborigines
116, 273 Chin-hoan

Since the Tschinwans are a very greedy people they often come to the officials and say: Taeskin (Sir), Mima (to drink), shinon (Sake), that is, sir, I should like a drink of Sake.

14: Tamai--98 [3] J-2 (1896) 1896 Formosan Aborigines
116, 577, 728, 628 Chin-hoan

One [MC: Japanese] official addressed the Tschinwans as follows: "We are very happy to see you. We feel like brothers toward you. For that reason we have wanted to see you for a long time but so far we did not have an opportunity to come to you. Fortunately, through our war with China we have acquired the land of our brothers, Taiwan, and we are exceedingly happy at this. We have been told that until now you have killed many Chinese. That is not right. From now on you must not kill us, who are your brothers; you must love us like brothers and live with us in peace. You must come to visit us often and we shall visit you, too. Today we have prepared a large banquet of food and Sake for you; eat and drink as much as you like." One of the chieftains answered him: "We did not really want to kill the Chinese, but we were forced to do it for they killed our men. But since the Japanese are our brothers we shall not kill them."

Then all the Tschinwans present dug out a hole in the ground and placed a stone in it. Then they threw clods of earth at each other with loud shouts and covered the stone with earth.

This custom is equivalent to an oath with them. The thought behind it is "just as the stone does not rot in the earth so our word (oath or vow) does not change."

15: U.S. Navy --21 (no date) 1944 Formosans
116, 177, 563

"In pursuing the assimilation program which they have announced to be one of the two basic policies of government, the Japanese have not been notably successful. They have carried out a negative program, destroying non-Japanese institutions and customs, making an active attack upon local practices which have no political significance. The result has been the arousing of antagonism which is neutralized, to some extent only, by the obvious and manifest economic benefits which the Japanese have brought to the rural peasant class. There is a feeling of mutual suspicion and distrust among the three ethnic groups, Japanese, Formosan-Chinese and aborigines. The Japanese minority is, of course, the ruling class, socially and politically, and treats the Formosan-Chinese with open discrimination and ill-disguised contempt. Few of the natives have wealth, but all of them live in much greater general security of life and property than they did under Chinese administration. This the educated Formosan will admit. Recently the Japanese have begun to publish formal programs regarding the assimilation of the subject people."

15: U.S. Navy--21 [2] (no date) 1944 Formosans
116, 167, 563

"Two to three hundred Japanese live in each of the scattered small towns having district offices. A few, who are classed as farmers, live on the sugar plantations. A few cultivate rice as ordinary country people. They have emigrated under Government sponsorship and settled at designated places. Three East Coast villages, Yoshino, Toyoda, and Hoshina, have a total population of 3,136 Japanese. Near Taito (on the east coast) 473 individuals (79 households) have been settled. Fifty-six households (256 individuals) have been settled at Shasen-sho in Taichu Province. Twenty-five households (111 individuals) have been settled as tobacco-growers at Hinode-mura on reclaimed land along the Shimo-Tamsui River, near Heito."

15: U.S. Navy --21 [3] (no date) 1944 Formosans
116, 186, 563, 177.66 Japanese
636.66

"The first generation of Japanese in the island came as adventurers who hoped to get rich quickly in the wake and under the protection of an occupying army. A domineering and ruthless attitude toward the native population has persisted, although the second or younger generation is beginning to identify itself with the island. It has been bred away from a strong homeland (Japan Proper) tradition. Although the essence of home and school training is emphasis on 'true Japanese spirit,' in practice the lives of these young Japanese are governed by the colonial situation in which they find themselves. They have a strongly developed 'exploitation' and imperialist outlook which prevents them from learning anything of the language or customs of the people among whom they live. Very few Japanese can speak elementary Formosan-Chinese."

15: U.S. Navy --21 [4] (no date) 1944 Formosans
116, 177, 867, 563

"Social life among the younger generation of Japanese of both sexes is more liberal than in the homeland and their outlook less traditional. Improved educational opportunities, local temples, cemeteries and other social institutions now tend to lessen the attraction of the homeland for the middle-aged."

15: U.S. Navy --21 [5] (no date) 1944 Formosans
116, 157, 167, 625, 177.18 Japanese
636.18

"The Japanese are exceptionally thorough and successful organizers, and have brought under their own control the economic life of the island. The police force and many of the urban commercial people came originally from Southern Kyushu and Shikoku, and speak the local dialects of those regions. The Japanese of the metropolitan areas in the homeland speak frankly of the hardness and unattractiveness of the colonial Japanese character in Taiwan."

15: U.S. Navy --21 [6] (no date) 1944 Formosans
116, 548, 563

"Japanese men very rarely legalize relations with Formosan women. So great is the antipathy toward intercourse with Formosans that the Japanese preferred to import girls from Japan Proper and Korea for the licensed quarters and cafes and dancehalls which once flourished."

15: U.S. Navy --21 [7] (no date) 1944 Formosans
116, 563, 565

"There is a noticeable social line drawn between the commercial Japanese community and the higher ranks of administrative officials and educators. Social distinction between Japanese and Formosans has no sanction in law but in practice there is a minimum of social intercourse."

15: U.S. Navy --21 [8] (no date) 1944 Formosans
116, 361, 563

"At Taihoku, where almost one-half of the entire Japanese population of the island have their homes, there is a distinct difference in the residential areas. The Formosans live north, west and southwest of the old administrative city area. The higher Japanese officialdom lives within the administrative center, together with the Japanese tradesmen whose retail shops are on the principal commercial streets. A distinctly Japanese housing development is spreading to the east of the administrative center. In other cities there is the same tendency toward voluntary segregation, but to a less marked degree. Although the Government maintains various relief agencies for the poorer people, there is little evidence of individual good feeling between classes. While generous among their own large families, both the Formosans and the Japanese are conservative in extending charity through impersonal channels."

15: U.S. Navy --21 [9] (no date) 1944 Formosans
116, 563, 177.18 Japanese
636.18

"Many Japanese are sincere in their effort to raise Formosan-Chinese living standards and honest in their desire to have the island become a real part of the Empire in spirit as well as in political name and military bondage. Hundreds of Japanese doctors, teachers, and minor officials have devoted their lives to the welfare of Taiwan. Unfortunately they have been a minority and have had little influence on the makers of overall policy."

15: U.S. Navy --21 [10] (no date) 1944 Formosans
116. 871, 177.87 Japanese
636.87

"The Japanese educational program calls for a great deal of physical training, marching, drilling, and calisthenics. Swimming, and judo and kendo (traditional Japanese military games) are also taught in all schools but are popular only among the Japanese."

15: U.S. Navy --21-22 (no date) 1944 Formosans
116, 177, 304, 563

"The Formosan-Chinese are divided into three main groups, the Hakka Chinese, the Cantonese Chinese, and the Fukien Chinese. In addition to differences in dialect between the three divisions, there are differences in costume and folkways. The Hakka women, for instance, have never bound their feet, and are notable for the [22] work they do in the fields and woods with the men. The Fukien women, on the other hand, formerly submitted to foot-binding, which the Japanese have forbidden. It is now rare to observe any woman under forty years of age so crippled. Many who have had bound feet now attempt to treat the foot normally. The Fukien women have never worked in the fields regularly, although they assist with the harvest and in other special circumstances. In the cities both men and women of the lowest economic classes do exceedingly heavy work."

15: U.S. Navy --22 (no date) 1944 Formosans
116, 186, 609

"The Formosan-Chinese as a whole are intelligent but self-centered, displaying little interest in affairs beyond the limits of their own community. They do not have high standards of loyalty or honesty outside their own group. In dealing with strangers they are crafty, but with friends they are open, generous and kind. They despise the Japanese and all their ways, but respect policing power and conform to Japanese orders as the course of least resistance. They are physically tough and capable of great endurance as laborers."

15: U.S. Navy --22 [2] (no date) 1944 Formosans
116, 181, 668, 177.66 Japanese
636.66

"Formosans who have received the advantages of a Japanese education naturally expect opportunities in return. If such cannot be found in Taiwan, nor in China or Japan, discontent may increase. The Formosan temperament is not aggressive, but 'Old Formosa Hands' remark that this temperament often finds devious ways of achieving desired ends in spite of official control.

The Formosans lack leadership, for the Japanese have destroyed out-spoken opposition or have driven it underground and abroad. Only through pressure of Japanese occupation did there begin to develop a sense of the interests of the Formosan people as a whole, and the formulation of a political program embracing the welfare of the island vis-a-vis Japanese policy."

15: U.S. Navy--22 [3] (no date) 1944 Formosans
116, 208, 609, 873, 177.20 Japanese
636.20

"The general population knows little of the outside world. The United Nations have individually and consistently been placed in an unfavorable light by the Japanese press, radio and educational policies. However, the Formosans who have reached the Middle and Higher Schools and those who have studied in Japan Proper, where they have had access to more evidence of American standards of living and national character, uniformly seem to admire the United States and what they understand of its liberal policies. The record of America's administration in the Philippines has made a considerable impression on educated Formosans. A few Formosans have received their higher education in America colleges and universities. For some years now they have been subject to strict surveillance."

15: U.S. Navy--22 [4] (no date) 1944 Formosans
116, 198, 484, 563, 177.19 Japanese
636.19

"By making use of the Japanese language necessary in business, education and communication, the administrators of the island have created the foundation of a unity unknown in pre-occupation days. The ease of travel throughout the island is tending to blur rapidly the lines of cultural differences among the educated Formosans. All three Chinese groups are represented among the settlements along the east coast, to which many have been encouraged to move by Japanese interests."

15: U.S. Navy --22 [5] (no date) 1944 Formosans
116, 517, 526, 547

"Except for sports sponsored as physical education at the schools, there can be said to be no formal recreational activities among the Formosan-Chinese. They are all too busy making a living. Amusement is found at the motion picture theaters and (for the men) in the cafes of the towns. Only a very few who have had advanced education are interested in or have opportunity for sports such as tennis, swimming, hiking, etc."

15: U.S. Navy--22 [6] (no date) 1944 Formosans
116, 526, 177.52 Japanese
636.52

"There is a traditional form of Chinese boxing which has been discouraged by the Japanese because of its 'un-Japanese' character. It is in fact much like Japanese judo of which it is the ancestor."

15: U.S. Navy --22 [7] (no date) 1944 Formosans
116, 181, 266, 578, 177.66 Japanese
~~636~~.66

"Through the past twenty years observers have commented on the passivity, and the subserviency of the Formosan-Chinese to Japanese rule. However sullen or resentful the general populace may be, they have been without effective means of resistance. This is not to be attributed to meekness or lack of spirit, but rather to the extremes of force and cruelty with which the Japanese established initial order and imposed their elaborate system of controls, reaching into every household on the island and placing upon the members collective responsibility for the acts of individuals. Even the most generous allowances cannot conceal the fact that before the Japanese came the Formosan-Chinese population as a whole was capable of extremes of ferocity in mob action among themselves, not stopping short of ritual cannibalism (the eating of the hearts and livers of victims to acquire strength and spirit), nor of the cold-blooded sale of the flesh of captured aborigines on the open market both on the island and across the channel along the coast of Fukien. In the years before 1941, educated Formosans commented frequently (and of course privately) upon the probable extremes of mob action likely to be directed against the Japanese if ever an opportunity should be presented. That the Japanese are aware of this was amply demonstrated on February 18, 1938, when the attack of a single bomber from China caused the authorities to barricade public buildings and to set up machine guns throughout the capital city before they sounded the air raid alarm. The guns were directed at the Formosan-Chinese population."

15: U.S. Navy --22 [8] (no date) 1944 Formosans
116, 181, 175, 362, 563

"The Hakka Chinese people. The ancestors of the Hakka people came to the island from the hinterland of Fukien and Kwangtung provinces. They remain distinct from other Formosans in dialect, dress and some ways of village life. They were an audacious and bellicose people when they arrived, and in the southern part of the island particularly they had to push through earlier Chinese settlements along the coast to the marginal land beyond, between the settled Chinese and the aborigines who were gradually and forcefully being dispossessed. As a consequence, even today the Hakka settlements are among the foothills rather than on the plains. This sequence of immigration has caused the Hakka to intermarry more freely with the aborigines."

15: U.S. Navy--22 [9] (no date) 1944 Formosans
116, 186, 668, 563, 177.66 Japanese
636.66

"It is evident from an analysis of election returns that the greatest interest in politics and representative government is shown in the districts where the Hakka people are predominant, notably in Shinchiku Province. It is also notable that many of the leaders of fierce resistance to the initial Japanese invasion of the island were Hakka people or people from areas in which the Hakka predominate. Not only is government -processed opium said to be more easily accessible in Shinchiku Province, but it is in this district that the Japanese have taken greatest pains to destroy local religious cults, and to press the Japanization program."

15: U.S. Navy --22-23 (no date) 1944 Formosans
116, 162, 361

"A first-hand observer, in 1903, stated that there were about 500,000 Hakká people on the island in 1901, most of whom were settled in the Shinchiku area between Byoritsu and [23] Nanto. There were a few settlements southeast of Takao and some on the east coast near Taito. The latest estimate available (1928) placed the number of Hakka at 'about 700,000'. It may be reasonable to assume the present number of Hakka people to be at least 1,000,000.

Villages in which the Hakka element dominates are Koro, Taiko, Gyubato, Gosei, Tokatsukutsu and Rokko."

15: U.S. Navy --23
116. 162, 609, 563, 484

(no date) 1944

Formosans

"The Cantonese. The people of Cantonese origin have always remained rather distinct and have been considered as foreigners. They numbered 'about 100,000' in 1930. As a group they have become identified with small-scale banking and wholesale trading. They have maintained their contacts with the mainland, and, when travel was possible, many spent part of each year at Canton."

15: U.S. Navy--23 [2] (no date) 1944 Formosans
116, 162, 361

"The Fukien Chinese. The Formosans whose ancestors came from the Fukien coastal area have settled throughout most of the arable lowlands and foothills. They represent, roughly, three-fourths of the total population and hence through sheer weight of numbers exercise considerable influence in the total economy."

15: U.S. Navy--23 [3] (no date) 1944 Formosans
116, 167, 175

"The Formosan-Chinese migrated to the island principally from the following places on the China coast:

(1) An-ch'i (Anki)
(2) Chia-ying (Chiaying, Kaying, Mei Hsien)
(3) Chang-chou (Changchow, Lungki)
(4) Ch'ao-chou (Chaochow, Chaoan)
(5) Hui-chou (Huichow, Waichow, Waiyueng)
(6) Hweian
(7) Nanan
(8) Sam Yup (San I)
(9) Tsingkiang
(10) Tungan"

15: U.S. Navy --23 [6] (no date) 1944 Formosans
116. 563, 582, 609 Japanese
636.58

"Fusion of ethnic groups. Special permission must be obtained from the government before a marriage between a Formosan-Chinese and a Japanese can be made legal. There are a few notable cases of marriages arranged between wealthy Formosan men and Japanese women, (as between a son of the wealthy Ko family in Taihoku, for instance, and the daughter of an impecunious Japanese nobleman). As a general rule the antipathy which one race holds for the other inhibits even casual sexual intercourse between the two. This, plus the fact that the Formosan-Chinese birth rate is much higher than that of the Japanese, precludes any hope for gradual fusion of the two peoples on the island."

15: U.S. Navy--23 [8] (no date) 1944 Formosans
116, 167, 221, 443, 177.16 Japanese
636.16

"The Japanese put an end to unregistered immigration and emigration when they took over the island in 1895.

All Chinese wishing to immigrate were required to register with a Japanese consular agent in China, and to register in Taiwan after arrival. Actually, a considerable clandestine unregistered traffic continued by small boats plying the Straits.

Until 1937 there was a seasonal movement of labor. Workers crossed from the mainland to work through the tea, sugar or pineapple seasons. After they had made enough to live on for some months, they returned to their legal homes on the China coast. A considerable number of merchants and day laborers engaged in urban enterprises were accustomed to pass back and forth between Canton and Taiwan, entering principally through Takao. As of July, 1935, there were on the island 11,327 households of Chinese holding Chinese citizenship, totaling 41,651 persons. Since 1937 (the outbreak of the China War) seasonal migration has been suspended."

15: U.S. Navy--23 [9] (no date) 1944 Formosans
116, 167

"There was a great rush of Japanese to the island when it was first taken over. After 1900 the number of immigrants dropped and the number of departures for the homeland reduced the total increase to a low figure. According to the most recent evidence, the increase of the Japanese population through immigration is not greater than 3,000 per year."

15: U.S. Navy--23 [10] (no date) 1944 Formosans
116, 167, 511, 609 Japanese
636.16

"Immigration of Japanese agricultural workers has been encouraged both by the Government, directly, and by the development companies in which the Government has large interests. Attempts have been made to establish agricultural villages here and there, in the hope that such settlements would help advance the assimilation and control program These settlements have been a failure. Thirty-eight were projected, eight were actually established, and all had failed by 1910. The native Formosan-Chinese populace was too hostile and the competition in living standards too great for the Japanese immigrants to bear. A second colonization plan, begun in 1910, succeeded in establishing three villages with a total of 3,368 persons settled. These have not flourished, though they continue to exist. They now have fewer settlers than in 1910.

The Government has made several attempts to attract and establish Japanese fishermen, but with practically no success, despite the government subsidies granted to them."

15: U.S. Navy --23-24 (no date) 1944 Formosans
116, 167, 441, 464, 177.16 Japanese
636.16

"The majority of Japanese immigrants go to the island for [24] administrative work or business management. Japanese officialdom some years ago arrived at the reasonable conclusion that since the increase in the Formosan population was proportionately so much greater than the increase of the Japanese, only a program of industrialization (with accompanying influx of Japanese technical labor) would serve to strengthen substantially the Japanese population of the island. Presumably, large numbers of Japanese have immigrated to manage the new technical establishments known to have been established on a fairly large scale in and around Takao, near Shinchiku, and elsewhere since 1941."

15: U.S. Navy --24 (no date) 1944 Formosans
116, 484, 493, 511

"Any tendency to move about within the island is held to a minimum because of limited rail and bus services, the absence of private motor vehicles, and the absence of incentives other than commercial interest. An agricultural population which has no surplus of cash finds little reason to move about from place to place. The tourist or sightseeing traffic is from Japan Proper or created by the Japanese upper class who are resident on the island. Commercial traffic along the main railway lines consists of agents travelling from centers of production to the ports and marketing centers."

15: U.S. Navy --24 [2] (no date) 1944 Formosans
116, 166, 177, 221

"In normal times population movements which entail permanent shifts in residence or occupation have been (a) from farms to urban centers; (b) from older residences to new industrial sites and into war industry; (c) subsidized movements of both farm and industrial labor to the East Coast valley; (d) compulsory movement of aborigines from scattered mountain settlements to villages established by the police; (e) movements of families and individuals returning to Japan; and (f) movements of traders, merchants, and seasonal labor to and from the China coast before 1938."

15: U.S. Navy --24 [3] (no date) 1944 Formosans
116, 166, 369, 464, 177.36 Japanese
636.36

"The industrial centers at Keelung, Shinchiku, Takao and Karenko have attracted many voluntarily. The better paid technical and supervisory personnel are Japanese, but the common labor is Formosan-Chinese drawn from local rural communities. There is evidence that the creation of a number of new air establishments has necessitated the development of servicing communities near them, either at the fields' borders or in nearby villages. The development of a town at Toshien, just north of Takao, is the most important example of a 'war town' on the west coast. Karenko's new industries and the hinterland development of villages on a Japanese pattern and with Japanese names are examples of a more permanent new development."

15: U.S. Navy --24 [4] (no date) 1944 Formosans
116, 221, 591, 438, 602

"Temporary movements. The people who move to these industrial sites [MC: i.e. developing industrial centers like Keelung, Shinchiku etc.] leave their families, or perhaps only some of the children, with the grandparents on the farms. There is a constant traffic (largely on foot) between ancestral homes in the country and the houses of sons and daughters in town. A great deal of produce is carried into the city for private consumption in this fashion, and in turn various small goods are carried out again to the country. The continuing and strong relationship between the main house and all branches of a family is of very great importance in Chinese life."

15:, U.S. Navy --24 [5] (no date) 1944 Formosans
116, 166, 486, 659, 177.48 Japanese
636.48

"The movement of Formosan-Chinese or Japanese into the aborigine territory is supposed to be strictly regulated. Permits must be had for any forest operations which take laborers into the area for logging or for camphor extraction. Likewise, the movements of aborigines who wish to leave the territory for business or sightseeing (educational) visits to towns and villages is carefully checked by the Japanese police. The police stations are small centers for trade and local administration through which most such traffic must pass. Roads, paths and the pushcar lines converge on these centers.

Movement from the western and northern settled regions to the isolated East Coast is susceptible of complete control. The town of Suo is the last important settlement at the northeast. Koshun is the last important settlement at the extreme south. Through these two towns pass all round-the-island motor traffic. (A road crossing the southern peninsula from Shajo eastward may now cross above Koshun.) All persons entering the territory through these points are expected to be registered for police purposes.

Some foot traffic (confined largely to bearers of supplies and messengers for the interior police stations) passes across the island from the Taichu-Hori district over the Noko mountain ridge to Karenko. It is improbable that Formosan-Chinese, singly or in small groups, should attempt to cross the mountains on foot unless armed or escorted by armed police."

15: U.S. Navy--24 [6] (no date) 1944 Formosans
116, 484, 788

"Few Formosan-Chinese have an opportunity to travel for pleasure or sightseeing, and that which is performed is often done as a pilgrimage to some well-known or favorite shrine or temple. Following the example of the Japanese, Formosans of the upper and middle classes have begun to frequent the hot-spring resorts (around Shirin and Hokuto in the north, near Giran on the northeast and north of Koshun on the southern peninsula)."

15: U.S. Navy--24 [7] (no date) 1944 Formosans
116, 493, 788, 764

"Funeral ceremonies and wedding parties occasion the passage of large numbers of people into and out of the cities. Cars, rickshaws, and coolie-borne palanquins are used. The hours at which funerals are held are determined by divination. Hence it is not unusual to encounter many people moving rapidly and noisily along the road at any hour of the night. Police permission must be secured for such affairs."

15: U.S. Navy --24 [8] (no date) 1944. Formosans
116, 191, 198

"There are three major language divisions in Taiwan, namely Chinese, Japanese, and dialects spoken by the aborigines."

"The Chinese dialects (mutually unintelligible).

(1) Variants of the Fukien dialect are spoken by approximately 4,200,000 persons, d are in turn subdivided into strong local variations. The dialect of the Chang-chou ea has the widest geographical distribution.

(2) The Canton dialect is spoken by approximately 150,000 persons, most of whom e in the southwestern section, near Takao.

(3) The Hakka dialect (closer to Mandarin than the other two) is spoken by scattered mmunities numbering approximately 1,000,000 persons and is most frequently heard the Shinchiku province area."

U.S. Navy --24-25 (no date) 1944 Formosans
, 191, 212, 872, 186, 177.19 Japanese
5.19

'Japanese, spoken by the 323,148 Japanese, is the official language of the island, and spoken by a high percentage of the middle-aged and younger Formosan-Chinese in oan centers, but by few of the older agricultural community. About 42 percent of the rmosan-Chinese children attend elementary public schools to learn the Japanese [25] guage and doctrines. They learn very little Japanese and at the same time lose the portunity, when young, to learn something of written Chinese. Hence these younger inese are technically 'literate', and can understand orders issued in simple Japanese. panese is supposed to be compulsory for all who know it, and it is true that Japanese become the lingua franca of the island. It may be said that Japanese, as the official guage, will be understood by someone in any large gathering of people or in every lage outside of the most remote savage territory, although the Formosan-Chinese oid using it when they can."

15: U.S. Navy —25 (no date) 1944 Formosans
116, 191, 177.19 Japanese
636.19

"Japan is engaged in the stupendous task of changing the language of nearly six million people. While the Formosans continue to use their native tongue in social and business intercourse with one another, it is undoubtedly true that the number of those who have some knowledge of Japanese is increasing at a very rapid rate."

U.S. Navy --25 [2] (no date) 1944 Formosans
, 162, 191, 177.19 Japanese
5.19

"The percentage of Japanese-speaking Formosans is said to have increased from .4 rcent in 1905 to 8.5 percent in 1930, to 37.8 percent by 1937 and to be over 45 percent the present time.

ble 20: Numbers of Formosan men and women who speak Japanese.

	Men	Women	Total	Percentage of total Formosan population
05	10,801	469	11,270	.4
5	50,143	4,194	54,337	1.6
20	87,897	11,168	99,065	2.9
30	394,677	70,750	365,427	8.5
37	---	---	---	37.8
38	---	---	---	41.9
39	---	---	---	45.6 "

15: U.S. Navy —25 [3] (no date) 1944 Formosans
116, 191, 554, 662, 177.19 Japanese
636.19

"No information is available as to the standard used in determining knowledge of Japanese. Consequently the official figure of 45.6 percent may be an exaggeration. It is nevertheless true that the campaign to promote the use of Japanese has greatly intensified since the beginning of the China 'Incident' in 1937.

Various methods are used. Town and village police stations record the names of inhabitants considered conversant with Japanese. Periodical inspection of homes and oral questioning determines eligibility for the book. Whenever a Formosan needs recourse to the local authorities for licenses, business purposes, appeals, or other matters, reference is invariably made to the 'blue book'. If the applicant's name appears in the book, he is usually granted his request; if not, he is refused. Obviously there is room for graft and the shutting of official eyes in judging eligibility for the book. A foreigner with a wide acquaintance among Formosan-Chinese states that he knows of a number of instances where a man of some financial influence in the community is listed in the 'blue book' although his knowledge of Japanese is decidedly open to question. Nevertheless, it is understood that the system, only recently inaugurated, is producing results. Formosans have come to realize that without a listing in the book privileges and opportunities are denied."

15: U.S. Navy--25 [4] (no date) 1944 Formosans
116, 191, 624, 177.19 Japanese
636.19

"The hosei or head of the Ho must have a knowledge of Japanese. One can not now hold office or participate in local meetings or assemblies without being able to speak Japanese, the 'national language.' Newspapers daily publish reports from various localities emphasizing local pride in the spread of Japanese. An example is an item from Rato, a town in Taihoku Province, stating that a forthcoming election would remove from town and village offices every non-Japanese speaker. A census in Heito, Takao Province, revealed that only 32 percent of the Formosan population knew the national language. To remedy the situation, a school was opened for every ten homes and instruction was to be given by members of the young men's association to persons over 10 years of age."

15: U.S. Navy--25 [5] (no date) 1944 Formosans
116, 191, 208, 554, 177.19 Japanese
~~636~~.19

"Use of Japanese only is permitted in banks and government offices. Even though a Formosan speaks with a clerk who is also Formosan, the language must be Japanese. If the former is unable to converse, an interpreter is required. To stimulate language learning, insignia bearing the legend 'This household speaks the national language' are placed above the door of Formosan homes. Other signs such as 'Speak only the national language' are seen frequently in buses and public places.

A commandant of the Keelung Base said to the press, 'The basis of Japanization is dissemination of the national language. To do this, I believe we must immediately mobilize the motherhood of Taiwan under the slogan 'Raise our children in Japanese'. Even though one may know the national language, to use Taiwanese at all does not befit a 'soldier of the Imperial Army.'"

15: U.S. Navy--25 [6] (no date) 1944 Formosans
116, 191, 873, 177.87 Japanese
636.87

"There are 7,306 'National Language Training Schools' (Kokugo-koshusho) which exist for the purpose of teaching Japanese to adults. According to statistics as of March, 1938, the number of schools and students was as follows:

Table 21: Number of Language Schools and Students

	Number	Pupils	Annual Cost
Elementary training schools.....	3,454	34,865	¥1,576,975
Training schools.....	3,852	257,277	---
	7,306	292,142	

According to the Taiwan Government General, Bureau of Education, in 1939 the number of institutes remains the same, although the pupils now number 470,000."

15: U.S. Navy --25-26 (no date) 1944 Formosans
116, 191, 875, 883, 177.87 Japanese
636.87

"Sessions of the koshusho [MC: 'National Language Training Schools' established to teach Japanese to the Formosans.] are held in schoolrooms, public halls, special buildings built for the purpose, or private homes. Teachers are almost invariably Formosan-Chinese, usually members of the local young men's association who have been graduated at least from the primary schools. Quality of instruction necessarily varies greatly. A young Formosan-Chinese states that in some districts, members of the young men's association are particularly active and enthusiastic. In such cases, instruction and results at the training school may be satisfactory. In other districts there is little local interest and the quality of instruction is poor. Often the instructors themselves have an inadequate knowledge of Japanese. It is stated that occasionally a Japanese with earnest conviction to aid in the process of assimilation will volunteer [26] to teach. Such cases are extremely rare, however. Instructors receive no pay."

15: U.S. Navy --26 (no date) 1944 Formosans
116, 873, 177.87 Japanese
636.87

"Texts used in the training schools are published especially for the purpose by the Taiwan Educational Association. The language used is extremely simple and few Chinese characters are introduced. The subject matter includes lessons on Japanese etiquette, polite phrases, Japanese holidays, and shrine worship, as well as consideration of Formosan village and rural daily life."

15: U.S. Navy --26 [2] (no date) 1944 Formosans
116, 191, 177.19 Japanese
~~636~~.19

"While the people of Taiwan are far from using Japanese in their daily life, knowledge of the language is increasing rapidly. Within a few generations it would doubtlessly supplant Formosan-Chinese among the educated to a large degree."

15: U.S. Navy--26 [4] (no date) 1944 Formosans
116, 198, 873, 177.19 Japanese
636.19

"English has been taught in the private mission schools and in the government schools for many years. It has been a compulsory subject in all middle and higher Schools, i.e., affecting the student age-group from 13 years upward. Pidgin English is not generally known; those who speak it will be found among the clerks and compradores who have worked for foreign firms.

The Imperial University at Taihoku, the High School at Taihoku and the Higher Commercial Colleges at Taihoku and Takao have trained small numbers of Japanese and Formosan students in Malay, Dutch, German, Thai, French, and two dialects of Chinese."

5: U.S. Navy --26 [5] (no date) 1944 Formosans
16, 177, 191

"An unknown but considerable number of Formosan-Chinese (students, clerks, typists, accountants and general assistants) have studied English successfully, either through interest in a non-Japanese foreign language, as an 'entertainment' language (motion pictures, etc.) or as a business language."

15: U.S. Navy --26 [6] (no date) 1944 Formosans
116, 741, 596, 177.74 Japanese
636.74

"The Japanese officially list 1,676 organizations or facilities for philanthropic and social welfare work in Taiwan. These include semi-official organizations such as 'Improvement of Village' associations, pawnshops, public markets, and others which under government supervison perform the work which would be financed elsewhere either through the government budget directly or through spontaneous private charity. There is less need for such organizations in a social system which is built on family units in which the individuals share and share alike."

15: U.S. Navy--26 [7] (no date) 1944 Formosans
116, 735

"In normal times it is rare to encounter beggars other than religious mendicants."

15; U.S. Navy --26 [8] (no date) 1944 Formosans
116, 596, 736, 626, 177.73 Japanese
636.73

"There are social welfare departments in the Government which endeavor to care for persons without support or livelihood. The family system absorbs the majority of such cases, for a moral obligation lies upon the entire family to supportand to share with all members. Property and the income from it is held in common. An able-bodied person who shirks his duties and tends to become a charge upon the family is open to reproof by the elders and by the family council. In extreme cases a member may be cut off from the clan in disgrace and so have no further claim upon it.

Those who are ill, the aged and the physically handicapped can claim the same support from the family group. Hence few appear as public charges."

15: U.S. Navy --26 [9] (no date) 1944 Formosans
116, 732, 759, 548, 874, 177.73 Japanese
636.73

"Schools for the blind, the deaf, and the dumb are maintained at Government expense at Taihoku and Tainan. In addition to instruction in Braille, pupils are taught various skills, of which the most important are weaving, chiefly of panama hats, and massage. Graduates of the school who have passed the required masseur's examination are licensed to practice, and are assigned districts or routes over which they go every evening from nightfall until midnight, with a whistle or pipe and a tune peculiar to each masseur. They travel, both men and women, in pairs or with a small child or elder person as a guide. Many are not wholly blind, but qualify to practice. Sometimes they work at home or in shops at various tasks during the day, making the evening work as a masseur a supplementary livelihood. Many Chinese hotels or lodging houses have masseurs regularly employed. A certain amount of illegal solicitation for prostitution is carried on by them as well as by the masseurs who travel a regular beat through the city streets."

15: U.S. Navy --26 [10] (no date) 1944 Formosans
116, 732, 743, 735, 177.73 Japanese
636.73

"There is a Government hospital for the insane at Taihoku. The general impression is gained, however, that the mentally deficient and the hopelessly crippled are not usually placed in institutions but are simply cared for in a haphazard fashion by their families. Occasionally such persons are found living or begging along the roads leading to popular temples and shrines."

15: U.S. Navy --26 [11] (no date) 1944 Formosans
116, 735, 792

"Religious mendicants, chiefly Japanese Buddhists, go from house to house with a begging bowl, praying or chanting, sometimes ringing a small bell or blowing upon a conch."

15: U.S. Navy--26 [12] (no date) 1944 Formosans
116, 511, 656, 177.65 Japanese
636.65

"The Japanese have immeasurably improved living conditions in Taiwan by systematically developing communications, public health measures, commodity distribution, agricultural planning and the like. Their efforts have been directed toward the improvement and control of the livelihood of the Formosan in order that he may better contribute to the total economic and strategic value of the island. Brigandage has been eliminated and the roads made safe. The whole organization of Formosan life has gone through much the same development and standardization that Japan has experienced since 1868, save that in Taiwan change has been an official policy executed methodically under police supervision with no regard to local opinion or tradition."

15: U.S. Navy --26 [13] (no date) 1944 Formosans
16, 625, 556, 744, 177.74 Japanese
36.74

"The Japanese policeman undertakes to instruct rural peoples in sanitation, house-
building, religious observance and many other things elsewhere usually left to private
initiative. Large-scale public works projects have raised the whole standard of health
and public welfare. Extremes of wealth and poverty are not very apparent in normal
times."

: U.S. Navy--26-27 (no date) 1944 Formosans
5, 511

"With some compromises Caucasians find it possible to live in Japanese fashion and better-class Formosan-Chinese [27] homes and temple hostelries, which are scatter- among the foothills."

15: U.S. Navy--27 [2] (no date) 1944 Formosans
116, 556, 511, 596

"Among the Formosans there is little outward display although there are several notably wealthy families. The majority of Formosans are impoverished farmers, but the natural richness of the land, the favorable climate, the quality of the soil and the communal nature of the Chinese family system which permits the individual to share equally in the total goods of the family, combine to prevent such great extremes of destitution as are to be found on the China mainland only 90 miles away."

: U.S. Navy--27 [3] (no date) 1944 Formosans
5, 171, 595

Marriage customs are generally similar to those prevailing in China. Monogamy is
e legal standard and concubinage is discouraged in practice as well as in theory, for
w can afford it."

15: U.S. Navy --27 [4] (no date) 1944 Formosans
116, 592, 562, 304, 464

"As in China, the older women who have sons are allowed to wield great influence within the home. Unmarried women and girls have few rights. Footbinding has been forbidden by the Japanese. There has been no attempt to limit female and child labor under even the most extreme conditions."

15: U.S. Navy --27 [5] (no date) 1944 Formosans
116, 591, 177, 554, 596

"As a usual thing Formosan-Chinese sons remain at home when they marry, bringing in their wives and rearing their children under the guidance of the eldest member of the family. Hence many individuals make up one family, living in patriarchal style. All members of the family share in the work and in the returns from the land, which is held in joint title. Some wealthy Formosans who have profited by cooperating with the Japanese have, as a matter of policy, added Japanese living quarters to their homes or attempt to live in Japanese fashion."

15: U.S. Navy -- 27 [6] (no date) 1944 Formosans
116, 454, 511, 556, 563

"As an indication of the relative wealth of individuals in Taiwan, it is notable that bank and postal savings deposits of Japanese in Taiwan are from seven to ten times larger than the average deposits of Formosans. It will be noted in the following table that per capita wealth increased rapidly until the outbreak of war between Japan and China in 1937.

Table 22: Average Savings per Depositor in Post Office Accounts

	1921	1929	1934
Japanese	¥33.3	¥51.0	¥146.5
	($15.98)	($23.96)	($44.27)
Formosan	¥8.2	¥16.6	¥14.2
	($3.93)	($7.63)	($4.29)"

15: U.S. Navy --27 [7] (no date) 1944 Formosans -1
116, 465, 511, 435, 556, 563

"Living conditions and the cost of living are intimately connected with the wage scale. Wages in Japan are two to three times higher than the wages of Formosans. For the skilled Formosan the average daily wage in the second half of 1938 was ¥1.13 ($.27) per day, and for the unskilled worker ¥.85 ($.17): figures based upon averages for sixty different categories. The Japanese official averages published for 1939 were ¥1.27 ($.33) for the Formosan-Chinese and ¥2.41 ($625) for the Japanese laborer. The average Formosan family consists of five persons, who must depend upon these wages. As an indication of the cost of living and the standard possible, there is presented the retail prices of some commodities in Taihoku, in May, 1939, when the yen was worth $.2596:

Table 23: Retail Commodity Prices, Taihoku, 1939

Sweet potatoes per kin (1.3228 lbs.)	6.4 sen
Rice (first grade) " " "	11.0 "
Sugar " " "	29.0 "
Pork (av. quality) " " "	43.0 "
Fish " " "	18-22.0 "
Chicken eggs, each	6.0 "
Soap per piece	10-17.0 "
Matches, per box	1.4 "
Firewood (per 100 kin)	180.0 "

Table 23: (cont.)

Miso (bean paste) (100 momme: 0.827 lbs.)	8.0 sen
Muslin, per yard	134.0 " "

15: U.S. Navy —27 [8] (no date) 1944 Formosans
116, 434, 511, 556

"The restrictions and rationing of food, clothing and fuel which have gone into effect throughout the empire, are felt more keenly by the Japanese because of their higher standard of living. A number of essential articles were unobtainable or only occasionally obtainable late in 1940 at Taihoku."

15: U.S. Navy--27 [9] (no date) 1944 Formosans
116, 241, 433, 434, 177.43 Japanese
636.43

"Food is plentiful, but is subject to requisition by the Army. The farming population is able to raise a substantial amount of the food it consumes, but the Japanese frequently order the restriction of plots planted to these crops in order that more space may be devoted to a crop (castor oil beans for instance) required by the military. In 1940 the official daily ration of rice permitted to farmers in Taihoku Province was only 0.60-0.75 pounds, or 2-2 1/2 go per person. This is well below the usual consumption and has been the cause of bitter discontent and resistance."

The rapid advance in the cost of living and its adverse effect on living standards must e kept in mind when notice is taken of wages listed in the Economic Supplement."

15: U.S. Navy --27 [11] (no date) 1944 Formosans
116, 177, 291, 302, 293

"The peasants wear loose two-piece cotton garments--trousers and coat. Undergarments are optional. A conical wide-brimmed straw hat which serves as an excellent sunshade and as a shelter in rain is a usual item of dress. Bare feet are the rule in the country. In the towns cloth shoes, straw sandals or Japanese wooden clogs (geta) are usually worn. The old Chinese queue ('pigtail') is very rarely seen, having been abolished by the Japanese. Sometimes a very old man will be seen wearing his hair in a stringy plait, wound up about his head in a thin cloth turban. Country people on the road are rarely seen without a large black cloth umbrella."

15: U.S. Navy--27 [12] (no date) 1944 Formosans
116, 177, 714

"Young men and boys who have been in Japanese schools wear the uniform which is required of all students and officials, and which gives them a military air. The hair is cropped close in military fashion."

15: U.S. Navy--27 [13]
116, 291, 511, 177.29
636.29

(no date) 1944

Formosans
Japanese

"For years the Japanese have tried to encourage the wearing of Japanese clothing, or at least to abandon traditional Chinese dress for western style clothing. After the war with China began in 1937 the requirement was made mandatory, but had little or no effect. The population is generally too poor to change its entire wardrobe at the wish of the Japanese."

15: U.S. Navy--27 [14] (no date) 1944 Formosans
116, 302, 178

"The Formosan-Chinese women of Fukien or Cantonese origin dress their hair sleekly with oil, pulling it smooth and tight to a small knot at the nape of the neck, and usually with some small flower or ornament pinning it there. The Hakka women wear a more elaborate traditional coiffure, surviving from the Ming period in China, and not at all unlike the traditional Japanese Geisha coif."

15: U.S. Navy--28 (no date) 1944 Formosans
116, 301, 556

"The women of both groups [MC: Formosan Chinese of both Fukien or Cantonese and Hakka origin] wear bracelets and earrings which , if they can afford it, are of gold and jadeite and represent a considerable concentration of family wealth."

15: U.S. Navy--28 [2] (no date) 1944 Formosans
116, 744, 177.74 Japanese
636.74

"Compulsory house-cleaning as a public health measure is rigorously enforced by the Japanese. Towns and country districts are systematically organized for semi-annual house-cleaning days and cooperation is expected of everyone. The movable contents of every house and most shops must be taken out into the open air and the premises must be cleaned thoroughly. Before replacement a police inspection is obligatory, and a certificate of approval must be issued and posted at the door of each building."

15: U.S. Navy--28 [3] (no date) 1944 Formosans
116, 515, 735, 744, 177.74 Japanese
636.74

"General standards of personal cleanliness are not high, but the universal shabbiness must be attributed to poverty rather than to sheer neglect. The principles of elementary hygiene are not widely understood. The Japanese have been making some progress in establishing habits of public cleanliness and have been trying to introduce new measures of household hygiene (careful disposal of waste, daily bathing). The problem is very great, however, among six million people. Although general standards are lower than the average in America, they are as high as standards maintained in backward districts in the South or in city slums, and are infinitely better than standards existing among Chinese villages on the China coast across the Straits of Taiwan."

15: U. S. Navy--28 [4] (no date) 1944 Formosans
116, 342, 353, 513

"Certain features are common to the majority of country houses in Taiwan. The usual construction takes the form of three units, a main room or building, with two wings closely adjoining to form three sides of an open courtyard. The doors and windows opening on this court are larger than the few doors and windows opening on the outer side, and these latter are usually closely barred. The main room or building is open to the roof and contains the altar bearing the ancestral tablets and perhaps a small shrine. Immediately behind the altar or in rooms opening into the main room, the eldest members of the family sleep and keep their personal effects. Passages to right and left lead to kitchen rooms and the sleeping and living quarters of other members of the family."

15: U.S. Navy--28 [5] (no date) 1944 Formosans
116, 342, 592, 352, 354

"Usually at least three generations are resident in a house. If the family is a large one, there are many additional rooms and buildings, all arranged symmetrically at the side and back of the main court. If the [MC: country] house is a large one and quite prosperous, there may be a series of courts one behind the other. The roof of the main building or room dominates the whole structure. The floors are tile, brick or tamped earth. Lighting arrangements are poor. The house is furnished with chairs, tables and beds in Chinese style, which is not unlike Occidental furniture."

15: U.S. Navy--28 [6] (no date) 1944 Formosans
116, 342, 352, 262

"Poorer [MC: country] people live in huts made of unbaked clay bricks, with heavy thatched roofs, tamped earth floor and the most meager furniture of benches and tables. Pork, rice and a variety of cooked vegetables form the basis of their diet."

15: U.S. Navy--28 [7] (no date) 1944 Formosans
116, 351, 343

"Around the back and sides of the door-yard [MC: of the huts occupied by the poorer people] are to be found thick hedges of bamboo, usually of an impenetrable giant variety (bambusa stenostachya Nakai), which affords a resilient barrier to attack from without. In front of the open court there is often found a semi-circular pond, used for breeding fish as well as for protection. The entrances to such a houseyard are few and narrow. Within the enclosure are the well, fruit trees and gardens, chicken pens and pig sties and at the back or side, the open-pit latrine."

15: U.S. Navy--28 [8] (no date) 1944 Formosans
116, 342, 362

"Most urban houses have a narrow frontage in proportion to their depth--14, 16 or 18 feet are usual, with depths of the building ranging from 24, 30 to 36 feet. A court may intervene and a second or even a third building of the same proportions be added beyond intervening courts. Houses look much alike and since they abut upon one another, they present a tenement-like aspect. They are shabby and often quite unclean. In towns and cities the average building is two stories high. Sometimes the space above the street arcade is open, forming a balcony."

15: U.S. Navy--28 [9] (no date) 1944 Formosans
116, 362, 444, 592

"Middle and lower class people live at the rear of their shops, in the second court, if one exists. Since the same patriarchal habits exist in towns as in the countryside, a great concentration of people is found to be living within one dwelling. Single households may include forty or fifty members. As many as 153 persons have been observed to be living in one old foreign-style dwelling in Taihoku."

15: U.S. Navy--28 [10] (no date) 1944 Formosans
116, 592, 596, 369

"Frequently husbands leave their wives and children under the patriarchal roof in the country while they spend the week in towns at some places of business or trade. The wives and older children help care for the farm. Many city households are dependent upon relatives in the country for much of their foodstuff, and there is constant going back and forth."

15: U.S. Navy--28 [11] (no date) 1944 Formosans /
116, 175, 178, 361

"The first Chinese settled in Taiwan along the southwest coast, in and about the Tainan region. Because early settlement among the aborigines was dangerous, the settlers kept their dwellings together in defensible clusters, often selecting a prominent elevation or point overlooking a stream which could serve as a moat about a compact settlement. Further north the later settlements tended to become elongated strings of houses on either side of a road or street, often along a river bank. Often they were an extension of a settlement around a temple or the walled house of a wealthy family. Throughout the north the scattered farmhouse is most common,. solitary dwellings depending upon their walls and hedges for defense. Near the borders of the aborigine territory the villages still retain a fortress arrangement of many houses within a highly defensible area."

15: U.S. Navy--28 [12] (no date) 1944 Formósans
116, 312, 361, 311

"Availability of water supply (less favorable in the south) has also helped determine these settlement types. The fairly even distribution of rainfall throughout the year in the north makes springs and wells more constant and obviates the necessity of building near a permanent pool or deep stream. The method of land reclamation had an effect, too. Early militia, stationed in compact settlements, guarded the colonizers during the Koxinga period (early 17th century), and the soldiers themselves spent considerable time cultivating the land. The northern lowland districts, however, were developed in later years by private enterprise rather than by government policy. Ambitious land operators undertook to secure and clear areas unclaimed by the government. In turn, they subsidized tenants whom they brought in from the south, settling them on good land and building farmhouses for them."

15: U.S. Navy--28-29 (no date) 1944 Formosans
116, 346, 363, 499, 177.33 Japanese
636.33

"In many villages, especially the elongated type built between rivers and irrigation canals, the temples of the patron saints are constructed at corners or bends in the main streets, making them visible from some distance. These have proved a great obstacle in the construction of new streets for motor-[29]ized traffic. Public opinion strongly opposes drastic changes.

The Japanese have not always been considerate of popular sentiment in clearing lands adjacent to some Japanese enterprise. In road-building, Formosan cemeteries have frequently been disturbed and the owners of burial plots forced to move graves to land of little economic use. Many temples and large mansions obstructing government projects have been torn away with little effort to explain or to compensate."

15: U.S. Navy--29 (no date) 1944 Formosans
116, 361, 369, 177.36 Japanese
636.36

"Many city or town planning ordinances are in effect in Taiwan. The Japanese have drawn up overall schemes for the modernization of urban life everywhere, but these have gone into effect only in the larger settlements. Hence a sharp contrast is presented between the excellence of some city arrangements and the extreme primitiveness of nearby settlements."

15: U.S. Navy--29 [2] (no date) 1944 Formosans
116, 361, 349, 177.36 Japanese
636.36

"Before the Japanese took over the island, all the cities and many of the towns were surrounded by great walls, pierced by well-defended gates. The Japanese have torn down most of the walls, preserving only the gates as decorative monuments. Settlement and development have gone forward rapidly. The result is a quadrilateral or circular arrangement of city streets within the old town areas and a very irregular pattern of streets and alleys developed outside. The Japanese have been cutting through old settlements and imposing a well-developed grid and radiation system of streets and roads upon many towns."

15: U.S. Navy--29 [3] (no date) 1944 Formosans
116, 347, 363

"City streets are paved with asphalt. Shady, cool arcades provide shelter in all weather for pedestrians and displays of shop goods. Although they darken the interiors of buildings, they serve a useful purpose in all seasons."

15: U.S. Navy--29 [4] (no date) 1944 Formosans
116, 364, 651, 656, 177.65 Japanese
636.65

"The Japanese have enforced rigorously a system of household registration. At the door of each dwelling there is displayed a plaque bearing the name of the head of the house. Near it are pertinent receipts or certifications received from the police which testify to registration at the nearest police station, house-inspection and approval, vaccinations or innoculations required of all members of the household, certain tax receipts, and such other data which the police may require from time to time to be displayed in a public and easily checked place. In the cities small insignia or notices indicate the public utilities available in each house."

15: U.S. Navy--29 [5] (no date) 1944 Formosans
116, 486, 177.48 Japanese
636.48

"The movement of all persons into or out of a community is carefully registered and reported to the police. Every hotel or place of lodging, such as a temple along a mountain trail, must keep a registry open for inspection at all times. Regular nightly inspections of hotel registers are made by the police--in the towns by a special police detail.

A further special registration is required of each person crossing the border of the aborigine territory on the East Coast."

15: U.S. Navy--29 [6] (no date) 1944 Formosans
116, 582, 177.58 Japanese
636.58

"There have been changes in such fundamental customs as betrothal and marriage under the impact of large-scale modernization programs and the realignment of social life to conform to Japanese ideas of colonial management."

15: U.S. Navy--29 [7] (no date) 1944 Formosans
116, 181, 178, 584, 562

"The general atmosphere of life on Taiwan has been always somewhat less conservative than on the Chinese mainland. Indeed, there are many evidences of the pioneer spirit at work. A girl still has very little to say concerning the choice of a husband, and the parents or eldest relatives on both sides actually carry out the negotiations leading to marriage. Still there is much less of the prenuptial seclusion of women in Taiwan. Marriages are frequently arranged after a young couple has had an opportunity to see one another in public (but not alone)."

15: U.S. Navy--29 [8] (no date) 1944 Formosans
116, 582, 584

"Marriage for both sexes comes early, usually before the age of twenty, and can take place only after a 'go-between' has brought each side to terms concerning dowry and wedding day. These go-betweens are sometimes friends of one family or the other, but most often are professional matchmakers who receive fees in cash or in presents to an amount commensurate with the wealth and social standing of the families concerned. Once a match has been agreed to, presents are exchanged formally and a preliminary betrothal contract is drawn up, giving data concerning the families and the pedigrees of each contracting party."

15: U.S. Navy--29 [9] (no date) 1944 Formosans
116, 582

"It is an iron-clad rule that persons from families with the same surname can not marry under any circumstance, no matter how clearly it may be evident that no blood connection exists."

15: U.S. Navy--29 [10] (no date) 1944 Formosans
116, 584, 565

"The period of probationary agreement is longer or shorter as the means of the families permit or the soothsayers direct. Among the poorest coolies and farmers it is very short or may be almost dispensed with because of the lack of funds or goods for fees and gifts and because of the necessity to get a new woman into the house for cooking, cleaning and working for the welfare of the new family."

"The marriage itself takes place in two ceremonies. The first consists of a solemn release of the bride from her home. In theory she ceases to be a member of her blood family. Her name is formally struck from the family records during a solemn gathering before the family altar and ancestral tablets. A last ceremonial cup of tea is drunk, a bit of rice is eaten, her name is removed and she is ready to be carried away.

If the wedding is carried out in full tradition, the bridegroom arrives at the bride's house with a suite of attendants and many colorfully prepared gifts. A closed palanquin, which is carried in over the threshold of the bride's house, is put down before her ancestral tablets. Sometimes the bridegroom sends an honored representative to act for him while he himself remains at his own home. The bride is placed in the palanquin and, in theory at least, is not expected to set foot to the earth nor be seen by anyone until she arrives at her new husband's home and is carried over the threshold. Usually one or more of the bride's family accompany her to her new home. The whole procession is strung out as long and impressively as possible along the road, with extremely noisy professional musicians to swell the numbers in the party. As many gifts as can be carried are decorated brilliantly in red paper and cloth and carried with festive cakes and other foods on open carts through the street. Great prestige is gained by a lavish display and no effort is spared to impress the neighbors with the economic well-being of both houses concerned.

15: U.S. Navy--29 [11] (no date) 1944 Formosans-2
116, 585, 554, 591

A second ceremony now is performed, during which the bride's name is entered upon the family register of the new house. Unless some disastrous thing occurs she is thereafter committed to complete obedience to the elders in the new household and to her husband.

Feasting follows, during which the bride and groom retire to their bridal chamber.

A good measure of ribaldry and earthy humor accompanies these feasts in proportion to the amount of alcohol consumed."

15: U.S. Navy--30 (no date) 1944 Formosans
116, 581, 836, 585, 842

"The Chinese make no pretense that marriage is other than a useful procreational arrangement. Sometimes the tradition is observed that the parents or elder relatives of the groom's family send back to the bride's house evidence that the bride was virginal. In any case, for at least three days(and sometimes longer according to family customs) the bride must remain within the bedroom and there receive the groom's friends and their congratulations and gifts. The new father-in-law or other elder male will proudly show guests the bedchamber and invite them to feel of the softness or note the elegance of the bed. All are supposed to receive a cup of ceremonial tea from the hands of the bride. As they finish it, a gift of money is usually left in the empty cup (wrapped in red paper) and the blushing bride is urged to have as many male children as possible, quickly."

15: U.S. Navy--30 [2] (no date) 1944 Formosans
116, 585, 837, 851

"If it can be afforded, in many families the bride is expected to remain within the house for a long period and under no circumstance to go out unaccompanied by an elder woman of her husband's family for three months. This appears to be an elementary and practical form of assurance that the first-born (preferably a son) shall certainly be issue of the new husband and of no other and that therefore the house is assured of a genuine heir to its name and to the duties of worship of the ancestors."

15: U.S. Navy--30 [3] (no date) 1944 Formosans
116, 586

"A girl may go back to her parents' home within a short period after marriage without too much prejudice if she discovers her new husband to be not all that was represented in the marriage contract. This is a rare occurrence, however, and a most serious matter, not to be undertaken lightly by a woman who values her future happiness.

On the other hand, divorces can be initiated by the man with little or no trouble and on slight pretext. Considerations of prestige or of having to confess to a bad bargain have their inhibitive effect, and a husband who has sent back a girl to her family without recognizably serious grounds will have difficulty in making another match on the same social and economic level."

5: U.S. Navy--30 [4] (no date) 1944 Formosans
6, 581, 587, 595, 842

"Too many daughters in a house which cannot employ them to economic advantage are n embarrassment and must be sent out to marriages or to common-law cohabitation or oncubinage on a less favorable social basis. It is almost unheard of that a widow or ivorcee should remarry."

15: U.S. Navy--30 [5] (no date) 1944 Formosans
116. 595, 597, 581, 591

"If a couple is so unfortunate as to have no male issue they may resort to either or both of two practices. If the husband can afford it, a secondary wife can be taken into the home, whose male offspring will have the full status of heirs and will, in all probability, be reared by the first wife. If a secondary wife is not taken, or if there are no sons of such a union, then adoption is resorted to. The son of another family (never the first son or heir) can be adopted outright or taken as the husband of a daughter of the house. This last arrangement is preferred, for it establishes a blood connection. The new son-in-law assumes the name of his bride's house and may take up residence in it. This arrangement often results in unhappy family situations, for the adopting family is usually in much better economic circumstance than the family of the young man adopted, and he is subject to a sense of accepted social inferiority. There are, however, instances of arrangements between well-to-do friends who wish to link the fortunes of their houses."

15: U.S. Navy--30 [6] (no date) 1944 Formosans
116, 595, 842

"The secondary wife has a legal status little inferior to that of the first wife. If no children are forthcoming from the first marriage, a man is under obligation to provide heirs to continue the worship of his forefathers. Frequently, too, as a woman gets older she is more and more willing that her husband enjoy the comforts and pleasures of younger companionship, and it is not uncommon that a cordial relationship is established among the two wives and the children. Concubinage on the other hand, has a less elevated object in the satisfaction of physical pleasures without the excuse of a need for heirs. Only the upper classes with an income well above average can afford to maintain two households or one establishment big enough to keep wives and concubines happily aloof from one another. Concubines usually have no status in law and can hold no implicit claim against the estate of their master. Concubines are recruited usually from families too poor to overlook a source of ready cash and perhaps other economic favors."

15: U.S. Navy--30 [7] (no date) 1944 Formosans
116, 565, 511, 105

"The worldly possessions of a coolie-class Formosan-Chinese, the day laborer of the towns and villages, consist of the blue cotton clothes on his back, and perhaps a change for special occasions, a loose smock-like upper garment and black trousers for his wife with an ornament and black headband to wear upon her head, similar clothes (though perhaps in white or light blue) for the younger members of the family, and the simplest of furniture in the house. A table, benches, one or two wooden springless beds, a brazier for cooking, together with chopsticks, bowls, a pot or two, some cups without handles, and the kitchen knives, make up the furniture. If the family can afford it, there may be a bicycle and a two-wheeled carry-all bicycle trailer called a 'riakka' (from the English 'rear-car'), which can be used for hauling an incredible number of objects, including the elders in the family, or livestock for the market. For those who cannot affort [sic] a bicycle, a simple shoulder pole with ropes and side baskets may suffice as professional equipment. For rainy weather, a coconut palm fiber raincape is worn, making the figure seem grotesque to unfamiliar eyes."

15: U.S. Navy--30 [8] (no date) 1944 Formosans
116, 241, 516

"There are many folkways and habits among the Formosan-Chinese which are of no importance administratively but which attract the attention of strangers on the island. These include the practice which farmers have of kneeling in the muck of the paddy fields and advancing through the rice rows on their knees, planting or weeding, instead of standing and bending or stooping to plant."

15: U.S. Navy--30 [9] (no date) 1944 Formosans
116, 293, 825

"Strangers notice that most country people, when going any distance, carry with them a large black umbrella. In this they seem to share with the Japanese a curious and pronounced reluctance to let the hair be wet by rain. And they behave toward moths fluttering about in a room as Americans behave when they find a hair in the soup, showing signs of extreme repugnance."

15: U.S. Navy--30 [10] (no date) 1944 Formosans
116, 525, 565

"Coolies and rickshaw men indulge an inordinate fondness for gambling, and gather together in small groups to play a game with pebbles not unlike the game of 'craps'. The Japanese have attempted to discourage the pastime, but with little success. The stakes are very small but they frequently represent all of a day's wages."

15: U.S. Navy--30-31 (no date) 1944 Formosans
116, 494, 177.49 Japanese
636.49

"Ricksha men operate under license, and must maintain certain standards of dress and of vehicle maintenance set by the police. Indeed, the regulations are so precise that every [31] ricksha man changes from a winter blue costume to a summer white costume on exactly the same day, and vice versa."

15: U.S. Navy--31 (no date) 1944 Formosans
116, 511, 177, 563, 342

"The Japanese have the highest average living standards. Insofar as their mode of living is concerned there is little to distinguish the Japanese here from the Japanese in the homeland, except that the wage scale of the former is higher. Without modification the Japanese retain their native style of architecture, which is admirably suited to a subtropical climate. A platform is raised about two feet over the ground. On it a layer of thick straw mats is laid. A tile roof is erected over this and the space between roof and floor enclosed by light planking and sliding panels of glass panes or paper."

5: U.S. Navy--31 [2] (no date) 1944 Formosans
16, 563, 262, 463, 457

"The Japanese diet is simple. Rice is the staple with a garnish of pickle or fish and ean paste soup. Most Japanese are managers of large enterprises, government offi-ials or wholesale businessmen, settled in and around the large cities. They have reated a large number of hotspring and recreational resorts. There are few Japanese f great wealth with permanently established residences in Taiwan, for the work of the najority is the creation and transfer of wealth from Taiwan to absentee proprietors in apan Proper."

15: U.S. Navy--31 [5]
116, 466, 656, 177.46
636.46

(no date) 1944

Formosans
Japanese

"Through direct employment and through indirect control of the large agricultural and industrial companies, the Japanese government is the largest single employer of Formosan labor. Control and supervision has been strict since the Japanese occupation of the island, but the progressive invocation of the National Mobilization laws after the outbreak of the China 'Incident' has made government control of labor complete. Although there is evidence of chronic discontent among laborers on Taiwan since the 'liberal' days of the 1920's, government policy has been careful to prevent the development of any leadership. The usefulness of Taiwan as a base for military operations and as a link in the new imperial system depends upon the smooth functioning of transportation and communication and (to a growing degree) of industrial activity. All this in turn depends upon the strict control and obedient service of Formosan-Chinese labor, both skilled and unskilled. The Japanese fear any labor agitation, and realize that they are extremely vulnerable to slow-down tactics, if these should be initiated."

15: U.S. Navy--31 [6] (no date) 1944 Formosans
116: 563, 464

"In 1936 there were 81,589 workers employed in industrial enterprises having more than six workers or having a prime-mover. Of these 76,251 (93.5 percent) were Formosan-Chinese. The others were a few aborigines, a few Chinese nationals and Japanese overseers."

15: U.S. Navy--31 [7] (no date) 1944 Formosans
116, 162, 241, 177

"Approximately 53 percent (2,880,410) of the population of Taiwan was engaged in agriculture at the end of 1937. The remaining 47 percent was engaged chiefly in trade and commerce.

In 1937 the number of persons employed in industry had grown to 87,244, an increase which reflects the rapid expansion of industrial enterprise. The distribution of labor was then as follows:

Table 24: Distribution of Labor in Industry

Industry	No. of Persons Employed	Percentage
Food (including sugar and pineapple processing workers)	48,615	55.6
Chemicals	4,988	5.7
Textiles (including hemp processing)	4,000	4.5
Mining	4,214	4.7
'Others'	25,427	29.5
	87,244	100.0"

15: U.S. Navy--31 [8] (no date) 1944 Formosans
116, 167, 464, 177.46 Japanese
636.46

"Labor problems are dealt with by the several offices of the Government-General. There is no 'Labor Bureau' as such.

Before the China 'Incident' there were few restrictions upon the employment of an alien within Taiwan provided the alien had entered the country legally, held a visa from a Japanese consul and was duly registered in Taiwan. All Chinese laborers entering were required to be licensed for labor by the immigration authorities. The government itself has attempted to employ local labor or semi-skilled and skilled labor from Japan. After August, 1937, steps were taken to end the immigration of Chinese, and in 1938 it was announced that all Chinese nationals who thereafter left Taiwan for any point outside of the Empire of Japan would automatically be barred from re-entry."

15: U.S. Navy--31 [9] (no date) 1944 Formosans
116, 466, 651, 177.65 Japanese
636.65

"The hoko system of mutual responsibility within households and local communities is under closest police supervision and control. Through it the government can demand and receive contributions both of hours of labor and of taxes in kind. Close check can be kept also on all labor unrest and agitation."

15: U.S. Navy--31-32 (no date) 1944 Formosans
116, 467

"During the 1920's, the period of relative liberalism in Japan Proper was reflected in Taiwan. In May, 1924, the first peasant organization was allowed to be formed at Inrin, Taichu province, among the employees of the Rin Hongen Company's sugar plantation workers. In 1925 this union presented three demands to the company. They demanded that prices be announced before the harvest, that a control committee be created to supervise the weighing of the cane and that prices be increased for sugar cane and [32] lowered for fertilizers. An armed clash occurred when the company refused to meet these demands, and as a result fifty union members were sentenced to hard labor."

15: U.S. Navy--32 (no date) 1944 Formosans
116, 467

"In June, 1925, the Ch'en Ch'ung-ho Company in the Takao area rented some of its land to fifty peasants from Shinchiku province, and then rented it again to the Shinko Sugar Company. This latter firm demanded that the peasants either move or take up the cultivation of sugar cane for the company. A union was formed at Hozan, in Takao province, to meet this challenge. This was soon followed by the formation of another union at Taiko in Taichu province. The unions formed at Inrin and Hozan soon influenced workers throughout the island. In 1926 the Hozan and Taiko unions merged to form the Taiwan Nomin-kumiai (Taiwan Peasants' Union). By October 31, 1927, it had branches throughout the island, with four provincial committees, twenty-three branch offices and 24,000 members. It ventured to send a delegation to Japan to petition the Diet on matters of interest and to make contacts with Japanese peasant unions."

"In December 1927 a first Congress of Formosan Peasant Unions was held. Delegates rom unions in Japan were present. Proclamations were drawn up stating that the unions ntended to be guided by Marxist theory and policies.

In 1927 labor unions were organized among metallurgical, building, mechanical and asonry workers. On February 19, 1928, a Taiwan Federation of Labor (Taiwan Koyuso-enmei) was formed by the affiliation of 29 trade unions, having a total membership of 367. Much was said of Sun Yat-Sen's Three People's Principles, and attempts were ade to obtain betterment of labor conditions, liberalization of labor laws and general olitical improvement of the status of Taiwan."

15: U.S. Navy--32 [3] (no date) 1944 Formosans
116, 466, 467, 656, 177.46 Japanese
636.46

"In 1931 the upsurge of reactionary power at Tokyo made possible the outbreak of the Manchurian Incident and the stage was set for the war program. Labor leadership, labor organizations and union programs came to an end much more quickly in Taiwan than in Japan Proper. By the end of 1931 everything which smacked of opposition had been suppressed. The employers in the strategic industries, transportation and communications are official or semi-official bodies. Hence there can be no dispute over labor questions."

15: U.S. Navy--32 [4] (no date) 1944 · Formosans
116, 177, 467, 369

"No contact appears to have existed between peasant and labor groups. Actually they were in conflict with each other on a number of issues. Peasant unions were closely tied up with the Japanese peasant unions, which had a strong Marxist element motivating them. The urban organizations--the Taiwan Minshuto and various trade unions--accepted the principles of Sun Yat-Sen of China, but were not connected with any organization outside of Taiwan."

15: U.S. Navy--32 [5] (no date) 1944 Formosans
116, 467, 668, 871, 177.87 Japanese
636.87

"Formosan peasant and trade unions were not organized along class lines, owing perhaps to the essential democracy of the Chinese guild system. Members of the middle and well-to-do classes actively supported the peasants and workers in their agitation for better working conditions and attempted to work for legislation to that end. The biggest handicap to any such movement has been the lack of education for peasants and workers, especially of education which could be gained outside of the Japanese 'National Schools.'"

15: U.S. Navy--32 [6] (no date) 1944 Formosans
116. 745, 466, 177.46 Japanese
636.46

"Hours of labor average about ten per day, including Sundays, although most employees get two days off each month. There are no labor laws or workmen's compensation laws, as there are in Japan. Excepting in cases of Government laborers, as in the Monopoly Bureau or the Government Railways, there are no provisions for bonuses or overtime payment, but most Japanese employers follow the Government example and pay for overtime work. The Government provides free housing for certain classes of Government employees, and retires long-time employees on small pensions. Private industry makes no such provisions, except sometimes where the employer is a wealthy family bearing a paternal relationship toward workmen long in service. The Government also has a scheme for compulsory social insurance payments. No such provisions exist in private industry. If a laborer is injured on the job, it is customary for the employer to pay hospital expenses. If he is killed or totally disabled, the employer makes a money contribution, called 'consolation money' to the injured man or to his family. Thirty days' notice is usual in discharging an employee; in lieu of notice, thirty days' wages are generally paid."

15: U.S. Navy--32 [7] (no date) 1944 Formosans
116. 464, 167, 177.16 Japanese
636.16

"The industrial program which has been developing since 1930 has received special stimulus since the China war broke out. Initially it had been retarded by an acute shortage of skilled or semi-skilled labor. To remedy this, a program for encouraging the migration of skilled and semi-skilled Japanese workmen from Japan to the island was inaugurated in 1937 by the Taiwan Government. The mining industry suffered most severely, as indicated by the fact that the percentage of increase in labor employed in the mines is greater than the percentage of increase in production."

15: U.S. Navy--32 [8] (no date) 1944 Formosans
116, 465, 511, 563

"The Formosan-Chinese can work at a lower wage-scale than the Japanese, but at the same time are supposed to be less efficient."

15: U.S. Navy--32 [10] (no date) 1944 Formosans
116, 166, 464, 177.16 Japanese
636.16

"The labor shortage is especially acute on the east coast where major industrial developments are planned for the next few years. To alleviate the shortage a bureau has been set up which attempts to engage workers on the west coast, send them around to the east, and there settle them in advantageous places.

In January, 1939, an employment bureau organized in Karenko (capital ¥200,000), brought 500 labor immigrants from the west coast of the island and put them to work in the Japan Aluminum Company's factory. They were given land (1/2 acre to each house) and were required to raise hogs, for there is a shortage of pork on the East Coast. A government bureau plans to continue this resettlement work."

15: U.S. Navy--32 [11] (no date) 1944 Formosans
116, 482, 462, 464

"Hours are long and, because of the abundance of unskilled man-power, few draft animals and little machinery are used in transport. Women and children and men pull carts and furnish motive power for the narrow-gauge push-car lines. Only the women of the Hakka Formosan-Chinese work in the fields, however. Women and children are employed extensively in tea-picking and sorting and in the ubiquitous small household industries."

15: U.S. Navy--32 -33 (no date) 1944 Formosans
116, 462, 466, 883

"The percentage of women among the total number of [33] employed persons in various industries is indicated by the following figures:

Table 25: Percentage of Industrial Workers who are Women.

Textile industry	73.4	Chemicals	26.4
Metals	10.6	Lumber	5.8
Machinery	1.2	Foodstuffs	34.8
Ceramics	18.2	Printing	12.9
'Others'	68.2		

The textile industry is negligible in Taiwan. If it is excluded, women numbered approximately 30.6 percent of the people employed in Taiwan in 1936. Women and children labor in the mines and are used to provide motive power for wagons, push-car lines and construction gangs. The wages for women are usually about half those for men. Human life as well as labor is cheap, and the employers in Taiwan are notoriously careless of safety and sanitary conditions in industry."

15: U.S. Navy--33 (no date) 1944 Formosans
116, 466, 177.46 Japanese
636.46

"Under the National Mobilization laws which have been put into effect the conscription of labor by the Japanese has been complete. Even before this, the forced contribution of labor, directly or indirectly, was managed in various ways. Work on semi-public undertakings was called a patriotic duty. Schools, young people's associations, and local ward organizations were expected to contribute certain hours of labor or, in lieu of them, special donations. If an individual Formosan is absent from any announced 'voluntary' project, complete explanation must be made to the authorities concerned. Types of semi-public undertaking include road-building, flood prevention, irrigation works, construction and care of shrines, land clearance, airfield construction, and tree-planting. The figures which follow indicate labor contributions over a one-year period:

Table 26: Enforced contributions of labor.

	No. of Laborers	Hours of Labor
School groups (primary and middle schools, Native and Japanese)	629,510	3,101,869
Young Men's Organizations	221,574	1,567,248
Adults in various organizations	399,708	2,265,361

Men of the upper class, especially those with advanced education and experience outside of the island, live in constant fear of impressment and transportation to the front for Army labor service."

15: U.S. Navy--33 [2] (no date) 1944 Formosans
116, 651, 241, 177.24 Japanese
636.24

"Compulsory service takes an indirect, though no less effective form in the forced contribution of produce. For instance, a village headman notifies the farmers that their district is expected to provide a certain quota of hay for army horses, which must be forthcoming by a certain date. Castor beans are another example. By requiring this crop (which has no value in the economy of the individual farmer) the production has increased from 126,893 pounds in 1936 to 4,148,364 in 1938, which represents an impressive labor contribution. Through this method a goal of 23,000,000 pounds has been set for 1949. Each year more time and more labor and more space must be given to producing castor oil for the air service. Each household tends a few plants from which the children carry the beans to school for collection. In many instances no compensation is given for the produce, and in the instances where compensation is given, it is wholly inadequate to reimburse the costs of production."

15: U.S. Navy--33 [3] (no date) 1944 Formosans
116, 465

"The scale of wages in Taiwan varies considerably in the various cities of the island for the same kind of effort, this being due to the small scale of industry in general. When there are large numbers of workers employed in any one industry, the difference in wages paid in each city is small."

15: U.S. Navy--33 [4] (no date) 1944 Formosans
116, 563, 463, 465, 177.46 Japanese
636.46

"Formosan-Chinese furnish almost all labor. Japanese are generally employed as foremen or skilled labor, or in particularly vital operations. For instance, they provide the personnel on the moving stock of the Government Railway system. This accounts for the difference in wage scales whereby the Japanese laborer receives from 80 to 150 percent more than Formosan-Chinese who do the same work. A Japanese tailor, for instance, at one time received two yen a day as against 1.20 yen per day for a Formosan-Chinese; a worker in a pineapple cannery 1.50 as against the Formosan-Chinese wage of 70 sen."

16: Müller--228 U-3 (no date) 1910 Formosan Aborigines
116, 161, 175

While, at the turn of the 17th century, the aborigines of Formosa occupied the entire island, today they form only a fraction of the total population. The hordes of Chinese immigrants from the mainland opposite, chiefly from the Fukien Province, have gradually pushed the original inhabitants towards the central and eastern mountains. There are today approximately 2 1/2 million Chinese and nearly 100,000 Japanese on the island, while the number of natives is, at the most, 120,000.

16: Müller--228 [2] U-3 (no date) 1910 Formosan Aborigines
116, 144, 171, 174, 197

While we have no tangible evidence concerning the origin of the aborigines of Formosa, we may assume from their physical appearance, customs, language, and level of intelligence that they belong to the racial group of the Malayans. We may therefore conclude that they originally came from the Malayan Archipelago. Although they have numerous traits in common, as a result of their derivation from one single group, their development has proceeded along different lines, partly because the chains of huge mountains have split them into different groups. Their language especially shows so many divergencies that some of the tribes cannot understand each other.

16: Müller--228 [3] U-3 (no date) 1910 Formosan Aborigines
116, 101

When we sum up the common and the individual characteristics of all the aborigines o Formosa we find that they are divided into nine groups:

1. Ataiyal Group
2. Vonum Group
3. Tso'o Group
4. Tsarisen Group
5. Paiwan Group
6. Pyuma Group
7. Amis Group
8. Pepo Group
9. Yami Group (Botel Tobago)

It must be remembered, however, that there are subdivisions within each group, in accordance with differences in families, tribes, and combinations of tribes.

16: Müller--229 U-3 (no date) 1910 Formosan Aborigines
116, 101, 177, 609 Pepo-hoan

Among the groups listed... [MC: see previous paragraphs in 101 for the author's group division of the aborigines.] the Pepo no longer have the external characteristics of the aborigines; in their manner and customs they have become culturally assimilated by the Chinese to such an extent that today it is hardly possible to distinguish between the two. They live in the eastern and central districts of the island, and a large number of them also inhabit the western plains. They are on friendly terms with the Chinese, although on the whole the two groups do not actually intermingle. This explains the name given to them by the Chinese, Pepo-hoan, that is, natives of the plain. Only a small part of the Pepo, the Saisiett tribe, has retained their original characteristics to this day.

16: Müller--229 [2] U-3 (no date) 1910 Formosan Aborigines
116, 101, 177

Another distinction made by the Chinese between groups of natives is that of Seiban and Jukuban; the first refers to those natives who remained independent, the second to those who had become subjugated. The latter includes, besides the Pepohoan, the Pyuma and Amis groups; although these have not been assimilated entirely by the Chinese, they nevertheless show a certain degree of civilization.

16: Müller--229 [3] U-3 (no date) 1910 Formosan Aborigines
116, 141, 142, 164

The physical characteristics which all the aborigines of Formosa have in common are stiff black hair, prominent cheekbones, black iris, eyes of the Malayan type, a snub nose with wide nostrils, yellowish complexion, sparse beard, and medium height. The size of the skull (cephalic index) is between 79 and 83; they are brachycephalic. Although their build is not especially strong, they are agile and have a great deal of endurance. They are, however, subject to climatic diseases such as malaria.

16: Müller--229 [4] U-3 (no date) 1910 Formosan Aborigines
116, 197

Their language belongs to the Malayan group of languages....

16: Müller--229[5] U-3 (no date) 1910 Formosan Aborigines
116, 177, 191, 197

Among the Pepo the Saisiett tribe is the only one which has retained the old language. The others speak Chinese, the Amoy and Hakka dialects, using only a few Malayan terms. Most of them have forgotten their original language almost entirely, although it was still spoken little more than a century ago. Only those Pepo tribes listed under Pazzehe and Kareowan speak both languages.

16: Müller--229 [6] U-3 (no date) 1910 Formosan Aborigines
116, 212

The aborigines of Formosa do not have a system of written symbols.

16: Müller--229 [7] U-3 (no date) 1910 Formosan Aborigines
116, 361, 592, 619, 643

The aborigines of Formosa are a settled people and live in communities. The Ataiyal tribe is organized on the basis of nuclear families, the Vonum, Tso'o, Pyuma, and Amis tribes on the basis of composite families. Each tribe has a chief as its head. There are some tribes and federations of tribes which have two head chiefs.

16: Müller--229-230 U-3 (no date) 1910 Formosan Aborigines
116, 643

The office of the chieftain of the tribe or federation is either hereditary or based on election. Sometimes his power is absolute, [230] sometimes he must have the consent of the tribal elders in all the more important decisions that concern the tribe.

16: Müller--230 U-3 (no date) 1910 Formosan Aborigines
116, 561, 646

In all those tribes where there is a tendency toward autonomy, there is a marked division according to age levels among the men who hold the vote.

16: Müller--230 [2] U-3 (no date) 1910 Formosan Aborigines
116, 466, 653, 561, 805 Ami

Among some tribes of the Amis group it is customary to assign public works according to the degree of physical development rather than age, since in some cases they do not even keep track of their age. They divide the men into three to eleven classes and assign these to permanent positions; this includes the construction of roads, guard duty, etc.

16: Müller--230 [3] U-3 (no date) 1910 Formosan Aborigines
116, 595

Most of the aborigines of Formosa are monogamous.

16: Müller--230 [4] U-3 (no date) 1910 Formosan Aborigines
116, 583, 584

Marriage is based on certain definite ceremonies which vary with each tribe. Among the Ataiyal and the Tso'o there are traces of the former custom of marriage by capture. Among the Ataiyal and in some of the Vonum tribes, the marriage ceremony consists of a contest between the bridegroom and a supposed rival. Among other tribes of the Vonum group marriage is based on an exchange (wife stealing), and among the Tsarisen, Paiwan, Pyuma, and Amis tribes the marriage ceremony consists of an exchange of presents.

16: Müller--230 [5] U-3 (no date) 1910 Formosan Aborigines
116, 586

Among the Formosan aborigines marriage is for life, but divorce is possible if it meets with the approval of the tribe.

16: Müller--230 [6] U-3 (no date) 1910 Formosan Aborigines
116, 587

It rarely happens among the Formosan aborigines that one party remarries after the death of the other.

16: Müller--230 [7] U-3 (no date) 1910 Formosan Aborigines
116, 582

Marriage between near relatives on the whole does not occur among the Formosan aborigines.

16: Müller--230 [8] U-3 (no date) 1910 Formosan Aborigines
116, 593

Husband and wife have the same rights among the Formosan aborigines. Life within the family is peaceful and harmonious; parents and children are greatly attached to each other.

16: Müller--230 [9] U-3 , (no date) 1910 Formosan Aborigines
116, 593, 627

It is a tradition in native family life that the murder of a parent must be revenged (blood vengeance).

16: Müller--230 [10] U-3 (no date) 1910 Formosan Aborigines
116, 736, 768

The family always takes care, in the most generous way possible, of the widows and orphans of its sib.

16: Müller--230 [11] U-3 (no date) 1910 Formosan Aborigines
116, 611

The ascendants and descendants of the third generation are still considered close relatives.

16: Müller--230 [12] U-3 (no date) 1910 Formosan Aborigines
116, 593, 574

It is because of their aversion to all domestic disharmony that the laws of hospitality are sacred to the aborigines. Thus the pursued may find refuge in the house of the pursuer and has nothing to fear until he leaves.

16: Müller--230 [13] U-3 (no date) 1910 Formosan Aborigines
116, 846

Childbirth usually proceeds with so little difficulty that the mother resumes her tasks on the following day; for one month after the delivery, she avoids the heavy labor in the fields. Usually the natives perform certain ceremonies, based on quasi-religious superstitions, after the birth of a child; this consists in driving the evil spirit out of the house and similar rites.

16: Müller--230 [14] U-3 (no date) 1910 Formosan Aborigines
116, 845

Among the Vonum, Tso'o, Tsarisen, and Paiwan tribes, the birth of twins is regarded as a misfortune and the second child is killed.

16: Müller--230-231 U-3 (no date) 1910 Formosan Aborigines
116, 553, 551

After a certain amount of time has elapsed, the child is given a name. Among some tribes [231] the custom of lending names is practiced, and only certain names may be used, so that there are many people of the same name within one village. Often the child is named after the father.

16: Müller--231 U-3 (no date) 1910 Formosan Aborigines
116, 553 Tayal

Among the Ataiyal group, who do not have any surnames, the name of the child is followed by the name of the father. If there is a surname in the family it follows the proper name.

16: Müller--231 [2] U-3 (no date) 1910 Formosan Aborigines
116, 881, 882, 721

A solemn ceremony is held when the child comes of age. Among the Ataiyal tribes this may take place only after he has undertaken his first successful headhunting expedition. Among the Pyuma and Amis tribes boys and young men must first pass through a period of preparation; they are separated from their parents and live in a special hut under strict supervision. Women may not approach the house of these bachelors. Before the boys are considered of age they partake in a ceremony which may be likened to the practice of knighting. The chieftain gently hits the seat of the boy with a bamboo pole.

16: Müller--231 [3] U-3 (no date) 1910 Formosan Aborigines
116, 764

The family shows manifestations of sincere grief upon the death of one of its members. They bury the body either in the yard around the house or outside of their property. The grave goods consist of objects which the deceased has used during life.

16: Müller--231 [4] U-3 (no date) 1910 Formosan Aborigines
116, 765

After the funeral it is customary that the family does not go out for some time. They do not wear any ornaments. The Tsarisen, Paiwan, and Pyuma aborigines even wear mourning apparel.

16; Müller--231 [5] U-3 (no date) 1910 Formosan Aborigines
116, 766

If someone has died an unnatural death or has been killed, he is regarded as someone afflicted with evil; he is buried either in the place where he died or in a concealed place as far from the community as possible.

16: Müller--231 [6] U-3 (no date) 1910 Formosan Aborigines
116, 766 Pepo-hoan

In former times, some of the Pepo tribes wrapped their corpses in a shroud and threw them in the river. In one tribe the corpse was placed in front of a fire in the hut until it dried out; at the same time a gay banquet was held. The corpse was left in the house and the family moved to a new residence.

16: Müller--231 [7] U-3 (no date) 1910 Formosan Aborigines
116, 361

Most of the aborigines of Formosa build their huts at a considerable distance from each other, so that one house may just be seen from another.

16: Müller--231 [8] U-3 (no date) 1910 Formosan Aborigines
116, 342

The houses of the aborigines are made chiefly of wood and bamboo. There are also stone structures, however, and among the Ataiyal aborigines there are even cave dwellings. Most of the houses have roofs made of rushes and consist of only one room. Some houses, however, have partitions dividing the interior into several rooms. The entrance is usually in the center of one of the long sides. Most houses have two windows on each of the long sides; shutters have hinges made of rattan stalks.

16: Müller--231-232 U-3 (no date) 1910 Formosan Aborigines
116, 352, 513

There is no furniture and no utensils of any kind in the interior of the aboriginal hut, since the natives use them only as a shelter from the storm and rain. There are no boards [232] on the floor. In each of the four corners there is a simple wooden compartment which serves as a bed. At night they place cloths, which they themselves have made, over these and use an ordinary cloth of the kind used for garments as a blanket.

16: Müller--232 U-3 (no date) 1910 Formosan Aborigines
116, 291

The clothing of the natives varies with each group. There are two articles of clothing, however, which are in use everywhere:

1. An exterior garment, with or without sleeves, with a collar which is open in front. The women are always careful to button this in front, while the men wear a square stomacher.

2. A rectangular cape, the sides of which are about 70 to 80 centimeters long. This may be worn by slinging it over the shoulder on one side and under the arm on the other and tying the two upper corners together with the tassels which are attached for this purpose. Another method is to cover both shoulders and tie the corners together behind the neck.

16: Müller--232 [2] U-3 (no date) 1910 Formosan Aborigines
116, 291, 292, 431

The women wear a broad loincloth which covers their thighs. The loincloth of the men consists of a piece of cloth 60 to 70 centimeters long and 50 centimeters wide which they tie around the loins so that the two ends cover their genital organs. The loincloth, which as a rule is dyed dark blue, and the manner in which it is worn, indicates to what tribe the wearer belongs and whether he comes from a family of low or high standing. Loincloths are often given as personal presents. Among the Ataiyal group there is one tribe which uses only leaves as loincloths, and several tribes which do not cover themselves at all.

Since that aborigines always cut and sew in straight lines, the shape of the garment never fits the body.

16: Müller--232 [3] U-3 (no date) 1910 Formosan Aborigines
116, 291, 292

While most of the aborigines go barefoot, the women wrap a plain piece of cloth around their calves for special occasions, such as a festival. Among some tribes of the Tso'o group the men and women wear a type of sandal made of the hide of animals, on bad roads.

Only the men cover their heads. For the most part they wear an ordinary bowl-shaped cap, which they also use as a measure of capacity. The shield on the cap is worn in back to protect the neck. They also use caps made of bearskin, of the head of deer, and of leather. Among the aborigines of the Tso'o and Paiwan groups the caps sometimes have ornaments consisting of tassels or the feathers of roosters. The cap serves as an insignia of rank.

16: Müller--232-233 U-3 (no date) 1910 Formosan Aborigines
116, 301

The chief aboriginal ornaments are the following:

1. Bracelets made of brass, worn by both men and women. They get the brass wire from the Chinese in exchange for other goods. Sometimes the bracelets consist of two tusks of a boar which are tied together at the ends. Bracelets are often used as hypothecs to confirm a promise.

2. Ear pendants of bamboo sticks from which a tassel may be suspended. Both men and women wear these; they insert them in the lobes of their ears. [233] They pierce the lobes with a pin and gradually enlarge the opening.

3. Necklaces made of shells, the teeth of animals, dried berries, imitation berries, beads, etc.

4. Hairpins made of shell. Among the Tso'o aborigines this is the customary gift for brides.

16: Müller--233 U-3 (no date) 1910 Formosan Aborigines
116, 304, 721, 554, 881

"Among the Ataiyal, Tsarisen, Paiwan, and Pyuma aborigines tattooing is a universal custom. Among the men the design consists of one or several vertical lines on the chin and forehead. The first line is usually made after their first successful headhunting expedition, but the children of prominent men sometimes receive theirs before that. The design for the women consists of a network of lines around the mouth extending as far as the ears. Among the Tsarisen tribes, the head of the family is tattooed on the back and on both elbows; the design consists of straight and curved lines. Among some of the Paiwan and Pyuma tribes the women tattoo the back of their hands.

Among the Ataiyal, Vonum, and Tso'o aborigines it is customary to remove the left and right canines of the upper jaw.

16: Müller--233 [2] U-3 (no date) 1910 Formosan Aborigines
116, 262

The chief articles of food among the aborigines of Formosa are millet, sweet potatoes, and bananas. They also, but less frequently, eat venison and pork, as well as rice.

16: Müller--233 [3] U-3 (no date) 1910 Formosan Aborigines
116, 252

They cook all their food except fruits.

16: Müller--233 [4] U-3 (no date) 1910 Formosan Aborigines
116, 264

They use their third and fourth fingers for eating and wash their hands before and after meals. To take the food out of the pot they use a simple wooden spoon and a spatula.

16: Müller--233 [5] U-3 (no date) 1910 Formosan Aborigines
116, 273

They make alcoholic beverages, of which they consume quantities, out of millet. For fermentation they use the pollen of the Chenopodiaceae or white yeast which they get from the Chinese. Among some tribes saliva takes the place of yeast: the women chew the millet before the wine is prepared.

16: Müller--233 [6] U-3 (no date) 1910 Formosan Aborigines
116, 276, 857

The natives grow their own tobacco, but they use the leaves without any preparation. All the aborigines of Formosa smoke a great deal. Even very young boys and girls constantly have a pipe in their mouth. The pipes are made of bamboo.

Many of the natives also chew betel, which is treated with a solution of lime. This practice blackens the teeth, which is considered an attractive feature.

16: Müller--233 [7] U-3 (no date) 1910 Formosan Aborigines
116, 411, 437

Firearms consist chiefly of Mauser rifles or modern hand arms which they obtain through barter from the Chinese. They take off everything that tends to make the rifle heavy, sometimes even the sight. They also get gunpowder and ammunition from the Chinese. Guns with matchlocks, which formerly were used by everyone, today are hardly used at all.

16: Müller--233-234 U-3 (no date) 1910 Formosan Aborigines
116, 411

Spears are used for bear-hunting, chiefly in the central and southern régions. [234] They get the iron spearheads from the Chinese.

16: Müller--234 U-3 (no date) 1910 Formosan Aborigines
116, 411

Sometimes the natives still use bows and arrows in battles, but in the north they use them only to hunt birds. They often use poisoned arrowheads.

16: Müller--234 [2] U-3 (no date) 1910 Formosan Aborigines
116, 411, 293

Swords exist in all sizes and shapes, and there are some with curved blades. They make only the sheaths themselves; one side consists of wood, the other of wiring. They often suspend the hair of humans or bears from the point of the sheath; on most swords there are grooves to mark the number of heads which have been cut off with that sword. The sword is the constant companion of the aborigines of Formosa; they wear it on a string around the waist, and it serves as an ornament as well as a weapon.

16: Müller--234 [3] U-3 (no date) 1910 Formosan Aborigines
116, 534, 535, 727

The musical instruments of the aborigines are the following:

1. Jew's harp; boys and girls play this instrument and dance at the same time. They either dance alone, with rhythmic motions and jumping up and down now and then, or they dance in groups. The latter takes place chiefly after headhunting expeditions; the young people form a circle and dance around the head.

2. A flute made of bamboo, played by men. This is also played chiefly after headhunting expeditions.

16: Müller--234 [4] U-3 (no date) 1910 Formosan Aborigines
116, 241, 361

The aborigines of Formosa cultivate millet, rice, and vegetables, but on the whole they do little work on their fields. They rely on the beneficent spirits of their ancestors to further the growth of plants, and they neither clear the fields nor fertilize them. If the soil ceases to be fertile, they leave their land and settle somewhere else. They have no agricultural implements save a hoe with a short shaft. Added to this is the poor soil in most regions, the steep mountains, and the rocky ground, so that the total agricultural produce is lamentably small.

16: Müller--234 [5] U-3 (no date) 1910 Formosan Aborigines
116, 241, 437

Since the amount the aborigines harvest falls far short of the amount they need, they are dependent to a large extent on barter with the Chinese. The articles which they are able to offer in exchange consist of the antlers and hide of stags, as well as cloth which they themselves have made; for these the Chinese give them rice and other articles of nourishment.

16: Müller--234-235 U-3 (no date) 1910 Formosan Aborigines
116, 436

The aborigines are not familiar with the use of money. For trade among themselves they use small pieces of shell money in the shape of beads which they carry on a string. The value of their currency is determined by the bintuan, a square piece of cloth as long and wide as the lower part of the arm, covered with shell beads of the type used for currency. One bintuan is worth about eight Mark. A woman is worth about 250 bintuan, a brass kettle about 1/2 bintuan, etc. Today these coins are no longer [236] made and they are used only for very important transactions such as buying a wife, a rifle, or for paying a penalty.

The usual medium of exchange today is cloth.

16: Müller--235 U-3 (no date) 1910 Formosan Aborigines
116, 304

The shell money is also used as ornaments for holiday garments or the clothing of chieftains.

16: Müller--235 [2] U-3 (no date) 1910 Formosan Aborigines
116, 531

The artistic impulses of the aborigines of Formosa manifest themselves only in weaving and wood carving.

16: Müller--235 [3] U-3 (no date) 1910 Formosan Aborigines
116, 286, 314

For weaving the aborigines use small, very primitive hand looms made, for the most part, of camphor wood. They use the fiber of ramie plants, which grow in abundance on this island. The Ataiyal aborigines differentiate between four kinds of ramie, kigi barai, kigipapa, yakai yogai, and katailok. Raw hemp is called mukatailok, hemp which has been bleached by wringing it out in water is called mukabenakan, and spun hemp is called wikui.

16: Müller--235 [4] U-3 (no date) 1910 Formosan Aborigines
116, 286, 531

They use their hands for weaving, or sometimes small hand spindles. The resulting textile is very durable and the designs are attractive. They often take out the red yarn from woolens which they obtain through barter and weave these into their designs. All the patterns they use in weaving consist of symmetrical arrangements of geometrical figures, arranged for the most part in parallel lines. Sometimes they picture animals in symmetrical shape. The colors most often used are red, white, black, blue, and yellow.

16: Müller--235 [5] U-3 (no date) 1910 Formosan Aborigines
116, 322, 531

Designs similar to these used in weaving are also found on the carved wooden figures which are used to decorate ear pendants, pipes, etc.

16: Müller--235 [6] U-3 (no date) 1910 Formosan Aborigines
116, 28, 32

The other native industries, besides weaving, are tanning, basket-weaving, dyeing, and pottery of clay or earthenware. They also know how to fashion wood, bones, and shells into objects and they make their own nets; some tribes even know how to make iron implements.

16: Müller--235 [7] U-3 (no date) 1910 Formosan Aborigines
116; 372, 178

For firemaking the natives for the most part use firestone, but they also have matches which they obtain through barter. The aborigines on Botel Tobago obtain fire by rubbing two sticks of wood together. This method was used on the main island in former times and among the Tsarisen and Vonum tribes is still employed today for certain religious festivals, especially for lighting the sacred flame. Many of the Tsarisen and Paiwan aborigines also use a fire drill.

16: Müller--235-236 U-3 (no date) 1910 Formosan Aborigines
116, 671, 673, 681

The concept of crime is not unknown among the natives. They judge misdemeanors according to ancient traditions; action is considered a moral offense if it is not in accordance with the principles held by the community as a whole. There is no written law; the punishment for each crime is [236] considered individually. No form of punishment, however, may exceed a certain degree of severity. Sometimes the offender may pay a fine to take the place of the punishment designated.

16: Müller--236 U-3 (no date) 1910 Formosan Aborigines
116, 681, 628 Tayal

Among the Ataiyal aborigines the following are the chief forms of punishment:

1. A small fine, for offenses such as trespassing in the fields.

2. Beating, used chiefly for personal insults. This may be administered symbolically, by striking the offender's arm very gently, or actually, with sticks.

3. Capital punishment, chiefly applied if the offender has murdered a relative or committed adultery, etc.

4. Confiscation of property and plundering of houses, applied against an entire tribe.

16: Müller--236 [2] U-3 (no date) 1910 Formosan Aborigines
116, 692, 695, 721, 787

The aboriginal chiefs administer justice either independently or together with the tribal elders. If a case is doubtful a trial by ordeal is held. This is preceded by certain formalities. The chieftain first of all asks the soothsayers and the men who interpret dreams whether a trial by ordeal should be held. If he has their consent he orders the accused to go on a headhunting expedition. The latter then makes the necessary preparations. He puts his weapons in a sacred place and lives in seclusion in a hut. If a day arrives which from the flight of birds he judges to be favorable he starts on the expedition together with several friends. If he is successful he is declared free from guilt, but if he returns home without a head he is punished.

16: Müller--236 [3] U-3 (no date) 1910 Formosan Aborigines
116, 675

Various formalities are employed for contracts among the Taiwan aborigines. One custom which is common among all tribes is to bury a stone in a secret place; both parties bury it together and neither may touch it during the time the contract is in effect. Sometimes one of the parties cuts a branch from a tree and throws it to the other, who at that moment cuts the grass with his sword. *

* A chieftain once offered me a pledge of security by biting a bullet out of a cartridge and giving it to me as a hypothec.

Contracts are held sacred among the aborigines, and it rarely occurs that one of the parties breaks the contract.

16: Müller--236-237 U-3 (no date) 1910 Formosan Aborigines
116, 775, 828

The aborigines of Formosa... hold the following beliefs:

1. Death destroys only the body; the soul remains immortal.

2. Dreams are due to the souls of departed which appear to the dreamer in his sleep. [237]

3. The souls of the departed inhabit certain definite places, in the forest, under a tree, or in imaginary places.

4. The spirits of the departed influence the fate of human beings for good or evil, and all fortune or misfortune is dependent on them.

16: Müller--237 U-3 (no date) 1910 Formosan Aborigines
116, 774, 775

The religion... of the aborigines is founded on a belief in spirits, although these are not represented by idols or other tangible images. Phenomena of nature, such as the sun, moon, and stars, bear a relation to these concepts in their imagination, since these are thought to represent a special kind of soul. A rainbow is a bridge for spirits, the pulse is the soul of the hand. Wherever one goes one is surrounded by spirits. Even shadows represent spirits. Closely connected with this is their belief in ghosts; these are believed to have the appearance of human beings, with long hair and long, claw-like nails, and they jump up and down. They bite people's necks. This belief is held by the Ataiyal aborigines. Those of the Tsarisen tribes believe that the mountains are inhabited by dwarfs who challenge human beings to fight with them.

16: Müller--237 [2] U-3 (no date) 1910 Formosan Aborigines
116, 753, 791, 775, 787

The belief in the evil power of spirits is deeply rooted in native imagination. Sickness and other misfortunes are all believed to be the work of evil spirits. If one is careful, however, one may recognize the signs of his approach. The flight of birds or their call, even sneezing or gas in the stomach are thought to be signs of the presence of spirits. With the aid of soothsayers and dream specialists it is possible sometimes to escape their evil designs. Once they have taken hold of their victim, however, it is difficult to elude their grasp.

16: Müller--237 [3] U-3 (no date) 1910 Formosan Aborigines
116, 755, 791

If a member of the household is taken seriously ill, the desire of the spirits must be learned first of all. In one tribe of the Ataiyal group it is customary to call a female soothsayer to the bedside of the sick man; there she consults the fates. She holds a small bamboo cane between her knees and balances a round stone on it. If she is able to keep it from falling from the cane by moving her right hand, the evil spirit will not be able to harm the sick man. If the stone falls off, however, the sick man's fate is sealed.

16: Müller--237 [4] U-3 (no date) 1910 Formosan Aborigines
116, 782, 789

There are numerous methods used to exorcise evil spirits. Often they are appeased with offerings; thus, if a man has recovered from a disease, he sacrifices a pig, etc. At other occasions, especially if the evil spirits have sown discord among a group or caused an epidemic, such as smallpox, they try to drive the evil spirit into a pig; then they cut off the ears of the pig and finally burn it so that the evil spirit is believed to be destroyed altogether.

16: Müller--237-238 U-3 (no date) 1910 Formosan Aborigines
116, 751, 789, 824, 721

Even when there is no immediate cause for anxiety, preventive measures are used. Thus every household uses measures to drive the evil spirits from its house several times a year. For this purpose they strew grains of rice, mixed perhaps with pieces of pork [238] or small pieces of Calamus [MC: the sweet flag (Acorus Calamus) or its aromatic root] on the floor and speak magic formulas. Calamus plays an important part in all the religious ceremonies of the aborigines. If there is a smallpox epidemic, they try to appease the evil spirits by going on a headhunting expedition and presenting the head as an offering. [MC: Millet and calamus form an important part of the periodic propitiation ceremonies. For details see category 796.]

16: Müller--238 U-3 (no date) 1910 Formosan Aborigines
116, 769

Just as all possible means are used to prevent the mischief of evil spirits, so everything is done to obtain the favor and blessing of the beneficent spirits. The natives, therefore, devote special festivals to the spirits of their ancestors.

16: Müller--238 U-3 (no date) 1910 Formosan Aborigines
116, 101, 197

[MC: A comparative table of numbers from 1 to 10 in the various Formosan Aboriginal dialects has been omitted from the files. However, the tribal classification system on which this table was based has been included below. This table was obtained by Müller from a Japanese who lived in the interior of Formosa and is not the result of Müller's own research.]

Ataiyal.....	A)	Ataiyal	(W)
	B)	"	(O)
	C)	"	(Taroko)
Vonum.....	D)	Vonum	
	E)	"	
	F)	"	
Tso'o.....	G)	Tso'o	(N)
	H)	"	(S)
	I)	"	
Tsarisen.....	J)	Tsarisen	
Paiwan.....	K)	Paiwan	
Pyuma.....	L)	Pyuma	
Tsarisen.....	M)	Taroma	
Amis.....	N)	Amis	
Pepo.....	O)	Saisiett	
Yami.....	P)	Yami	

Pepo.....	Q)	Makattao
	R)	Siraiya
	S)	Loa
	T)	Poavosa
	U)	Arikun
	V)	Vupuran
	W)	Pazzehe
	X)	Taokas
	Y)	Ketanganan (1)
	Z)	Kareowan
	A)	Kuvarawan
	B)	Pepo

(1) Ketangapan?

16: Müller--238-240 U-3 (no date) 1910 Formosan Aborigines
116, 241, 796, 769 Tsuo

Among the Tso'o aborigines there are three festivals to propitiate beneficent spirits every year. The most important of these at the same time marks the time when the harvest of millet begins; it is held under the sacred tree [239] which is the habitat of the spirits. To prepare for this festival the women brew the wine made from millet with many ceremonies, using millet which they have chewed beforehand to ferment it. On the day of the festival the unmarried young men ring a bell and all the heads of families start out for the sacred tree. They carry a bunch of Calamus reeds [MC: the sweet flag (Acorus Calamus)] tied together with fiber; the Calamus must be grown under the sacred tree. When they have arrived at the tree, the village elder sacrifices a bamboo cup filled with wine made of millet, murmuring incantations at the same time; during this time the others kneel down. After this everyone plants his Calamus under the sacred tree. On the following day [240] the young men again ring the bell and all the inhabitants, dressed in their holiday attire, assemble in the house of the chieftain. The oldest man in the village and the chieftain then sing a song in praise of the ancestral spirits. After this, all the participants form a solemn procession and march to the hut of the unmarried men where they dance around a fire. On the last day of the festival a banquet and a drinking bout are held.

In Polysia, the festival in honor of the ancestral spirits is somewhat different. On the first day there is a race for the boys, and the victor is given a red flat. On the second day the people assemble in the chieftain's house. There they knead viscous rice with their hands in a solemn fashion and give it the shape of a fish; the chieftain then cuts off the head and tail of the fish and distributes the body among those present. He puts the head and tail in a basket which he attaches to a bundle of Calamus. [MC: the sweet flag (Acorus Calamus)] After that he leads the people to the sacred tree; everyone carries a single Calamus reed. A huge stone lies under the tree.* Then the rites connected

* In the mythology of the natives, a huge stone under a tree is connected with the origin of headhunting. They say that this stone once split in half and a woman arose from it. The children of this woman had a feud which was arbitrated by an ordeal. He was to be the victor who would kill the greatest number of bears on a bear-hunting expedition. Later, when the Chinese came to this island and their strength and knowledge was compared to that of bears, the Chinese became the objects of the hunt.

with the offering begin. The young men present their Calamus to the chieftain and then turn around. The chieftain places his own offering of Calamus and rice and that of the others on the sacred stone, murmuring incantations at the same time. Then he pushes

his spear into the lower part of the tree trunk, and at the same time all the young men run home with loud shouts. On the third day of the festival, they hunt for stags. They make an offering of the stag, or, if they have not been successful, of a pig, to the spirits of their ancestors. The fourth and last day of the festival is a gay one: the people eat, drink, and dance as long as they can.

16: Müller--240-241 U-3 (no date) 1910 Formosan Aborigines
116, 554, 721, 881, 582

Among the natives of Formosa, as on all the Malayan Islands, the practice of headhunting is widespread and forms one of the most important traditions. The Ataiyal aborigines practice it to a greater extent than any other group. Those of the Paiwan and Vonum group also practice it a great deal. In former times, according to the Chinese sources, headhunting was practiced throughout Formosa. There are various reasons for this custom. It is considered, first of all, a test of courage. This may be seen from the fact that the tribe which has the largest number of heads in its possession is considered the most courageous. Where there are many skulls there is also great power, according to the text of one song. Every young man [241] who wants to be considered an adult must pass this test. If two men are rival suitors, the girl chooses the one who is the first to return home with a head.

16: Müller--241 U-3 (no date) 1910 Formosan Aborigines
116, 789, 775

Since the aborigines of Formosa are extremely superstitious, it is only natural that they have other reasons for headhunting. Its function in trial by ordeal has already been discussed. Among some tribes of the Ataiyal group, headhunting is also a necessary preparation for the festivals in honor of ancestors. It is also used as a kind of fetish for exorcizing evil spirits. Some of the aborigines believe that the soul of the man who has been killed in this way becomes subject to the power of the man who has killed him.

16: Müller--241 [2] U-3 (no date) 1910 Formosan Aborigines
116, 224, 721, 727

The method used for headhunting is the following:

As a rule the hunter hides near a road and there waits for a victim; often he must wait for days and has little food with him. He knows from experience that whoever approaches this region will scent danger at the slightest sound and take precautions, and therefore uses the following ruse: he steps on a twig and shoots his victim at the moment when the latter stops to find out where the noise came from. If the victim is hit, the hunter rushes out of his hiding place and cuts off the head.

The natives either keep the heads on racks which are made for that purpose, or they suspend them from the roof of the huts. Some tribes preserve the skulls of animals which they have killed in the same way.

17: Norbeck--1 (no date) 1950 Formosan Aborigines
116, 114

"A search for anthropological material in western languages on the aborigines of Formosa discloses very little. Such writings as exist are for the most part old and have been executed by untrained observers. Formosan folklore in European languages, as far as has been determined by a fairly extensive search, is extremely limited. (1) To

1. Except for brief references in general works, only the following articles on Formosan folklore have been found: Asai Erin, A Study of the Yami Language (Leiden: Universiteits-boekhandel en antiquariaat, J. Ginsberg, 1936); G. Taylor, 'Folklore of Aboriginal Formosa,' Folklore Journ., V (1887): 130-53; Otto Scheerer, 'Sagen der Atayalen auf Formosa,' Zeitschr. f. eingebor. Sprach., XXII, Hft. 2, 3 (1932). (Six folk-tales.)

my knowledge virtually no attempt has been made to correlate Formosan folklore with that of other areas of the world. (2)

2. An unavailable article in English by Arundel Del Re in Il Marco Polo (Shanghai, ca. 1939) is reported to deal with the religious concepts of the Formosan aborigines and other peoples of Southeast Asia as expressed in their mythology."

17: Norbeck--1 (no date) 1950 Formosan Aborigines
116, 121, 144, 171

"The similarity of the Formosan aborigines to various other Indonesian or southeast Asian peoples in physical type, culture, and language has been frequently noted, but no thorough study of the Formosan groups has as yet been made by a westerner. This paper presents translations from Japanese of folk tales of the Atayal tribe of north Formosa. The tales reveal an affinity with the mythology of other Indonesian and southeast Asian groups; the most noteworthy resemblance, which is close to the point of identity in some instances, is with the folklore of the mountain tribes of northern Luzon."

"It may be well to note that interior Formosa, still little known to the western world, is in actuality one of the better-known areas of the world in Japanese administrative and scholarly circles. After the acquisition of Formosa by Japan in 1895 foreign researchers were discouraged from study [2] there. The languages barrier, extremely rough terrain, prevalence of tropical diseases, and the existence of the custom of head-hunting also effectively barred Japanese ethnologists until about 1930, although various Japanese governmental agencies concerned with the aborigines had produced a substantial number of works since shortly after the turn of the century. With the gradual acculturation of the wild tribes, extensive field work was begun in 1930 under the direction of the late Professor Utsurikawa Nenozō of Taihoku University.

As a result of this field work a considerable number of works were published in journal and book form in Japanese, among them a work covering the mythology of all of the interior tribes by Ogawa Naoyoshi and Asai Erin. (3) The translations given here

3. Ogawa Naoyoshi and Asai Erin, Taiwan Takasagozoku Densetsu Shū ('Myths and Traditions of the Formosan Native Tribes') (Tokyo Tokō Shoin, 1935).

are all from the part of this work executed by Ogawa, former head of the Linguistic Institute of Taihoku University, Taihoku, Formosa. Other available Japanese works on

Formosan mythology (4) are essentially free paraphrases of the tales collected by

4. See Bibliography.

Ogawa and Asai."

17: Norbeck--2 (no date) 1950 Formosan Aborigines
116, 114, 121, 127

"Professor Ogawa's work, [MC: on the mythology of the interior tribes, translations of which have been used by Norbeck in the present study] prepared from material gathered directly in the field, appears to be meticulously executed and contains considerable linguistic data. Unfortunately, all of the tales are removed from ethnographic context. Professor Ogawa, in fact, states that he considers his work to be primarily of linguistic value. For an analytic study of primitive folklore, an ethnological knowledge of the people concerned is of course imperative. The meager information gained from the available works in European languages and from a cursory examination of Japanese sources at hand is inadequate for such a study and, therefore, this paper is devoted principally to the comparison of tale motifs with those of other areas."

17: Norbeck--2-3 (no date) 1950 Formosan Aborigines
116, 144, 174

"The tribes which inhabit the interior of Formosa, an area comprising approximately one-half of the total island, are of preponderantly Malay or unspecialized Mongoloid stock, and the present peoples are thought to have resulted from successive waves [3] of migration. Although considerable variation exists among the tribes, all are members of the of the Malayo-Polynésian linguistic stock, and in physical type and culture resemble peoples of southeast Asia, the Philippines, and other Indonesian areas."

17: Norbeck--3 (no date) 1950 Formosan Aborigines
116, 101, 175, 177

"The Japanese classify the Formosan aborigines into two groups, representing neither ethnic nor tribal divisions: the Seiban ('wild' or 'raw' aborigines) and the Jukuban ('civilized' or 'ripe' aborigines). These terms are taken over from the earlier Chinese Sek-huan and Chin-huan. Both groups originally fell under the classification of 'wild aborigines,' but with acculturation through the centuries from China, Holland, and Japan a number of the tribes or members of tribes (the present Jukuban) largely abandoned their native cultures and languages, and, adopting principally Formosan Chinese culture, lived in amity with the Chinese, Hakkas, Japanese, and other nonnative residents of lowland and coastal Formosa. The Seiban, however, persistently resisted the advance of the more highly developed cultures and continued their life essentially unchanged in the security of the mountainous area of the interior. They remained fierce and unyielding, making frequent head-hunting forays, so that the Chinese, as a protective measure, were obliged to establish guard lines in various places. After Japanese occupation these guarded areas were elaborated, strengthened, and enlarged into one line encompassing most of interior Formosa. No real conciliatory progress was made by the Japanese until the late nineteen twenties. From Japanese material at hand it appears that the practice of head-hunting has almost, if not entirely, been abandoned, but that complete acculturation has not been achieved so that the Seiban remain at a primitive cultural level. Information on the post-war situation is lacking."

17: Norbeck--3 [2] (no date) 1950 Formosan Aborigines
116, 101, 131 Atayal

"The Seiban are usually classified into nine tribal groups, with a large number of subtribes, often with little or no political unity. One of the largest units is the Atayal, composed of a considerable number of more or less independent and sometimes feuding subgroups which inhabit the extremely mountainous area of the north interior, an area comprising approximately one-sixth of the total island."

17: Norbeck--3-4 (no date) 1950 Formosan Aborigines
116, 161 Atayal

"According to a Japanese census of 1930, the Atayal numbered 32,925, in 241 villages [4] (perhaps more properly translated as communities), and had a total of 7,040 houses. (5)

5. Suzuki Sakutarō, Taiwan no Banzoku Kenkyū ('Study of the Aboriginal Tribes of Formosa') (Taihoku, Formosa: Taiwan Shiseki Kankō-kai, 1932), p. 6."

17: Norbeck--4 (no date) 1950 Formosan Aborigines
116, 105, 177 Atayal

"The Atayal have long been known as one of the most fierce tribal groups and the most aggressive in head-hunting. They depend for subsistence upon hoe agriculture, principally of millet, dry-land rice and sweet potatoes, and to some extent upon the hunting of wild pigs and deer. Metal working is not practiced, but metal implements and guns are secured by barter. Atayal women are skilled in loom weaving, and proficiency in weaving is considered the highest feminine attainment. Religious practices, largely concerned with ancestor worship, are open to women as well as men, and women have been reported to serve occasionally as chiefs. Much importance is attached by the Atayal to their own history and genealogy, and traditions are transmitted orally by hereditary officials.

Considerable change in culture has come about from Chinese and particularly Japanese contact, and the Atayal have long possessed rifles. Both official and scholarly Japanese sources state that many Atayal customs have been abandoned or greatly changed in the last few decades, as is also indicated in some of the appended folk tales."

"Ogawa's work, (6) from which the present translations were made, consists of texts in

6. Ogawa and Asai, op. cit.

the native language by International Phonetic Alphabet representation, with Japanese characters inserted below each native word, and is accompanied by what is obviously a literal translation into Japanese. My translations are also fairly literal throughout and are based upon the Japanese text. (7) Little attempt has been made to put them into

7. Recourse has been made to the native text for a number of obscure place names appearing in the Japanese text under names given by the Japanese which, for lack of adequate reference material, are difficult to [4] identify or even to read. In such cases an approximation of the native name has been utilized.

[4] fluent English. What may have been lost from, or added to, these folk tales in this process of double translation is impossible to estimate. I am, however, satisfied that the general content and motifs are faithfully reflected."

17: Norbeck--5 (no date) 1950 Formosan Aborigines
116, 128, 539 Atayal

"These tales are mostly stories of mythical times and etiological stories. The tales of mythical times are concerned with the origin and ancient life of the present human beings, and stories of the creation of the universe do not occur. The etiological or explanatory stories, comprising the majority of the tales, tell of magical transformation into birds, insects, and animals as the result either of misconduct by the persons transformed or of injustices against those who transform themselves. For ease in handling, the motifs are here subdivided into the following groups: (1) Tales of Magic Appearance of Food and Requisites for Living, (2) Flood Tales, (3) Tales of the Mythical Period, (4) Tales of Transformation, and (5) Miscellaneous Tales. Some duplication of tale elements occurs since the twenty-eight tales were gathered from two different villages or communities, Daihyō-sha and Takonan-sha (see Map 1 [MC: facing page 12]. (8)

8. Tales 1 to 17 are from Daihyō-sha; the remainder from Takonan-sha."

17: Norbeck--5-6 (no date) 1950 Formosan Aborigines
116, 171, 539, 773 Atayal

"A comparison based upon the comprehensive motif-index of Stith Thompson (9)

9. Stith Thompson, 'Motif-index of Folk Literature,' Indiana Univ. Studies, 19-23, Nos. 96-97, 100-101, 105-6, 108-12 (1932-36).

reveals that nearly all of the tales share motifs with other areas of the world in general outline, although detailed resemblances have a much more restricted range. The incidence of frequency and the degree of similarity, as might reasonably be expected, increases with territorial propinquity, and is particularly marked among the Malay and other unspecialized Mongoloid peoples. These similarities are intensified in the folklore of the Philippines, and particularly in that of the pagan mountain tribes of northern Luzon. A fairly substantial amount of folklore is at hand on the Apayao, Tinguian, Nabaloi, and Bontoc-Igorot, which is here compared with that of the Atayal. Folklore of the Ilongot and Ifugao, for whom the quantity of material available is considerably smaller, has also been utilized for comparison. [6] Since material on the remaining mountain peoples of Luzon is either very limited or unavailable, references to it have been omitted from consideration here."

17: Norbeck--6-7 (no date) 1950 Formosan Aborigines-1-3
116, 171, ~~539, 773~~ Atayal

"Tables of motifs in the mythology of the foregoing Luzon groups follow, with references to Atayal tales bearing the same or similar motifs. For the sake of convenience the appended Atayal folk tales are referred to by number.

I. TALES OF MAGIC APPEARANCE OF FOOD AND REQUISITES FOR LIVING

Philippine Version	Philippine Group	Atayal Folk Tale Number
Food, clothing, and anything desired appear magically. (10)	Apayao	7, 20
As punishment, people must labor for daily needs, with no further magical aid. (11)	Apayao	7, 20
Small basket of rice becomes five pots. (12)	Bontoc-Igorot (14)	7, 20
Pigs and deer emerge from forest		

at call. (13)	Bontoc-Igorot (14)	7, 20
Food once easily available. Handful of rice sufficient for a family. (15)	Ifugao	7, 20
One teaspoon of rice when cooked sufficient for one person. (16)....	Ifugao	7, 20
Magic betel nut which, upon being chewed, produces deer. (17).....	Nabaloi	7, 20 [7]
Prepared food appears at a word. A small jar containing a single grain of rice supplies an abundance of food. (18)	Tinguian	7, 20
One grain of rice placed in each of twelve jars, which at once become filled with rice. (19)	Tinguian	7, 20

Many additional tales bearing the motif of magic appearance of food appear in the folklore of the above groups. This motif is also common in the mythology of other peoples of the Philippines. The motifs listed above bear the closest resemblances to the Atayal tales.

(10) Laurence S. Wilson, Apayao Life and Legends (Baguio: Privately printed, 1947), p. 82.
(11) Mabel Cook Cole, Philippine Folk Tales (Chicago: A. C. McClurg & Co., 1916), p. 105.
(13) Ibid.
(14) In ibid., as 'Igorot.'
(15) H. Otley Beyer, 'Origin Myths Among the Mountain People of the Philippines,' Philippine Journ. Sci., 8, No. 1 (1913): 111.
(16) Dean C. Worcester (trans.), Fr. Juan Villaverde's, 'The Ifugaos of Quinigian and Vicinity,' Philippine Journ. Sci., 4, No. 4 (1909): 256.
(17) C. R. Moss, 'Nabaloi Tales,' Univ. Calif. Publ. Amer. Archeol. Ethnol., 17, No. 5 (1924): 345-46. [7]
(18) Fay-Cooper Cole, 'Traditions of the Tinguian,' Field Mus. Nat. Hist., Publ. No. 180, Anthropol. Ser., 14, No. 1 (1915): 191.
(19) Ibid., p. 211."

17: Norbeck--7 (no date) 1950 Formosan Aborigines
116, 171, 539, 773 Atayal

"Flood tales similar to the two Atayal flood tales (Nos. 5 and 19) have been found for the Apayo, Ifugao, Nabaloi, and Bontoc-Igorot. All are based on the general theme that the world was once flat except for one or two mountains upon which the surviving people, usually two, take refuge from the floods, and that the present mountains and valleys were formed by the receding flood waters. Elements from these tales are elaborated in the following section."

17: Norbeck--7-8 (no date) 1950 Formosan Aborigines
116, 171, 773 Atayal

"Especially frequent throughout the mythology of the Tinguian and Bontoc-Igorot are references to 'peoples of the first times' who had different customs and ideas. Mabel Cook Cole, in referring to Tinguian myths, writes, '...the chief characters of these tales are not celestial beings, but typical generalized heroes of former ages.' She states further, 'In [8] the...stories we read of many customs of "the first time" which differ radically from those of the present.' (20) This is also characteristic of the Atayal

20. M.C. Cole, op. cit., pp. vi-vii.

myths."

"Roland B. Dixon, in The Mythology of All Races states, 'The mountain tribes of northern Luzon in the Philippines seem to stand alone in respect to cosmogonic myths in that, so far as material now at our command is concerned, they lack entirely, or almost entirely, any myths of the origin of the universe.' (21) He writes further that

21. Roland B. Dixon, The Mythology of All Races, Oceania (Boston: Marshall Jones Co., 1916), 9:55.

the actors in cosmogonic myths are treated as human beings in Igorot and some other Philippine mythology. (22) In commenting on cosmogonic mythology among the Ifugaos,

22. Ibid., p. 172.

H. Otley Beyer reports, 'The Ifugaos have no beliefs that I have ever been able to discover, as to the origin of the universe; to their minds it has always existed and will always continue to exist.' (23) Although the appended Atayal tales unquestionably do not

23. Beyer, op. cit., p. 99.

represent the total group mythology, from material at hand the above points are also

characteristic of the Atayal.

Of the Philippine mountain groups, at least the Tinguian, Nabaloi, and Bontoc-Igorot share with the Atayal the idea (not uncommon in the beliefs of many other peoples) that death was not intended to be inevitable and that immortality was lost through some error."

"Some individual elements from these tales of the mythical period appear below:

Philippine Version	Philippine Group	Atayal Folk Tale Number
Earth once flat. (24)	Apayao, Bontoc-Igorot, Ifugao, Nabaloi	5,19
Sun and moon once of equal brightness and there was perpetual daylight. (25)	Apayao, Nabaloi	4 [9]
The moon once also a sun, and it was always day. (26)	Bontoc-Igorot	4
Mountains and valleys formed by rush of receding waters. (27)	Ifugao	5,19
Shooting the sun with an arrow. (28)	Nabaloi	4
People formerly immortal. (29)	Nabaloi	19

(24) Wilson, op. cit., p. 39; M.C. Cole, op. cit., pp. 102-3; Beyer, op. cit., p. 111; Moss, op. cit., p. 237.
(25) Wilson, op. cit., p. 40; Moss, op. cit., p. 237. [9]
(26) Albert E. Jenks, The Bontoc Igorot (Manila: Dept. Int., 1905), Ethnol. Surv. Publ. I: 221.
(27) Beyer, op. cit., p. 100. Note: only the Ifugao flood tale explicitly states that the mountains and valleys were formed by flood waters. All others begin with the statement that the earth was once flat, and the reader can infer the formation of mountains and valleys from the floods.
(28) Moss, op. cit. p. 233.
(29) Ibid., p. 235."

IV. TALES OF TRANSFORMATION

Philippine Version	Philippine Group	Atayal Folk Tale Number
Boy turns into hawk because parents will not peel sugar can for him. (30)	Apayao	25, and others (31)
Origin of monkeys from women. Planting sticks become tails. (32)	Apayao	8, 24
Boy turns into fish when parents kill his pet pig. (33)	Apayao	23, 25, and others
Vain girl turns into scaly fish. (34)	Apayao	12, and others
Boy turns into serpent eagle because mother is stingy with food. Flies overhead saying. 'I don't need your food any longer.' (35)	Bontoc-Igorot	25, and others [10]
Boy turns into monkey because step-mother did not give him enough food. (36)	Bontoc-Igorot	8, 24, and others

Girl turns into rice bird because mother did not give her enough food. (37)	Bontoc-Igorot, Nabaloi	9, and others
Origin of monkeys from men. Rattan becomes attached to anuses as tails. (38)	Ilongot	8, 24
Men turn into rice birds when woman employer does not feed them. (39)	Ilongot	9, and others
Boy turns into monkey because no one will peel sugar cane for him. Cane becomes tail. (40)	Nabaloi	8, 24
Lazy daughter turns into monkey; roll of cotton becomes tail. (41)	Nabaloi	8, 24
Boy turns into hawk because of mistreatment. Flies over house and tells parents he will eat their chickens in the future. (42)	Nabaloi	25, and others
Woman turns into rock because of shame. (43)	Nabaloi	9, and others

Woman turns into wildcat to punish man for misdeeds. (44)	Nabaloi	22, and others
Lazy man constantly leans on planting stick. He turns into a monkey and stick becomes tail. (45)	Tinguian	8, 24 [11]
A boy is too lazy to strip sugar cane for himself. His mother, in anger, tells him to stick it up his anus. He does so and becomes a monkey. (46)	Tinguian	8, 24
Lazy girl pretends she does not know how to spin. Her companions, in disgust, tell her to stick spinning stick up her anus. She does so, and turns into a monkey. (47)	Tinguian	8, 24
Young wife is told by husband to cut an excessive amount of rice. She turns into a bird and flies off. (48)	Tinguian	9, and others

Boy is sent off to tiresome work of keeping birds from rice field, and turns into bird. Parents plead with him to become a boy again, but he refuses and flies off. (49)	Tinguian	25, and others
Deer which hunters are pursuing turns into a jar. (50)	Tinguian	21, and others
Boy turns into a stone because his grandmother ate the bird he snared. (51)	Tinguian	25, and others

Many additional tales of transformation exist among other peoples of the Philippines, but the most numerous and those of closest resemblance to the Atayal occur in the groups above.

(30) Wilson, op. cit., pp. 105-6.
(31) The Atayal tales which are most similar are listed by number. Where the phrase 'and others' appears, similar motifs may also be found as elements of various other Atayal tales.
(32) Wilson, op. cit., pp. 106-9.
(33) Ibid., pp. 115-16.
(34) Ibid., pp. 134-36.
(35) Jenks, op. cit., pp. 222-23. [10]
(36) Carl W. Seidenadel, The First Grammar of the Language Spoken by the Bontoc Igorot (Chicago: The Open Court Publishing Co., 1909), pp. 562-65.
(37) M. C. Cole, op. cit., pp. 117-18; Moss, op. cit., p. 291.
(38) Laurence L. Wilson, Ilongot Life and Legends (Baguio: Privately printed, 1947), pp. 40-41.
(39) Ibid., pp. 42-44.
(40) Moss, op. cit., pp. 282-83.
(41) Ibid., p. 283.
(42) Ibid., p. 291.
(43) Ibid., p. 323.
(44) Ibid., pp. 335-37.
(45) Dean S. Fansler, Filipino Popular Tales (Lancaster, Pa., and New York; Amer. Folklore Soc., 1921), p. 414. [11]

(46) Ibid.
(47) Ibid.
(48) Fay-Cooper Cole, op. cit., p. 191.
(49) M.C. Cole, op. cit., p. 53.
(50) Ibid., pp. 68-70.
(51) Ibid., pp. 84-85.
(52) Laurence L. Wilson, Apayao Life and Legends, p. 88."

V. MISCELLANEOUS TALES

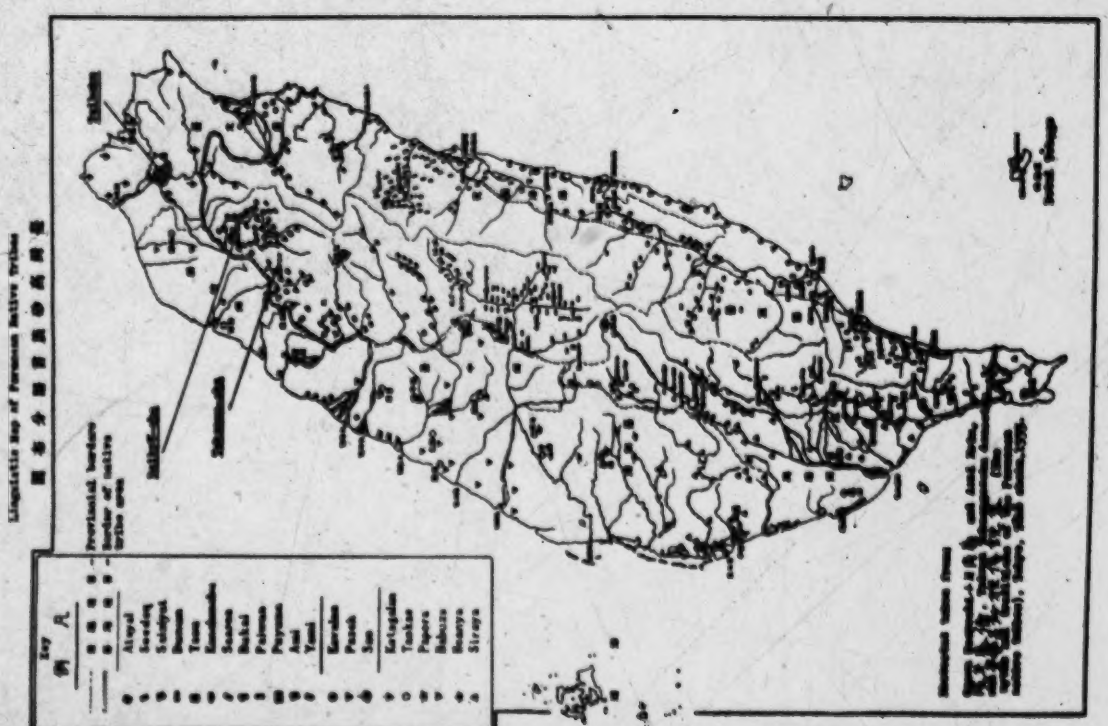
Philippine Version	Philippine Group	Atayal Folk Tale Number
People who lived by inhaling the vapor of cooked rice and who had no anuses; anus made by piercing with pointed stick. (52)	Apayao	3 [12]
Examination of tattoos on back of hands before crossing bridge to Paradise. (53)	Apayao	16
Wicked giant whose skin is so thick it cannot be pierced with arrows. (54)	Nabaloi	6
Giant who violates women. (55) ..	Nabaloi	6
Giant who extends arms across river as a bridge when water is high. (56)	Nabaloi	6

(52) Laurence L. Wilson, Apayao Life and Legends, p. 88. [12]
(53) Ibid., pp. 166-67.
(54) Moss, op. cit., pp. 341-43.
(55) Ibid., pp. 343-45.
(56) Ibid., p. 347."

17: Norbeck--12 (no date) 1950 Formosan Aborigines
116, 171, 773 Atayal

"As may be noted, a number of the Philippine tales referred to above contain motifs and details identical or very nearly identical with the appended Atayal folk tales. Reference has already been made to the similarities noted in the culture, physical type, and language of the Formosan tribes and the various peoples of the Philippines. The coincidence of mythological motifs alone is suggestive of some sort of relationship."

17: Norbeck--facing 12 (no date) 1950 Formosan Aborigines
116, 102, 198



17: Norbeck--12 [2] (no date) 1950 Formosan Aborigines
116, 171, 177, 773 Atayal

"Both the Philippine groups under consideration and the Atayal inhabit isolated mountain regions and, at least during the historic period, remained resistant to outside cultural influences, preserving until very recent times cultures thought to be much the same as those of generations of their forebears. Indian and Islamic influence seems not to have reached them, and western influence upon the mythology of these groups is hardly discernible. In discussing diffusion of mythological themes, Stith Thompson reports that one-seventh of one hundred traditional tales current in western Asia and Europe have been recorded from Indonesia. (57) The motifs which he lists under this

57. Stith Thompson, The Folktale (New York: The Dryden Press, 1946), p. 284.

heading are almost entirely absent from the folklore of the groups here considered."

17: Norbeck--12-13 (no date) 1950 Formosan Aborigines
116, 171, 773 Atayal

"The similarity in folklore of the Atayal and Luzon groups seems unquestionably valid as a further substantiation of the relationship noted on the basis of linguistic, physical, and cultural similarities. A thorough comparative study of these [13] groups as well as other isolated groups (58) of Indonesia and Southesast Asia should be rewarding.

58. Of the groups examined in the southern Philippines, those of greatest similarity to the Atayal in mythology (but with considerably less similarity than the Luzon groups covered) were the Bagobo and Mandaya of Mindanao, both isolated peoples. Laura W. Benedict, 'Bagobo Myths,' Journ. Amer. Foklore, 26, No. 49 (1913); Fay-Cooper Cole, 'The Wild Tribes of Davao District, Mindanao,' Field Mus. Nat. Hist., Publ., No. 170, Anthropol. Ser., 12, No. 2 (1913)."

"1. THE PLACE OF ORIGIN OF OUR ANCIENT ANCESTORS [MC: Translation of an Atayal folktale]

With regard to the origin of us Atayal by splitting a stone, it is said that there was a very large stone. It split in two suddenly and two men and one woman emerged from the place where it cleaved. When they looked about them, their surroundings were just deep virgin forests and wild beasts. Thereupon one of the men said, 'I don't like living on earth,' and re-entered the severed place in the stone, so it is said. The other two wanted to stop him, but he had already gone in. Then they said, 'What should we do to increase our number?' and thought about this continually. First the woman went to the ridge of the mountain, spread wide her thighs, and had the wind blow on her. Thus she thought she would become pregnant, but she did not, so it is said. Then once she thought 'If we two have sexual connection I will become pregnant, won't I?' They did not, however, at once understand how to accomplish this. They tried with the sphincter, the nostrils, then the ears, the mouth, all of the orifices, but accomplished nothing. Then, once, they saw a fly come rushing in flight and alight between the woman's thighs. Pondering on this they said, 'This must be a hint from the gods.' Then, when they tried this, the sexual desire of living things actually became this way (satisfaction was attained in this way), (59) so it is [13] said. After a time the body of the woman became strange,

59. Parenthetical items are those of the Japanese text; such additional

notes as seemed required by my translation have been entered as foot-notes.

and her belly gradually grew larger. When the month came she confined herself to the house (gave birth to a child), and the joy of the father and mother was very great. The origin of us Atâyal, who split a stone asunder and then increased, is thus."

17: Norbeck--14 (no date) 1950 Formosan Aborigines
116, 539 Atayal

"2. THE ORIGIN OF DIVINATION BY THE SILEK BIRD [MC: Translation of an Atayal folktale.]

When our ancient ancestors went out they had no one who could make auguries, and, therefore, they became sick, were injured, and consequently sometimes died, so it is said. They therefore held a consultation and said, 'We are the representatives of the gods, and we desire to find someone who can do divination.'

One time the other birds had a contest with the silek birds in crossing a river while carrying stones. They said, 'The one of us who is successful will be the one who determines the auspiciousness of the comings and goings of you human beings.' Then the other birds, crying 'kaw-kaw,' tried to lift a stone but it didn't move. The silek birds then took their turn and, crying 'shi-shi,' lifted the stone just as it was, crossed the river, and placed it on the other side. Thus the silek birds won. Thereafter, when people went any place the silek birds determined the auspiciousness."

"3.THE STORY OF THE SHIGUTS TRIBE [MC: Translation of an Atayal folktale.]

In the time of our ancient forefathers there was a village of the Shiguts tribe where the life of the people was naturally out of the ordinary, so it is said. This Shiguts tribe is said to have eaten only the vapor of cooked rice and boiled vegetables.

A man named Sijuma went there and saw that, although they cooked the rice and boiled the vegetables, they still did not eat the bulk and only inhaled the vapor. The Shiguts were surprised when they saw that Sijuma swallowed the rice and vegetables just as they were and wondered from where he would eliminate the food that he had eaten. Thereupon Sijuma said, [15] 'My people are not like you, who have no anus. We successively eliminate the food that we consume.' Having said this he showed them by excreting right there, so it is said.

Then one of the Shiguts said, 'We also certainly would like to emulate you, who do not eat the vapor of the cooked food. I wonder if there is any way to make an anal opening.' Sijuma said, 'In that case I shall make an anal opening for you. If that is done you can eat rice and vegetables as I can and will be able to eliminate successively.' The Shiguts man said, 'By all means please do make an anal opening for me,' and was very happy, so it is said. Sijuma thereupon heated an iron and when the iron became very hot he made the Shiguts turn his buttocks toward him and suddenly thrust the iron into his buttocks. The Shiguts died at once and so Sijuma secretly fled away.

This Shiguts tribe had very light bodies and ran swiftly. That is because they ate only vapor. When the other Shiguts awakened in the morning they saw that the man whose anus was pierced by Sijuma and who had been left by him was dead. Because Sijuma had run away they knew that he had killed the Shiguts. They thereupon immediately pursued him. Sijuma looked and saw that they were pursuing him and that he was about to be overtaken. He therefore immediately climbed a tree and hid in its branches. In a few seconds the Shiguts, like the rustling of the wind, came pursuing him, but since they did not find his footprints, they went back.

After the Shiguts had left, Sijuma descended to the ground. He was afraid, however, that the Shiguts would again come searching for him, and so he took some betel nut and stuffed it into the hole of an anteater, and also plastered it around the hole. Then he himself was able to get home safely.

As was foreseen, after Sijuma had gone home the Shiguts came back to search and found the hole of the anteater. Seeing that there was blood (60) they thought he was

60. This refers to the red color of betel juice.

undoubtedly in this hole and thrust a spear in. They saw that the spearhead when withdrawn was dripping with blood, and thinking that Sijuma was without doubt dead, they again returned to their homes, so it is said."

"4. THE STORY OF CUTTING THE SUN IN HALF AND RETURNING HOME [MC: Translation of an Atayal folktale.]

In the ancient times of our forefathers there was only one sun. When it became day it was always only day for a half year, and when it became night, it was always only night for a half year. Everybody was suffering because of this, so it is said. They thought of various plans and then one person said, 'What if we go and cut the sun in half? If we do that it might become night and day alternately.' They then decided to go and cut the sun in half.

Accordingly, for that purpose, they selected three strong young men. These three, carrying their babies on their backs, went on their way, and as they went along the road they planted orange trees, so it is said. They went on and on but could not reach their destination. They saw that they, who had left their homes as young men, had all become gray-haired. They almost reached the vicinity of the sun, but then they all died.

The babies whom they had carried on their backs had all become young men, and so they carried on for their parents. Those young men took the place of their dead parents and at last arrived at the place where the sun emerges. They found that it was very hot. They waited at that place with caution, and lay concealed and eagerly waiting at the peak of the mountain where the sun emerges. They saw the sun come out. It was so hot that it seemed as if it would blind them. So they just waited as they were, and taking an

opportune time, one of them drew his bow; and when he released it with a twang, blood welled up and the man who had shot the sun was bathed in blood from his head on down and died. The others, who were drenched with blood but still alive, returned home, eating the oranges that they had planted on the way over. It is said that when they arrived back home their backs were crooked; they had canes; their hair was gray, and they were extremely old men.

After they had shot the sun and returned home it came about that day and night alternated. During the day the sun came out, and at night the moon came out. After that the life of all the people became prosperous, so it is said."

"5. THE FLOOD [MC: Translation of an Atayal folktale.]

Long ago there were no valleys nor cliffs; the earth was just flat land with no irregularities, so it is said. There were hills, but they were small and, in general, they were the same as the flat land. Furthermore, the directions in which the rivers flowed were uncertain.

Then at one time there was a flood, and even the tiny mountain streams became swollen with water. Then suddenly the water gradually increased and became a sea, and the Atayal therefore all fled to Pappak Mountain. The water again increased and gradually made headway so that they were finally pushed up to the summit of Pappak Mountain.

There all the Atayal held a consultation, saying, 'We wonder why this water is gradually increasing. It may be that the gods are demanding something. How would it be if we offered them a person?' Then, for that purpose, they selected a worthless man whose death was of no concern. When they threw that man into the water, the water immediately roared, and, contrary to expectations, began to increase. They all deliberated and said, 'The gods are undoubtedly angry because we offered a worthless person. How would it be if we offered the daughter of the chief?' Since the chief consented when they spoke to him, they offered up the chief's daughter. Then, in a moment, with

a roar as if the cliff were crumbling, the water receded.

When they looked at the land they saw that there were landslides, and deep valleys and precipices were being formed. In the place where the water had passed there were many fish and eels clinging here and there. They were not able to eat all of them and so they rotted and smelled terribly, so it is said. The old men of long ago have handed it down as a tradition that it was from this time that the precipices, high mountains, and deep valleys around this area appeared."

17: Norbeck--17-19 (no date) 1950 Formosan Aborigines-1-2
116, 539 Atayal

"6. HALUS [MC: Translation of an Atayal folktale.]

Once upon a time a long time ago there was a very large man who was called Halus. It is said that he was sixty fathoms tall. The place where he slept was the size of a division of [18] a field, and the ground in this place was depressed to that extent.

It is said that his phallus was of a size large enough to cross a river and that ordinarily he wound it around his waist. At times when floods arose because of great storms, people came and called him and he made a bridge over the river with his phallus. It is said that he extended both of his arms at the same time and made a railing for the bridge. When women crossed it became hard as iron and did not move, but when men crossed it moved waveringly up and down, and it is said that crossing was an extremely frightening thing.

If he were always this way it could have been a beneficial thing, but actually this was not the case, for this Halus frequently violated the women. When the husbands went to the fields and the wives were in the houses, he would violate them. The women whom he violated had their thighs rent and died, so it is said. It is said that even if the doors were locked he would place his private parts in through the windows and violate the women.

That is not all. When they went hunting he would steal a march and go directly to the roads that the animals traveled and wait there. Then, when the animals came fleeing,

he would open his hands wide, chase them into his mouth, and swallowing them whole, would eat them up. The people wanted to kill him, but although they shot him with arrows, they were like mosquito bites and did not penetrate his body, so it is said. Then everyone was worried and said, 'What is the world are we going to do?' Fortunately, one man had an idea and said, 'Let us heat stones and try to deceive him by saying, 'Wait, some animals are coming.' Then we will try to kill him by causing him to eat the hot stones.' Everyone said, 'This is an excellent idea.'

So then they went to the mountains and heated two stones, and when they had baked them for three days the stones were red. They then went to Halus and said, 'We are going hunting. There are a great many animals. Go to the place at the foot of the mountain and wait very attentively.' Halus was very happy because they had said this, and left. When he was waiting attentively they said, 'A huge deer is coming,' and rolled a hot stone down. However, because this stone passed by Halus's side, they shouted, 'There is still another deer. Watch sharply,' and rolled down another stone. When the red [19] stone rolled down Halus gulped it down. Then a sizzling sound was heard; Halus gave one shrieking cry and instantly died."

"7. A STORY OF THE ANCIENT WAY OF LIFE [MC: Translation of an Atayal folktale.]

In the way of life of our ancient forefathers, it was not necessary for them to work to the point of getting tired, and actually it was an easy life, so it is said. For the fields they estimated enough millet to produce ten stalks and planted it. This was because, for some reason, when they cooked one grain of millet it filled the pot.

All of their food, whenever anything was wanted, appeared at once spontaneously. When they wanted to eat wild pig, the wild pig appeared of itself. Then, if they pulled out one hair and covered it with a winnow, and after a while lifted it and looked, the flesh of the pig was the size of a mountain. When they wanted deer they also did it in this manner. Thus, when they thought they desired any animal, it was always this way. Also, when they were talking together and said there is no firewood, it appeared of itself. Water was also always this way. When they went hunting, head-hunting, and visiting relatives, if they put seeds of grains inside a bamboo ear ornament they were not concerned with food even if they stayed a long time, so it is said.

However, this changed. A certain man put in ample grain and cooked it, but because it was still half raw he put on a lid. After a while he opened the pot and looked and a sparrow came out, and, crying 'papitspits,' flew off and alighted on the top of a reed. Then the sparrow said, 'From now on if all of you work with all your might you will not starve, but I, nevertheless, will eat. Moreover, lazy people will get no food.' It came

about that from then on they were able to eat only at times when the harvest was good.

The animals, moreover, were vexed with the human beings. The animals were angry because an old woman once suddenly took a very large piece of meat in one slice, and so it came about that they tasted the flesh of animals only when they went hunting.

As for the firewood also: A certain woman was weaving with a loom. The people of the house were about to cook some grain and said, 'There is no firewood.' The firewood [20] then appeared of itself from the window and struck against the cloth. The woman weaving was angry and threw the firewood away. After that it came about that firewood did not appear of itself.

The reason why it came about that the Atayal search with all their might for food is thus, so it is said."

"8. THE STORY OF THE MAN WHO TURNED INTO A MONKEY [MC: Translation of an Atayal folktale.]

In the time of our ancient ancestors it seemed that there was an exceedingly lazy man. When he went into the fields, he always struck the hoe against stones, snagged it on the roots of trees, and soon broke it completely, and, thus, whenever he went into the fields his hoe never failed to break.

Once upon a time he went to cultivate the soil, but his hoe again snapped at once. Thereupon, he instantly inserted the hoe just as it was into his anus and, saying 'tekerak, tekerak,' jumped into a tree. Hair grew on the handle of the hoe which he had inserted into his anus, and it became a monkey's tail. Hair grew on his body also, and he turned completely into a monkey, so it is said.

This man who turned into a monkey said, 'I am lazy and not fit to become a real Atayal, and therefore I turned into a monkey. I, in this form that I now have, will only wander about here and there and eat the fruit of trees.' Then, just as he was, he turned his back and went along into the trees, so it is said."

"9. THE STORY OF THE GIRL WHO TURNED INTO A PIGEON [MC: Translation of an Atayal folktale.]

In the time of our ancient ancestors there was once a girl. She had no brothers, only a father and mother. Her mother made her work constantly and she was not often in the house.

Once upon a time her father went head-hunting, and, having been successful, he returned home singing a song. The mother and daughter knew that the father was returning, and the daughter asked for the various necklaces (used in dressing up) as [21] she wanted to go to meet her father; but the mother said, 'Go gather a little firewood,' and sent her off. The daughter went out and returned with the firewood on her back. The father was already close. She said, 'Please give me the necklaces,' but the mother did not give them to her, and sent the daughter out again to draw water. When the girl had drawn the water and returned she said to her mother, 'Father is very near. Mother, please give me my necklaces quickly,' but the mother did not give them to her. The very cold-hearted and ill-tempered mother again made the girl do some work, and because of this the girl at once went outside, and, making a fluttering sound, went flying away.

The mother went out to look and saw that the girl had turned into a bird and was perched on a twig of a dead tree resting. The mother was startled, brought the

necklaces, and, saying, 'Let me give you your necklaces. Come quickly. Your father has returned,' she displayed the necklaces. The girl, making an uncomprehending face, sang 'wa-wa.' She had turned completely into a pigeon."

17: Norbeck--21-22 (no date) 1950 Formosan Aborigines-1-2
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"10. THE STORY OF THE ORIGIN OF TATTOOING [MC: Translation of an Atayal folktale.]

In the days of our ancient forefathers there were once an older sister and a younger brother. Although he became of marriageable age the younger brother could not get a wife. His older sister sympathized with him and for his sake went out to look for a wife, but she found none. The older sister thought, 'How would it be if I were to change my appearance and deceive my younger brother?'

Thereupon she said to her brother, 'For your sake I have found a woman. Go for her the day after tomorrow. I will have her wait beneath the tree at the place where the trail divides.' The brother was therefore very happy.

When the promised day came, the older sister went ahead of him to the place. She then tattooed her face with ink, and, before her brother arrived, sat down at the base of the tree at the place where the trail divided. On the promised day at noon, when the younger brother went to see if it were true, sure enough, just as his sister had said, there was [a] tattooed [woman] waiting. Since she was actually there, he brought her home and made her his wife. After that their number increased, so it is said. [22]

In another story the origin of forehead tattooing is said to be a mark indicating that the head of hontōjin (61) has been taken. According to another tale of our ancient

61. This refers to the Formosan Chinese, who form the major part

of the population of Formosa. Since the term 'Formosan,' which is commonly applied to them, is ambiguous in this context, the term hontōjin from the Japanese text is utilized.

forefathers, it happened that in times of war allies were mistakenly killed, and so the marks were put on in order to have no errors while fighting."

17: Norbeck--22 (no date) 1950 Formosan Aborigines-1-2
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"11. THE MARRIAGE OF BROTHERS AND SISTERS IS UNLUCKY [MC: Translation of an Atayal folktale.]

In ancient times it is said that even brothers and sisters indiscriminately became husband and wife. Once upon a time there were a younger sister and a younger brother. One night the two slept together. The mother of the girl arose early and said, 'It is noon. Cook some food.' But the girl said, 'I have a headache,' and did not get up to do the cooking, and the mother therefore cooked the food. When the food was prepared the mother stood up and said, 'Eat the food.' The girl said, 'I have a headache,' and the two of them did not get up. Thereupon the mother got angry and said, 'If you two continue in this way you will probably really be sick. Eat a little.' But they did not comply at all.

The mother, it seems, became extremely angry, and suddenly pulled off the covers. She saw that the two were in an embrace and did not separate. The mother tried to pull one of them away, but the two were locked together and did not separate. The mother was frightened. People came to help and pulled at them, but were unable to separate them, and so they were forced to sever the man's penis. Thereupon the two separated at once, but at the same time both of them died.

The Atayal thought that they had probably incurred the anger of the gods because related people who drank milk from the same nipples had had sexual relations. They

therefore held a consultation and it came about that brothers and sisters selected their spouses from outside the family, and brothers taking related persons as wives were called the source of misfortune."

17: Norbeck--23 (no date) 1950 Formosan Aborigines
116, 539 Atayal

"12. THE STORY OF TURNING INTO A PHEASANT [MC: Translation of an Atayal folktale.]

It is said that once in ancient times there was a lazy girl. She always went to the fields, but there was no evidence whatever of accomplishment of the work she went to do. It is said that she always went just to play. No matter how much she was reprimanded, she did not go to work at all if her parents did not accompany her.

Once her mother and father sent her to the fields and said, 'Go knock down the beans.' At noon they went after her and looked, but there was no sign of her having knocked down the beans. They looked for her but could not find her, and letting it go, they stopped searching. Then they burned the pods of some beans which were knocked down and piled up. When the fire started up a pheasant suddenly emerged from the heaped-up pods and fluttered off, so it is said. The bird said, 'Because I shirked my work, I have become a pheasant. From now on I will eat only the seeds of pods and the fruit of trees,' and flew away, so it is said."

"13. THE STORY OF THE SEPARATION OF THE SKHAMAYUN AND THE ATAYAL AND THE ORIGIN OF HEAD-HUNTING [MC: Translation of an Atayal folktale.]

Regarding the place where our ancient forefathers originated, it is said that, since their numbers gradually increased, there was insufficient food and they were naturally in troubled circumstances.

They thereupon held a consultation, saying, 'What is the best thing to do? We should hunt for a spacious place that will enable the descendants of a part of our people to gain a livelihood.' They said, 'If we do that we should divide our number, and then go search for a living place in the Front-hill region,' (62) and started to divide their

62. 'Front-hill' is the name of one of the Atayal tribal groups.

number. However, the people who were going to the Front-hill region said, 'There are not enough of us. Let us shout loudly and make a test. We will make up the deficiency in people to the side whose shouting is the fainter, and then again make a comparison,' and part of them went over and gathered together at a distance. [24] Then the Skhamayun (the group going to the Front-hill region) shouted first. After them, the Atayal shouted. Then, as the shouting of the Atayal was superior, the chief of the Skhamayun quickly said, 'Your side is larger. Make up the deficiency in our

number.' Thereupon the Atayal gave people to make up the deficiency. Then, when once again they compared the volume of their shouting, the shouts of the Skhamayun were enough to move a mountain. Then they understood. The Skhamayun had first hidden away some of their number. The Atayal side shouted, but it was unable to match the other. It is said that the chief of the Atayal then said, 'Why are you deceiving us? You are concealing part of your number.' The chief of the Skhamayun at once said, 'You have no reason to be troubled even if we are superior in number. At time when you are involved in disputes, (63) come to our place to hunt heads. If your bird

63. J. W. Davidson, in The Island of Formosa, Past and Present (London and New York: The Macmillan Co., 1903), pp. 566-67, states that the Atayal considers head-hunting obligatory in certain cases, among them the following: 'To be considered victor in a dispute or to recover one's standing after having committed some offense against one's fellows. Thus, when two savages quarrel and cannot arrive at a settlement both parties disappear; and the first to return with a head obtains a settlement of the disposition in his favor.' This statement by Davidson has been corroborated verbally by Asai Erin, co-author of the work here translated.

divination is good, you will take our heads; if your omen is bad, you will not be successful. Don't be worried because your number is small,' and then they departed. The traditional story of the origin of head-hunting is thus, so our ancient forefathers have said."

"14. THE STORY OF BUTA DRIVING AWAY THE SKHAMAYUN [MC: Translation of an Atayal folktale.]

In ancient times when the Atayal were all in the place of origin of our ancestors, the various drainage areas of the streams were the places in which the Skhamayun lived; that is, beginning with the stream of the Taroko people and extending to the place where the streams of the Kalaisan, Nebowan, Teranan, Sebetunux, Tsinbulan, Linahoi, and Pizinoh peoples converge at Tagbiran, all of these headwaters were populated by the [25] Skhamayun, so our ancient forefathers said. Since these Skhamayun were a division of the ancient forefathers of the Atayal, there was also intercourse between them.

With reference to the origin of the hostility between them and the Atayal, when the Buta (the name of an Atayal chief) group went hunting one time, they made a visit to the place of the Skhamayun. Among them was a man called Uloh Nauwi (Uloh, son of Nauwi), and because he was said to have touched the nipples of a Skhamayun woman for a joke, the brothers of the woman were angry and secretly killed him. Buta then became angry and said, 'Why did they kill him when he did it in jest? These Skhamayun intend to challenge us to war. We will drive them out and take the place where they live. If we do so, the range of our twisted hoes will be broad.' Then they all gathered together and conferred upon a plan of attacking the Skhamayun.

After the conference was over they pounded rice (prepared foodstuffs). Then they

first went to the river of the Taroko people. After they had completely driven out the enemy there, in this manner, step by step, beginning with the stream of the Nebowan people, they went to the streams of the Nebowan, Teranan, Sebetunux, and Tsinbulan peoples. They overthrew the Skhamayun at those places and moved to the stream in the Linahoi people's region. Buta went there because it was said that Chief Opil of the Skhamayun was waiting there to attack them.

When they were engaged in fighting one of the Skhamayun chiefs suddenly appeared and said, 'I am Opil the Good.' Buta then immediately fired his bow and killed him. Then he rejoiced saying, 'I succeeded in killing Opil the Good,' but when he looked carefully, it was another man, Opil the Bad, and so his joy had been premature.

According to a story they heard, Opil the Good had escaped and was waiting in the vicinity of Pizinoh stream. Therefore Buta again arose at once and, together with his elder brother (the father of Uloh), went there. When they went and looked, the enemy, as anticipated, lay waiting in ambush. Thereupon Mauwi (the elder brother of Buta and father of Uloh) said, 'Buta, I will go ahead. I am not concerned about being killed by them. I will go (on the road to Hades) together with the spirit of my son,' and he went on leading the way. When they emerged from the cover of a bank, Opil the Good appeared [26] suddenly and, quickly releasing his bow, killed Mauwi. Buta, who instantly took Mauwi's place, released his bow, and at once shot down Opil the Good. Because of this the Skhamayun became completely scattered, so it is said.

Buta took the head of his elder brother and of Opil the Good, and, carrying them on his back, left. Then he stopped at the summit of Kayinan Mountain, buried them there, and again returned to the place of our origin, so it is said.

The Skhamayun who lived in the drainage area of the Sebetunux stream were making the Mohein plain their latest living place. Buta went there and looked out across from Piyawai Mountain. He saw that the Skhamayun were really making the Mohein plain their latest abode, and so he and his men went there, attacked, and were victorious. However, the enemy at once left and assembled at Kin-yaopan plain, and waited in ambush there. At this time the Malipa people also united with Buta's followers, attacked the enemy and quickly defeated them. It is said that the heads which they took were very numerous. The names of these places thereafter became Kin-yaopan 'the place where they attacked' and Tarekan 'the place where they fought,' so it is said.

They lined up the heads they took. The heads the Malipa took extended to two and one-half times the breadth of the river, and the heads which the Buta group lined up extended to one and one-half times the breadth of the river, so it is said.

The Skhamayun fled and went to live at Hemawan plain. Buta and his followers once again rose and struck and scattered them, and this time they caused the death of the man Omao Lawa. Then, referring to this, (64) they called this place Hemawan plain.

64. Meaning uncertain.

The Skhamayun moved once again and took up abode at Payasan. Buta's group once again attacked and scattered them. This time the man Payas Pugao was killed. Thereupon they called this place Payasan. The Skhamayun left this place and lived at Pakowayan. Buta again fought and defeated them. They fled to Panan (65) plain, but Buta's

65. Orthography follows text. It appears that this may be an inadvertent error and that Panan should be Punan.

forces killed Makakowai, and, therefore, they called this place Pakowayan. Buta again attacked them at Punan plain, and once again quickly scattered them. Since this time they killed [27] Puna, they referring to his name, called this place Punan plain. The Skhamayun fled across the river and went ashore at Tsiyayan and waited. There again they fought and again were scattered. On this occasion Katsiyai was killed, and they therefore called this place Tsiyayan. When the Skhamayun fled, Buta at once pursued them. He went as far as Gogo Sliban, and the expulsion of the Skhamayun who were in the drainage area of Sebetunux stream was successful, so it is said. In the last place where Buta put his feet he shot an arrow into a tree and left it there, so it is said. This, they say, is what people today call the butt of Buta's lance."

"15. BUTA'S WAR STRATEGY [MC: Translation of an Atayal folktale.]

Once upon a time Buta went forth to attack the Skhamayun, and, because his forces were not large, he met with defeat. Thereupon, after due consideration, he said, 'We will wait until the time when the Skhamayun have a feast and then attack.' As they were watching for this to happen, the Skhamayun gathered just at the time of the full moon and held a feast.

The houses of the Skhamayun had boards laid in the manner of those of storehouses, with apertures in between them. It is said that when they slept their hair hung down below their pillows through the apertures. When Buta came to see the state of affairs they were absorbed in holding their feast, and when it grew late they all seemed to be asleep.

Buta then arose and went to reconnoiter. When he looked closely he found they were sound asleep. When the first cock crowed, Buta arose at once and went and tied together the hair of all of them. When dawn came he quickly went into the houses, awakened the people and saying, 'I have come to kill you,' started to kill them one after another. Then and there he killed them all. When he had finished this [the other] (66)

66. Meaning uncertain.

Skhamayun all awakened, and, although Buta escaped they immediately pursued him.

In his path of escape lay a mountain stream with a bridge of vines. When Buta reached this place the Skhamayun seemed to be about to take the risk of following him. Just when Buta had crossed the bridge, it seemed that they also [28] had reached the edge of the bridge. Buta thought it over, calmly awaited his chance and said, 'Come, let us have a match.' The Skhamayun then came on just as they were to try. When they were all on the bridge and the leader was just on the point of setting his foot on the other side, Buta, not missing his opportunity, severed one end of the bridge. Then the enemy, all in one group, suddenly fell into the mountain stream, so it is said. Thereupon Buta, in high spirits, left the place and returned home, so it is said.

Moreover, once upon a time, because the number of his followers was not great, Buta lined up many lighted torches and made the enemy think his forces were large.

Also, once upon a time, just one road went over the steep precipice of a mountain. Buta collected the hides of deer, had people sew them together and laid them out on the path above the precipice. When night came Buta's party advanced, fired their rifles, and challenged the enemy to battle. When the enemy accepted the challenge and advanced, they feigned retreat. The enemy said, 'We will pursue them,' and ran after them, but when they came to the place where the hides were spread, unexpectedly, one after another, they slipped and fell from the cliff. Although the ones in front fell off, the others

still came one after another and slipped and fell off. This was because it was night, and they, not realizing the situation, all kept advancing. When morning came and Buta's forces looked down at the foot of the cliff they saw a mountain of corpses, so it is said."

"16. THE ROAD TO PARADISE [MC: Translation of an Atayal folktale.]

In ancient times the Atayal said that being a true man or a true woman, just this one thing, was the most important to us who live in this world, and they taught this principle to their children, so it is said. They instructed them in just this way because it was said that those who knew the essential crafts (i.e., true women) and true men were the ones eligible to cross the Bridge of the Gods and go to Paradise.

It is said that there was a Bridge of the Gods which must be crossed on the road to Paradise. In the river below this bridge lived great serpents and many fishes, so it is said. On the near edge of the bridge was situated the house of a [29] watchman, who awaited the souls of the dead, and this was the place where they were judged, so it is said. When there were dead people, the watchman waited at this house at the foot of the bridge and made judgments. If they were judged to be true men and true women, they passed directly over the bridge just as they were without being specially painted with the juice of pigweed. People who were somewhat questionable first had their hands painted with pigweed, and then tried to wash it off. Those who were thoroughly stained and could not wash the stain off although they tried, since they were true men and true women, were allowed to cross the bridge and go on to Paradise, so it is said. The people who were not thoroughly stained and did wash off the stains were made to go

from the direction of the bank because they were evil people.

On this river-bank path were trees covered with thorns; burs grew thickly, and there were great numbers of leeches. The people who came to this place were scratched by the thorns, bitten by the leeches, and their clothes were all covered with burs, so it is said. Some of the people died before they reached Paradise. Some evil people among those who were not permitted passage on the bridge insisted, saying, 'Let us cross the bridge.' Then the watchman deceived them, and, in a kind manner, lightly gave them his hand and allowed them to cross, but when they came to the center of the bridge they were pushed off and were eaten up by the huge serpents and fish."

17: Norbeck--29 (no date) 1950 Formosan Aborigines
116, 539 Atayal

"17. THE ORIGIN OF THE WIND [MC: Translation of an Atayal folktale.]

The source of the rise of the wind is a deer which lives in a deep pool, so it is said. It is said that the wind blows because he moves about in order to wash his body. The rise of violent winds is due to his thrusting his ears out from the water. A wind that is not strong comes from his thrusting his ears out just a little distance, but as he gradually thrusts his ears out farther, the wind gradually grows heavy. At times when he thrusts his ears out farthest the wind is its most violent, so it is said."

17: Norbeck--30 (no date) 1950 Formosan Aborigines
116, 539 Atayal

"18. THE DISTRIBUTION OF THE ATAYAL [MC: Translation of an Atayal folktale.]

In ancient times this locality was not the abode of the Atayal. Here there were only wild animals and trees. The Atayal did not live here, but in Sabayan there was just one place from which we sprung. At first there was only one man, but because the number increased gradually and the places in the interior became crowded, the people gradually moved down below. By degrees they descended the mountain streams and scattered about in the place where we now live. As the number of people gradually increased, they felled all the trees in this place. In ancient times there were many trees, and there was much room. However, only the Baibuyu (Saisiyat tribe) lived in this vicinity. When the Atayal crossed over the mountains they vanquished all the Baibuyu, and so the Atayal gradually took over their living place. The Atayal gradually defeated the Baibuyu and made them move down the streams, pursuing them to the confluence of the streams at Tamaro. They pursued them to the juncture of the streams at Tamaro, and left only two Baibuyu unkilled. Those two men had hoes, a little salt, gunpowder, and rifles, and so the Atayal saw gunpowder, rifles, hoes, and salt for the first time. They let the two men live and bartered with them for the hoes and salt. In this manner reconciliation was effected between us and the Baibuyu. From that time on we and these Baibuyu lived together."

"19. THE FLOOD [MC: Translation of an Atayal folktale.]

In ancient times our number was not great. Because the ocean (the flood) came up, the Atayal fled from the ocean and went to the interior. They went to the summit of Pappak Mountain, which was the only place the ocean did not reach. Because the ocean pursued them right to Pappak Mountain, the Atayal fled far away and assembled at its summit. As the food was ample they calmly stayed where they were. In those days they placed heads of millet in their ears (67) and went on trips. If they boiled one grain cut in half,

67. See tale No. 7. [MC: in category 116]

it filled a large iron pot when cooked. [31]

The animals also escaped to Pappak Mountain. The snakes also escaped to Pappak Mountain. The animals and the snakes joined the Atayal, but the relations between the three were excellent and from the beginning there was no quarreling. Because they became tired of being in this place, the Atayal propitiated the ocean by throwing into it an excellent dog. The ocean did not comply; it neither moved nor retreated. Later, when they offered up a splendid Atayal in propitiation, the ocean waters retreated. Thereupon the Atayal once again returned to the place here where we now live.

17: Norbeck--30-31 (no date) 1950 Formosan Aborigines-2
116, 539 Atayal

This place was originally not an evil place. This place where we now live became an evil place because the flood came. The reason that this place became evil is that at the time of the flood, eels crawled on the surface of the land and indented it (made the topography irregular). Although our ancient ancestors again returned to their former abode, they still preserved their millet seeds.

There was a god whose custom it was to enter excreta. Once this god spoke to the Atayal promising: 'If you will wash me off, you will shed your skin successively like the crepe myrtle and never grow old, and you will never die.' However, as they did not wash this god he said, crying, 'If you show me no concern and consider washing me too much trouble, we will be averse to protecting even the small children and will take their lives. The people whom we are not averse to protecting will be left to their own courses, and when their span of life is completed, we will then take their lives.' He spoke thus, and in actuality it was no lie. People died even if they were children. The people whom he had not ceased protecting grew old, and then their lives were taken. This is why our lives have come to be as they are."

17: Norbeck--31-32 (no date) 1950 Formosan Aborigines
116, 539 Atayal

"20. FOOD APPEARS SPONTANEOUSLY [MC: Translation of an Atayal folktale.]

In ancient times our ancestors did not buy things. This was because the various sorts of food appeared of themselves. When they called for water it appeared. When they called for trees, they also appeared. Even when they called for pigs, they also appeared. Deer also came when they called. Once upon a time they called for deer; but, because when the deer came they took more meat than they needed, the deer were [32] angry, fled away and did not return. Since the deer never came again, they got them only when they went hunting. Then the water, the trees and the pigs also became angry, and none of them ever came again. From then on the Atayal had to work. From that time on all people who did not work died of starvation."

"21. THE DECEASED MAN MAKOWAI [MC: Translation of an Atayal folktale.]

In olden times, as one of our customs, we held harvest festivals. People who did not observe the harvest festival we re always drawn away by a luttux. (68) Once, one of

68. In Japanese text, kami. Footnote in Japanese text equates the Atayal word luttux with the Philippine word anito, 'god' or 'supernatural being.'

our ancient ancestral founders did not observe the harvest festival and a luttux drew him away. His name was Makowai. When he went hunting he fought with a luttux at Puloto Mountain. When he fought there he cut off the head of the luttux, but when he looked at his sword there was no evidence of the cutting. The luttux also cut the Atayal (Makowai), but there was no evidence of the cutting.

Makowai was drawn by the luttux, went along a mountain stream, and suddenly was no longer in this land. The luttux returned in a year, but Makowai, while with the luttux, always said, 'Let us go hunting. Let us go hunting and arouse the animals.' While waiting in concealment out hunting, he killed the luttux's dog with an arrow. The luttux came and saw this, and said to Makowai, 'Why have you killed my dog? For a male dog it is best to cast a spell.' Then the luttux gave him the dog and said, 'If you are

going to cook and eat the dog, then do so. However, we will again go hunting in this place. I will have my child go with you. When the wild pigs to be caught emerge, the child will be able to instruct you.' Then they went hunting, but when they looked at the thing they drove out, it was a frog (actually it was a wild pig, but looked like a frog to Makowai). Makowai bent a stalk of withered pampas grass, inserted the frog, and bound it with a blade of grass. The child of the luttux shouted, 'Please come and see. Uncle Makowai has just caught a wild pig in a trap.' The father [33] went there. Then they all went there and pierced the frog with swords. Then the luttux was happy, and he and his child cooked the frog and ate it. Makowai cooked and ate the dog he receive from the luttux. Then he said, 'When I look at the luttux's array of food, I see he has a great deal and I have little,' and thought it strange (because what Makowai saw as a frog was really a wild pig, the amount of flesh was great). Then he returned home.

Afterward they again went out head-hunting. When they looked carefully, the appeaı ance of their quarry was not that of an hontōjin [MC: Formosan Chinese]. After they had pursued it, they found it was a raspberry. When they picked the fruit of the raspberry, it was the head of a hontōjin. Makowai picked all the raspberries on both sides of the river, and when he got home and looked, all the raspberries, which he had put iı a bag and brought with him, were the heads of hontōjin. Makowai and the luttux were both scratched and wounded by the raspberries, just as if they had been hit by a rifle. They returned home and performed rites for the heads of the hontōjin. Makowai said,

'I do not understand the food I eat. Although I am told by them to eat, I do not understand what I eat. That is because the god is a spirit.' (70)

70. Note by Japanese translator at end of this passage states: 'Meaning unclear.'

Later, the luttux dispatched Makowai saying, 'Go back. You have killed the things (the hontōjin) we value.' Makowai said, 'How can I return? I don't know the road back.' Then the luttux said, 'All right. I will see you off. I will allow you to take six arrows. When you have used up those six arrows, I will at once take your life.'

It was improbable that the people of Makowai's household would know of his return. Makowai's wife had gone to the storehouse, and Makowai at that time had returned and stood trembling by the storehouse. His wife said, 'Why have you returned? I thought you were dead long ago.' One of the stories I heard thereupon ends. (This tale is confused throughout, and the person switches fromthird to first. The Japanese translator has translated the person as given by the narrator, with a note so indicating. The narrator apparently at times put himself in the place of the character Makowai. Third person has been used throughout in this translation.)"

22. EATING CHILDREN [MC: Translation of an Atayal folktale.]

In ancient times our forefathers always ate children. A certain wife did not want to eat her child, but was deceived into eating it. When she was going to the fields her husband deceived her, saying to her, 'Leave the child for a little while, as I will go and prepare some food. When the food is cooked I will call you. Don't hurry. Wait until I call.'

The husband then shot the child with a gun and cooked it for his wife's food. When the child was cooked he called his wife. The wife came and the husband said, 'I just killed a monkey.' The wife was very happy and said, 'We're going to eat monkey.' She then said, 'I will go get the child and let it suckle.' The husband had put a stone in the child's hammock after he had killed it. The husband said, 'Don't be in such a hurry to get the child. If you don't eat the monkey now, its flavor may not be good.' The wife then said, 'All right. I'll do that. If I eat it now it will probably be delicious.' The husband said, 'You eat. I finished eating a little while ago.' The husband felt sad because she was about to eat his child. When the wife had eaten her stomach full the husband said, 'Put your dishes over there, and I will show you the head of the monkey you ate,' (he had left the head and the fingers and toes uncooked). Actually it was the head of the child which he had cooked. When the wife looked at the head, she saw it was that of her own child. She began to cry and immediately vomited, and what she

vomited was the size of a mountain. The wife said, 'While I am crying, just as I am, right here, I will make myself vanish,' and in a twinkling she did vanish. The cicada which you see today incessantly crying among the leaves of the trees of the deep forest is what this woman turned into."

23. TURNING INTO A WILD PIG [MC: Translation of an Atayal folktale.]

In ancient times some of our ancestors turned into wild pigs. A certain father and son went out to the fields. When it became noon the father and mother sent this child to a hut, saying, 'Go prepare some food.' They also said, 'When we think it is an auspicious (71) time and you have cooked the food, we will [35] come to eat.' The child cooked the

71. Meaning uncertain.

food and waited for his mother and father, but they did not come. The child went out to look for them, but they had already turned into wild pigs and were at the edge of the field. The father came pursuing his son and said to him, 'We have just turned into wild pigs.' He almost bit his son. The son said to his mother and father, 'Father, mother, don't bite me. I am just going to plant some potatoes, taro, peanuts, and sugar cane, and so you may come and eat a little at the edge of the field.'

Wild pigs existed after this. You will notice it has come about that since then, when we plant our fields, the wild pigs come and eat at their edges.

The wild pig said, 'I have turned into a wild pig. I go to eat at the edge of your fields, and when I chase you, if my luck is bad you will shoot me. Then, when you do hit me,

eat me. When your luck is bad and you disregard the bird divination and go hunting, I will bite you.' Ever since then it has come about that when we go hunting with a good bird omen we kill wild pigs; when we go with a bad omen, the wild pigs bite us. That we go hungry is because the wild pigs eat up the borders of our fields."

17: Norbeck--35-36 (no date) 1950 Formosan Aborigines
116, 539 Atayal

"24. TURNING INTO A MONKEY [MC: Translation of an Atayal folktale.]

In ancient times one of our ancestors turned into a monkey. He didn't want to turn into a monkey, but, once upon a time, when he went out to work in the fields and had worked all day, the handle of his hoe broke five times. Then he said, 'Once again I will cut a tree and make a handle. What shall I do if this one breaks?' He completed the handle and resumed work, but when he had chopped twice the handle of his hoe broke again. He thrust the broken end of the hoe into his anus and then, just as he was, turned completely into a monkey. The handle became his tail.

Concerning his food he said, 'Am I one who so indiscriminately eats anything and everything? I will eat only from the borders of your fields.' Then the Atayal said, 'When you come to eat at the edges of our fields, we will shoot and kill you. If our field products are eaten by you, what will we have to eat?' The monkey said, 'It's all right even if you do shoot me. When there is no food, what am I to do? Since I am not [36] concerned about this, when you do shoot me with a rifle, then eat me.' This was the beginning of our shooting and eating monkeys."

"25. TURNING INTO A KITE [MC: Translation of an Atayal folktale.]

Long ago, in the time of our ancient ancestors, the kites were also Atayal. The boy who turned into a kite didn't want to do so, but his mother and father were wicked. His mother and father deceived him and said, 'Go clean up outside. When you have done so we will give you some ornaments.' When the boy had finished the cleaning he asked his mother and father, 'Mother and father, please give me my ornaments.' His mother and father said, 'You are not finished yet. Go draw some water. When that is done and you have returned, we will give you the ornaments.' When the boy had returned to the house after drawing the water he said, 'Please, mother and father, give them to me. I am back from drawing the water.' Then his mother said, 'You are not through yet. Go get some firewood. Then I will give you the ornaments.' When the boy returned he said to his mother, 'Mother, please give me the ornaments!' His mother said, 'You are not through yet. Clean our sleeping places, and then I will give them to you.' When he had finished he said, 'Mother, please give them to me,' but his mother and father said, 'You are not through yet. Clean our toilet, and then, when you have finished we will give them to you.' When the boy had finished he said, 'I have finished. Please give them to me.' But they didn't give them to him. His mother said to him, 'I deceived you. Look, you did the work splendidly.' The boy then said, 'Yes, you deceived me. All right, I shall turn into something before your eyes.' The boy went across the way,

entered the storehouse and took his ornaments. Then he arranged them, made them into wings and covered his whole body. When he had finished he called his mother, saying, 'You deceived me. Look at me now.' When his mother and father went to the door to look, he had turned into a kite and flew over the house. The boy said, 'No matter how many things you offer to appease me, I will not return, but that will probably not worry you. There is no reason why you should not be able to see me. From now on I will fly over the house, and when you raise chickens I will [37] from time to time come and seize one or two, then go to a high place and eat them.' Since then it has actually been as he said. When we have chickens he seizes them, goes to a high place and eats them."

"26. THE VILLAGE OF ONLY WOMEN [MC: Translation of an Atayal folktale.]

In a certain place some women lived, and there were only women there. When they felt sexual desires they went to the top of a precipice, and when the wind entered their vaginas they became pregnant. No matter how many children they gave birth to, they were always only female children. Such were their circumstances in the days of long ago. Although there were only women, they were not without a leader. An old woman was their chief.

These women had never seen a man. Once upon a time a dog belonging to our ancient ancestors got lost, and so one of our ancestors went to look for it. He went to the place where the women lived. The man said to the women, 'Hasn't my dog been in this vicinity? It went off chasing a wild pig.' The women said, 'It isn't here. No dogs ever come to our place.' The man said, 'Well, if that is so, all right. I will go look someplace else.' The women said, 'What is that between your thighs. We have never seen such a thing before. Why does the thing between your thighs dangle so?' Thereupon the man said, 'There are also people like you (women) at our place, but don't you have any mates?' Then the women said, 'If you don't mind, experiment with us a little.' The man said, 'In that case, let us go to your sleeping place and sleep.' The women said, 'Experiment a little with each of us.' Then they went to the sleeping place and, one after another, cohabited with the man. No matter how eagerly they moved themselves,

they were not able to achieve satisfaction. This was because there were many women and the man was in no way capable of effecting union with all of them. After the women had finished they called the old woman who was their chief, saying, 'Mother, mother, come here for a minute and try this. It is a pleasant sensation.' The old woman smiled as she approached this place and said, 'What is this that you call a pleasant sensation?' When the old woman arrived she entered the sleeping place, but because the man had already had a great deal of [38] sexual intercourse, no matter how he tried he was impotent. Thereupon the old woman said, 'Why didn't you let me do it first? I am the one who is your chief.' The old woman was offended, and so she took a hatchet and severed the penis of the man who had come hunting the dog. This man then died.

Our kinsmen waited and waited, but the man didn't return. There was a rumor that some women who lived in a good place had killed him. Our ancestors said, 'They killed him, and so we will go kill them.'

Our ancestors departed and surrounded the women they were going to kill. This was because the women had taken the first step. They shot at the houses with rifles, but no one came out and there was not even any noise in the houses. Only bees came out. Our ancestors were dispersed by hornets, and no women to be killed came out. Our ancestors returned, but clinging to their clothes were ants, wasps, honey-bees, hornets, and other insects. These built nests in the trees in this place where we now live. When those bees build nests, we burn them and eat them and their taste is delicious.

Also, there were no small red ants nor large black ants anywhere in ancient days; but, as they came back together with the men who went out to surround the women, they all spread out over the earth.

The women said, 'They tried to kill us but didn't succeed. They stopped attacking because they were afraid of the bees.' However, our forefathers said, 'After all, we were putting the enemy at ease.' Later they went and encircled the enemy again and unexpectedly set fire to the grass, burning them all up, the bees, the ants, and also the women. The houses also turned black and burned down.

When they looked at the burned remnants of the house, there was one hut for pigs remaining, and in it a small girl stood trembling. The men said, 'It is very good luck that we found the girl.' They carried the girl on their backs and took her home with them. The man who took custody of her and took her along was a man from Tahayakan village. They reared the girl and when she was mature secured her a husband. Then a boy was born to her. Later, whenever he (72) wanted anything, he was able to

72. Apparently refers to the 'man from Tahayakan village.'

practice sorcery and get it. Furthermore, he also taught the sorcery to his son. This man from Tahayakan village was from a line of sorcerers, but at [39] the present time

there are no longer any practitioners of sorcery at Tahayakan village. This is because they were all killed. Even if there were sorcerers, what would they be able to do?"

"27. THE BRANCHING OFF OF OUR ANCESTORS [MC: Translation of an Atayal folk-tale.]

In ancient times, when our ancestors separated from the hontōjin [MC: Formosan Chinese] the Atayal said to our hontōjin ancestors, 'We are going to part from you. You go below to the plain and we will live in the mountains. Since we are going to separate from you. let us have a conference in order to make our numbers exactly even.' Then, in point of fact, they did assemble and count their number. When they were divided into halves, the hontōjin said, 'All of you shout once with loud voices.' When the Atayal side shouted, the leaves of the bamboo fell. The Atayal then said, 'You shout,' and so the hontōjin shouted, but the leaves of the bamboo neither stirred nor fell. The hontōjin said, 'Our side is a little wanting. That is because the side of you mountain Atayal is larger.'

Then the Atayal made up the deficiency of people on the hontōjin side, but the hontōjin said, 'Let us shout once again.' Then the hontōjin shouted, and the leaves of the bamboo fell. Next the Atayal shouted, but the bamboo leaves neither stirred nor fell. The side of the Atayal was smaller, and the hontōjin side was larger. The Atayal said, 'You hid some of your number. Make up our deficiency.' However, the hontōjin refused, saying, 'We will not make up the deficiency.' The hontōjin all gradually escaped in the direction of the lowlands.

The Chief of the hontōjin said, 'There is nothing to worry about because there are a great many of us. When you are involved in disputes, (74) look at the sesili bird, and

74. See tale No. 13. [MC: in category 116]

if the bird divination is good, it is all right even if you come and kill one of us. When you come with a bad bird divination, we, in turn, will kill one of you.' This was the beginning of the hontōjin and ourselves killing each other.

The hontōjin also say, 'We took the smiths with us at the same time we separated.' And, look, the Atayal are all stupid and there is no one who knows anything. This is because the [40] people who knew smithing went only to the side of the hontōjin at the time of the separation. See, we Atayal do not know smithing. Thus it came about that we buy our implements from the hontōjin. This is because the people who knew smithing were all taken for the benefit of the hontōjin. Our buying things from the hontōjin and also our killing them began after this.

Although we kill the hontōjin, we do not do so indiscriminately. We do not kill people who live in the same drainage area as we. It is all right to kill hontōjin who live in the drainage areas of other rivers. Doing it in this way, we shelter the people of our own river drainage area. Strange people from other places come to kill the hontōjin we shelter. Also, it is all right if we go to other rivers and kill hontōjin.

Our acino (of shells fashioned like glass beads and attached to China grass cloth) also come from the hontōjin. Like the other things, we buy them from the hontōjin. These acino are put to use. We always decorate our clothes (75)

75. Asai Erin informs me that the loom-woven jackets worn by the Atayal are frequently covered with these shell beads.

with them, and also always adorn our hats with the acino. Since we also adorn our necks, we look all the more beautiful. The rich always have many acino, and the poor, few. We always use these acino in the settling of accounts. One acino equals one sickle; ten acino equal ten sickles. This is no different from present day money. What we call one piece (76) equals one ten-sen silver coin; ten pieces equal one yen. We call ten

76. Refers to the acino.

pieces one tunux, and this is no different from our present day money. What we call a yen the old people called a tunux."

"28. TATTOOING [MC: Translation of an Atayal folktale.]

We Atayal practice tattooing. I will tell you the story of its origin. In the early times of our ancient forefathers there was no tattooing. Once upon a time, in experiment, they tried tattooing their legs, and, since it looked beautiful, our ancient forefathers thought, 'If we, to try it out, put this tattoo just as it is on our faces, it will probably look very beautiful.' This was the beginning of our tattooing our faces. [41]

The ancient tattoos were not like our present day tattoos. At the same time that they had finished the tattooing, the whole faces of our ancient ancestors always turned completely black. Later their tattoos gradually became more limited.

They did not tattoo themselves, but when they gave a fee to a man who came to do tattooing, he put tattoos on their faces. When they tattooed a woman, they began at dawn and when it was sunset they had finished tattooing her. They treated the man who came to do the tattooing with food. This was, so they cleverly thought, to make him contrive a good design. As for the tattooer's fee, a low price was seven banun; (77)

77. In Japanese, taba ('bundle'). Explanatory note in Japanese text states: 'Five each of sickles, hatchets, etc., in a bundle.'

that is, the equivalent of seven of the yen of today. An expensive tattoo was eight

banun; that is, the equivalent of eight of the yen of today. After the Japanese came, the tattooers wanted money and the fee became three yen, but, as a result of our taking the customs of the Japanese (abandoning the custom of tattooing), the fee of three yen also stopped completely.

After our young men return from killing hontōjin [MC: Formosan Chinese] they tattoo their foreheads and chins. Even when they went to kill someone our ancestors took many people, even their children, with them. Then, from the head taken, they distributed one hair to each of the children. After they returned, these people who went out to kill hontōjin were all tattooed. As a result of this, the children grew with the speed of the wind. According to the Atayal custom, a man who has killed many men tattoos his chest. A man who has killed only a few men does not tattoo his chest.

When we return from killing hontōjin, we return with our voices raised in the war cry along the road. When we get home we all go to the place for the heads of hontōjin and sing. On the following day we assemble and dance, and put the heads of the hontōjin in the head stockade. We always place rice flour cakes, which our wives have pounded, into the mouths of the heads. Taking them out again, we let the children of those of us who have returned from head-hunting eat them. We make owao (78) in celebration,

78. Millet wine.

and also go hunting. When our [42] owao is mature, we always invite everyone in the whole village. Then everyone comes and drinks our owao."

18: Kakyo--63 E-2 (no date) 1899 Formosan Aborigines
116, 121

In May, 1898, a learned society with the name Banjokenkyukwai ("Society for the Investigation of Savages") was founded in Tamsui, on Formosa. Its task is to investigate thoroughly the life of the savage and half-savage tribes of Formosa, their physical peculiarities, their language, their customs and religion, the geography of the regions they inhabit, etc., and to make the results of these investigations, as far as possible, available for practical use. At the same time the wild tribes of other countries are to be drawn into the circle of comparative study. The society to which the Japanese Government has granted its support, and at whose disposal it also places the official material available, tries to accomplish its task by journeys of its members into the interior, and by lectures and publication of every kind. Recently a member of the Banjokenkyukwai, the Japanese Ino Kakyo, has published several longer articles dealing with the savages of Formosa, one of which has kindly been placed at the disposition of this periodical in a German translation.

18: Kakyo--64 E-2 (no date) 1899 Formosan Aborigines
116, 101

When the question is raised whether the aboriginal inhabitants living in the mountains of Central Formosa and on the eastern and western plains, in scattered groups, and called Dojin by the Chinese, are the descendants of one ethnic family or of several, we do indeed find that the Chinese for a long time past have distinguished Seiban and Jukuban; but this grouping is political, being a distinction between independent and subject tribes, and does not signify a difference of origin.

To determine this origin, one must not limit oneself to treating the origin of the Formosa savage alone. All the tribes and peoples living in the less immediate surroundings of the island must be examined, their distinctive features recorded and the common points of accord investigated. But we will postpone these considerations for a later occasion and limit ourselves today to throwing some light on the peculiarities of bodily structure, the customs and the intelligence of the savages living on Formosa and, on this basis, undertake their grouping. When we seek, in this way, the features common to all and, on the other hand, examine the special features of individual groups, a division into tribes and families does not prove difficult. Although this does not prove that they had a common origin, the division I have made may nevertheless correspond to the facts.

18: Kakyo--64-65 E-2 (no date) 1899 Formosan Aborigines
116, 101, 174

If we start with the assumption that the Formosa savages do not all descend from the same ancestors, that they have not all resided in the same place, that they also have branched off at different times and have changed their places of residence, that in the course of time they have then mixed with each other and, in separate groups, have adopted the same customs and usages, and that as a result new [65] tribes have been formed, then it would appear that to investigate the features common to all and to trace the origin of the individual tribes is the best ground work for an investigation of a possible common origin.

If one proceeds according to these principles, one arrives at a division into four main groups with eight tribes, and 24 subsidiary divisions. To make this clearer I append a table.

First Group: Altdaiyar

First Tribe: Altdaiyar

First Division Tagare Aldaiyar

Second Division Daiya Aldaiyar

Second Group:
Nakuijo

First Tribe: Vonum (Nuwannwan)

First Division Matsuwa Vonum

Second " Rakubishan Vonum
Third " Sekukun

Second Tribe: Tsono

First Division Tsono Omiya

Second Division Tsono Oiye

Third Group: Kadas

First Tribe: Tsalisen

Second " : Paiwan

First Division Palisalisao

Second " Tepomaku

Third " Pakulkal

Third Tribe; Puguma

Fourth Group: Tanas

First Tribe: Amis

First Division Kawanan Amis

SecondDivision Kaele Amis

Second Tribe: Behpo

First Division Tatsuo

Second Division Shiraiya

Third Division Roa

Fourth " Pazchhe

[66] Fifth " Hinapabosa

Sixth " Taokasu

Seventh Division Ketaganan

Eighth " Kubawaran

Ninth " Amtonra

All these names are those applied to the individual tribes, etc., by themselves in part, and in part by others. The terms have in part a direct, and in part an indirect significance. "

18: Kakyo--67 E-2 (no date) 1899 Formosan Aborigines
116, 80Z

The Formosa savages have numerals up to 1,000 or even 10,000. (The question if they actually employ these terms does not belong here.)

18: Kakyo--67 [2] E-2 (no date) 1899 Formosan Aborigines
116, 177, 415

They are familiar with the use of iron and earthenware vessels (which they have received, however, from the Chinese).

18: Kakyo--67 [3] E-2 (no date) 1899 Formosan Aborigines
116, 372

They strike fire from stone.

18: Kakyo--67 [4] E-2 (no date) 1899 Formosan Aborigines
116, 281, 286

The Formosan aborigines weave their own materials and prepare leather.

18: Kakyo--67 [5] E-2 (no date) 1899 Formosan Aborigines
116, 291

They cover the pudenda (with but few exceptions); this is observed particularly rigorously in the case of women.

18: Kakyo--67 [6] E-2 (no date) 1899 Formosan Aborigines
116, 341,361

The Formosan aborigines have fixed residences....
They use stone and wood for building houses.

18: Kakyo--68 E-2 (no date) 1899 Formosan Aborigines
116, 177, 241

The Formosan aborigines are familiar with agriculture....
In cultivating the fields they no longer use implements of stone or horn, but iron implements.

18: Kakyo--68 [2] E-2 (no date) 1899 Formosan Aborigines
116, 177, 411

They no longer shoot exclusively with bows and arrows, but already know the use of firearms.

18: Kakyo--68 [3] E-2 (no date) 1899 Formosan Aborigines
116, 241

For two reasons in particular the economic development of uncivilized peoples is generally slowed down:

1. because of firmly rooted superstition.
2. because of the unfavorable nature of the soil.

...The Ainus have the superstition that manuring the soil arouses the anger of the earth gods. Fortunately the Formosa savages do not share this superstition; they believe that they owe the fruits of the soil to the favor of the spirits of their ancestors. Their failure to use manure is due, not to superstition, but to custom.

As for the nature of the soil, in the districts inhabited by the savages it is particularly poor for agricultural uses owing to the steepness of the mountains and the stoniness of the ground; in addition, the savages have only the most primitive tools, do not use manure and do not hoe the weeds. So the results of their labors are so scanty that they cannot even nourish themselves.

Their artistic sense is revealed in wood carvings as well as in weaving and the preparation of clothes. In general the effort can be observed to arrange geometrical figures symmetrically in parallels, and less often not in parallels, or they favor the representation of animal figures or otherwise, but always in symmetrical forms. The colors they favor are red, white, black, blue, yellow and others.

18: Kakyo--69 [2] E-2 (no date) 1899 Formosan Aborigines
116, 582, 595

With regard to marriage, the following general principles may be found among the Formosan aborigines apart from some insignificant variations:

a) there is a definite way of concluding marriages;
b) a marriage once concluded binds the spouses for life;
c) the woman who is the wife of one man may not at the same time marry another;
d) marriage between close relatives is not allowed;
e) there is strict monogamy.

18: Kakyo--70 E-2 (no date) 1899 Formosan Aborigines
116, 562, 577

The distinction between the man's profession and the woman's is sharply drawn, particularly in the case of married couples. Any action that conflicts with this principle is looked on as an offence.

18: Kakyo--70 [2] E-2 (no date) 1899 Formosan Aborigines
116, 593, 765

Within the family peace and harmony reign. Even when the parents live together with their children and other relatives, there is no friction. When one member of a Formosan aborigine family dies, he is lamented by the family and solemnly buried, and for a certain length of time no one leaves the house.

18: Kakyo--70 [3] E-2 (no date) 1899 Formosan Aborigines
116, 888, 858

Age is respected and the young are loved, particularly among the Amis tribe, where disrespect towards the old is looked on as a crime.

18: Kakyo--70 [4] E-2 (no date) 1899 Formosan Aborigines
116, 593, 627, 858

Love between parents and children among the Formosan savages is based above all on the principle that rules in general the relations between young and old; to this is added parental love, which created a strong bond between parents and children. Although, among savages, the ethical love of children is not prominent as compared with natural love, nevertheless the parents love and care for their children, while the children look on it as their sacred duty, if father or mother is killed, for example, to take revenge. This is enough to show that the ethical love of children is being developed.

In general, the criterion for the crime concept among Formosan savages is the following:

a) They treat as crimes all actions that must be looked on as such according to tradition and custom.

b) But to constitute a crime, the action nevertheless must conflict with the moral notions shared by everyone among them.

The principles adopted with regard to a crime are as follows:

1. The crime must be punished.
2. In some circumstances, the punishment can be transformed into retribution.

18: Kakyo--70 [6] E-2 No date) 1899 Formosan Aborigines
116, 692

Justice is enforced by the chief among Formosan aborigines.

18: Kakyo--71 E-2 (no date) 1899 Formosan Aborigines
116, 671

The following may be said about the methods of punishment:

1. There is no fixed penal code. The punishment is determined according to the circumstances of the case.

2. The degree of punishment is fixed by tradition and custom, and the punishment should not exceed these limits.

18: Kakyo--71 [2] E-2 (no date) 1899 Formosan Aborigines
116, 775, 828

1. The natives of Formosa are able to distinguish between sleep and death.
2. They believe that death destroys only the body, but that the soul is immortal.
3. They believe that a dream is the appearance of the soul of a dead person.
4. They believe that the soul leads a happy existence in a definite place.
5. They look on the spirits of the dead as a kind of "evil powers."

18: Kakyo--71 [3] E-2 (no date) 1899 Formosan Aborigines
116, 775, 769

The distress and the happiness, the fortune and misfortune of all men are attributed by the Formosan aborigines to the influence of these devilish forces. [MC: i. e., spirits of the dead.].

To attain happiness and ward off misfortune, they honor the spirits of their ancestors. This enables us to recognize that the Formosa natives are already on the way to developing a cult of their ancestors.

18: Kakyo--73 E-2 (no date) 1899 Formosan Aborigines
116, 101, 161, 177

The Pepohan of Formosa are dying out. The Besha, who live in the plains of Polisia, in a district cut off by natural boundaries, numbered 120 fifty-one years ago, according to the account of a Chinese official. Gradually their community dissolved, and at the present time only 11 Besha are living, scattered among various tribes.

The Matoska savages living in the surroundings of Kagi, in whose district the Dutch formerly had set up a school, at the time of the Tei dynasty formed one of the largest native communities of Formosa. According to an original document of 1639 they numbered 3,000. But since they have lived together with the Chinese, their number has been sinking steadily. According to their traditions, they numbered between 800 and 1,000 one hundred years ago. Now only 200 of them are known.

19: Guérin and Bernard--545 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 131

Formosa is an island which extends along the Chinese continent from lat. 22° to 25° 20" N. When you measure it on the map, its greatest length equals 4 degrees from north to south. The book by the American writer William gives its surface as 14,000 English squares (36,000 kilometers). It is volcanic in nature, and its distinguishing feature is the chains of parallel mountains, which traverse it from north to south.

19: Guérin and Bernard--545-546 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 133

There are masses of mountains in the east, where their perpendicular slopes drop down to the level of the ocean; they cover the southern tip of the island, then on their western slopes they make a fairly regular curve, which forms an uninterrupted plain between the mountains and the sea; it extends from Takao to Taika. It is narrow at first, then it widens until in some spots it is 20 kilometers wide. Between these two points there is a series of peaks which rise perpendicularly from the chain. From Taika on, the mountain system is more highly developed, and the northern quarter of the island is an enormous mountainous area. As you go from east toward the sea on the west, you constantly see some isolated peaks, but they are not so regular. [546] Large and fertile valleys extend along the water courses. The same arrangement is found in the N. N. E. extremities, as far as Sau-o-bay.

The center of this radiation is the peaks of Mount Morrison, [VMM: Guérin and Bernard seem to have mistaken Mt. Sylvia for Morrison] which rise in this section of the island; they are probably the original mountains of Formosa. The summit towers to a height of 12 to 13,000 feet, and it is covered with eternal snows. These peaks include more than one mass of mountains which have an elevation of between 5 and 6,000 feet. While the eastern slope of the chain is covered with virgin forests, on the west, and in all the points where the Chinese have settled, you find that the trees have been replaced by cultivated fields, tall grasses, and occasional groves.

19: Guérin and Bernard--546 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 134

The soil is usually sandy in the plain; the valleys are formed by alluvions or pebbly layers, which are covered with vegetable earth.

19: Guérin and Bernard--546 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 133

The long slope of the mountains is on the western side whereas the eastern slope has brooks or torrents, although no real rivers. The western part of the island, however, is furrowed with water courses which empty into the sea after they have been swollen by several tributaries. The main ones, going south to north are: the Taiwan-fou and Pakan rivers; the Black River (rivière Noire), the Lokan, Taïka, Héou-lang, Tion-Kan, Touk-Shan, Tam-sui and finally the Sau-o-bay river. They have a number of arms at the time when they reach the plain, but they soon meet, and each river has just one mouth when it empties into the sea.

The water-courses in the plain have a broad bed with a sandy bottom which is formed by the piles of sand that the winds of the S. W. monsoon accumulate on one of their banks. The rivière Noire, which is the broadest one on the island, is peculiar in that its water is as black as the sand in its bottom. Starting with the Taïka river, the waters are confined, and they roll on a pebble bottom.

19: Guérin and Bernard--547 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 133

The Tam-sui river is the only one that is navigable; ships can anchor [547] three miles up stream while fairly good-sized junks can go 10 miles farther up; then its tributaries are such that light boats can go into the heart of the mountains.

Formosa has one serious fault: there are no good anchorages, and the coasts are inhospitable. On the east the waters are deep and the mountains practically vertical. Sau-o-bay could only be a place of refuge, for the commerce is on the western side. It is true that the harbor of Ki-long is vast and easy to reach; but most of it is filled with coral shallows, and the surrounding hills are not a sufficient protection, so vessels anchoring there are frequently thrown on to the coast during a typhoon. Then even if the weather is not really bad, the sand-bar defending the entrance to the Tam-sui river becomes impassible. Taïwan-fou is only an anchorage on the open sea, and ships do not dare stop there except during the northeastern monsoon. The Takao sand-bar makes it impossible for any save small vessels to enter it. And the other points on this coast are only anchorages which are several miles from shore; they have no protection, and are treacherous because of their bars of quick-sand.

19: Guérin and Bernard--547-548 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 174

Formosa does not have any autochthones. Its first inhabitants belong to the great family whose cradle was in Indo-China but which was doomed to wander because of the invasions of conquering races; they are a part of that human sub-soil which is formed by the savage tribes of China, Hainan Island, the Philippines and its neighboring archipelagoes, the Mois of Laos, etc. However, as they were the first and for a long time the only inhabitants of our island, we shall call them the aborigines. [548]

Their migrations must have taken place at a very remote time; they were successive and had no unity as to their point of departure.

At that time the forest dropped way down to the sea so the immigrants could settle in the valleys and the plain. The water-courses were natural frontiers between these newly-arrived clans. They lived by hunting and fishing, spoke totally different languages, and fought one another. . . .

The wind of migration blew many tribes to Formosa, but there was a very small number of individuals in each agglomeration. Some of these clans have disappeared, others have been dominated by the Chinese, but the majority of them have bravely retired into the heart of the mountains.

19: Guérin and Bernard--548-549 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 161

What is the savage population at the present time? [549] Although it is impossible to answer this question exactly. . . we estimate that it is between 15 and 20,000 people.

19: Guérin and Bernard--549 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101, 197

One important point is the localization of the tribes on the soil to which they retreated. With the exception of slopes which are used for cultivation, and the thickets which are in the immediate vicinity of the villages and hamlets, the territories of the aborigines are very confused. Several clans use them for hunting; those in the east have a right of passage, which enables them to approach the Chinese frontier. And yet there are certain boundaries, which are rarely crossed. These barriers are essentially of a moral nature, and they are due to the linguistic differences existing between neighboring tribes. Let us add that there are always water-courses which form a corresponding frontier. However, these were purely a nominal obstacle at the beginning .....

The distinctive characteristic of the savage state is a wide diversity of language in a small area, and we find this on Formosa. But in spite of this diversity, and a few differences in costumes and customs which are really due to typography or surroundings, the family characteristics stand out in relief.

19: Guérin and Bernard--550 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101, 197

In general each tribe has its dialect on Taiwan which is often incomprehensible to the neighboring clan, but there is one notable exception. [MC: see succeeding notes in 101 for discussion of Tayal.]

19: Guérin and Bernard--550 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101, 171 Atayal

In the northern third of the island there is a group of aborigines which belong to various denominations, obey independent chiefs and are not jointly liable, although they live peacefully and share their hunting territories and frontiers. The whole agglomeration speaks the same language, although a few idioms reveal that there are different tribes. We shall call this group the Morrisonien, for the peoples composing it live on the slopes of this alpine region. [VMM: The authors seem to have mistaken Mt. Sylvia for Morrison] A simpler term would by the Tayal, and we are glad to borrow it from their idiom. Although this idiom does not resemble that of the island of Luzon, the analogy of the words Tayal and Tagal is worthy of note; the latter is the generic name of the inhabitants of the Philippines.

19: Guérin and Bernard--550 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101 Atayal

There are sixteen or seventeen Tayal tribes. They are: on the east and adjoining th sea, south of Sau-o-bay, the Tapéhan, then the Katasiek. Parallel to them but farther west are the Menibo, the Moulaou, the Sélamaou, the Kaïaou, and the Kouan. As we approach the Chinese frontier we find the Takassan, the Kakaougan, the Kéouï, the Lahaou, and the Tétounan. And finally along this frontier are the Tangav, the Takoham the Malipa and the Malikouan. This circle is limited by Chinese on the western and northern sides; by the Taoussaï and Taïoukou on the east, and by the Kalapaï on the southwest.

19: Guérin and Bernard--551 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101

From the geographical point of view, the Taoussaï and the Taïoukou complete the Morrisonien [MC: i.e. the area around Mt. Sylvia or the northern mountain area. The authors have here confused Mt. Morrison with Mt. Sylvia.] center, but they have a different language;[MC: from that of the Tayal] they fight each other, the Kaiaou, the Sélamaou and the Mouiaou.

19: Guérin and Bernard--551 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 361, 826

All of these clans [MC: of northern Formosa in the district around Mt. Sylvia] have property along a water-course. The Tapéhan have a brook, and the Katasièk a river which empties into the eastern sea. The water-course which has watered the Taoussaï territory has its mouth in the Taïoukou region. A large river traverses the country of the Kaïaou, the Sélamaou, Mouïaou and Menibo, and then ends near Sau-o-bay. The Tangav have the Manka river at its source, the Takassan, the Kakaougan, the Kéoui and the Takoham each have one of the tributaries of this same river.

The most populous of these tribes are the Takoham, Menibo, Mouïaou, Taoussaï and the Taïoukou.

The Menibo are reputed to be thieves. The Taoussaï have goitres, so they are an object of horror to the other tribes.

19: Guérin and Bernard--551 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 123

We have had frequent and intimate relations with the Tayal; since we knew their dialect, it was possible to learn their habits and customs. Our visits to the other tribes were shorter, and they were made for the purpose of drawing comparisons.

19: Guérin and Bernard--551 [4] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 197, 609, 619

The language of the Kalapaï is unlike that of the Tayal, and the two tribes are separated by a water-course; but they cross it whenever they like, for they are on friendly terms with each other, and with the Maraïkoun, a tribe whose language is derived from the Tayal.

19: Guérin and Bernard--551-552 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101, 197, 304

The Bouiok are in the interior, and they only have some frontier camps. Their dialect is a peculiar one, so they use the Tayal idiom when they want to talk with the Chinese. Their women only have their foreheads tattooed, while the men are the first ones that we have seen with a supplementary tattooing pattern on each side of the chest. [552] We had been told that the Bouiok were a scaly people, and it is true that a great many of them have skin diseases.

19: Guérin and Bernard--552 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101

There are six tribes between the territory of the Bouiok and the windings of the river whose mouth is at Héoulang; they are the Meianhan, the Kabouron, the Baoukéton, the Makama, the Kaou-lo and the Shabagala. They still speak a language which is derived from the Tayal, but they use a number of words which are foreign to this idiom.

19: Guérin and Bernard--552 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101, 304, 609

There are two rivers which empty into the sea near Taika and at Lokan; they serve as barriers to the powerful Ata-bou tribe, which has its own language. It is feared by the Chinese and by the aborigines in the south. The men of this tribe have their faces tattooed with the same designs that we have already seen, and then they also use horizontal arabesques on it.

19; Guérin and Bernard--552 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 286, 289

The clans that we have just mentioned [MC: i.e. those just south of the Tayal] make rice paper, hemp and weave some materials.

19: Guérin and Bernard--552-553 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 141, 224, 341, 576 Tsou

Between the rivière Noire and the Pakan are the Tsoo, who are also called the Tibou-la, as that is the name of their largest village. The Tsoo are the unique example of a tribe of savages that are allied with the Chinese, and they are not tattooed at all. But they have little pity for their Ata-bou neighbors, and those of Sibou-koun. There is another language here, and we find that the race has become smaller, more thick-set, more southern, in a word. The house is round with a conical roof, instead of being square. The native no longer bids you welcome by laying his hand flat on your chest; he presses your forearm instead. (These observations apply to all the southern tribes). The Tsoo have replaced the Chinese head trophies by [553] enormous piles of wild-boar skulls.

19: Guérin and Bernard--553 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101, 304, 609

Still within the limits of the two water-courses, [VMM: the rivière Noire and the Pakan] we find the aborigines of Sibou-koun and those of Kanagou. Each of these tribes has its own dialect. Tattooing and the hatred of the Chinese are characteristic of them. The territory of these two tribes extends to the eastern slope.

19: Guérin and Bernard--553 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 103

Several times we shall mention the aborigines of the north, as a contrast to the southern ones. Then the Lokan river will serve as a frontier between the two groups, in other words, we shall consider that the Ata-bou are the last of the northern tribes.

19: Guérin and Bernard--553 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 141, 142, 481

The Formosan savages are similar to the higher quadrumanes, such as the gorilla, in their gait. Their arms are long, and they have enormous feet. When they walk the front part of the foot is the only section that touches the ground; this is managed in some way by a perfect manipulation of the toes. The savages are above normal height, except among the southern tribes. The hair of the savages is usually tied in a knot at the back of the head, although it is occasionally cut short. Body hair is not very abundant. The features are those of a race which has been degraded by the difficulties of eking out an existence. Children in the north look very much like Europeans. You are amazed by the variety of physiognomies, for flat faces are seen side by side with Greco-Roman profiles. Unfortunately, the natural beauty is soon destroyed by an artificial ugliness. The southerners look like Malays or Tayals, but they are all extremely vigorous and agile.

19: Guérin and Bernard--553-554 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 141, 609

The savages are all alike [554] in having an expression of defiance and anxiety, which shows that they are undeveloped mentally. Some of the women are pretty, and they are small.

19: Guérin and Bernard--554 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 291

The basis of the savage garb is a blue or black cotton scarf which is wound around the thighs and knotted in front. In a pinch, he considers that this is sufficient raiment. Usually, however, he adds a waistcoat which has no buttons, or a large sleeveless shirt, which is open way down the front. If he is cold, he fastens a smock around his neck, and this hangs down to his feet. The women sometimes wear shirts with sleeves; their costume consists of leggings, an apron, a piece of material which passes under the arm and then ties like a towel in back, and finally, a kind of turban which is wrapped around the head. The fabrics of these garments are solid color, or they may be a mixture of bright wools.

19: Guérin and Bernard--554 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 292

The savage keeps the rain off by means of a goat skin; a split makes it possible for the neck to fit into a round opening which is made in the upper edge of the skin. If the weather is fine, this coat is folded in fourths, and then kept in a net which the Tayal carries over his back whenever he leaves his home.

19: Guérin and Bernard--554 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 292

Generally there is no head dress. But the tribes in the northern circle use reeds to braid plain skull caps, broak-brimmed hats, or--and this is the most remarkable shape real jockey caps. In this case, the visor is turned back. These helmets wear forever, they are painted red and provided with chin-straps of glass beads.

19: Guérin and Bernard--554-555 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 301

In the eyes of the aborigines, the ornament is more important than the costume itself, and men and women vie with each other in frivolity. So there is a whole collection of [555] copper bracelets, collars and belts of crude glass trinkets, plaques of bone which are arranged around the forehead or neck as if they were ivory, others are made into earrings, bells, etc.

19: Guérin and Bernard--555 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 301, 304

The ear lobe is pierced in the European fashion, but in the case of the men, it disappears almost entirely so that it can hold a bamboo cylinder which is decorated with designs, and whose front end is completed by a tuft or rosette of red wool. The aborigines of the north are much more wealthy, so they have a great many ornaments of this kind. In the south some flowers are occasionally worn in the hair.

19: Guérin and Bernard--555 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 224, 411, 714

The apparatus for fighting or hunting is more dignified; it consists of a bread knife, whose sheath is of wood which has been painted red, and this is slipped through the bel there is a long gun with a fuse, and in front of it two or three powder-horns are suspended from strings of false pearls; in back the man carries a coat which is folded into the net, a bag for balls, a parchment case containing eight powder charges in eight bamboo holders; then around his wrist is a cord, a lighter with a fire-stone, and some banana marrow instead of a tinder; sometimes the hunter has a bow, and in that case h always uses it with consummate skill.

19: Guérin and Bernard--555 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 231

The dogs of the savages are coupled and held by rush thongs; these valuable animals are one of the sources of the tribal wealth. Some of the clans cut off the tails, but most of them respect this appendage.

19: Guérin and Bernard--555-556 G-3 (ca. 1866) 1868 Formosan Aborigines-1-2
116, 304, 721

Two things are axiomatic among the savages: 1. every tribe which fights the Chinese practices tattooing; 2. the tattoo marks on the forehead and the chin are the only ones that have any fundamental meaning. In the middle of the forehead there is a rectangle two centimeters long and 1 centimeter wide; it is filled with parallel lines which are spaced a millimeter apart. The same median design is found on the chin, save that it is a little shorter.

The Chinese, who is either too naive or ill-informed, [556] states that the formula inscribed on the face of the savage corresponds to two periods of his life: puberty and marriage. Unfortunately for the son of Sem, the savage has a different interpretation for these signs.

When a boy is betweeen twelve and fourteen years old, his father, brother or some relative takes him on a Chinese-hunting expedition. If the hunt is successful, the child receives his first chevron, in this case a tattoo mark, when he brings the heads back to the village. But his chin is not decorated until he has slain a Chinese with his own hand. There is often a very brief lapse of time between the two.

The aborigines of the Morrisonien group [VMM: the authors seem to have confused Mt. Sylvia with Mt. Morrison] only use these two signs. We have seen other clans, which added a transversal bar both on the face and the chest.

It is unfortunate that women should be tattooed too since they have no share in the

hunt; but a blue mark defaces the forehead of the marriageable girl. In many cases, this is the extent of the work, but occasionally, as among the greater number of the Tayal tribes, the bride is covered with marks until her cheeks and lips disappear beneath the linear streaks of the design. Naturally this may cause severe inflammation, whereas the plain tattooing on the forehead and the chin is of no significance.

19: Guérin and Bernard--556-557 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 304, 314, 462

Women are the only people entitled to exercise the profession, or really the priesthood of tattooing. They use a splinter of resinous pine, which is burning; the flame is held against a polished surface which is covered with a thick layer of a black substance. A thread is sprinkled with this stuff and then held at both ends to show what the design should be. The metallic teeth of a kind of comb are placed on this sketch, [557] and then hammer blows pound them into the skin. The first flow of blood is stanched with a bamboo scraper, and at this moment the tattooer dips her finger into the resinous smoke and rubs it over the wound. The operation is over, the blood soon stops flowing, and the scar is an indelible blue. Most of the clans get their tattooing wood from the Kakaougan tribe, where there are forests which are unusually full of resinous products.

19: Guérin and Bernard--557 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 224, 349

The aborigines have places to rest when they are hunting or traveling; they are huts which are fashioned of tree branches and ferns.

19: Guérin and Bernard--557 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 341, 361

The houses are carefully built, but they are arranged in a manner which looks more like a hamlet than a village. Enormous piles of offal show that you are approaching the settlement, and then you come into a vast clearing which is surrounded on all sides by the forest. The dwellings are perched on the slopes of the hills, and there is a good deal of space between them; they are rectangular or square (circular and with a conical roof in the south). The walls are made of planks which are poorly squared, and the roof is bamboo, covered with thatch; they have doors and windows.

19: Guérin and Bernard--557 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 352, 353

The floor inside a savage house is well stamped down, and in each corner there is a bed (made of a bamboo framework resting on wooden feet), with a weaving box on top. In the space separating two beds there is a hearth on each side, and it is made of three stones; above it is a bamboo screen which is used to dry skins and stag horns; the weapons and hunting equipment are arranged in panoplies; and finally in one corner you see tubs, jars (water vessels), baskets of various shapes and household utensils.

19: Guérin and Bernard--557-558 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 343, 352, 422

Across from the savage dwelling there is a granary on piles where the family provisions and treasures are stored; bouquets of rice, barley, chickweed and millet are artistically arranged; then in the coffers of a savage house you find woven materials, clothing and festal decorations, Chinese [558] scalps and money.

19: Guérin and Bernard--558 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 301, 436

The savage money consists of little white cylinders, like those made of jet, and they are made of the bony parts of certain kinds of fish; when strung on a chaplet, they are worn around the throat and head as if they were jewels; they are marked when they are given to the aborigines, and are arranged in series on pieces of red material.

19: Guérin and Bernard-- 558 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 241, 311, 727

Around the savage house are several fields of sweet potatoes, hemp and Aralia papyfera (rice paper plant). At the end of these cultivated lands there is an area with some high grasses, but the passer by avoids it. If you go into this region, you will understand the reason for this repugnance for the green conceals a set of crude wooden shelves which have rows of Chinese heads; they are arranged as if they were in an anatomical museum, and there are always some new ones.

19: Guérin and Bernard--558 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 241, 276, 311

Cereals are harvested by the savages on the slopes or plateaus which are near the dwellings. Fertilizer comes from the ashes of large tree trunks that lie flat on the ground and are burned every year. In the spaces between them you see turnips, a kind of dandelion which is a remedy for intoxication, and tobacco. Although the soil is carefully cultivated by hand, these plants are frail and do not grow close together; they look like the agricultural attempts of a people that is still in its infancy. The rice grains are very large, but that is the only successful crop. The tobacco leaves are stripped from the plant as needed, and are dried in the fire. Several tribes in the south prepare them in the shape of carrots.

19: Guérin and Bernard--558 [4] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 231

You miss the noise of the farmyard around the savage dwellings. But the savage feels that he has enough trouble finding food for himself, and he is unable to comprehend that domestic cattle can be a valuable source of food.

19: Guérin and Bernard--558 [5] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 241, 462

Women do the work in the fields among the savages, and men help them when they are not hunting or taking trips.

19: Guérin and Bernard--558-559 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 251, 262, 264

Among the privileged tribes, the [559] family squats around a small pan of rice twice a day. Sometimes sweet potatoes and a little venison complete the repast. The flesh of the wild boar, deer and goat is preserved by cutting it in pieces, flattening the fragments and then drying them in the air.

19: Guérin and Bernard--559 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 273

The Formosan savages ferment barley and thus obtain a sourish drink which produces an inoffensive type of intoxication.

19: Guérin and Bernard--559 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 224, 262, 281

The aborigines are hunters both by inclination and necessity. They track the boar and the deer, although the latter is also captured in traps. The hunters perch in trees, and then lie in wait for leopards and bears. Bear skins are prepared in the south, but in the north they are roasted along with the animal, and only the four paws are removed.

19: Guérin and Bernard--559 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 462, 562

Savage wives accompany their husbands on peaceful expeditions, but usually they stay home. They have to do the house work, and a great deal of the cultivation in the fields. The women are real companions for their husbands, and by nature they are happy and gay.

19: Guérin and Bernard--559 [4] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 533, 534

The savage women like to sing, and in some tribes they play as well. The instrument is a bamboo segment which is a decimetre long; two copper tongue-like strips are fastened to one of the extremities, and a thread is slipped through each end. When you want to play this instrument, you place its convex side between the lips; your hands pull the two threads and this gives the instrument a movement of traction and rotation, while the tongue keeps pressing the metallic valves. In some of the tribes the women and girls accompany their recitative chant with an obscene motion of their hips, and they do this in the most innocent manner imaginable.

19: Guérin and Bernard--559-560 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 548, 768, 837

Although there is no prudery in the language of the savages, prostitution is unknown, and there is almost no adultery; moreover, the husband has rights of a Draconian severity to protect his honor, and he would avail himself of them if it were necessary. [560] In the south, custom authorizes widows to sell themselves, but this was doubtless a means devised to enable them to make a living and support their young children.

19: Guérin and Bernard--560 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 582

Marriages among the savages are performed at a very early age, even before girls are nubile.

19: Guérin and Bernard--560 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 584

The savage boy [VMM: wishing to marry] offers the girl's father some gifts, which consist of a pan without a handle, a knife, a jar and money cloths. If he is too poor, he may give one of his brothers instead. The father of the girl gives his consent or refuses it; in the first case, the period of the engagement is set at once, and it varies between a month and a year. If there is only one daughter, the parents delay the moment of separation as long as possible.

19: Guérin and Bernard--560 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 585, 591

Among the savages the wedding is held at the home of the fiancé; the bride has no share in it, and she waits at home until a noisy procession comes to get her, and then she accompanies her husband. If her father is dead, she has no brother, or just little ones, the husband and his wife live with her mother.

19: Guérin and Bernard--560 [4] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 584

It may be that a savage father is too ambitious, and that he will refuse the first suitor; then the daughter resigns herself to wait for someone who has more money. As time passes her beauty fades, and she usually gets a poor husband.

19: Guérin and Bernard--560-561 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 304, 584, 585

All marriages among the savages are arranged according to the wish of the young people unless the parents refuse permission. In this case the couple may go off to hide in the mountains. Then the chief of the hamlet and the friends of the family intervene to obtain forgiveness and the recall of the fugitives. The difficulties are smoothed away, [561] and then it only remains for the tattooer to do her duty. In these conditions it costs the guilty woman ten times the p[illegible] which is charged a girl before her marriage.

19: Guérin and Bernard--561 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 304, 585

There are some clans in which the husband has his two canine teeth extracted at the time of his marriage; the bride is even more enthusiastic, and she has the adjoining incisor removed as well.

19: Guérin and Bernard--561 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 581, 736

You see few men who are crippled; they could never hope to marry.

19: Guérin and Bernard--561 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 595

Monogamy is the custom among the savages, according to law, although a few of the chiefs have two wives.

19: Guérin and Bernard--561 [4] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 844, 846

The woman in labor is her own mid-wife, and five days after her delivery she resumes her normal occupations. There are no difficult deliveries among the aborigines.

19: Guérin and Bernard--561 [5] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 553, 842, 853

The arrival of a child of either sex is considered a benediction;when it is a month old, the parents select a name. The mother nurses the child as long as she has milk for it, and there is no weaning.

19: Guérin and Bernard--561 [6] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 164

The most common diseases among the savages are: intermittent fever, tuberculosis, intestinal disorders and small-pox.

19: Guérin and Bernard--561 [7] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 753, 755

The remedies for disease among the savages, are rest and a few prayers. If the patient does not have a family or a dwelling, his charitable neighbors build a hut for him where he can get well or perish in peace. If it is a case of small-pox, the whole hamlet flees as quickly as possible, and takes refuge in temporary shelters at some distance from the village; a line is drawn around the spot where the infection is raging, and only people who have already had small-pox are authorized to approach it. We asked one guard if the same person did not get the malady again, and she replied that once was quite enough.

19: Guérin and Bernard--562 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 764

Among the savages there is a code governing funerals and mourning. The deceased is always buried in his clothing and decorations. He remains on a bed of state for twenty-four hours, so that his relatives and friends can bid him farewell, and then the immediate members of the family attend to the burial; they dig a deep hole under one of the beds, and lower the corpse in a sitting position; a pinch of rice and a bit of deer meat are laid on his knees; a pan (of the same shape as the one used as a household utensil) is placed on his head; this acts like a vault, and the soil is thrown on top of it; the knife, gun, powder flasks, in a word all the hunting and fighting equipment which the savage used during his lifetime, follow him into the tomb. The child who has never hunted or worked in the fields does not have the pinch of rice or the piece of deer; then, too, he does not have the right to the honors of the sauce pan. When the grave has been filled and the earth tramped down on top, the bed is set up again, and then the family goes to spend a month with some relatives.

19: Guérin and Bernard--562 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 766

If a man is killed by some violent or accidental means when he is away from home, he is buried in the mountain.

19: Guérin and Bernard--562 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 765

Among the savages, mourning consists of weeping and fasting. These manifestations of sorrow are regulated according to a precise ritual, and they vary according to the status of the deceased and the relationship of the survivors.

19: Guérin and Bernard--562 [4] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 771, 828

The aborigines do not have any external cult; there is no adoration of gods or fetishes, and no belief in a future existence. However, they invoke a kind of familiar genius who visits them in their dreams; he does not assume a divine shape, but comes in the guise of a father, a mother or close relative. There is never any doubt about the interpretation of a dream; the councillor limits himself to recommending or forbidding the action which the dreamer envisages.

19: Guérin and Bernard--562-563 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 787

Both men and women observe a daily superstition; every morning at dawn each one of them [563] goes to the center of the path to watch the augural bird (a blackish wren, which is very common in the mountains). If the bird cuts the road obliquely, the omen is favorable and plans will turn out well. But if the bird flies perpendicular or parallel to the path, the savage resigns himself to spending the day in his hut; it will be full of disaster, and there will not be any game or Chinese heads; women hesitate to go down to the fountain, fearing lest they might encounter some venimous reptile on the way; tattooing is postponed, and the lover will not propose to his lady-fair. The omens derived from the direction of the bird's flight are corroborated in good and evil when it sings its confused but rhythmic song. When we lived among the tribes, we never failed to regulate our conduct according to this pattern.

19: Guérin and Bernard--563 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 241, 273, 796

The aborigines celebrate three annual feasts which correspond to the sowing or harvesting of rice, millet and chickweed. The Tayal call them by the picturesque name of work of the cups. As a matter of fact, there is a great deal of drinking, and according to a custom which is fraternal rather than convenient, people drink two by two out of the same vessel. There is some preliminary hunting, so the natives always have an ample supply of venison. The guests get drunk, fight, and then when the ceremony is over, they limber up their muscles in a hunt.

19: Guérin and Bernard--563 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 592

The head of the family has absolute authority over his household, but he soon shares this with his eldest son, who will be his successor eventually.

19: Guerin and Bernard--563 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 622, 643

The tribe does not have any high chief. The hamlet has a magistrature which is both hereditary and elective (the son does not replace his father unless he is judged worthy of it). The magistrate's power and influence are based entirely upon his wealth and courage.

19: Guérin and Bernard--564 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 622, 682, 692

He [VMM: i.e. the magistrate in a savage community] is a justice of the peace, and he always tries to conciliate the parties. There is no murder among these savage tribes, but theft is rather frequent and only in exceptional cases does the victim render justice himself. The parties appear before the magistrate, and he tries to appease the feeling of hatred between them and to make the delinquent restore the goods or at least pay compensation for them.

19: Guérin and Bernard--564 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 101, 619

There has never been any federation of tribes, and the only link is the language.

19: Guérin and Bernard--564 [3] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 439

Commerce, in the form of barter, plays a vital role among the Formosan tribes. From the Chinese they receive fire arms, gun powder and lead, knives, pottery sauce pans and jars, salt, rice, wine, cotton materials, wool stuffs (destined to be unraveled and mixed with native materials, to give them color and design), needles, thread, buttons, bells, copper, glass ornaments, ivory ornaments, money, etc. In return they furnish hemp, materials, rice paper, bear, leopard, and a great many deer skins, the tendons, feet and horns of deer, the fangs of the wild boar, venison, mushrooms, medicinal plants, kamatchi (a tubercle for dyeing), and above all, the right to exploit the neighboring forests or to cultivate the valleys and turn them into rice fields.

19: Guérin and Bernard--564-565 G-3 (ca. 1866) 1868 Formosan Aborigines-1-2
116, 175, 177.17 China
636.17

If the Dutch had succeeded in establishing their dominion, it would have been an excellent thing for the Formosan tribes. Under the rule of these prudent and clever masters, the tribes would have been taught a relative kind of civilization; in any case, [565] they would have learned how to live and to prolong their race. But the Chinese invasion took all their possessions without teaching them anything in return, it has been pitiless from necessity for the island was small, and the invaders were both numerous and hungry. During Koxinka's time there was a general retreat of the poor tribes, and then since then events have proceeded at the slow tempo which still characterizes them today. The new-comers see that the valleys and the plain are occupied, and so they move toward the mountains and infringe upon the territory belonging to the tribes; they want to get land which may be transformed into rice fields, to seize a water-course that is essential for irrigation, to cultivate indigo, tobacco, and especially sweet potatoes on the slopes, and then they are anxious to exploit the forests, especially those containing camphor trees.

In the north the advance has been very slow; it may be that the aborigines have defended their land foot by foot, or it is possible that the Chinese have found a permanent source of wealth in the lands that they have annexed, and so they have not been spurred on to new conquests. In the south, on the other hand, there were some enormous

19: Guérin and Bernard--564-565 G-3 (ca. 1866) 1868 Formosan Aborigines-2
116, 175, 177.17 China
636.17

deforestation projects at the start. This resulted in some vast empty regions which extend from the last Chinese farms to the frontiers of the aborigines. The tribes may have vegetated more safely on this account, but they have suffered from the difficulty of bartering their products, and this is caused by the absence of roads and the difficulty in navigating the rivers. This deforestation would have been more difficult if several tribes had not joined the conqueror, so there was no resistance whatsoever.

19: Guérin and Bernard--565-566 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 177.17 China
636.17

The Chinese pioneer tries to obtain what he wants by buying it, and his favorite tactics are persuasion; but if he encounters an obstinate refusal, he will try other means, at his own risk of course. Thus wood choppers scatter [566] through the forests singly, or in small groups, and they are an easy prey to marauders. Sometimes the villages or wealthy proprietors do business with a part of the tribe, which comes to the neighborhood to protect the workers. These good services are rewarded by a subsidy (rice, wine, poultry, young pigs etc.) Finally, if the savages refuse to make any concessions, the Chinese proceed in a large group, and half of them keep armed guard over the safety of the workmen. In this way there is no danger, and if the Chinese adopted this procedure all the time, the tribes would be condemned to retreat a little more each day; but the Chinese only do this on rare occasions, and they do not like to use this method.

19: Guérin and Bernard--566 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 721

The aborigines have a system of defence which is very similar to their plan of attack. Hunters scour the frontiers in small groups, they lie in ambuscade in strategic spots, do not appear until there is no danger, and are very rarely surprised. The bordering tribes would be unable to protect their territory unless the clans in the interior helped them perform this task.

The aborigines who are protecting the Chinese do not attempt to flee from what every savage considers as his chief duty, so they kill their enemies, but at a safe distance, where they are no longer responsible for them.

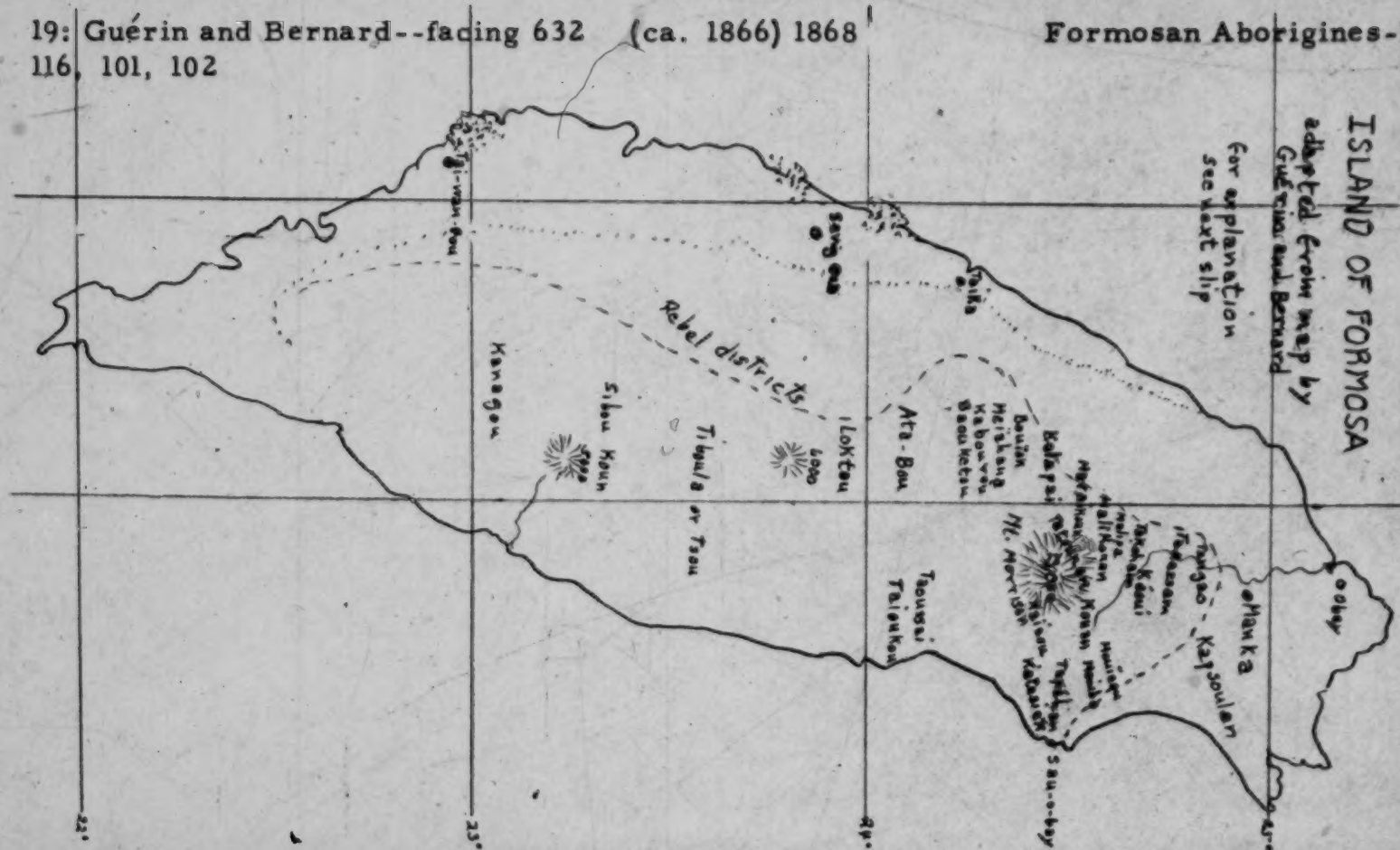
19: Guérin and Bernard--567 G-3 (ca. 1866) 1868 Formosan Aborigines
116, 437, 563

A good many Chinese live on fortified farms which are dotted here and there at the foot of the mountains. Some of them are centers for trade and barter, especially those where there is a savage who has married a Chinese. These women are the natural mediators, and then there are also the half-breeds.

19: Guérin and Bernard--567 [2] G-3 (ca. 1866) 1868 Formosan Aborigines
116, 443, 563

When a Chinese has several children by a savage, he keeps them for several years, and then sends them back to their mother's tribe. The girls marry and learn to hate the Chinese. The sons marry too, but they have more sympathy for their father's race, so they do not take part in the head-hunting expeditions, or in the festivals which follow them; some, however, have innocent tattoo marks on their foreheads. They take charge of the clan commerce and attend to the exchanges. Then there is a system of peddling, which distributes the Chinese products to the most distant tribes.

19: Guérin and Bernard--facing 632 (ca. 1866) 1868 Formosan Aborigines-1
116, 101, 102

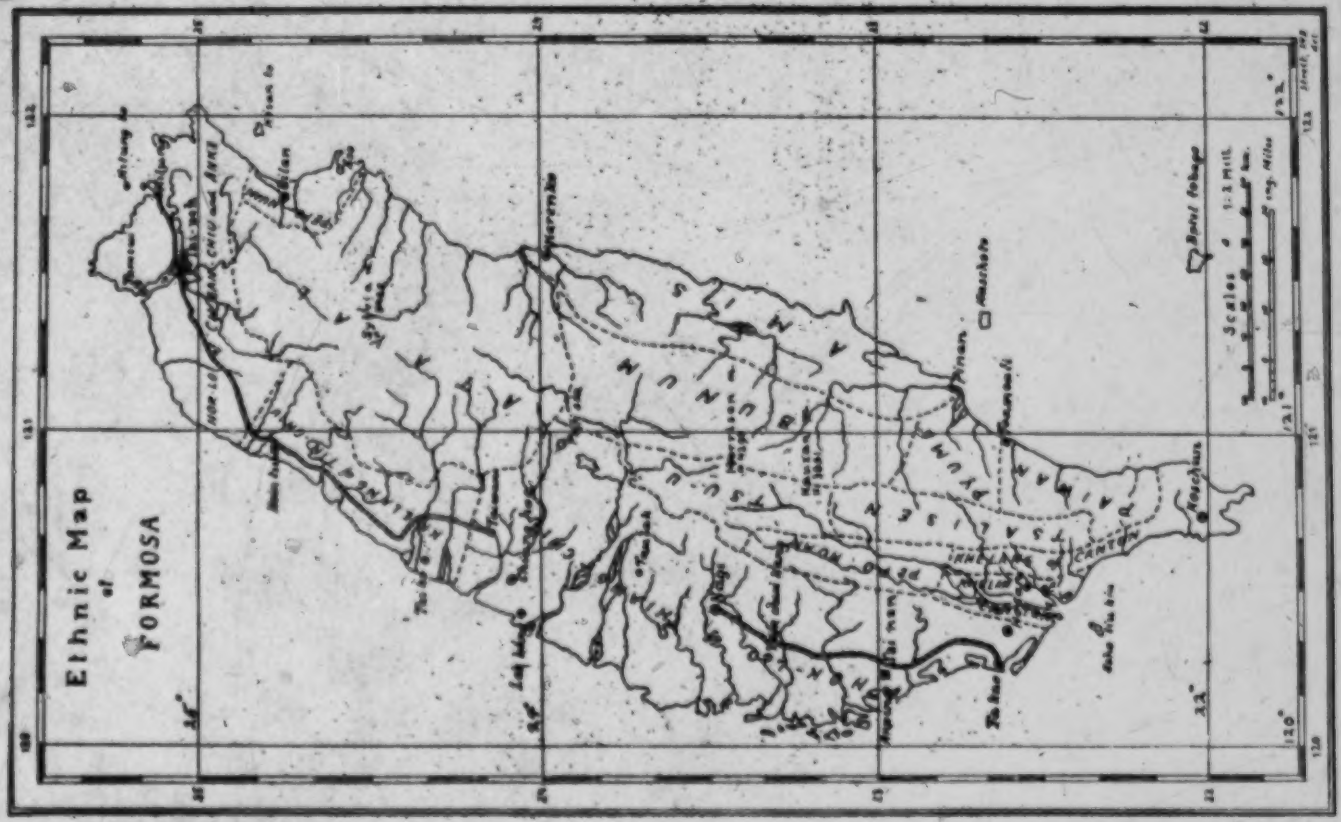


19: Guérin and Bernard--facing 632 (ca. 1866) 1868 Formosan Aborigines-2
116, 101, 102

EXPLANATION FOR MAP BY GUÉRIN AND BERNARD

[MC: The purpose of this map by Guerin and Bernard was to indicate the locations of the various aboriginal tribes mentioned in the text. The map is apparently taken from English Admiralty charts and appears to be inaccurate as to the longitude of the island and its coastal configuration. The chief defect however, is the apparent confusion of Mt. Morrison with Mt. Sylvia, the latter being entitled Mt. Morrison on the map whereas the real Mt. Morrison is located in the south. This adaptation of the author's map is reduced somewhat in size and includes only the main features and locations of the tribal groups, omitting the names of most towns and bodies of water. The line of dashes indicates the approximate limits of the territories of the aborigines and Chinese. The dotted line divides the region of the plains from that of the mountains. The altitudes are in English feet.]

20: Alvarez--247 (no date) 1927 Formosan Aborigines
116, 102



20: Alvarez--248 (no date) 1927 Formosans
116, 131, 101

"Formosa is still almost unknown to [MC: the] scientist. It is one of the great islands which are situated to the southeast of the vast Chinese empire (now republic), and it is separated from the mainland by the Strait of Formosa, also called Channel of Formosa. In the centre of the latter, about 25 sea-miles away from Formosa and from the shores of China, are the poor islands named 'islas Pescadoras' (fisher islands), which, on account of their important strategical position have on several occasions been coveted by powerful foreign nations."

20: Alvarez--248[2] (no date) 1927 Formosans
116, 131

"The island is about 264 miles in length and 80 miles in breadth. The total area of Formosa thus amounts to 14,000 square miles, embracing the sinuosities and entangled foldings formed by the numerous and elevated mountains of the high ranges, some of which, as for instance Mount Sylvia and Mount Morrison, rise to twelve and thirteen thousand feet above the level of the sea."

20: Alvarez--248 [3] (no date) 1927 Formosans
116, 161

"According to the official census of 1919, the population of the island was 3,341,217, the greater part of them living in the western plains, which comprise about the third part of the whole surface of the island."

20: Alvarez--248 [4] (no date) 1927 Formosans
116, 132

"Its climate, changeable and rather hot, is however, healthy owing to the South-Western Monsoon that blows continually from May to September, and the North-Eastern Monsoon, from November to April. To this extremely favourable circumstance may be added the benign influence of the sea-current called Kuroshimo, which rushes along the shores of the island. The climate is moist owing to the exuberant vegetation of the vast virgin forests and the pathless wildernesses. The island is not unhealthy; nevertheless, there occur very frequently cases of malarial fever, to which one is exposed especially during the summer."

20: Alvarez--248-249 (no date) 1927 Formosans
116, 133

"The Channel of Formosa is famous for its rough waters, being attacked by violent typhoons every year. The many disasters that have occurred on the coast of the island strike terror into the sea-faring people, who have to sail in that always agitated and violent sea of the extreme Orient.

There are no active volcances, [sic] though some of the mountains seem to offer signs of craters now extinguished, such as Mount Taitum, in the northern section, in the district named Kagi. Then also, in Central Formosa and in the southern part, is found the small but yet smoking crater called Rigyo [249] by the Japanese. Proofs of the volcanic soil of Formosa are, we believe, the numerous hot springs of high temperature, the sulphurous springs in the north, and, lastly, the frequent earthquakes."

20: Alvarez--249 (no date) 1927 Formosans
116, 134

"The soil of the island is most fertile. Rice can be cultivated everywhere, tea in the northern section, sugar-cane especially in the centre and the south, and in the mountains, grows the famous camphor-tree, which yields valuable profit. As far as this natural product is concerned, Formosa is considered to be the richest emporium in existence."

116, 101, 175

"The history of Formosa, as commonly known by Western historians, seems to commence in the XVIth century. It was then that first appeared the name 'Formosa', which is undoubtedly of Portuguese origin. Yet no evidence can be found in Portuguese history that this name was first applied by Portuguese to the island. The same may be said with respect to the discoverer who first saw the shores of Formosa. Nor do we know, whether the motive by which that navigator was compelled to land on those far shores to which he gave a name so much in accord with the real beauty of the island was fatal or purposive.

Among the peoples of the Far East, the Chinese and Japanese have for many centuries known the island, as in their respective histories are preserved names, such as Piisaye, Pak-kando and Taiwan (1). The latter appellation first appeared in the XVIth century,

1. Taiwan, according to the Chinese characters in use at present, means: 'bay of earthy cover', or 'high bay', though one can see no relation between this denomination and the object to which it is applied, a fact altogether contrary to Chinese custom of namegiving. It is to be presumed that the tribe called Paiwan, in whose territory the first Chinese invaders had established themselves, might have given origin to that name; or, that the word Pairan, the nickname applied by the Formosan aboriginal inhabitants to the Chinese, induced the latter to call the island by this name. The Chinese dialect of

> Formosa locks the R, and the interchange of P and T, in order to soften the pronunciation, make that supposition very probable.

and it is still in use among the Chinese and Japanese. The latter of course had already known the island under the name Takasago, 'a place most beautiful and famous in Japan', according to a Japanese author. Taikosama, who in 1592 sent an expedition with the object of subjecting the island to his empire, called it Takasago, viz., 'Kingdom of the great mountains'. This took place long before the arrival of Europans [sic] at Formosa. These possessed the island for a short time only; the Spaniards occupied the northern part from 1626 to 1641, while the Dutch, first established in the south and afterwards possessing the whole eastern section from 1624 to 1661, were expelled by the wild Koxinka, or Ti-kok-sieng. From now on Formosa formed an independent kingdom under the name of Tong-to, or Tonglieng, viz., 'Oriental Metropolis'. Here reference is surely made to its geographical position with respect to that of China."

20: Alvarez--249-250 (no date) 1927 Formosans
116, 175

"In 1683, Kochuan, a grandson of Koxinga, was obliged to cede the sceptre he had inherited from his grandfather, to the Tartaric dynasty. The latter then usurped the power in the Celestial Empire, and Formosa, united with China, since that time became a mere colony of the same. This state of affairs was prolonged until the last war, in 1895, when the Japanese annexed the [250]island. At present they continue with pride to be the lords of beautiful Formosa."

"The races who share among themselves the whole of the hilly parts and plains of Formosa are three in number:

(I) The Japanese, new-comers, intruders, yet the masters of the island to-day, number about a hundred thousand souls.

(II) The Chinese, owners of the island for more than two centuries, constitute the main part of its population. They call themselves hok-lo (2), viz., 'good' 'plain', and

2. This name is applied by the Khe-lang to other Chinese of Formosa. It seems to take its origin from the fact that when the Hak-kas, persecuted everywhere in the Celestial Empire, arrived at the South of Fokien, they were welcomed there. Henceforth they appear under the name of 'thankfulness' that had been given to them by the inhabitants of that province. This, indeed, did not prevent at all the fact that until the arrival of the Japanese the Khe-lang and Hok-lo were living in continuous shie [sic] with each other. The Hok-lo of southern Fokien, whose dialect, with slight differences, is the same as that spoken in Formosa, call Khe-lang, viz., guests, those, to whom, in the dialect of Canton, in China, is applied the nickname Hak-kas, viz., terrible guests.

this name is applied also to the Chinese born and brought up in the 'Prefecturas' of Chiang-chin, Choan-chin and Anke, in southern Fokien. They number more than two

millions. They call Khe-lang their neighbours, who proceed from Canton and the 'Sub-Prefecturas' of Chiau-an and Tin-chiu, likewise situated in Fokien, where their ancestors are still living and their brothers well known under the name of Hak-kas. The terrible civil war that followed the downfall of the Ming Dynasty in China compelled most of the partisans of the Mings to leave their native soil. The Hak-kas, who had suffered most from persecutions, crossed the strait and established themselves in Formosa. At present they constitute the third part of the population of the island. They number about 800,000 souls.

(III) Finally, there are the genuine aborigines, who were masters of the island for many centuries before the Chinese and Japanese made their way from their native countries and reached Formosa. They are divided into two classes, viz., Pepo-huan and Che-huan. The former once occupied the vast plains which at present are inhabited by the Chinese invaders. Subdued by them, the tribes now called Pepo-huan in time adopted not only Chinese fashions, but also the Chinese language. Several northern branches still retain their mother-tongue, the old customs, manners and traditions. But their number is very limited to-day. They are named Che-huan, viz., 'savages' by the Chinese. They are hillmen, with their own peculiar language, and number about 121,500 souls, according to the official report of December, 1910."

20: Alvarez--250 [2] (no date) 1927 Formosan Aborigines
116, 101, 144

"The aborigines of Formosa are, we think, of Malayan origin. They constitute seven groups, with the following names: Atayal, Bunum, Tsu-u, Tsalisen, Pyuma, Amis and Paiwan. [MC: see map, category 102, p. 247] They represent a racial unity from the anthropological and ethnological as well as linguistic points of view. Physical differences exist only between the Atayal and the Bunum, and between these and the Paiwan."

20: Alvarez--251 (no date) 1927 Formosan Aborigines
116, 131 Tayal

"The Atayal, an amalgam of Chinese and Pre-Chinese elements, occupied in the XVIth century the whole northern part, that is to say, not only the mountains they inhabit today but also the plains where now is situated the capital Taihoku. Under the name of Southern Atayal, they still live in the plains of Polisia."

20: Alvarez--251 [2] (no date) 1927 Formosan Aborigines
116, 171 Bunun

"The Bunum who have kept less aloof from contact with the invading races have lost entirely all the characteristics of their race. They are the lords of the summits of Central Formosa. They may be identical with those tribes mentioned by the Dutch historian VALENTIN: 'They live in the mountains and speak a different language', says this authority. Yet we do not know whether they are Negritos or not."

20: Alvarez--251 [3] (no date) 1927 Formosan Aborigines
116, 144, 131, 173 Paiwan

"The Paiwan seem to be of Malayan extraction. At present they live in the southernmost part of the island. It is said that four centuries ago they were lords of a flourishing kingdom, then comprising the whole south and a part of the centre, where they afterwards were met with by the Dutch and subsequently reduced to submission by the invaders.

As to their antiquity and origin, there is nothing left but some oral traditions and the notices, most of them obscure and extremely vague, given by several ancient Chinese historians. It is needless to say, that such material can cast but a slight light upon the past history of these tribes."

20: Alvarez--251 [4] (no date) 1927 Formosan Aborigines
116, 144, 173

"Following the records we have referred to, [MC: i. e. oral traditions and sketchy notes of Chinese historians] the Atayal seem to be the oldest inhabitants in the northern section. The first elements of their people might have come from China. The Bunum have for centuries occupied the hills of Central Formosa. It is said they are descendants of Malayans who had landed on the eastern shores of the island. There they found the fertile country inhabited by a black people, who are supposed to be the primitive inhabitants of Formosa. Dispute and struggle soon arose. The black race, indeed of inferior civilization, was conquered and absorbed by the higher civilized intruders. The amalgam of these two elements afterwards retired to the mountains which they now occupy. They had probably been dislodged from their former home and pressed back by some more powerful new-comer also of Malayan origin. The most extensive of all the tribes are the Paiwan. Highly influenced by them, somatically as well as linguistically, are the Tsalisen, Amis and Pyuma."

20: Alvarez--251-252 (no date) 1927 Formosan Aborigines-1-2
116, 175

"Chinese history furnishes some dates as to the antiquity of the Formosan aborigines, but the conflicting statements make it difficult to arrive at the truth.

According to the learned Prof. LUDWIG RIESS, several centuries before the Christian era a people named Lonkius came from the north and arrived at Formosa. There they settled down, spreading over the greater part of the west. They were met with by the Chinese in the third century of the Christian era. The authors of the Chinese Annals call them 'negroes'. The Chinese historian Ma-fuanlien records that in 605, during the reign of the Suy Dynasty, the emperor Yang-ti ordered a mandarin, Chu-kuan by name, to set sail for the purpose of seeking unknown countries. A mariner, named Homan, who had for some time had the intention of sailing in an easterly direction [252] for the same purposes, was ordered to accompany the mandarin on the voyage. They arrived at the kingdom called Lieu-kieu. As they could not understand the language spoken by the inhabitants, one of the indigenes was seized and embarked, and they returned to China. We are also told that the Chinese expeditionaries were highly surprised at seeing in Formosa people different from the ancient inhabitants they had already known formerly. According to the same source of information, the people of the south were quite distinct from those in the north, especially as far as their manners and customs are concerned. They had black eyes, long noses, and were similar to the inhabitants of Hu. This word signifies in the Chinese literature a 'type' of non-Mongolian race dwelling in Central Asia.

In the following year (606), the emperor again commanded the general Ching-Ling to set out at the head of an expedition against Lieu-kieu(3), in order to oblige its inhabitants

3. The name given by the ancient Chinese to Formosa.

to recognize the emperor's authority and to pay him tribute. Some of the inhabitants had to be brought to China, yet 'the people of Lieu-kieu were not willing to obey and revolted against the Chinese general'. An attack was made; the capital, palaces and houses were destroyed and several thousand prisoners, both men and women, were taken. Ching-Ling then returned to China."

20: Alvarez--252 (no date) 1927 Formosan Aborigines
116, 175

"The name Kuen-lun is borne by several places and mountains in China, in the East Indies and in different islands of Oceania. And this name is always chosen to designate dwelling-places of Negroes, or of Malayans. Ling-nan, a territory in the modern province of Kansi, was formerly inhabited by men of non-Chinese origin. And according to the authors of the Suy Annals, those foreigners had great resemblance to the ancient inhabitants of Formosa.

In 1430, during the Ming dynasty, the Chinese history speaks of the eunuch Wan-san-h who, when returning from Siam, was obliged to put into a harbour of the southwestern shores of the island. He found Formosa inhabited by 'barbarous races'; though he was treated cordially and well supplied. Some other Chinese historian says: 'the huts of the indigenes are scattered around, occupying an area of about one thousand Li. There are a large number of villages, each of them containing five hundred, six hundred or even a thousand persons.'"

20: Alvarez--252-253 (no date) 1927 Formosan Aborigines-1-2
116, 175, 144, 167

"Now, supposing the Chinese records to be incorrect and even exaggerated, we can, however, arrive at the conclusion that Formosa must have been peopled several centuries before the Christian era. The first Malayan tribes seem to have then invaded the island. In the fifth and sixth century they became a nation powerful enough to beat and dominate the primitive inhabitants. A new competitor, of Malayan origin too, now appeared. They occupied the northern section of Formosa, and were in all probability the ancestors of the Atayal. In the south, the Paiwan began to spread and occupy a great extent of territory. The highest degree of their grandeur and advancement they reached in XIIth century. It was then that they crossed the strait, or channel of Formosa and frightened the Chinese population by an unexpected landing and bold attack on the coast of Fokien. [253]

New immigrations of tribes of alien origin have since contributed to alter and complicate the character, manners and customs, language, and so on, of the Formosan aboriginal race; and this to such a degree that to-day it is almost impossible to solve the question as to the origin and ethnical affinities of the Formosan tribes. Among the new invading tribes, there were, for instance, the Bisayas. They appeared in 1174-1189, landing on the coast of Fokien. According to the Chinese records of that time, the Bisayas were a most ferocious people with great eyes, using ironlances, and bamboos, which they used to throw with force at their enemies. TERRIEN DE LECOUPERIE says,

they might have crossed the strait and passed over to Formosa and given origin to the name Piisaye, which later on was applied by the Chinese to the island Formosa."

20: Alvarez--253 (no date) 1927 Formosan Aborigines
116, 101

"The tribes of the northern section of the island [MC: call] themselves Atayal. In the centre, the east, the west and far into the south there are found the groups named Amis, Pyuma, Bunum, Tsu-u, Tsalisen and Paiwan. Of course, the branches are divided into several tribes, subtribes, clans, and so on, and each one has a distinguishing title of its own. The northern tribes bear the name Atayal, while those living in the south, yet belonging to the same group, call themselves Tayal. And the inhabitants of nine Atayal villages situated at a short distance from the Chinese villages of the Prefectura Shinchiku call themselves Saisset."

20: Alvarez--253 [2] (no date) 1927 Formosan Aborigines
116, 101

"Many savage tribes are found in the neighbourhood of the vast and rich plain of Central Formosa, situated between the mountains called Posia or Polisia by the Chinese. Those who occupy the east and the south call themselves Bunum. Some of them also call themselves Buhuan, or Kantaban. The Chinese apply the name of Chui-huan, viz., savages of the water, to the inhabitants of four villages situated on the borders of the lake called Candidius by the Europeans, and jitsu getsutan, viz., lake of the floating sun and moon, by the Japanese. Other neighbouring settlements are named Siek-huan, viz., mature, or civilized savages. Of course, this appellation is given indiscriminately to all the tribes which have been influenced by the intercourse with their higher civilized Chinese neighbours."

"The Chinese call Alisan-ban, viz., savages of Mount Alisan, the Tsu-u, who live in the surroundings of this mountain, in front of the District of Kagi. The Tsalisen of the mountains in front of the Port of Takao are styled ka-lé-lang by the Chinese (4). This

4. According to the highly authorized Chinese dictionary (Kang-hi), the two signs... mean 'ugly wooden figures used to make dollies'. They are called Kalé-hi in Formosa. Such Kalé-hi are made for the purpose of exorcising the devils, when somebody suddenly dies. This name 'ugly figures' seems to have been applied by the first Chinese invaders to the savage tribes of Formosa.

word signifies a mountain situated in Asia, inhabited by uncivilized races of non-Chinese origin. The word is doubtless synony-[254]mous with Che-huan, viz., barbarous, uncivilized, not yet mature, a term too very often used to designate the Igorrotos of Formosa.

Ka-lé is, therefore, not of Formosan origin, as has been asserted by some students. No relation seems to exist between this name and the mountain of the same name worshipped by the Malayans.

The next to be mentioned are the Amis of the vast eastern plain, who are subdivided into Amis of the North and Amis of the South. Their neighbours are the Pyuma, who do not differ widely from them.

20: Alvarez--253-254 (no date) 1927 Formosan Aborigines-2
116, 101

The southernmost section of the island is occupied by the Paiwan. They are subdivided into the following great branches: Chakuvukubum, Pakurukul and Parizarizao. Several tribes of the stock have reached a relatively higher degree of civilization, due to the permanent contact with the Chinese."

20: Alvarez--254 (no date) 1927 Formosan Aborigines
116, 101, 609

"The Atayal of the villages Linmongan, Urai, Pesia, and others, situated in the neighbourhood of the capital of the island, apply the nickname Bunbukan to the Chinese. This word probably signifies 'foreigner' 'inhabitant of the plains', in opposition to Atayal or 'mountaineer'. The Tsalisen of Kapiangan, Tukubul, Kananigan, Kulalut, in front of the port of Takao, surely express analogous ideas by giving the name Pairan (5) to the

5. Or Paragas, as the Chinese are termed by the Paiwan.

Chinese."

20: Alvarez--254 [2] (no date) 1927 Formosan Aborigines-1-2
116, 101

Groups	Sub-groups	Some Tribes
Atayal	N. Atayal	Gaogan
		Marikouan
		Keito
		Taruko
	S. Tayal	Nansei
		Musia
C. Bunum		Tandai
		Sibukun
		Gundai
W. Tsu-u		Alisan
		Kanabu
Amis	N. Amis del	Mokkui
		Siukoran
	S. Amis del	Pilam
SE. Pyuma		Pilam
		Chipon

20: Alvarez--254 [2] (no date) 1927 Formosan Aborigines-2
116, 101

Groups	Sub-groups	Some Tribes
W. Tsalisen.....		Simosan
		Kali
S. Paiwan.....	Chakubukubun	Botan
	Pakarukal	Kosun
	Parizarizao	Subon "

20: Alvarez--254 [3] (no date) 1927 Formosan Aborigines
116, 101, 131

"The territory occupied by the seven tribes, or branches mentioned above [MC: see preceding paragraphs in categories 116 or 101] embraces nearly seven thousand two hundred square miles, viz., the half of the total area of the island."

20: Alvarez--254-255 (no date) 1927 Formosan Aborigines
116, 131, 101 Tayal

"The Atayal have a much greater extent of territory (about 3000 square miles) than any other distinct branch of the Formosan [255] aborigines. They are most ferocious and dreadful head-hunters. They use also the art of tattooing in great scale. The Ocean constitutes the eastern border of their home. In the north, they are neighbours of the Chinese. The capital Taihaku, or Taipeh is about four leagues distant from the first villages of the Atayal. Their western neighbours are likewise Chinese. In the south they live adjacent to the Bunum. And in the south east, they are neighbours of the northern Amis."

20: Alvarez--255
116, 101, 131

(no date) 1927

Formosan Aborigines
Bunun

The Bunum are hill tribes of the centre. They occupy a strip of 25 leagues of the central range, especially north of Mount Morrison (4290 m.). The territory west of them belongs to the Tsu-u, whose western neighbours are also Chinese."

20: Alvarez--255 [2] (no date) 1927 Formosan Aborigines
116, 131, 181, 101 Ami

"The fertile eastern sea-shores, about forty leagues in extent, form the home of the Amis. The latter generally are of friendly manners and peaceful customs. This section of the island is still to be invaded by the Chinese and Japanese."

20: Alvarez--255 [3] (no date) 1927 Formosan Aborigines
116, 101

"To the south, [MC: of the Amis] also close to the sea-shores, are found the Pyuma. Their home is a very small territory. To the north, they reach the Bunum and Tsalisen. The northern neighbours of the latter are the Bunum. To the west of the Tsalisen are found colonies and villages of the so-called Pepo-huan. And to the south live the Paiwan. This branch reaches the southernmost section of the island. Their eastern neighbours are named Koalut and Botan. Both are extremely warlike and notorious, for they are regarded as the murderers of the ill-fated shipwrecked crew of the North American bark Rover, in 1867; and in 1871 they murdered part of the shipwrecked crew of the Miyako. To the west are found the Siek-huan, viz., civilized savages, a plain and most sociable people."

20: Alvarez--255 [4] (no date) 1927 Formosan Aborigines
116, 137

"Virgin forests and impenetrable thickets with secular trees of most precious wood cover the whole territory which is occupied by the aboriginal tribes."

"The statistics of the aboriginal inhabitants, as made in 1910 by order of the Japanese government are as follows:

Branch	Square-miles (approximately)	Villages	Houses	♂ (males)	♀ (females)
Atayal	3.000	217	5.974	13.592	14.174
Saisset		9	130	408	356
Bunum	1.200	115	1.802	8.528	7.541
Tsu-u	500	27	238	1.230	1.070
Amis	1.000	107	4.655	16.421	16.387
Pyuma	100	9	1.108	3.184	3.287
Tsalisen	600	53	3.029	6.687	6.464
Paiwan	600	118	4.702	10.871	10.423
Total: 7	7.000	655	21.638	60.921	59.702
				120.623	

This official record is regarded as exact, except for the figures given for the Atayal, whose territory is not yet well explored."

20: Alvarez--255-256 (no date) 1927 Formosan Aborigines
116, 177, 361, 166, 241

"The Amis, Pyuma and several other branches have been influenced by owing [sic] and assimilated to their Chinese neighbours, [MC: owing] to the close and permanent contact with the invading race. They pursue some agriculture and have also a [256] little home industry, while others, especially the Atayal, seem to be averse to any kind of manual labor. The latter are hunting tribes. Of course, there are some of them engaged in agricultural work; yet, generally, they prefer to walk about the vast forests in search of game, honey and so forth. Authors of the past century asserted, incorrectly however, that the aboriginal inhabitants of Formosa had but temporary shelters, for they were always wandering abouth [sic] the woods. There were, undoubtedly, transmigrations since the arrival of the Chinese in 1683. It is for instance, almost sure that the ancestors of the Amis, Pyuma, Paiwan, Atayal and Tsalisen had been driven out from their primitive home by the Chinese. But nomads, in the strict sense of the word, we think have never existed in the island."

20: Alvarez--256 (no date) 1927 Formosan Aborigines
116, 142, 144

"The Igorrotes of Formosa have great beautiful black or brown eyes, an agreeable and even noble countenance, notwithstanding their savage manners and customs. The horizontal orbits of their eyes separate them from their oblique-eyed Chinese neighbours. There are indeed oblique-eyed individuals among them, for they have mixed very considerably with the Chinese. The head is covered with blackish, smooth hair, yet not very abundant, nor very long, owing probably to the lack of care and cleanliness. Blond haired individuals have rarely been observed among them, and bare-headed people are likewise extremely rare.

The Japanese Prof. R. TORII, however, states: 'blond haired Igorrotes are to be found frequently'. And TAYLOR says: 'they have red hair and use bracelets of silver, made by themselves'; and 'they seem to be descendants of the Dutch, who took refuge in the mountains, when they fled ferocious Koxinga'."

20: Alvarez--256 [2]
116, 141, 142

(no date) 1927

Formosan Aborigines
Paiwan

"The forehead is regular. The nose is straight, yet slightly flattened towards the nostrils. Very thick lips appear among the Tsalisen, Pyuma and Paiwan. Tendency to obesity is rare. The Tsalisen, and most of the Pyuma and Paiwan, have round faces and strong limbs. They can run with great speed. They have good eyes and are splendid marksmen. They are either dark brown or blackish in complexion."

20: Alvarez--256[3] (no date) 1927 Formosan Aborigines
116, 142, 302

"The women of the villages Urai and Linmongan, situated in the north, near the capital of the island are almost red in colour and of a cheerful and agreeable countenance. The Tangoos, as well as the Atayal, are bronze in complexion and of a bad-looking appearance. A similar complexion is found among the Bunum and Tsu-u, in the central regions. They are called Chui-huan, viz., savages of the water, for they dwell on the borders of lake Candidius. According to TAYLOR, the Diaramonk, a Tsalisen branch of the southeast, 'are rather black and let their hair and finger-nails grow'."

20: Alvarez--256-257 (no date) 1927 Formosan Aborigines
116, 142, 144

"Lighter shades of complexion are observed among the Bunum, Tayal and northern Amis (6). The latter are generally strong and well built. They [257] are much stronger

6. See on this subject 'Memoria de cosas pertenecientes á la Isla Hermosa en 1632', by Father JACINTO ESQUIVEL, publ. in the 'Correo Sino-Anamita, o Correspondencia de las [257]Misiones del S. O. de Predicadores' 1897, Vol. XXX, p. 18 passim. The original Manuscript is preserved in the Archives of the monastery of Sto. Domingo, at Manila (Philippine Islands).

than the western Paiwan, who are weak and short in stature. The Paiwan of Botan, in the east are, however, tall and strong. The same may be said of the Buhuan in the centre. They 'are a beautiful race, strong, tall and of fine complexion', while, according to the Japanese authors, Bunum, Tsu-u, Tsalisen and Paiwan are found to be of either short of middling stature and of unprepossessing appearance, especially those of the Bunum branch named Gundai. The latter may be regarded as the genuine primitive inhabitants closely related to the Papuans, while the Atayal of the north undoubtedly belong to the Malayan stock."

20: Alvarez--257
116, 164, 753

(no date) 1927

Formosan Aborigines

"There is a strange tendency for crop, principally among the females of the Bunum and their neighbours the Tayal of the south. That 'bunch' is called toa-am-kui viz., great womb, by the Chinese. It is found particularly in the district of Taulak, or Toro-ku (Japanese name), in the central region; in several Cantonese Khe-lang villages, and among the Bunum and Tayal, who live in the mountains, not very far from each other. It is generally observed in female adults. Its origin used to be attributed to the influence of the environment. The Chinese believe it to be due to the meat of an animal named pong-hond, viz., 'full of wind', which is an article of the diet of the tribes mentioned above."

20: Alvarez--257 [2] (no date) 1927 Formosan Aborigines
116, 144

"The question as to the origin of the Formosan Igorrotes is somewhat complicated. Judging from their physical features, the southern Paiwan in many respects are like the Sannan and Shikishimo of Lyu-kyu. The Paiwan of the east look very much like the Tagales of Luzon. The southern Amis resemble the natives of the Caroline Islands. The so-called Chuihuan of the centre, who belong to the Tsu-u and the Bunum, have a great resemblance to the Malayans of Borneo and Singapore. Some Atayal bear a resemblance to the Maori of New Zealand, while the Pepohuan of Baska, in the south, according to Thomson, seem to be related to the Laos of Siam.

And the Tsalisen in front of the port of Takao in their physical features closely resemble the broad type of Japanese peasant of the south, with his short but strong limbs."

20: Alvarez--257 [3] (no date) 1927 Formosan Aborigines
116, 609

"In general, they [MC: the Formosan Aborigines] are timid and reserved in the presence of strangers."

20: Alvarez--257 [4]
116, 181, 884, 583, 721

(no date) 1927

Formosan Aborigines

"All the savages are extremely warlike, bold and fanatic of unbounded freedom. They were always disposed to take up arms in defence of their liberty. The bride price is a head of an enemy (head hunters), which at the same time is a proof that the youth has become man. When he has brought home the head of his first slain enemy, the young man thereafter is regarded as adult."

20: Alvarez--257 [5] (no date) 1927 Formosan Aborigines
116, 276

"They [MC: the Formosan Aborigines] are very fond of brandy, yet without being immoral, or degenerated."

20: Alvarez--257 [6] (no date) 1927 Formosan Aborigines
116, 181

"The Amis and Pyuma are a quiet and peaceful people. The same may be stated of the tribes called Sick-huan, viz., mature savages, by the Chinese, in opposition to the Che-huan, viz., green, not yet mature savages, of the central range."

20: Alvarez--257-258 (no date) 1927 Formosan Aborigines
116, 181, 609 Paiwan

"Of a ferocious nature are also the Paiwan, who are exceedingly averse [258] to any kind of trade with their neighbours. The Paiwan are revengeful in the highest degree."

20: Alvarez--258 (no date) 1927 Formosan Aborigines
116, 461, 241

"The Igorrotes, in general, are averse to every kind of manual labour, excepting the Amis, who build fine houses and have a handsome home industry. During the agricultural season, they as well as their Pyuma neighbours engage in agricultural work."

20: Alvarez--258 [2] (no date) 1927 Formosan Aborigines
116, 577, 581, 586, 837

"They are not strict moralists, though libertinage is severely punished in accordance with the laws established for it. Matrimony seems to be regarded as a transcendental act in the life of man. Among the Tsalisen, however, the man leaves the hut of his wife in case she has failed to become mother. By this, the marriage is regarded as dissolved, and both are free and can marry again."

21: Asai--1 L-5 (1935-46) 1950 Formosan Aborigines
116, 101, 144

"There is sometimes misunderstanding and confusion in the terminology of Formosans and Formosan tribes. Most of the present day inhabitants of Formosa are of Chinese stock from Fukien and Kwantung provinces, many of them Hakka Chinese. The original inhabitants, the aboriginal groups of Formosa, are of Indonesian stock. They belong to the Indonesian stock both physically and culturally. They number about 140,000 and this figure is relatively stable. They are generally divided into 13 tribes: Atayal, Saisiyat, Sedeq, Bunun, Tsou, Kamakanabu, Saaru, Ruka, Paiwan, Puyuma, Ami, Yami, and Siroiya."

21: Asai--1 [2] L-5 (1935-46) 1950 Formosan Aborigines
116, 101, 174, 197

"Each of these tribes [MC: 13 Formosan aborigine tribes. See preceding paragraph in category 116] uses a different dialect, but the dialects belong, of course, to the common Indonesian language. The dialectical differences are great enough, however, so that the individuals of different tribes cannot understand one another. This indicates that since they immigrated into the Island, they have lived in separate communities and there has not been much communication between the groups. There are also divergent cultures in the different tribes."

21: Asai--1 [3] L-5 (1935-46) 1950 Formosan Aborigines
116, 592

"There are two types of family system: family unit system—that is small family system; and big family system."

21: Asai--1 [4] L-5 (1935-46) 1950 Formosan Aborigines
116, 592, 596 Bunun

"The big family system is found in the Bunun tribe. There is one big house (long house) similar to Borneo in which live the extended family. This includes couples of different generations, as well as several small families of equal generation. In each long house there are several compartments for each small family. The cooking and labor are in common. Descent in these families is patrilineal."

21: Asai--2 L-5 (1935-46) 1950 Formosan Aborigines
116, 594 Atayal

"The small family system is found in the Atayal tribe. The husband, wife and children live in separate houses."

21: Asai--2 [2] L-5 (1935-46) 1950 Formosan Aborigines
116, 594

"Other tribes prefer small family system but sometimes there are exceptions, and several families will live in one house."

21: Asai--2 [3] L-5 (1935-46) 1950 Formosan Aborigines
116, 591, 592 Ami

"The Ami tribe has a matriarchal system. The female owns the property and the house and inheritance is through her. The husband comes from another house. The keys of the granary are kept by the women."

21: Asai--2 [4] L-5 (1935-46) 1950 Formosan Aborigines
116, 592

"Generally, in the other tribes [MC: other than the Ami] we find a patriarchal system, and this principle is especially strong in the north among the Atayal and Bunun. The Paiwan and Puyuma in the south have both."

21: Asai--2 [5] L-5 (1935-46) 1950 Formosan Aborigines
116, 361

"The people live in villages consisting of from 10 to sometimes 200 houses. At present, all the tribes, excepting the Yami (?) tribe, live on the hills at about 1,000 feet above sea level. This is a malaria free area. In the Atayal and Bunun areas are isolated communities, each house standing alone without depending on neighbors. In other areas, the houses are in clusters."

21: Asai--2 [6] L-5 (1935-46) 1950 Formosan Aborigines
116, 583, 584

"All tribes have the custom of paying a 'bride price' for a wife. This consists of gifts, cooking pans, clothing. The young man needs one or two years of courtship before the girl will accept his proposal. In the Ami (Yami?) there is a kind of test marriage. The young man makes a visit every night to the girl's house and sleeps with her over a period of one or two years. Marriage is on the basis of free choice."

21: Asai--2 [7] L-5 (1935-46) 1950 Formosan Aborigines
116, 622

"The social structure patterns are varied and often complex. In Japanese writings on the life of Formosans, the chieftain of the village is often mentioned, but he is not the same kind of chief as in Africa or as in some places in Indonesia."

21: Asai--2-3 L-5 (1935-46) 1950 Formosan Aborigines
116, 621, 622, 626, 794 Atayal

"Among the Atayal, there are four ritual leagues called gagas in one community, each with its own chief. All four gaga are not always in one village. In one village there may be two. One part of the village will belong to one and the other [3] part to another. Among the gaga there is the head of the ceremonies. At present few ceremonies are practiced in the name of gaga. Membership in gagas is hereditary through the father. A man who immigrated into a village from another village would not be able to join the gaga of the new village. If he marries a woman of the new village, his son can join the gaga. It is possible to marry within the gaga. The gaga play an important role in social control."

21: Asai--3 L-5 (1935-46) 1950 Formosan Aborigines
116, 224 Atayal

"In Atayal, besides the ritual league gaga, there is the hunting league. These groups are not parallel to the ritual leagues [MC: see preceding paragraph in category 116]. The members of the hunting league always go together for hunting and each league has its own hunting area. They hunt for deer, fox, leopard, bear."

21: Asai--3 [2] L-5 (1935-46) 1950 Formosan Aborigines
116, 226, 396, 476 Yami

"Among the Yami there is a fishing league. (The Yami live between Formosa and the Philippines on a very small island.) The Yami live on fishing—not much agriculture. They are very skillful in constructing boats. There are one-man, two-men, and the largest are 10-men boats. In the construction of 10-men boats, 10 members are necessary. They form a union. Sometimes it takes more than a year to build a 10-men boat. The men who have built the boat always fish in that boat and always together. The fish is divided among them. Such groups are voluntary rather than hereditary."

21: Asai--3 [3] L-5 (1935-46) 1950 Formosan Aborigines
116, 171, 241, 622 Paiwan

"In the village of the Paiwan there is a chief. The villagers are all subjects of the chief. All land belongs to him and he has absolute power. Labor is performed by the order of the chief. The workers are given a portion of the crops. (This is similar to Marshall Islands.)"

21: Asai--3 [4] L-5 (1935-46) 1950 Formosan Aborigines
116, 775

"Immortality is believed in. The soul will live eternally and after death the souls live in other worlds. They have a concrete idea of a land of death and know the direction of the land. The direction is usually the place of their origin. They people believe in multiple souls."

21: Asai--4 L-5 (1935-46) 1950 Formosan Aborigines
16, 775, 776 Yami

"The Yami believe in four souls. They say that their souls often go to visit a friend during a dream. The Yami have a distinct idea of gods and they have the idea of several heavens, but this is exceptional among Formosan tribes."

21: Asai--4 [2] L-5 (1935-46) 1950 Formosan Aborigines
116, 177, 756

"In almost all the tribes there are medicine men or women. Shamanism is also found in the Siroiya tribe. The Siroiya have become almost completely acculturated with the Chinese and speak Fukien Chinese. Their own culture has practically disappeared. Shamanism is not borrowed from the Chinese. Very detailed descriptions of Shamanism are found in early Dutch accounts."

NB

21: Asai--4 [3] L-5 (1935-46) 1950 Formosan Aborigines
116, 171, 777, 787

"Dreams are important in divination. The lucky and unlucky days for hunting are told in dreams. Another kind of divination is by the Sisili bird. When they go hunting (whether for birds or for animals), they count the number of cries of the bird, and if the number is unlucky, they will go back to the village. This is an Indonesian type of divination."

21: Asai--4 [4] L-5 (1935-46) 1950 Formosan Aborigines
116, 721, 761, 775, 778

"The cult of headhunting was very general in Formosa, but at present it is engaged in very rarely. They believe in two kinds of death, natural and accidental. In natural death, the soul goes to the land of death where it lives peacefully. In the case of accidental death, the soul does not go to the land of death but must wander around the spot where the person was killed. If the heads of the enemy are taken and brought back to the house, then the soul of the person killed will stay in that place peacefully. Such heads have mana and aid in growth of crops. Therefore, it is good to have as many heads as possible. They are offered food and wine on various occasions."

21: Asai--4-5 L-5 (1935-46) 1950 Formosan Aborigines
116, 177, 241, 769, 796

"A special ceremony takes place just after the harvest. In such ceremonies, wine and foods are offered to the souls of the ancestors, who live in the land of the dead. The people chant [5] ceremonial songs to make the souls come to the village. The dances last sometimes 24 hours in one week successively in Saisiyat. This is called the period of pastaai. The people bring rice and cooking utensils. The festival usually takes place in November. Through Chinese influence, there are sometimes two festivals, spring and autumn."

21: Asai--6 L-5 (1935-46) 1950 Formosan Aborigines
116, 141, 144

"Physical types: There are five different types—Atayal, Saisiyat, and Sedeq; Bunun; Tsou, Kamakanabu, Saaru; Ruka, Paiwan, Puyuma, Ami; Yami. They are all rather similar to the Igorot tribe in the Philippines."

21: Asai--6 [2] L-5 (1935-46) 1950 Formosan Aborigines
116, 583

"Bride-price is paid even in the matriarchal tribes. Among the Ami the amount is very small, but the bridegroom brings something to the bride."

21: Asai--6 [3] L-5 (1935-46) 1950 Formosan Aborigines
116, 171, 769

"There is a connection between the Formosan festival for the dead and the Urabon festival in Japan. When Buddhism was brought to Japan, the Japanese already had a festival honoring the dead, and they took up the Buddhistic form, though in India it was not very important. Much the same thing happened in Java until about the 10th century, when Islam was introduced."

21: Asai--6 [4] L-5 (1935-46) 1950 Formosan Aborigines
116, 868, 869, 882

"In the southern tribes, the Tsou and Paiwan, every village has a young man's house. The boys upon reaching a certain age must live and sleep there and adults are put in charge of their education. The boys are taught hunting, observance of ceremonies, law and religion."

21: Asai--6 [5] L-5 (1935-46) 1950 Formosan Aborigines
116, 872, 882, 177.87 Japan
636.87

"After the Japanese came in, the children were sent to school for four years and learned Japanese. The Japanese put the Formosans on reservations and restricted the number of visitors and also restricted the movements of the Formosans. At present young men's clubs are strongest among the Tsou."

21: Asai--6 [6] L-5 (1935-46) 1950 Formosan Aborigines
116, 173, 361

"They move their villages often. Many old sites have been found through excavations, and the oral traditions of the tribes have been studied."

21: Asai--7 L-5 (1935-46) 1950 Formosan Aborigines
116, 231, 241, 243, 177.24 Japan
636.24

NB

"Agriculture. Grow chiefly sweet potatoes, millet, peanuts. The fields are on the slopes of hills. They keep pigs—used originally for sacrifice. They grew dry field rice, but the Japanese started them growing wet rice. This was bad for their health as malaria would start up."

21: Asai--7 [2] L-5 (1935-46) 1950 Formosan Aborigines
116, 423

"Land tenure. In the Atayal tribe, some land is held in common. This common land has some ritual significance. Any piece of land which one family wants to cultivate can be used by that family. There is no fixed rule of possession of land, only the common land is fixed."

21: Asai--7 [3] L-5 (1935-46) 1950 Formosan Aborigines
116, 224, 462

"Agriculture is carried on by the women, the men hunt. Use bows and arrows and spears for hunting. They hunt deer, pigs, fox, bear, leopards."

"The Bunun have a clan organization. Takeshi is the word for 'family' name (i.e., lan name). The Bunun have such family names, the other tribes don't. Cannot marry ithin the same clan. The clan is important in ceremonials, social functions. In the unun, each clan has common ceremonies; members of the same clan go hunting together."

21: Asai--7 [5] L-5 (1935-46) 1950 Formosan Aborigines
116, 561 Ami

"Age classes in Ami tribe."

21: Asai--7-8 L-5 (1935-46) 1950 Formosan Aborigines
116, 462, 752, 756

"Medicine men and women do different things. The medicine women are usually very sensitive and sometimes a little insane. They cure diseases, put hexes on individual's enemies. In Bunun they are very careful not to leave hair, etc. around so that they won't have a curse put on them. In the case of serious illness, they believe the person has the soul of the [8] father or mother in them. The medicine woman gives offering to the ancestors and asks that the spirits go away. If a person has pains in distinct places, the pain is caused by an enemy, and the medicine woman must make a counter-charm to make the pain go away."

21: Asai--8 L-5 (1935-46) 1950 Formosan Aborigines
116, 626, 776, 784 Yami

"There are many tabus among the Yami. They believe that anyone who goes against the laws will be killed by the gods."

21: Asai--8 [2] L-5 (1935-46) 1950 Formosan Aborigines
116, 681

"Enforcing of the laws. Penalties for breaking the laws are fixed. The injured person gets the amount of the penalty. If the crime was committed against the whole group, they all share in the penalty."

21: Asai--8 [3] L-5 (1935-46) 1950 Formosan Aborigines
116, 578, 619, 721

"The territory of each tribe is well fixed, also the hunting area. If one group enters into another's area, war will usually break out. The number of heads taken by each side decides who won the war. Sometimes there are quarrels between gaga in the same village."

21: Asai--8 [4] L-5 (1935-46) 1950 Formosan Aborigines
116, 113

"Japanese periodicals. Minzoki Kenkyu, Tokyo (The Study of Ethnology); now called Minzokugaku Kenkyu.

Nampo Dozoku (Southern Ethnology). Many articles on Formosa have appeared here."

21: Asai--9-10 L-5 (1935-46) 1950 Formosan Aborigines-1-2
116, 101, 197

"[MC: linguistic subdivisions of Formosan Aborigines]
a. Living Languages:

1.	Ataiyal	Northern
2.	Sedeq	Northern
3.	Saisiyat (or Saiset, Saisirat)	Northern
4.	Bunun	Central
5.	Tsou	Central
6.	Kanakanavu	Central
7.	Saaroa	Central
8.	Rukai	Southern
9.	Paiwan	Southern
10.	Puyuma	East coast
11.	Ami	East Coast
12.	Yami	Botel Tobago Is.

'b. Half-dead Languages: These people are bi-lingual: speaking Chinese and their proper Indonesian languages. They speak their proper Indonesian languages among the tribesmen to a limited extent and it is feared their languages will disappear in the near future.

1.	Kavalan	Northern
2.	Pazeh	Central west coast

3. Thao	Central [10]
'c. Dead Languages:	
1. Ketagalan	Northern
2. Taokas	Northern west coast
3. Papora	Northern west coast
4. Babuza	West coast. It is called Favorlang by the Dutch missionaries.
5. Siraya	Central west coast. It is the language of the Bible translation of Gravius and the vocabulary of Utrecht MS Makatao and Taivoan belong to this group."

21: Asai--10 L-5 (1935-46) 1950 Formosan Aborigines
116, 197

" 'It is indisputable that these Formosan languages. . . belong to the Indonesian group of the Austronesian family, though some of them show traces of language-influence of non-Austronesian races, but the phonological, morphological and lexical differences between some of them are fairly great and it may be surmised that various strata of the Indonesian peoples immigrated to Formosa which lies at the northern end of the Indonesian district. For example, the northern languages Taiyal, Sedeq and Saisiyat show an interesting phenomenon in t′ (Brandstetter s)>h. Peculiar non-Indonesian suffixes exist in Ataiyal and Sedeq. Tsou, Kanakanavu and Saaroa are open-syllabled and Tsou has a complex system of the tense-expression."

21: Asai--10-11 L-5 (1935-46) 1950 Formosan Aborigines-1-2
116, 197

"Our present knowledge of the Formosan languages does not permit us to construct a full table showing the affinity of each language definitively, but in view of the reciprocal relation of their phonology, morphology and vocabulary, the following table, though it is very rough, can be suggested.' [11]

- Northern Group
  - Original Ataiyal
    - Ataiyal Proper
      - Taikei-Dialect
      - Taiko-Dialect
      - Bunsiu-Dialect
      - Hakku-Dialect
      - Bandai-Dialect (mixed with Sedeq)
    - Sedeq
      - Taroko-Dialect
      - Musha-Dialect
  - Saisiyat
- Bunun Group
  - Bunun
    - Northern Dialect
    - Central Dialect
    - Southern Dialect

- Tsou-Paiwan Group
  - Tsou
    - Arisan Dialect
    - Ruftu Dialect
  - Original Saarua-Kanakanavu
    - Saarua
    - Kanakanavu
  - Original Paiwan
    - Paiwan Proper
      - Southern Dialect
      - Central Dialect
      - Northern Dialect
    - Puyuma
  - Original Rukai
    - Rukai Proper
    - Taromaki
    - Tordukana-konadavanu
    - Mantaulan
- Ami Group
  - Ami
    - Northern Dialects
    - Central Dialect
    - Southern Dialect
- Batan Group
  - Batan
  - Yami
  - Proper (Philippine Islands)"

22: Wiedfeldt--7. F-5 (1913) 1914 Formosan Aborigines
116, 101, 161 Atayal

Yielding to the pressure exerted by Chinese immigrants, the "savages" of Formosa have evacuated the western plain, and have withdrawn to the mountainous country of the interior and the eastern coast, with the result that they occupy about 17,000 of the 34,700 square kilometers of the island's area. At present, their number is estimated at 120,000, and they are said to be divided into nine tribes, which vary as to composition, language, and customs.

22: Wiedfeldt--7 [2] F-5 (1913) 1914 Formosan Aborigines
116, 101, 161, 177 Atayal

The largest and most vigorous of these [MC: Formosan Aborigine] tribes is that of the Atayals. This tribe is estimated as consisting of 30,000 persons occupying 7,700 square kilometers, and has deliberately remained aloof from foreign influence. They call themselves Atayals, which in their language means persons of the same kind, presumably in the anthropological sense.

22: Wiedfeldt--7 [3] F-5 (1913) 1914 Formosan Aborigines
116, 173, 186, 609 Atayal

According to their traditions, they are the noblest and oldest kind of people on the island. Their ancestors took refuge on the mountains after a severe typhoon, and from there they slowly returned to the plains. Later, other savages came to the island; then came the Chinese, the whites, and finally the Japanese. They consider all of these people as illegal intruders, but they especially hate the Chinese, with whom they have been longest in contact. The boundaries of their territory consist of mountains thickly wooded with virgin forest. The interior is said to be similar, as far as foreign observers have penetrated. To be sure, that is not very far. No foreigner has as yet set foot on Mt. Sylvia.

22: Wiedfeldt--7 [4] F-5 (1913) 1914 Formosan Aborigines
116, 137 Atayal

The tangible wealth of their land consists of the forests, which are worthless at present because of the lack of roads, and of the very desirable camphor trees, because of which the Japanese have pushed the Aiyu line forward by about 800 square kilometers annually during the last few years.

The Atayals are said to consist of 24 tribes. I became better acquainted with the two tribes living along the frontier: the western [8] Schimptonoff, or Bedonoff, and the eastern Taroku, or Toroku. The former are called by the Chinese Sensanban, or Kappansan, which means in German the fore mountain savages; the latter are called Bokkui. I have not been able to find out anything about the meaning of the other names. Both tribes have stubbornly resisted all cultural influences coming from the Chinese, the Japanese, and the other savages, and they have vigorously opposed the advance of the Japanese. After a violent struggle, the Schimptonoff have for four years been kept within the Aiyu line. This is the fate that lies ahead for the Toroku in the struggles now threatening.

As things are now, one can become well acquainted only with the tribes living on the frontier. Nevertheless, as far as I have been able to observe, the members of other tribes resemble them in stature, clothing and tattooing, and are said to resemble them also in mode of life and customs. Just as all the Atayal tribes are distinguished as a unit from the other savages of Formosa because they do not have the common dormitory for the young men, or because they are not acquainted with the custom of chewing betel, etc., so they are united by similar customs. They have the same type of money, they can understand each other, although their language shows dialect variations, since it does not have the benefit of the restraining influence of a written form. Neighboring tribes of the Atayals intermarry and have occasionally undertaken joint military expeditions, two things which are unheard of between branches of different tribes. Conditions among the Schimptonoff and the Taroku may hence be taken as typical of the Atayals, especially since both tribes, in spite of their frontier location, have lost very little of their tribal peculiarities, and have lost that little very recently, apparently.

22: Wiedfeldt--8 [2] F-5 (1913) 1914 Formosan Aborigines
116, 101, 161 Atayal

The Schimptonoff, [MC: also called the Bedonoff tribe of the Tayals] whom I investigated more thoroughly, because my work kept me in their district a longer time, are about 1800 strong. Some almost extinct neighboring tribes have fused with them, so that they now number about 3,000 individuals. Including their hunting grounds, they have an area of around 80 square kilometers. They are composed of 52 clans. Every clan has an average of 12 to 15 families, and every family consists of 4 to 5 persons. It is calculated that there are 2500 individuals of the Taroku.

22: Wiedfeldt--9 F-5 (1913) 1914 Formosan Aborigines
116, 262, 241, 252, 527 Atayal

The main article of food of the Atayal is millet. They celebrate tribal and clan festivals in connection with the planting and the harvesting of this crop. It is ground by the women in a stump of wood in which a hole has been burned out, or on a stone, by means of a solid round piece of wood. They also eat yams and wild bananas, and more recently they have learned from the Chinese to eat rice and beans, and from the Japanese, sweet potatoes. With this vegetable diet they seldom eat meat, but occasionally they eat large quantities of it; for example, they eat antelope after a successful hunt, or at a wedding feast, and when they eat up the sacrifices. Recently they have begun to eat chickens and pigs, which they have obtained from the Chinese. Fish is eaten in large quantities once a year at the tribal feast.

22: Wiedfeldt--9[2] F-5 (1913) 1914 Formosan Aborigines
116, 263, 177, 824, 431 Atayal

As a condiment, they like salt best of all. If this is lacking, they use as a substitute the small, salty berries of the mabu tree. The Taroku are said to have learned how to get salt from the sea from the Chinese by way of the Amis who border them to the south. Recently there have been isolated instances of their giving this necessary condiment as a gift and also as an article of barter to the tribes in the interior, after the Japanese prevented the importation of salt. Otherwise they use as a spice a kind of ginger which they get from the root of a species of banana, and to which they attribute a strengthening effect.

22: Wiedfeldt--9 [3] F-5 (1913) 1914 Formosan Aborigines
116, 252 Atayal

Baking and broiling are processes which are unknown to the Atayals. Meat is half roasted and half burned over a fire. Mountain potatoes are roasted in the ashes. Millet is either wrapped in large firm leaves, put into a hole in the ground, and heated by means of hot stones placed around it and on top of it, or it is put into a bamboo stick which is permitted to burn slowly, whereby the millet is cooked to suit the taste of the Atayals.

They now make a fire with flint and steel, which they get from the Chinese, but in isolated cases they are already using Japanese matches. It is said that in the interior they still make a fire by rubbing two sticks together, which was said to be the only method used by the border tribes also up to two decades ago. The legends and customs with which the peoples of colder countries invest the obtaining and keeping of the fire which is such a vital necessity in their lives are unknown to the Atayals. They are also unacquainted with conflagrations, for after preparing a meal, they put out the fire, inasmuch as they do not need it to heat their dwellings. Moreover, the fire would find little to feed on [10] in the luxuriant foliage surrounding it and in view of the high degree of humidity.

22: Wiedfeldt--10 F-5 (1913) 1914 Formosan Aborigines
116, 271, 312, 415 Atayal

Their staple drink is fresh water, which is generally brought to their huts in partially slit bamboo trunks from the nearby brook. They also use hego, a kind of elder, for this purpose. If the stream is farther away, the water is brought to the hut in bamboo staffs.

On special occasions they drink a fermented millet. The women salivate and masticate thoroughly a mouthful of millet, and place the result in a hollow stump of wood, where it ferments after a time. It stays there until it is mixed with water and drunk. Recently they have begun to make rice-whiskey in the same way. They also like slightly salty water, in which ginger has lain. Since they have been restricted to the Aiyu line, many Schimptonoff have become fond of sake and whiskey without soda, which they drink from the bottle. Immoderate drinking is said to have been unknown among them formerly. After all, it was difficult to keep large amounts of intoxicating drinks on hand in view of their laborious method of preparing them.

22: Wiedfeldt--10[3] F-5 (1913) 1914 Formosan Aborigines
116. 264, 576, 177.26 Japanese
636.26

The Atayals have two meals a day, which serve to set a beginning and an end to their day. One is in the early morning, after they get up, and the second is in the evening, before they go to bed. Men, women, and children eat together. A guest eats with his host, while the women and children eat afterward. The hollow of the hand serves as their cup, and as knife, fork, and spoon they use the five-pronged fork with which they were born. In the Japanese school which has recently been organized the young Schimptonoff are receiving their first instructions in the use of table implements and drinking vessels.

The Atayals are moderate in the consumption of their daily ration of vegetable meals, but they are immoderate in their consumption of meat and fish. This may have some connection with the fact that they can keep meat for only a short time. They are not acquainted with methods of curing it, and merely scorch it over a fire, which makes the meat black and hard as dried Japanese fish. It may also be connected with the fact that they leave their millet on the field for a long time, and then store it in the small adjoining hut until the time of the next harvest.

22: Wiedfeldt--10[5] F-5 (1913) 1914 Formosan Aborigines
116, 262, 222 Atayal

They are fond of wild honey, together with which they eat the bees and the nests. At night, the men go wherever they have seen bees during the day, and by the light of a burning log enveloped in dry grass they take the nests from the blinded bees with no difficulty at all.

22: Wiedfeldt--10-11 F-5 (1913) 1914 Formosan Aborigines
116, 177, 241, 276 Atayal

Tobacco smoking is general among men, women, and children. As a pipe they use two sticks of bamboo, thrust one into the other. [11] According to their traditions, they received the "tamako" from the savages of the plain, who in turn got it from the whites. Although it is only recently that they have taken over the planting of tobacco from the Chinese, today there are a few tobacco plants by every hut. Everyone picks a leaf as he needs it, sticks it in his hair or lays it on the ground to dry, and then packs it in his pipe when it is still half green.

Masculine clothing consists of a square cloth, without armholes. It is held over the shoulders by a string and hangs down in front as far as the knees. As a result of Japanese influence, a loin-cloth has also begun to be worn recently. The women add to this article of apparel a somewhat wider piece of cloth bound around the hips, and leg-coverings which extend from the knee to the ankle and are fastened top and bottom. Sewing is unheard of. All articles of clothing are yellowish grey in color, and often have reddish brown stripes. Their feet are bare, in spite of the stony mountain paths, just as their heads are unprotected from the heat of the sun. Occasionally the men wear caps with a peak, woven out of osier switches or the twining branches of the to tree.. These caps cover the nape of the neck. Apparently they are a poor imitation of European caps. Many of the young girls have recently taken to twisting around their heads strips of bright colored material which they get from the Chinese or the Japanese. A costume of this sort, which leaves the back of the body as well as the head and the feet uncovered, affords no protection against bad weather, but this is unnecessary in the climate of Formosa. Nor can this costume be attributed to a feeling of modesty, for the Japanese loin-cloth is said to be still unknown in the interior. Also, the leg-coverings of the women leave the upper part of the thigh exposed. This costume satisfies their need for adornment, and this is why the ornamented cloth hangs over the part of the body which is first seen, just as the leg-coverings adorn only the portions of the leg that are visible, and are a pleasing contrast to their dark skins.

22: Wiedfeldt--11-12 F-5 (1913) 1914 Formosan Aborigines
116, 301, 291 Atayal

Adornment enjoys a degree of importance unknown even to modern luxury in the life of the Atayals, as well as in their possessions, and it requires a disproportionate amount of their time to produce the articles necessary for it. I have never seen an adult Atayal who was not wearing several ornaments on his head, arms, or legs. Only the children [12] have almost no ornaments. Up to about the age of twelve they go entirely naked, and then they wear the same clothing as adults.

22: Wiedfeldt--12 F-5 (1913) 1914 Formosan Aborigines
116, 302 Atayal

The women wear their hair twisted into a knot. The men wear theirs quite short. It is singed off, or more recently hacked off with a bowie-knife over a bamboo comb with several prongs. From this it may readily be understood why the Atayals consider the cutting of hair as painful. Even more painful is "shaving", for they simply pluck out the hairs, since wearing a beard, an Atayal woman told me through the medium of an interpreter, is considered ugly and indecent.

22: Wiedfeldt--12 [2] F-5 (1913) 1914 Formosan Aborigines
116, 304, 301, 177 Atayal

...[MC: An Atayal woman]could not understand why the whites do not like the sticks of bamboo 1 cm. thick and 6 cm. long which she wore in the lobes of her ears. She did admit, however, that the piercing of the ear with a sharp pointed piece of wood and the subsequent enlarging of the hole had been very painful. Apparently this is the reason why rings of brass or bronze, obtained from Japan, have recently begun to be preferred for the ears. Many women wear similar rings as bracelets and occasionally as anklets. I saw as many as 12 rings on one arm. Some young women proudly display glass beads from Osaka strung on strings around their necks, in place of the animal teeth or dried red berries such as the older women wear as necklaces.

22: Wiedfeldt--12 [3] F-5 (1913) 1914 Formosan Aborigines
116, 301, 292, 436, 177 Atayal

If such foreign ornaments [MC: i. e. brass rings and glass beads from Japan] have been taken over by the women, the men have kept for themselves the characteristic old ornamental dress. These "things set with precious materials", as the Atayal description runs, have three sizes, which are worn as arm or leg coverings, kinrai, or as a doublet, bintoan, or as a sleeveless jacket, rokosch-kaha. They consist of material dyed red, on which is fastened small pieces of pierced fish-bone arranged in rows and geometrical designs. Since the fish are not to be found in the interior, and the making of these ornaments would be too tiresome and difficult for the Atayals, who have no tools, these ornaments, which the Chinese call schukun, are very highly prized, and their owners like to wear them on festive occasions because they give them a certain amount of prestige. These valuable and lasting, but unnecessary ornamental garments are used as money. The three sizes are worth respectively 3, 5, and 10 yen.

22: Wiedfeldt--12-13 F-5 (1913) 1914 Formosan Abbrigines
116, 304 Atayal

Their main ornament is produced by the lengthy and painful process of tattooing the bodies of the men and the women. The man has a strip about the width of two fingers [13] running up from the base of the nose to the hairline, another from the lower lip to the chin, and sometimes also a strip on the breast. The woman is more profusely tattooed. In addition to the design on her forehead, she also has a broad stripe on her cheeks, which runs from the corners of her mouth to her ears like moustache-trainers. The old woman of the tribe, hamangoppu, pricks the design into the skin with a piece of hard wood, and then rubs into it a blue dye, which is obtained by burning certain plants and dissolving the ashes in water.

22: Wiedfeldt--13 F-5 (1913) 1914 Formosan Aborigines
116, 304, 773, 835 Atayal

According to the Atayal tradition, the first people on earth were a brother and a sister. The sister proposed to the brother that he marry a woman whom she had found for him near the river. The man also found this woman, who differed from his sister only in tattooing, and married her. His sister then disappeared. All the legends which describe the human race as originating from one couple, and which forbid the marriage of brother and sister, get into certain difficulties, such as occur also in Byron's Cain. The Atayals find the solution of the problem in the tattooing, which even now is the sign of being marriageable.

22: Wiedfeldt-- 13[2] F-5 (1913) 1914 Formosan Aborigines
116, 304, 582, 881, 721 Atayal

The young man who brings home a skull that he has captured is permitted to have himself tattooed, and is thus declared capable of marrying, as well as of being admitted to the councils of the tribe. A young girl receives this sign when she has reached sexual maturity and has woven a piece of fabric. In many tribes, a new stripe of tattooing is added for every skull that is captured, just as in modern states diamonds are added to a decoration for special reasons. Among the Atayals this mark differs according to tribe and clan, so that an Atayal Elsa would not have to ask the fatal question, but could distinguish from the place and the density of the strip of tattooing what the family and the nature of her rescuer was.

22: Wiedfeldt--13-14 F-5 (1913) 1914 Formosan Aborigines
116, 361, 351 Atayal

Every Atayal family occupies its own hut. It is about 200 to 500 meters away from the hut of the nearest neighbor, for the Atayal, who keep no cattle, do not need to live in a compact village either to watch their herds, or for their own protection, or even for the purpose of accomplishing more easily the performance of certain joint tasks, such as the building of roads. Their huts usually are on a hillside, somewhat apart from the beaten path, but so located that the only path by which they can gain access to their homes is visible from their doors. The hut is always near running water, and is often surrounded by bamboos and other flexible trees, [14] such as the Chinese of the plain are accustomed to plant around their houses as a protection against typhoons.

22: Wiedfeldt--14 F-5 (1913) 1914 Formosan Aborigines
116, 342 Atayal

The huts [MC: of the Atayal] are 4 x 4 meters square, or 6 x 6 meters square, and are 1.5 meters high. They consist of two parts, the bamboo hut proper, and the framework of four corner posts and two door posts, which are connected by cross beams. In building a hut one uses, if possible, trees which stand at the proper distances. The tops of the trees are burned off, and the hut is built in between the trunks. The doorway is 60 cm. wide, and is on the front of the hut, somewhat to one side. The back wall and one side wall each have a small opening of 10 x 10 cm. or 10 x 40 cm., which, like the doorway is covered with a curtain of woven bamboo. The walls consist of split bamboo trunks, which are grooved and fitted into each other, like the type of construction which Marco Polo has described as being used in the summer palace of Kublai Khan. Nothing is nailed together in the entire hut. Everything is tied. The roof, like the walls, is made of bamboo trunks which are covered with bamboo grass and held in place by two cross-pieces. The ground serves as a floor.

22: Wiedfeldt--14 [2] F-5 (1913) 1914 Formosan Aborigines
116, 352, 356, 354 Atayal

In one or two corners [MC: of an Atayal hut] at the back there is a bamboo compartment which holds their scanty store of provisions. In the other two corners are the sleeping quarters. They consist of a mat of woven bamboo and leaves, which rests on a bamboo stand about 1 meter high as a protection against ants. There is no other furniture, and as tools there is nothing more than a weaving frame, a spindle, and a pestle for pounding millet. Recently, a few clay vessels have been added, which have been acquired by barter from the Chinese. A hole in the floor serves as a fireplace, and the smoke from it passes out through the window opening.

22: Wiedfeldt--14 [3] F-5 (1913) 1914 Formosan Aborigines
116, 343 Atayal

Beside most huts there is a small additional hut built on four posts, the two floors of which can be reached by a ladder. The first floor is the storage space for millet and yams; the second floor is the sleeping quarters of the grown-up daughter or son, but even the smallest hut is said to be sufficient for a couple.

22: Wiedfeldt--14 [4] F-5 (1913) 1914 Formosan Aborigines
116, 562 Atayal

The material needs of the Atayals are distinguished from ours more by degree than by nature. There is a wide gulf, however, in the way in which they satisfy their needs and the way in which we satisfy ours. The main task of the man is the protection of the family. . .

22: Wiedfeldt--14 [5] F-5 (1913) 1914 Formosan Aborigines
116, 293, 554 Atayal

A man never goes out unarmed, less for the sake of his own security than for the sake of his prestige.

22: Wiedfeldt--14-15 F-5 (1913) 1914 Formosan Aborigines
116, 411, 177, 224, 721 Atayal

Each Atayal makes his bows [15] out of the flexible wood of the Katsura. He makes his arrows out of bamboo reed. Nowadays most of them have metal tips, which he gets from the Chinese, but formerly they had nothing but wooden tips which had been hardened by fire. He still uses arrows with three wooden tips for shooting birds and as fire-bolts, the destructive effects of which on Japanese houses were demonstrated by the last Schimptonoff war. He also makes himself a spear two meters long, with a tip of wood, antelope horn, or recently of metal forged for this purpose by the Chinese in Amoy. Shields and helmets are unknown. Instead of them, one always carries a net which he has woven himself of ramie, for the purpose of carrying home the game which he has captured or the skulls he has taken.

Presumably within the last generation, they have acquired a knife, which is 40 cm. long, from the Chinese. Every Atayal carves and decorates the handle for this knife himself. His most important and most cherished weapon is the gun, which he has been getting for one or two decades from the Chinese and Japanese, and which he is continuing to get even now, despite the law which forbids the importation of guns. At least, I have seen at the sentinels' posts modern guns which were taken from Atayals by the Aiyu guards. Most of the guns, to be sure, are old-breech-loaders, or even muzzle-loaders, which might conceivably be dangerous to the person shooting. There is said to be a scarcity of bullets. An Atayal living in the interior is said to have learned how to pour bullets from the Chinese, but can not satisfy the demand.

The man's obligation is not only to afford protection against enemies, but also to provide shelter against the rigors of the weather. Before he is married, he builds the hut and the small adjoining hut, and prepares them, which takes about four to five months. During his married life he also builds a new hut, if the old one is destroyed by termites or storms, or is used as a place of burial and hence left deserted. He makes all the woven material, from the mats which are used as curtains to the baskets to hold provisions...

The protector, among the Atayals, also becomes an archer and hunter, as well as a fisherman.

Since there are no implements for catching fish, fish are caught only once a year, in spite of the great wealth of fish in the mountain streams. This is a cooperatuve undertaking in which the whole tribe takes part. The chief of the tribe sets a day for the gathering of the chiefs of the clans, and also for catching fish in the large river. It is in the fall, when the trout has reached its full growth and the millet is ripe. Every clan sends at least one representative, and the women and children [16] also come. Every man brings along some poison which he has prepared himself from a species of bindweed. When it is dropped into the river, the fish are supposed to come to the surface immediately and even to hurry to shore, so that the participants in the celebration are able to catch them by splashing their hands in the water, amid laughter and joking. They are divided into as many piles as the number of clans represented, in which process the chief of the tribe sees that justice is observed. The same procedure is followed in dividing the clan allotments among the families participating. Since the fish are immediately roasted on the fire and consumed, this fish festival is a convenient way of feeding the people attending the meeting of the tribe.

22: Wiedfeldt--16 F-5 (1913) 1914 Formosan Aborigines
116, 423, 224 Atayal

The antelope hunt and the wild boar hunts are not carried on by individual clans, but as a joint adventure of several clans in their common hunting-ground. For reasons similar to those which now require a minimum size for the formation of a private hunting preserve, the hunting-grounds of the Atayals are not distributed among the individual families, but to dekane, that is, hunting associations of from four to five clans. They are not permitted to hunt on the hunting-grounds of strange dekane. The hunters lie in wait for the game, attempt to wound it by arrows or bullets, and then pursue it until it collapses under the onslaught of blows from the spears. Speed and endurance in running are among the virtues of the Atayals.

22: Wiedfeldt--16 [2] F-5 (1913) 1914 Formosan Aborigines
116, 224, 177 Atayal

Formerly, the dekane [MC: hunting associations composed of several clans] were supposed to have hunted once a month, and thus to have observed a kind of closed season. Since the introduction of guns, they, like the savages, have cut loose, so that now they can only serve in the hunt once every quarter year. About a third of the hunters are armed with guns, and the others have bows and spears.

22: Wiedfeldt--16 [3] F-5 (1913) 1914 Formosan Aborigines
116, 224, 281, 437 Atayal

Every hunt lasts about a week, during which time the hunter lives off his booty. In general, they bring back little meat, which is then consumed at once, for the most part. They throw away the skins, which they do not need in their climate, and which they do not know how to tan, either. Recently, a few tribes near the frontier have begun to use them for barter with the Japanese.

22: Wiedfeldt--16 [4] F-5 (1913) 1914 Formosan Aborigines
~~116~~, 224, 226, 517, 868 Atayal

Fishing and hunting, especially, are of little use in providing food, but serve as a sport for the purpose of training them in the use of weapons and as a diversion for the leisure time of the Atayal men.

22: Wiedfeldt--16 [5] F-5 (1913) 1914 Formosan Aborigines
116, 462, 562 Atayal

If it is a man's job to take care of protection, then it is the woman's duty to provide food and clothing.

22: Wiedfeldt--16-17 F-5 (1913) 1914 Formosan Aborigines
116, 423, 614, 621 Atayal

Every clan is the permanent owner of a fixed piece of arable land of about 100 to 130 hectares in size. No one knows how or when this land was assigned to the clan. [17] Every family of the clan may take as much of this clan land as it wishes.

22: Wiedfeldt--17 F-5 (1913) 1914 Formosan Aborigines
116, 311, 241, 177 Atayal

They do not select the fertile valleys, [MC: for purposes of cultivation] but the parcels of land which lie on the slopes and are easier to work. Even in the cases in which individual families have taken over from the Chinese the raising of rice, together with the proper tools, they pay no attention to the unfavorable results of experience and avoid the places that are best adapted and that have a good supply of water, for they lack the ability to stay at a piece of work, which is necessary in raising rice.

22: Wiedfeldt--17 [2] F-5 (1913) 1914 Formosan Aborigines
116, 592, 423 Atayal

Since every Atayal family can count on only the labor which its own members supply, and the produce of the fields must furnish them their food, the families have tracts of land which are pretty much the same size. Out of a total of twenty families, only two particularly large families, between which a wedding was about to take place, had 1/5 more land than the usual area of 60 to 70 are. [MC: an are 0.02471 acre]

22: Wiedfeldt--17 [3] F-5 (1913) 1914 Formosan Aborigines
116, 241, 827, 462 Atayal

When a family has selected a piece of land, the man first pulls off or cuts off the branches of the trees on the land, so that the trees will die. The following year he burns off the dry trunks, together with the underbrush and the grass. The Atayals think it ridiculous to claim that these ashes encourage plant growth, and they find the Chinese custom of using human excrement as fertilizer repugnant. When the Formosa maple has red shoots, the woman loosens the ground with a stick or a spear and sows millet. The next year she plants mountain potatoes, or sweet potatoes and beans, and sometimes she plants millet again in the third year.

22: Wiedfeldt--17 [4] F-5 (1913) 1914 Formosan Aborigines
116, 423, 311, 241 Atayal

As long as the family is making use of its plot of ground, their possession of it is protected. As soon as they leave it, which happens after two, or sometimes three crops, because the soil will not produce anything any more, any other family of the clan can take possession of it. This does not generally happen, however, before seven years have passed, and the field has become covered with a luxuriant growth of bushes and trees.

22: Wiedfeldt--17 [5] F-5 (1913) 1914 Formosan Aborigines
116, 241, 461, 311 Atayal

The Atayals have only one crop a year, and they consider the efforts of the Chinese to get two crops a year from the soil as a proof of poor work, because they have to work twice instead of once for their food. The fields are protected against the depredations of antelopes and wild boars mostly by means of a bamboo hedge, which is considered a logical part of the man's work. Corresponding to the rotation of crops, every family has three or four non-contiguous pieces of land.

22: Wiedfeldt--17-18 F-5 (1913) 1914 Formosan Aborigines
116, 241, 177 Atayal

Some 30 to 40 are[MC: an are 0.02471 acre] are planted with millet, 20 are with mountain potatoes or sweet potatoes, and 10 are with bananas and beans. At harvest time, the woman picks the millet [18] and treads it out with her feet, or digs the potatoes with a stick. The activity of the Atayals in securing their food consists, thus, in burning off the stand of trees, sowing the seed, and garnering the fruit. Thus it is really only a process of facilitating the activity of nature. It seems questionable to me whether one may use Hahn's designation of hoe cultivation, since the tool which is characteristic of this type of cultivation, the hoe, is lacking. There are only isolated instances in which the Atayals have adopted the Chinese method of hoeing to a depth of 5 cm.

22: Wiedfeldt--18 F-5 (1913) 1914 Formosan Aborigines
116, 241, 412, 482 Atayal

Their chief [MC: agricultural] tools are a stick, a spear, or an antelope horn. These are used for loosening the ground and for removing the product. The stick also serves as a support and for carrying loads on their shoulders. Aside from this, they also use the hunting net for transporting products. The long knife which we have already mentioned is carried nowadays by most of the men. They use it as a hatchet, a sickle, or a hoe.

22: Wiedfeldt--18 [2] F-5 (1913) 1914 Formosan Aborigines
116, 243, 251, 415 Atayal

For winnowing the millet and the rice they use bowl-shaped baskets. They store it in shallow baskets.

22: Wiedfeldt--18 [3] F-5 (1913) 1914 Formosan Aborigines
116, 231, 177, 262, 857 Atayal

If the Atayals may be said not to practice agriculture in the proper sense of the word, it may also be said that they do not do any cattle-farming. They have not domesticated any animal, nor do they need any, either for draught animals or for food. In the regions along the frontier, they have recently learned from the Chinese to raise the small black pigs, and they have also become acquainted with the Chinese method of keeping wild boars, according to which the family which raises boars gets a young pig from every litter. From the same source they have introduced the few chickens that they have, which are kept as a luxury... since they, like the Chinese, do not eat eggs. Even the dog, which one now finds in almost every hut, the Atayals are said to owe to the Chinese, and to get them from them by barter. The dog is not used for hunting nor for guarding the hut, but is a playmate of the children. It is apparently more attached to the woman, whom it helps to pass the time, than it is to the man.

22: Wiedfeldt--18-19 F-5 (1913) 1914 Formosan Aborigines
116, 286 Atayal

The Atayal woman works harder at providing clothing than she does at providing food. She picks and beats the green ramie grass, soaks the sun-dried fibres in water, and beats them again. She spins the fibres into thread by walking around the stationary spindle. She weaves the fibres in a simple pattern, similar to a netting stitch. She makes them into pieces of cloth in sizes to suit the special use to which they are to be put. [19] One end of the threads is wound around a hollow piece of wood which the weaver holds between her feet, and the other end is fastened to a bamboo rod which she ties to her body. The lengthwise threads are raised and lowered in groups by a long shuttle, and the weaver forces the woof through with a bamboo stick. Individual threads are dyed in advance, so that as the weaving proceeds stripes or square figures are formed. The commonest color is a rusty brown which is made from the sap of a root, and is perhaps used to simulate drops of blood. In addition, the greyish blue which is used for tattooing is used, and recently a bright red that they get from the Chinese has come into use. They are especially fond of red and rusty brown, perhaps because they are complementary to the perpetual green of their surroundings. . .

22: Wiedfeldt--19 F-5 (1913) 1914 Formosan Aborigines
116, 593, 462, 512, 533 Atayal

From the economic point of view, Atayal life is based on the cooperation of man and woman in the family. Estimated exactly, the feminine contribution is greater and more essential, as is shown by the moving lament of an Atayal widower:

No woman weaves me garments,
None brings me yams,
None brings me wood,
None brings water,
None plants the fields,
None prepares the meal
For me, starving,
None cleans my hut,
None helps me.

The activities listed here, together with the usual interruptions, keep a woman busy for almost the whole day. Without interruptions, they would take up about a third of a day. A man is busy only at intervals, and is mainly concerned with building the hut and clearing the land, and he scarcely does a twentieth or a thirtieth part of what he is capable of doing.

22: Wiedfeldt--20 F-5 (1913) 1914 Formosan Aborigines
116, 581 Atayal

In accordance with its character of an indispensable economic partnership, marriage among the Atayals is a universally recognized arrangement designed for permanence.

22: Wiedfeldt--20 [2] F-5 (1913) 1914 Formosan Aborigines
116, 582 Atayal

In their rigid notions of the economic prerequisites which are necessary for marriage, the Atayals go further than our modern demands for a mere age limit, and permit only those to marry whose tattooing is the outward and visible sign that they are adequate to the most important economic tasks that marriage imposes upon them. Marriage between relatives is not permitted in the direct line as well as to the fourth degree of the collateral line.

22: Wiedfeldt--20 [3] F-5 (1913) 1914 Formosan Aborigines
116, 584, 161, 177 Atayal

In contrast to the Japanese and other Oriental peoples, marriage brokers are unknown among the Atayals. The young people become acquainted freely. The young man tries to win the favor of his girl by distinguishing himself in the skull hunt, as is shown by the Atayal love songs translated by Florenz. The Atayal belles are said to have become less exigent in this respect lately, and to be satisfied with the simple line of tattooing, as a result of the excess number of women after the homicidal fights with the Japanese. The lover does his own courting, or sends his father to the girl's father to set the price of the bride.

22: Wiedfeldt--20 [4] F-5 (1913) 1914 Formosan Aborigines
116, 583, 582 Atayal

Generally the young man takes his bride, who is usually a few years older than himself, home to his clan. The bride's family thus loses a worker, and is compensated therefore by the bridegroom or his family to the extent of 25 to 30 rokoschkahas. [MC: ornamented clothing used as money].

22: Wiedfeldt--20 [5] F-5 (1913) 1914 Formosan Aborigines
116, 591, 583 Atayal

Sometimes, if the bridegroom can not get together the price of the bride, or if the girl is the only living child of her parents, the bridegroom enters the family of the bride, and works out the price of the bride, so to speak, in two years. During this time, he and his wife live in the small adjoining hut.

22: Wiedfeldt--20 [6] F-5 (1913) 1914 Formosan Aborigines
116, 584 Atayal

Engagements are unknown, as a rule. If a young man wants to assure himself of his sweetheart, he pays a part of the price of the bride. As long as this sum is not returned, which, of course, might happen any time, the girl is bound, while a suitor who changes his mind loses his payment.

22: Wiedfeldt--20 [7] F-5 (1913) 1914 Formosan Aborigines
116, 591 Atayal

If the bridegroom and the bride are from different clans, he is permitted to choose in which of the two clans he wishes to settle. Every clan welcomes an increase in workers and fighters... As a rule, however, the bridegroom builds his hut on the land belonging to his clan.

22: Wiedfeldt--21 F-5 (1913) 1914 Formosan Aborigines
116, 584, 241, 585, 177 Atayal

If the son of a family wishes to marry, the family plants a larger piece of land with millet. At the time of the millet harvest, when there are enough provisions on hand for a year, the marriage takes place without any religious celebration. The head of the clan in which the couple will live in the future, and the members of the clan are invited to it. First they accompany the parents of the bridegroom to the bride's hut, where her parents serve them millet wine. Then all of them go to the new hut for the wedding feast, to which each guest contributes millet or millet wine... Recently they have begun to follow the Chinese custom of slaughtering a pig or killing a hen for the marriage feast. After a few hours, generally after a round dance has been danced and sung, the guests leave the hut wishing the couple many children.

22: Wiedfeldt--21 [2] F-5 (1913) 1914 Formosan Aborigines
116, 586 Atayal

"The main purpose of marriage is the begetting and rearing of children." This precept... holds good among the Atayals, for whose economic existence this is also necessary. Childless marriages are therefore immediately dissolved. Under other circumstances also, marriages can be dissolved at any time and without presenting definite grounds. The party who desires the marriage to be dissolved, however, must leave the other party as well off as it was before the marriage. If the man desires the separation, the woman simply goes back home with her children. If the woman desires the separation, her family must pay back to the man the price that he had paid for her, so that he can get another woman to manage his household. In the case of marriages in which the man worked out the price of the woman, the situation is reversed. If the man desires the separation, he has to pay a sum equivalent to the price of the bride. If the woman desires the separation, the man is obliged to go. Children under three years of age always stay with the mother. Older children, who are always in great demand and can be sold at any time for adoption, never stay with the party who wishes to dissolve the marriage, but with the other party. If children and the rearing of them constituted an economic burden, it would not be so easy to dissolve marriages.

22; Wiedfeldt--21-22 F-5 (1913) 1914 Formosan Aborigines
116, 562, 593 Atayal

In spite of the emergence of this dark economic side in the making and unmaking of marriages, [MC: see preceding paragraphs in 116] the married life of the Atayals [22] makes a pleasant, or, as the Japanese say, a European impression, not merely because man and woman go arm in arm and kiss each other on the lips, but because the woman plays an active role, and has equal rights. As Tschinsappa (head of the house), or Tonsappa (head of the family), the man very properly is the leader in marriage, and he alone has certain rights and duties in the clan and the tribe. The women and the grown children take part only in the clan and tribal festivities. Of course, the Atayal man does not possess absolute mastery in his own house... Physically, the Atayal woman is scarcely inferior to the man in point of strength, skill, and endurance, with the exception of speed in running. Intellectually she is more curious and more alert. When I asked a question about the purpose of tattooing, an Atayal woman answered me through the medium of an interpreter with this question, "why do you wear a beard?" She represents an economic value which the price of the bride puts in terms of capital. The greater part of the household rests on her shoulders. Consequently, she does not in the least occupy the position of a work animal or a slave, but is equal in rank to the man... Outwardly this is reflected in the fact that when she marries she retains her two maiden names. Children have the father's first name as their second name.

22: Wiedfeldt--22 F-5 (1913) 1914 Formosan Aborigines
116, 595, 837 Atayal

The Atayals are strictly monogamous, and look with contempt upon the Chinese practice of swelling the ranks of the family by concubines and upon the Japanese Geishas. Adultery is consequently rare, and is severely punished.

22: Wiedfeldt--22 [2] F-5 (1913) 1914 Formosan Aborigines
116, 836, 847 Atayal

Sexual intercourse between unmarried persons... troubles nobody. It should be rare in view of the ease with which a family can be supported. Illegitimate children are killed by the father of the girl as illegal offspring, in spite of the fact that such a high value is attached to children.

22: Wiedfeldt--22-23 F-5 (1913) 1914 Formosan Aborigines
116, 837, 684, 597 Atayal

If a married woman commits adultery, she is killed by her husband or his clan, and the hut of the adulterer is burned. In addition to this, the guilty man, or his clan, has to pay the injured husband compensation as a substitute for the murdered woman. The amount of the payment is fixed by the head of the clan according to the adulterer between 25 and 30 rokosch-kaha. [MC: ornamented clothing used as money] If the adulterer is unmarried, he has no hut that can be burned, and he only has to pay half the compensation. If the guilty party or his clan does not pay [23] the injured party steals children out of the clan andsells them for adoption until the sum has been made up. No one knows what happens when a married man commits adultery with a single girl. To the Atayals, the real crime is adultery on the part of a wife.

22: Wiedfeldt--23 F-5 (1913) 1914 Formosan Aborigines
116, 842, 844, 846 Atayal

The birth of a child is not considered anything special, and takes place without a midwife or any other help. By the following day the mother has resumed her usual activities. After a few days a fire is lighted in front of the hut, in order that the purifying force of fire may drive out the impurities of birth. In contrast to other far-eastern peoples, boys and girls are equally highly prized.

22: Wiedfeldt--23 [2] F-5 (1913) 1914 Formosan Aborigines
116, 847, 553, 851 Atayal

The father has the right to kill a child, or more accurately, to have someone else kill it, for he never does it himself. With the high value placed upon children, this never occurs except when a child is blind, or deaf, or burdened with some other kind of physical defect. It has the effect, if you will, of making the race a select one. There is no punishment for killing a child that has not yet reached the age of two or three years, and hence does not yet have a name. In view of the high rate of infant mortality, they do not give the child a name until there is some prospect that it will survive. In naming it, the name of one of the grandparents, or of a famous head-hunter of the clan, is placed before the first name of the father.

22: Wiedfeldt--23 [3] F-5 (1913) 1914 Formosan Aborigines
116, 862 Atayal

The mother nurses the child until she ceases to have any milk before the birth of the next child.

22: Wiedfeldt--23 [4] F-5 (1913) 1914 Formosan Aborigines
116, 868 Atayal

The father instructs the boys in the making and use of bows and arrows, and the mother teaches the girls how to prepare food and make clothing.

The relationship between parents and children is apparently good, and is based on obedience, but a child is never disciplined in the presence of others. Children remain in their parents' house until they are married, and work for them. After marriage there is no further economic bond between them. The children neither receive help from the parents, nor would they think of helping them. In cases of need, the clan intervenes, but there is no family sentiment, nor activities on the part of the relatives.

22: Wiedfeldt--23 [6] F-5 (1913) 1914 Formosan Aborigines
116, 163, 165 Atayal

A family seldom has more than three children living. The largest family had ten children at a time as a result of multiple births; the smallest had none at all after the death of several children.

22: Wiedfeldt--23-24 F-5 (1913) 1914 Formosan Aborigines
116, 755, 887 Atayal

They do not lack medical aid entirely. [24] Old women, called hamangoppu, of whom there are about 30 among the Schimptonoff, or one to every two clans, do not limit their activities to tattooing and prophesying with the aid of a bamboo wand whether the patient will die, or whether the young woman will have a child, etc., but they also dispense medicines compounded from herbs which they have gathered themselves. In return for them, they receive gifts valued at from one to two binto-an. [MC: ornamented clothing used as money]

22: Wiedfeldt--24 F-5 (1913) 1914 Formosan Aborigines
116, 764 Atayal

If some one dies, the family mourns for a whole day, during which time no one sets foot in the hut. The body is buried in a deep hole in the burial place in the hut, and the personal property of the deceased is placed in the grave also. Thus, a bow, a knife, a gun, are buried with a man. With the woman are buried her loom, spindle, and rice pestle. Clothes and a pipe are buried with both men and women. It is believed that they will need all these things later. There are no funeral services, and mourning clothing is unheard of.

22: Wiedfeldt--24 [2] F-5 (1913) 1914 Formosan Aborigines
116, 768, 587 Atayal

On the following day [MC: after a death and burial in an Atayal family], a man who has lost his wife or a child begins to build a new hut. After three months he moves into it and if he is a widower, he marries again. If the man dies, the widow also marries after three months, when her new husband had finished the hut. In this case, the widow brings the man into her clan. The old hut is regarded as a burial chamber. It is left untouched, and it soon falls apart.

22: Wiedfeldt--24 [3] F-5 (1913) 1914 Formosan Aborigines
116, 428 Atayal

Produce, provisions, and, since recently, also dogs, chickens, and pigs, are left to the surviving partner. Children who have lost one parent do not inherit anything, so that there are no prerogatives attached to primogeniture.

22: Wiedfeldt--23 [7] F-5 (1913) 1914 Formosan Aborigines
116, 164 Atayal

The Atayals are said to be very susceptible to disease, and succumb more frequently than do the supposedly weaker civilized individuals.

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22: Wiedfeldt--24 [4] F-5 (1913) 1914 Formosan Aborigines
116, 768, 736 Atayal

Until the widow remarries, she is, so to speak, the guardian of the children. If she is unable to act in this capacity because of illness or any other reason, a neighboring member of the clan, if possible, one of her husband's relatives, or the head of the clan, assumes the duty of caring for the children. The children then have to work for the household of their guardian. During an illness, the nearest neighbors, both men and women, help to keep the household going.

22: Wiedfeldt--24 [5] F-5 (1913) 1914 Formosan Aborigines
116, 762 Atayal

If the Atayal discovers that he is suffering from a persistent, incurable illness, or when he is suffering from the infirmities of old age, he commits suicide by taking the poison used for fishing, which is on hand in every hut. No one else has a right to kill a sick person, but every one has the ancient right to dispose of his own body, when he is only a burden and can no longer be useful.

This partnership of two individuals for living and for economic purposes which we find in the Atayal family can be dissolved by divorce or by the death of one partner.

22: Wiedfeldt--25 [2] F-5 (1913) 1914 Formosan Aborigines
116, 614, 602, 619 Atayal

The Atayals have developed two other social institutions which are superior to the individual and are independent of life and death, as well as of the will of the individual. They outlast the changing generations and give stability and strength to the whole Atayal community. Just as each individual belongs to a family, each family is a member of a clan, and each clan in turn is a member of a tribe. No clan can leave its tribe, and no family can leave its clan, unless it is excluded by the decision of the clan.

22: Wiedfeldt--25 [3] F-5 (1913) 1914 Formosan Aborigines
116, 614, 621 Atayal

The clan, karan, or aran, called scha, or village, by the Chinese, consists of from 8 to 30 families which are interrelated and which act for each other, like the Japanese goningumi. Individual clans trace their tradition back to a common ancestor, but all of them must have some blood ties.

22: Wiedfeldt--25 [4] F-5 (1913) 1914 Formosan Aborigines
116, 614, 622 Atayal

The clan has two spokesmen: the clan chief and the full assembly. The office of chief is hereditary. During his lifetime, the clan head designates the worthiest of his sons as his successor. If none of his sons is worthy, he selects a younger brother or another relative... The head of the clan almost never retires from office before his death. Like many another official who has long since become incapable of action, he likes to die in harness. The nomination of a successor is designed to avoid a break in continuity and to make it possible for the present head to exert some influence on the future.

22: Wiedfeldt--25 [5] F-5 (1913) 1914 Formosan Aborigines
116, 623, 614, 527 Atayal

The clan assembly consists of the heads of all the families and the successful head-hunters of the member families. It meets when summoned by the head of the clan, which is regularly on the occasion of the two millet festivals. Aside from these two regular meetings, it meets when it is necessary to impose a punishment or to conduct some legal business.

22: Wiedfeldt--25 [6] F-5 (1913) 1914 Formosan Aborigines
116, 614, 476 Atayal

The clan is a family on a larger scale, amongst whose members there is complete solidarity. Like the family, its prime tasks are economic ones, although they are not so vital and are limited to those which constitute the obligation of the man of the family. It is an assembly of the men, and it undertakes those things which require more than the strength or the ability of the individual man. Thus, it takes care of protection against numerous enemies.

22: Wiedfeldt--25-26 F-6 (1913) 1914 Formosan Aborigines
116, 726 Atayal

The members of the clan go into battle together. If one of them falls, the clan is defeated, and the others go back home with the consciousness of having performed their duty. [26] The Japanese take advantage of this custom in fighting with the Atayals. They attempt to kill one member of as many clans as possible.

22: Wiedfeldt--26 F-5 (1913) 1914 Formosan Aborigines
116, 423, 614, 432, 574 Atayal

The arable land is the property of the clan. It protects the members in the undisturbed possession of the fields which he has planted. If one clan becomes much larger than another, for example, if it becomes much larger than one which has become reduced in numbers in fighting with the Japanese, the larger clan sometimes buys a piece of arable land from the small clan, paying it about 10 rokoschkaha [MC: clothing used as money] for a hillside plot of 12 hectares. The members of the clan fix the payment of this price by the families in the clan assembly, according to their funds. The families that settle on this hillside have to contribute more heavily. Also, the fines imposed upon the clan are collected in the assembly, as is also the price of the bride for a member whose family can not raise the money, but whom they wish to retain in the clan. Fines are paid to the head of the clan who is entitled to receive them. He organizes a feast with them, or hands the fines over to the family to whom they are due, and the family uses them for the same purpose.

22: Wiedfeldt--26 [2] F-5 (1913) 1914 Formosan Aborigines
116, 224, 476, 614, 736 Atayal

In the hunts, the heads of the clans who take part act as directors and leaders for the members of their clans, for the dekane [MC: hunting association] has no head. If a family belonging to the clan is in distress because of wounds received in war, illness, or death, the neighbors help out, for the clan is a solid unit in aiding each of its members. Poverty or even begging is unknown.

22: Wiedfeldt--26 [3] F-5 (1913) 1914 Formosan Aborigines
116, 614, 527 Atayal

The degree to which the clan feels itself a solid unit may be seen in the common clan festivals at the time of planting and harvesting the millet. These festivals generally precede the tribal festivals, and only members of the clan are permitted to attend them. No woman who has married into another clan may attend them.

22: Wiedfeldt--26 [4] F-5 (1913) 1914 Formosan Aborigines
116, 614, 626 Atayal

The solidarity which exists among the members of the clan is clearly evident in the protection of the member families not only against assaults on their possessions from outside, but even to a greater degree against injuries from within. They help the injured husband or father, but they also encroach upon his position. They give this protection of property, person, and marriage partly in an indirect manner, by virtue of their numbers, and partly directly, in accordance with fixed customs, which correspond exactly to those that are in effect for the tribe.

If the judicial function holds second place in the clan, in the tribe it holds first place in scope, although in importance it is inferior to the political activity of the tribe. Among the Schimptonoff, the members of the tribe are called koto-ro-ryong, [27] people living along the same great river. Among the Taroku, they are called koga-ru-gaya, people with the same customs. As the names indicate, the common bond of the tribe is not blood relationship, but the fact of occupancy of the same territory, or the fact that they have the same political and judicial customs.

22: Wiedfeldt--27 F-5 (1913) 1914 Formosan Aborigines
116, 643, 177.64 Japanese
636.64

The tribe has the same organs as the clan. The designation applied to the chief, maraho, or moruhuk, means venerable old man, also leader of the army. The Japanese Governor-General is called by the Atayals the maraho of the Japanese. The chief is by no means the richest member of the tribe, and he lives in a hut just like the other members of the tribe. His title is hereditary, as it is in the clan, but a tribal chief is never also a clan chief. This office is said to have been held by the family of the present chief of the Schimptonoff [MC: an Atayal tribe] from the beginning of the tribe. At any rate, their position has not been disputed. Partly from lack of knowledge and partly for political reasons, the Japanese have often appointed Atayals who were friendly to them as chiefs, but their appointees have never been able to obtain any influence or to be successful.

22: Wiedfeldt--27 [2] F-5 (1913) 1914 Formosan Aborigines
116, 643, 701 Atayal

If a man brings back a great many enemy skulls from a war, he is sometimes called a boku-maraho, an honorary chief, and he has the right to be the first to express his opinion in the tribal assembly, after the maraho. From this one might assume that the present family acquired the chieftaincy because of the special prowess of one of their ancestors in battle. Occasionally the tribal chief resigns his title in favor of a successor whom he has appointed, for example, if a war is imminent, or if major hostilities have broken out between several clans. Like the old German duke, the maraho is, as his name indicates, primarily a leader in battle. He prepares the ground for the fight, he chooses the positions, he arranges the units, and he is himself the leader in the fighting. As Clausewitz has said, war is only the continuation of politics, using other means, and thus the maraho is also the political leader of his tribe. He carries on negotiations with the Japanese and with the other "savage" peoples, and with other Atayal tribes. By means of his prestige, he protects their embassadors against over-zealous members of the tribe by keeping them always close to him. In making plans for the wars, and especially in political negotiations, he can not act independently, but his power is limited. If things take an unexpected turn in the negotiations, he must obtain new authority.

22: Wiedfeldt--28 F-5 (1913) 1914 Formosan Aborigines
116, 527, 643 Atayal

The two great millet festivals, in which the tribal chief is the leader, also serve to maintain political solidarity and to foster a harmonious attitude in the tribe.

22: Wiedfeldt--28 [2] F-5 (1913) 1914 Formosan Aborigines
116, 643, 619, 692, 648 Atayal

The person who is the political representative and the military leader also has sufficient prestige to handle legal business. If it is a question of matters which concern individuals of the same clan, the clan chief is capable of dealing with them, but if members of different clans are involved, the tribal chief handles them. There is no difference between them, except the one that has just been mentioned, as to the type of matters that they handle. The procedure is the same also. If members of different tribes are involved, there is no legal procedure, if this expression is permissible, for there is no institution in their society which is superior to the tribe, and which could decide which one was right. The matter either is left unsettled, or force of arms determines who is in the right.

22: Wiedfeldt--28 [3] F-5 (1913) 1914 Formosan Aborigines
116, 681 Atayal

Penal usage is for the most part highly developed among the Atayals, just as it forms the part of the law which was codified long ago among the Chinese.

22: Wiedfeldt--28 [4] F-5 (1913) 1914 Formosan Aborigines
116, 684 Atayal

Clan and tribe cooperate in the punishment of adultery.

22: Wiedfeldt--28 [5] F-5 (1913) 1914 Formosan Aborigines
116, 682 Atayal

If anyone deliberately kills a member of a clan, he is killed in turn by the family of the victim, with the help of the clan, if this is needed. A fine of from 15 to 20 rokosch-kaha [MC: clothing used as money] is imposed by the tribal chief for the deliberate killing of a member of the tribe. If it is not paid within the appointed time as a ransom for the murderer, he is killed. If someone is accidentally killed, which is not infrequent in the hunt, where many hunters crowd around the wounded animal and make blind thrusts with their spears, the tribal chief sets a fine of from two to six bintoan [MC: clothing of less value than rokosch-kaha], according to the circumstances and to the means of the criminal.

22: Wiedfeldt--28 [6] F-5 (1913) 1914 Formosan Aborigines
116, 682, 851, 847 Atayal

As long as children do not have a name, there is no punishment for killing them. A child that is capable of running around alone at a distance from the hut always has a name.

22: Wiedfeldt--28 [7] F-5 (1913) 1914 Formosan Aborigines
116, 681, 574, 692 Atayal

The fine is considered something not good, and is therefore spent by the clan or the family that receives it for a clan feast, the schukun [MC: the ornamented clothing with which the fine was paid.] being exchanged for a pig or for sake. In many tribes, the clan chief keeps the fine and adds it to a fund out of which he occasionally pays fines.

22: Wiedfeldt--28-29 F-5 (1913) 1914 Formosan Aborigines
116, 685, 691, 421 Atayal

Civil cases among the Atayals [29] really amount to nothing more than contests about property and possession, the former between clans and the latter between families. ... Since there is no surveying and no fences, disputes about property lines are frequent and are difficult to decide. The Atayals have no written records. They do not know how to deal with the conflicting statements of different people, no matter how greatly they rely upon the testimony of eye-witnesses because of their great love of the truth... They do not consider it feasible to take the short additional step of determining a contested boundary line according to the testimony of the oldest people. They think this is too difficult and too uncertain in view of the importance of the matter.

22: Wiedfeldt—29 F-5 (1913) 1914 Formosan Aborigines
116, 685, 721, 695 Atayal

If two clan heads have a dispute concerning a piece of land, the tribal chief first discusses the matter, and then fixes a period of a few days, after which they are to appear again, bringing with them all the skulls that the members of their clans have been able to capture in the meantime. The clan chief who presents the most skulls gets the land. If a gun is stolen and the thief can not be found, the clans which are under suspicion, but never more than ten at the most, are ordered by the tribal chief to go out on a head-hunt. The clan that does not bring back any skulls, or the one that brings back the smallest number, is considered the thief. If a supposed murderer denies his deed, he has to present a certain number of skulls within a fixed time. The number of skulls rises according to how well founded the suspicions are. If he brings the skulls, he is not guilty.

22: Wiedfeldt--29-30 F-5 (1913) 1914 Formosan Aborigines
116, 721, 114, 881, 695 Atayal

Although Bullock and many others after him write that "the wild savages of Formosa seem to carry on the practice of man hunting out of mere devilry," a somewhat more thorough investigation shows that the hunting of skulls has a very definite legal significance, and hence springs from other grounds than mere devilry. [30] Successful skull hunting is taken as a sign that one has come of age, and is accepted as evidence in penal and civil law.

In the Atayal concept, the members of the tribe are the only ones who should be protected. They are permitted to hunt only savages of other tribes, Japanese, and Chinese, and quite understandably, Europeans, but the number of these is very small. The first group retaliates by conducting their own skull hunts, or by special punitive and plundering forays. The second group is protected by a strong military and police force, which punish such excesses as severely as possible. The third group is victimized comparatively more often but even in this case the Japanese occasionally take harsh measures against a tribe that has a particularly large amount of skull hunting chalked up against it, and force it to withdraw behind the Aiyu line. Inasmuch as unrestrained head hunting on the part of the members of the tribe has seriously endangered the tribe formerly and now in particular, when this practice endangers its independence and its very existence, head hunting is only permitted in the border tribes and supposedly in most of the tribes of the interior when it is ordered by the tribal chief. In many of the tribes of the interior the clan chief also has this privilege. In many tribes, it takes place only in the fall, after the tribal assembly, so that apparently all legal contests are postponed until that time. Everywhere a young man who wants to acquire the skull which will show that he has come of age must control himself until a skull hunt has been declared open for his clan. This regulation does not make the skull hunt any the less dangerous for strangers who approach the territory of the tribe, for they never know whether or not a skull hunt

22: Wiedfeldt--31 F-5 (1913) 1914 Formosan Aborigines
116, 685, 554, 802, 614 Atayal

On the basis of this kind of evidence [MC: i. e. skull trophies], disputed land is awarded to a clan, or a penalty is imposed on a clan. The head of the clan then assigns the land to the family concerned, or demands that they comply with the penalty. In business which concerns only the clan, the procedure is the same. All payments are made by the clan heads, with the occasional assistance of a wise man, that is, one who can surely count up to 30. The payment of the price for a bride, and the adoption settlements, etc., are also mostly made with the help of the head of the clan, for the ordinary Atayal can count up to 5 at the most. In decisions of this sort, where there are two steps, one of which is carried out between clans and the other within the clan, there is no difficulty in putting them into effect, as the tangible nature of what is generally recognized as evidence is a help.

22: Wiedfeldt--31 [2] F-5 (1913) 1914 Formosan Aborigines
116, 614, 686, 622, 626 Atayal

It is unheard of for the head of a clan not to submit to the decision of the tribe, for example, not to pay a fine at once. If a family or an individual does not submit to the judgment of the clan, which very rarely happens, the clan can suspend the family or the individual from the clan. If the suspended member is old, he is not taken in anywhere, and he perishes in misery. If he is young, as a rule he finds employment in a clan which lives at some distance and belongs to another tribe, for all additional labor is very welcome. To be sure, he and his family are a favorite objective of skull hunts on the part of his former comrades in the clan.

22: Wiedfeldt--31 [3] F-5 (1913) 1914 Formosan Aborigines
116, 646, 622, 202 Atayal

The full assembly of all clan heads and honorary chiefs meets at the invitation of the tribal chief. The time and the place, in case it should be held somewhere else but in the hut of the tribal chief, as well as the agenda, are announced to the nearest clan heads by swift runners. These clan heads, in turn, similarly inform the clan heads who live near them.

22: Wiedfeldt--32 F-5 (1913) 1914 Formosan Aborigines
116, 646, 527, 484, 576 Atayal

This koto-kumai-roh, or common council [MC: the full assembly of all clan heads of the tribe and honorary chiefs]... meets as a rule at the time of the millet harvest. It begins early in the morning, since most of the clan heads have used the previous day for traveling, and it lasts one to three hours. Connected with it are the community fishing expedition, which supplies the food, and on the next morning, the tribal millet festival. The chief of the tribe opens, conducts, and closes the meeting. He presents the agenda briefly, and then yields the floor to such honorary chiefs and then such clan heads as have something to say. While someone is talking, all the others listen attentively in silence, without interrupting him in any way. Each individual speaks only a few minutes, for it is considered improper to take a long time to express one's opinion.

22: Wiedfeldt--32 [2] F-5 (1913) 1914 Formosan Aborigines
116, 643, 646, 721 Atayal

The negotiations [MC: carried on in an Atayal tribal assembly called koto-kumai-roh] concern political and military affairs. The koto-kumai-roh makes the decisions and confers upon the tribal chief the necessary powers, according to which he acts. The assembly has nothing to do with his judicial powers. Nevertheless, the assembly takes this opportunity to question the clan heads concerned in any infraction of the law that has taken place, and on their confession, a penalty is imposed or a skull hunt is ordered. Decisions are for the most part made unanimously. Otherwise, voting is by rising from the squatting position. A simple majority decides, and the vote of the tribal chief is used to break a tie. In general, a minority is bound by the decision. In the tribes of the interior, which have not yet had any fights with the Japanese, only those clans are said to take part in a fight whose heads have voted for it, while the other clans remain at home, but are not permitted to give aid to the enemy.

has been ordered for precisely that time. At any rate, the time before the millet harvest is the safest, and the time after it is the most dangerous. This unpleasant custom is the only thing that gives the slightest justification to the application of the otherwise unjustified designation of savages to the Atayals. It makes no difference whether a skull is that of a man, woman, or child, provided only that the child is over two years old, for the skulls are not captured in battle, but are taken by tricking and surprising the victim. [31] According to the statistics, which are surely incomplete, about 300 Chinese and 40 Japanese are killed annually in the skull hunts. Some 300 Chinese and 20 Japanese are wounded. There is no clue to the number of savages who are captured, but it must be almost as large as the number of Chinese, in the border districts alone. In spite of all the punitive expeditions and all the efforts on the part of the Japanese border patrol, almost no progress has been made in suppressing this unpleasant custom up to now, because it is closely connected with the legal aspect of the life of the Atayals. The most success seems to have been obtained in cases where the Atayals have been told: "Skulls are skulls. Hunt monkey skulls, or antelope skulls".

22: Wiedfeldt--32 [3] F-5 (1913) 1914 Formosan Aborigines
116, 619, 609, 648, 721 Atayal

Just as the struggles with the Japanese have had the effect of producing greater solidarity within the tribes, so in recent years, under the same sort of pressure, there have arisen temporary alliances of several tribes, but never of a majority of tribes, for the purpose of a joint military expedition. In spite of the enthusiastic support given these joint expeditions by many of the tribal chiefs, the Atayals have no confidence in these products of extreme necessity. My question as to whether tribes of different savage peoples had ever united for the purpose of a joint military venture, aroused only laughter and amazed headshakings among the Atayals present.

22: Wiedfeldt--33 F-5 (1913) 1914 Formosan Aborigines
116, 177, 182 Atayal

In this modest study of the life and activity of the Atayals it has often been apparent that their needs and their means of satisfying them dovetail neatly... with their institutions and their customs. The Atayals have a narrow, but well integrated culture, and despite centuries of contact with the pervasive influence of a superior Chinese culture, they have up to now taken over from it only a few non-essentials. In all the essentials, however, unlike the other peoples of Formosa, they have remained aloof from its influence. That these peculiarly stratified cultural conditions, with which the Atayals still are perfectly satisfied today, existed before they had any contact with the Chinese, and the reasons why they have remained stationary so long can only be explained if we can bore a special hole in this petrified culture on another occasion. For our purposes it is sufficient to assume that Atayal culture is not an isolated pocket, but a stratum of considerable extent.

22: Wiedfeldt--33 [2] F-5 (1913) 1914 Formosan Aborigines
116, 412, 241, 372 Atayal

If man, as Franklin says, is an animal that makes tools, then the Atayals, with the implements and weapons that have been enumerated, are well past that boundary, although they lack hoes, fishing-rods, and all kinds of metal tools. They have mastered fire, and they can clear the land for planting by using fire.

22: Wiedfeldt--33[3] F-5 (1913) 1914 Formosan Aborigines
116, 322, 503 Atayal

They know how to build huts, lay canals about a hundred meters long, or bend strong wood, by softening it in water, propping it up at both ends and weighting it down with stones in the middle.

22: Wiedfeldt--33-34 F-5 (1913) 1914 Formosan Aborigines
116, 417, 283, 286 Atayal

They can build suspension bridges up to 30 meters long out of Katsura wood, and they can span mountain streams with strips of rattan, the ends of which are fastened to projecting rocks or trees. [34] Although these are only continuations of the trees that overhang the mountain brooks of Formosa, and which provide a natural connection which is somewhat strengthened by the rattan, nevertheless this process of making bridges by tieing the trees together is a considerable technical accomplishment on the part of the Atayal men. On the feminine side, it is paralleled by the weaving of garments with the primitive loom. Perhaps this may even be regarded as a superior accomplishment ; the ramie grass, like the hemp, passes through their hands nine times.

22: Wiedfeldt--34 F-5 (1913) 1914 Formosan Aborigines
116, 462, 221 Atayal

Whether the Atayal man merely keeps himself busy, or whether he works, may be doubtful. Still, the annual clearing of the arable land should be considered a regularly recurring, conscious effort directed toward a definite and vital purpose. On the other hand, there can be no doubt that the Atayal woman really works in the economic sense of the word, with her planting, harvesting, and preparation of meals, her spinning, dyeing, and weaving. In any case, in contrast to modern conditions, the woman is more of a worker than the man.

22: Wiedfeldt--34 [2] F-5 (1913) 1914 Formosan Aborigines
116, 533, 461 Atayal

Neither men nor women sing at their work. They only sing when they are sitting in the bush, and they do so to the accompaniment of their instruments which resemble jew's harps, or they sing when they dance after partaking of the millet wine. Even when men are working together, as for example in the hunt, or when they are fishing, or making bridges, there are neither songs nor rythmical cries, nor shouts of encouragement to be heard, which is a thing that astonishes the Chinese and Japanese. Since this is so, there is no basis for the assumption that among the Atayals work originated from the rhythmical games.

22: Wiedfeldt--34-35 F-5 (1913) 1914 Formosan Aborigines
116, 462, 592 Atayal

Men and women never work together. Each has his or her special occupation in the household... They do not have the division of labor which is common among us today, according to which the man is active outside the house as a producer, and inside the house as a consumer, while the woman occupies herself only with the affairs of the household, but is not engaged in productive economic activity for the benefit of the household. Among the Atayals both parties have their special activities in the household, without which neither the household nor their entire existence would be possible. The man provides protection against the enemy and the weather; he makes the land fit for cultivation, makes weapons and wicker-work. [35] The woman plants and harvests, spins, and weaves the clothes, prepares food and drink. The Atayal household is thus a productive community based on the division of labor...

22: Wiedfeldt--35 F-5 (1913) 1914 Formosan Aborigines
116, 463, 304, 756 Atayal

Division of labor among the Atayals has not yet progressed to the point of vocational training, for every family produces all that it needs itself. There are no artisans. The only exception to this rule is that of the prophetess and medicine-woman, who receives payment for her poisonous drinks, her prophecies, and especially for her tattooing, in the formof gifts which are scaled according to the means of the client, a method of calculation which is current among modern doctors also. The only profession which has been able to develop because it finds a field for its accomplishments in the custom of tattooing, is therefore one of the activities of the women, and, if one considers tattooing treatment of the body, and hence an activity which falls in the sphere of the doctor, it is a profession which in our day women have had to struggle to wring from the monopolistic control of men, while among the Atayals it is handed down from mother to daughter.

2: Wiedfeldt--35 [2] F-5 (1913) 1914 Formosan Aborigines
6, 463, 177, 231 Atayal

the keeping of boars has recently produced a kind of side-line for individual Atayal
milies, this is a case of a recent innovation borrowed from Chinese economy.

22: Wiedfeldt--35 [3] F-5 (1913) 1914 Formosan Aborigines
116, 476, 463, 224 Atayal

Several women never work together. If several men work together, as for example in making bridges, fishing, or in war, there is no division of labor, but each one does the same thing as his neighbor. They have no ability to organize their occupations. If in hunting, 1/3 of them have guns and act as shooters, while 2/3 of them have old-style weapons and are busier as beaters and runners, without their knowing it the lack of guns has become an advantage.

22: Wiedfeldt--35 [4] F-5 (1913) 1914 Formosan Aborigines
116, 592, 425 Atayal

The Atayal household subsists on the complementary labors of man and woman on a piece of arable land of about 70 are. [MC: one are. = 0.2471 acre or 100 square meters] There is no lack of land for the family. Therefore it has no market value for them, but it does have one for the clan, as is shown by the prices which the clan pays, when it can get a piece of land under favorable circumstances, which is rarely.

22: Wiedfeldt--35-36 F-5 (1913) 1914 Formosan Aborigines
116, 464, 586, 597 Atayal

Labor, however, is harder to get [MC: than land], and hence female labor, which the man generally has to provide, has a corresponding market value of from 25 to 30 ro-kosch-kaha [MC: ornamented clothing used as money]. This same value [36] serves as the basis of compensation when a marriage is dissolved. If elderly parents have no more unmarried children to help out in their household, they buy young people as laborers. If they have no means, the clan helps to make up the price. In every tribe, 60 to 70 children are sold in this way annually.

22: Wiedfeldt--36 F-5 (1913) 1914 Formosan Aborigines
116, 586, 858, 597, 768 Atayal

They [MC: children]are offered for sale when marriages are dissolved, on the occasion of the death of one of the parents, when the remaining partner remarries, in which cases children are often a burden or become unnecessary, and thus are put up for sale. A brother or sister may also be sold when a son of the family is to be married, in order to raise the price of the bride for him. This does not suffice, however, to fill the demand for labor. I myself have seen an old Schimptonoff come to the Japanese police commissioner leading a Chinese boy by the hand, and ask for permission to buy him from his parents, which he was forbidden to do, according to Japanese regulations. The price for a ten-year old boy, --younger children are not bought as a rule, --amounts to from 10 to 13 rokosch-kaha. [MC: ornamented sleeveless jacket used as money] For a ten-year old girl, who can not weave yet, the price is 7 to 10. If the girl knows how to weave, she is worth the same amount as the boy.

22: Wiedfeldt--36 [2] F-5 (1913) 1914 Formosan Aborigines
116, 464, 567, 597, 886 Atayal

Since the most common of all the contracts of our day, the labor contract, is not known of, either as a contract for service or for labor, the only possibility which ageing people have of getting the necessary labor to enable them to live is purchase. The expression "purchase" gives the wrong impression, and is merely used for the sake of brevity. Just as the price paid for a bride is compensation paid to the family for the loss of labor, so the purchase of children is more a question of adoption by compromise with the physical parents. Children thus acquired are considered real members of the family, and are in no way treated as slaves. For example, it never happens that a girl is bought for sexual purposes. The children are said never to run away. If they did, their family would have to pay back the money which they received for them.

For all settlements and compensations, for the purchase of land by the clans, and the reimbursement of the prophetess, the Atayals have a definite means of exchange which has the same value for all of the Atayal tribes: the materials [MC: which are set] with precious things, which are usually of three kinds. [MC: See page 12 in category 116 or 436 for description] The general acceptance of this indigenous money is based on its high value as a means of adornment, and its worth depends on the rareness of the materials and the care with which it has been made. [37] Ostensibly the Atayals have never wished to learn how to make these things. An old Taroku told me through the medium of the interpreter that they had gotten the precious materials long ago from white men, but the other Tarokus and all the Schimptonoffs denied the truth of this improbable tradition. If it were true, one would be forced to think of Spanish amulets. All the Atayals are agreed on this point, that they were once brought to them from outside, and that for a long time, there has been no new material. According to this, the same quantity of objects used as money, which presumably are fairly safe from the ravages of termites, has been in circulation among them since its introduction, and only the temporary owners change. This is very possible, in view of the fact that there is no economy based on earnings, and in view of the fact that there has been no increase in the population of the Atayals, as well as because of the stagnation of their culture. The objects used as money are the only possessions that do not follow their owner to the grave. Neither tribe nor clan has concerned itself with making of ornaments to be used as

money, nor have they attempted to fix the value of such ornaments, but nevertheless, they are the "legal" means by which all fines are paid. Together with language and customs, money is the only tangible bond that unifies all the tribes of the Atayals. The entire fortune of the Atayals consists of such money.

22: Wiedfeldt--37 F-5 (1913) 1914 Formosan Aborigines
116, 423 Atayal

Land does not belong to individual families.

22: Wiedfeldt--37 [2] F-5 (1913) 1914 Formosan Aborigines
116, 422, 432, 434 Atayal

Their huts, tools, weapons, and clothing constitute personal property, which no one sells. Even the pigs, which they have recently begun to raise and sell, do not count as a source of personal income. They serve only for the clan feasts.

22: Wiedfeldt--37-38 F-5 (1913) 1914 Formosan Aborigines
116, 426, 556, 614, 622 Atayal

The richest man in the tribe is said to have 250 rokosch-kaha. [MC: ornamented sleeveless jacket used as money] The next richest is supposedly one who has 80. Since the first man is the head of a clan, probably all of this is not his private property, but merely belongs to him as the representative of the clan and is derived from rather large fines. Be that as it may, since the families have an average of 20 to 30 rokosch-kaha, there are no great inequalities of income among the Atayals. As to their other possessions, there is almost no difference between families. The ornaments which serve as money are not used for any other purposes than those which have been mentioned. In particular, it is never loaned, so that capital in the sense of money, and also interest, are unheard of. If the clan helps a family to assemble the amount needed for a fine or for the price of a bride, this is done from a feeling of solidarity, but the family does not repay the amount, nor does anyone expect them to do so. If a family breaks a tool, the neighboring family helps them out. [38] by giving them the tool if they have two of them. When the first family has made another tool, they give it as a gift to the second family.

22: Wiedfeldt--38 F-5 (1913) 1914 Formosan Aborigines
116, 439 Atayal

The objects set with precious things [MC: used as money by the Atayal] are not used in trading either. After all, there is no trading, although it is customary for barter to develop between "savages" and civilized people. There can be none. The fact that there is no means of communication would not be an insuperable obstacle, but would only make things more difficult. The means of communication now in use, such as the fire signals of distress, or the sending of messengers,...are destined only for military and political purposes, and it seems improbable to me that the suspension bridges are made for any other purpose. There is, however, a lack of goods that might be used in barter. "Trade follows the flag", but very slowly, even in the case of a country well equipped for trade like Japan...It does not follow at all for "savage tribes", which have no need of the wares of civilized peoples, except for modern weapons to keep off the traders, and it has not been desired to sell them weapons. The exchange that has gone on up to now between the Atayal border-tribes and the Japanese traders has been very limited as to amount and variety of objects: bright-colored cloth, glass beads, rings, sake, and matches, for reeds, bamboo sprouts, and recently, hides. Such ornaments are more necessary to the Atayals than salt, pots, knives, and metal tips, which they get from the Chinese, who are not protected by any flag. The need of the Atayals for those baubles is just as small as the market which they offer to Japanese economy is unimportant.

22: Wiedfeldt--38-39 F-5 (1913) 1914 Formosan Aborigines
116, 439, 177.43 Japanese
636.43

What the Japanese really need is the valuable camphor trees which grow in Atayal territory. This important commodity is not bartered, however, and the Japanese control only the camphor trees inside the Aiyu line, pushing this line ahead as they feel the need. The tribes in the interior naturally do not share in this insignificant trade in trifles which has slowly developed in the border territories. Barter between tribes is just as impossible as barter between members of tribes, for all the Atayals produce the same things, and therefore have nothing to offer each other.[39] The Atayals and the Amis, who bound them on the south, hate each other mutually, and have nothing but hostile dealings with each other. Since the Japanese forbade the importation of guns and salt, a contraband barter in these two articles, which can hardly be dispensed with for purposes of defence and maintenance, is said to have developed in place of the former free gift of these things to the tribes of the interior, but no one knew anything about it, or if they did, they were unwilling to say anything about it.

22: Wiedfeldt--39 F-5 (1913) 1914 Formosan Aborigines
116, 156, 181, 241, 433 Atayal

Atayal domestic economy produces no surplus which they could give up. Every family plants just as much land as it needs for its own maintenance. Besides, who would take a surplus off their hands, since every family produces the same thing and has enough for itself? The impulse to make a profit, which now dominates our whole life, is completely lacking....Furthermore, the Atayals have no competition, that motive power of economic life. Indeed, the effort to produce more than the other fellow and thus to distinguish oneself may be seen only in the skull hunt. Finally, they do not know how to aim at the greatest possible production with the smallest possible expenditure of strength.

22: Wiedfeldt--39[2] F-5 (1913) 1914 Formosan Aborigines
116, 185, 224, 251 Atayal

They do not understand how to accumulate means for definite purposes. They do not store up any provisions for bad seasons, which, to be sure, is difficult in view of the damp, hot climate and the danger of destruction by termites. In general, it would be unnecessary, also, since nature is extraordinarily fertile. Because of the same lack of foresight, they know nothing about closed seasons in hunting. On the grounds of this lack of care for the future, the thrifty Chinese among whom the failure of the crops always means famine and widespread death consider the Atayals animal-like creatures.

22: Wiedfeldt--39-40 F-5 (1913) 1914 Formosan Aborigines
116, 43, 464, 592 Atayal

In spite of lack of good management, one may speak of an integrated Atayal economy, which, for all its crudity, corresponds to the economic ideal of complete self-sufficiency ...Atayal economy has a certain technical equipment, and recognizes real economic labor. It has values and prices; it had currency; and it has marketable wares for which there is supply and demand. [40] It consists of many uniform and individual domestic economies, which are based on the complementary labors of the men and women of the family, and in which a lack of labor is met by a money payment to the household. There is no such thing as supporting a family by labor brought in from outside.

22: Wiedfeldt--40 F-5 (1913) 1914 Formosan Aborigines
116, 45, 433, 463, 592 Atayal

Atayal economy has developed only one special profession, for the exercise of which there is always a market and which is paid in wages. With this one exception, the families provide for all of their needs themselves, on their own fields, which are theirs as long as they use them. The size of the fields is just large enough to support the family and to keep the family supply of labor occupied. Everything that has to do with profits is lacking, such as the production and sale of surpluses, competition, ground-rent, interest, and employers' profits, as well as all the more important phases and ramifications of economy, from communications to capital and credit.

22: Wiedfeldt--40 [2] F-5 (1913) 1914 Formosan Aborigines
116, 183, 626, 671 Atayal

There is no Atayal system of laws, in the modern sense of the word, for the fall of man in the development of laws, as Savigny calls the codification of legal usages, has not yet made its appearance in these tribes which can not write. For all that, they do not act with complete freedom of the will in their legal paradise, but move in the fixed grooves of traditional and generally observed rules which govern their relations with each other, not merely in the case of infractions of the legal usage, but in their community life as a whole.

An Atayal, unlike a modern cuckold, can not disregard this offence, but the clan, with its strict conception of marriage, will demand that the offence be punished, and if need be, will intervene in his place. Their simple and consistent legal principles are part of the flesh and blood of every Atayal, and are apparently more closely observed and less frequently violated than the individual regulations which are turned out by our parliamentary paragraph factories, which are a matter of concern to virtually only the parties interested for the moment. The penal law, civil law, and legal procedure of the Atayals, if I may be permitted to use these terms for the sake of brevity, could be put into the form of laws, if it were worth the trouble, and if, in so doing, their most characteristic features would not be lost. For this entire legal system consists of nothing but basic principles, from which one may safely deduce the necessary procedure for every individual case.

Their penal law is based on the principle that every infraction of a legal usage must be punished. Conscious striving after justice is foreign to the Atayals, as far as I can determine. They want to restore conditions which have been upset by the offense to their proper place by means of expiation. They recognize infractions of the law only within the tribe. Adultery with a woman who does not belong to the tribe does not trouble any member of the tribe. To kill a man who belongs to another tribe or even to another people, confers prestige as a head-hunter. I myself have heard an Atayal boast in the presence of the Japanese police commissioner, who had been in office for 13 years in the border territory, that he had stolen a pig from a Chinese the night before. Neither do they consider it objectionable to pick bananas from a neighbor's field as they pass by.

Recognized legal customs are seldom violated by the Atayals. In the course of two years there were said to have been in one tribe one case of adultery, three thefts, and four murders. These three types of offenses against the law are recognized by them, and so they protect the most important social principles: life, family, and property. They punish adultery more severely than is customary in modern times, because of the high esteem in which the family is held...and because of their solidarity with the injured member of the clan. The Atayals, like ourselves, distinguish three kinds of offenses: a delict--to use our expression--for example, killing a person in the hunt; a misdemeanour, for example, the killing of a member of the tribe; a crime, for example, the killing of a member of the clan. They have three corresponding degrees of punishment: a fine, compensation derived from the offender's property by means of a fine or burning his hut, and the death penalty, from which there is no appeal. It is less surprising that they do not know anything about depriving a person of freedom as a means of punishment, --which would be difficult to do, anyway, --than that they have not adopted the practice of corporal punishment in spite of the fact that they have long been neighbors of the Chinese. If the fine is not paid, the death penalty is applied. After all, that failure to pay the fine is a sign that the members of the clan reject the criminal. The punishments may be accumulated, for example, in the case of adultery. Since the punishment is an attempt to settle and avenge the offense, it almost always includes a fine paid to the injured party or to his clan. [42] It is not a fixed sum, but is adjusted

according to the demands of the clan, the seriousness of the offense, and the capacity of the offender to pay. Finer legal distinctions of other kinds are not unknown to the Atayals, for example, premeditation, mitigating circumstances, or the distinction between adultery on the part of the woman and adultery on the part of the man, a distinction which has been obliterated in modern times.

22: Wiedfeldt--42 F-5 (1913) 1914 Formosan Aborigines
116, 692, 614 Atayal

Whereas nowadays the corporate body of the state has pushed the injured party to one side, and only in exceptional cases allows him to appear as co-plaintiff, while it acts independently of him through the medium of its experts, an injured party among the Atayals takes the law in his own hands. He kills the adulterer or murderer, and he takes back by force what has been stolen from him. If he can not obtain his rights alone, he calls upon his clan for help, and he alone, or strengthened by his solidarity with his clan, appears as the only plaintiff and demands compensation. The chief of the tribe does not interfere except in the case of an unreasonable demand, or to help determine the identity of the criminal. The fines never flow into the community coffers, that is, those of the tribe, but always into those of the clan, or they go direct to the injured party, who is under obligation to use them for the benefit of the clan.

22: Wiedfeldt--42 [2] F-5 (1913) 1914 Formosan Aborigines
116, 304, 671, 851 Atayal

The Atayals also possess the most important institutions of civil law. ... The mere fact of birth is a matter of indifference before the law. Only when the child receives a name, that is, when it is about three years old, does it begin to enjoy some consideration before the law. On the other hand, the capacity to carry on business is indicated by the outward sign of tattooing, instead of by age.

It may be shown that the Atayals recognize the existence of such a thing as a corporation from the fact that the clan has property, buys and sells land, that it has definite representation, and that action may be brought against it, as it may bring action against someone else. In spite of this, I do not think that the Atayals see the clan as a special repository of their legal rights. It is more probable that they merely regard the head of the clan as the member who has to take care of the joint liabilities of the families in the clan together with them and as their authorized agent. Taking the law into one's own hands is not limited to cases of self-defence. For example, if an adopted child runs away, and the adoption money is not returned, the head of the family can take another child from this family or clan without further ado. [43] Other legal principles, such as fixing a term, or full power of attorney, are also known.

22: Wiedfeldt--43 F-5 (1913) 1914 Formosan Aborigines
116, 675 Atayal

From the legal principle of indebtedness, the Atayals derive the basic concept of the bilateral agreement, or contract, which applies to purchase as a matter of give and take, both to the purchase of a wife or a child, and to the purchase of land between clans, and, more recently, also to the purchase of cattle. If a person who has been bought leaves the purchaser, he must be given back, or the sum paid must be returned. All other kinds of contracts, such as rent, lease, borrowing, loans, and contracts for service and labor are unheard of... The reimbursement of the hamengoppu [MC: old women] for tattooing is more in the nature of a gift than of a money-payment according to contract.

22: Wiedfeldt--43 [2] F-5 (1913) 1914 Formosan Aborigines
116, 177.64 Japanese
636.64

The agreements between the tribes and the Japanese officials are in the nature of international law, and have been forced upon the Atayals in the last decade and a half.

22: Wiedfeldt--43 [3] F-5 (1913) 1914 Formosan Aborigines
116, 421 Atayal

In the field of property law among the Atayals, the most important institution, ownership, is clearly present as the complete and exclusive right to dispose of a thing. There is no such right to dispose of persons. The purchaser may neither kill nor mistreat a child he has purchased. Every individual is the absolute owner of his possessions, which even follow him to the grave. The clan is the owner of the arable land. The hunting-grounds are the joint property of several clans. The law is closely adapted to the economic possibilities, for the land is of no value to the individual family after two or three years, but it continues to be of value to the clan. During such time as they keep the land planted, the family enjoys undisputed possession of it. The families do not have even a temporary share in the ownership of the hunting-grounds, which are the common property of several clans. The members of the clans in question, accordingly, have only the right to use the hunting-grounds, without any special duty to be performed in return, unless one considers as such the general duty to defend the members of the clan. If, thus, property, ownership, and usufruct appear to be legal concepts which are common among the Atayals, on the other hand they are completely unacquainted with hypothecary law, mortgages, and taxes on real property.

22: Wiedfeldt--43-44 F-5 (1913) 1914 Formosan Aborigines
116, 421, 581, 584 Atayal

In the field of marriage law... [44] the Atayals clearly recognize the idea of monogamy, which is generally practised. They are acquainted with the idea of betrothal, which they accomplish by means of making a payment on the price of the bride. The betrothal may be dissolved by paying it back. Marriage itself is minutely, one might say, exhaustively regulated as to the terms under which it may be made and unmade. It is not unsuitably connected with the only form of contract that they know of, that of cash purchase. Married couples live, so to speak, with separate property rights, for each one retains the property which he or she has brought to the marriage, and ultimately takes them along to the grave. Anything that is acquired during their married life, such as provisions, belongs to both persons equally, and is left to the survivor.

22: Wiedfeldt--44 F-5 (1913) 1914 Formosan Aborigines
116, 597 Atayal

Among the Atayals, as throughout the whole of the East, the adoption of children is much more frequent than in the West, and is correspondingly governed by many legal usages.

22: Wiedfeldt--44 [2] F-5 (1913) 1914 Formosan Aborigines
116, 428 Atayal

Among the Atayal tribes there is only a rudimentary form of an inheritance law. The surviving spouse inherits, irrespective of children, relatives, or clan, the provisions and whatever property there is in the form of ornaments. Recently, they have also begun to inherit the dog, the hen, and the pig.

22: Wiedfeldt--44 [3] F-5 (1913) 1914 Formosan Aborigines
116, 429, 614, 768 Atayal

The widow is the authorized guardian of the children, and can therefore sell them, or can demand the bride-price for a marriageable daughter. If she is not capable of performing this duty, a neighbor who is a member of the clan, or the head of the clan intervenes. At a glance, this recalls the modern system whereby many municipal authorities may exercise a general guardianship.

Finally, some traces of formal legal procedure may also be detected, although there is no training in the law nor even a special legal profession as such. In cases of civil law, the chief of the tribe is not really the authority who has the deciding word on the legal aspect of the case. He merely collects the evidence, and from the results of this, the decision is clear to everyone, and the deductions to be made are self-evident, for everyone is well acquainted with the legal usages. In criminal law, the chief of the tribe has considerably more power, because the community has a real interest in not permitting a crime, for example, adultery, to go unpunished through the complaisance of the husband. Nor do they wish the murder of a child to go unavenged by the head of a family, because the murderer was a more powerful neighbor, and they are anxious to prevent the irascible victim of a thief from taking the law into his own hands and thus committing a new and unjustifiable crime. As representatives of the community in such cases the two most highly respected [45] men are naturally called to serve. At the same time, if it is necessary, they pass on the possibility of carrying out the sentence. Their jurisdiction is simply and clearly limited according to whether members of the same clan, or members of different clans are involved in the case. Where there is no such spokesman, there is no course of law, so that among the Atayals all of their legal activity has continued to be limited to the individual tribe.

22: Wiedfeldt--45 F-5 (1913) 1914 Formosan Aborigines
116, 692, 695 Atayal

In the Atayal tribes, each of the two legal authorities decides his cases definitely, with no possibility of appeal. There are no lay assessors or boards. The two chiefs act independently, although they themselves are laymen, and live on equal terms with the other members of their tribe. The action is taken by the injured party, or civil plaintiff, and in some cases by his clan. The community only helps him to obtain his legal due, or intervenes, if he refuses to act. Naturally, the proceedings are conducte orally, and are brief. The testimony of eye-witnesses or the skull-hunt serve as evidence.

22: Wiedfeldt--45 [2] F-5 (1913) 1914 Formosan Aborigines
116, 614, 671, 681, 696 Atayal

The execution of the decision arrived at [MC: in criminal cases] is simple. The clan always bows to the decision in the presence of the chief of the tribe; an individual famil or a single individual almost always does so. If necessary, the clan uses force, or debars a disobedient member from the clan. The injured clan always receives the fine which is due it, even though the clan which is obligated to pay can not always get it from the guilty member, which after all does not mean very much in view of the solidarity of the members of the clan. Thus, the Atayals have a well developed system of criminal law, they possess the most important basic institutions of civil law, and they have orderly legal procedure.

22: Wiedfeldt--45-46 F-5 (1913) 1914 Formosan Aborigines
116, 581, 594 Atayal

The economic life of the Atayals is concerned with caring for the existence of the individual. Their legal life concerns itself with the delimitation and regulation of the relations between two peoples or clans. Their social institutions seek to unite several individuals for definite purposes. It is clear from the start that in this difficult field of human organization, Atayal life is less developed in respect to the nature, duties, and composition of these overlapping institutions than it is in the other two. Their most important social institutions is the family, which is founded on the basis of strict monogamy. It has its roots in the economic sphere, and, as we have already shown, it makes possible the economic existence of the Atayal tribes. It [46] extends to the higher social development, provides for the continuation and marriage of the sexes, and is the only thing that preserves and carries on the degree of civilization which they have attained. In contrast to our social conditions, the higher social institutions do not concern themselves with this last task at all, but merely foster tribal tradition and the unity of the tribe and the clans through their festivals, which the family as such does not have anything to do with, purely because of a division of responsibilities.

22: Wiedfeldt--46 F-5 (1913) 1914 Formosan Aborigines
116, 571, 602, 614 Atayal

The next highest social institution [MC: above the family], the clan, is based on the blood relationship of the families, which are thus united into a solid unit. Since each member has the same influence on the direction of the clan, each is exposed to the same dangers, and each derives the same profit from it. Joint responsibility, which is the most rudimentary and most easily developed form of common responsibility is in keeping here, especially since more cultivated types of association with limited or graduated responsibility are unknown. The clan is charged with such economic tasks as exceed the capacity of the individual family. In particular, it owns the property which the member families use and own temporarily... It has other important functions in criminal and civil law, and together with the tribe it facilitates the entire legal side of Atayal life.

22: Wiedfeldt--46 [2] F-5 (1913) 1914 Formosan Aborigines
116, 619, 648 Atayal

The tribe is a political association of the clans which live in a definite territory and are united by similar customs. Accordingly, it has no economic functions. It is responsible for the legal regulations which are beyond the scope of the individual clan. Furthermore, it is charged with certain military and political functions on behalf of its members.

22: Wiedfeldt--46-47 F-5 (1913) 1914 Formosan Aborigines
116, 464, 476, 592 Atayal

Measured by the standards of our present conditions, the Atayals lack the social relationship between employer and labor which has come into being by means of the labor contract, and by means of which the worker places his labor at the disposal of the employer in return for compensation. The Atayals know nothing about bringing outside labor in to help in their own households, nor do they understand the principle of mutual aid between neighbors... They only know how to manage with the labor supplied by the members of their own families and they increase the membership of the family if the need arises. The association of several clans for the purpose of hunting or fishing, and the [47] equal division of the booty among all can not be regarded as the beginning of the social institution of joint production, for there is no integration of labor. It may rather be regarded as a kind of economic union, and considered from this point of view, it would emphasize the difference between the poverty of Atayal life and the great number of economic organizations and unions that characterize our times.

22: Wiedfeldt--47 F-5 (1913) 1914 Formosan Aborigines
116, 64, 619 Atayal

The gap between our conditions and theirs is further emphasized by the fact that the Atayals lack any political organization which is superior to the tribe, in short, any organization resembling a [MC: national]state.

22: Wiedfeldt--47 [2] F-5 (1913) 1914 Formosan Aborigines
116, 594, 614, 622 Atayal

If the family, which is connected among the Atayals by sexual life and propagation, has received its characteristic form because of the economic tasks which it is called upon to perform, the clan is apparently an enlarged family, whose original chief has retained definite legal and economic obligations of a superior nature.

22: Wiedfeldt--47 [3] F-5 (1913) 1914 Formosan Aborigines
116, 174, 619, 643 Atayal

Judging from the name and the powers of the chief, the tribe may have originated from the fact that several clans gathered about a skillful and successful military leader.... [MC: National] states in general have originated by force and conquest under a powerful leader, who then took upon himself the obligation to perform valuable services, such as defence against outside forces and the exercise of justice in domestic life. Such a development by the use of force did not take place among the Atayals.

Every tribe is independent of the other tribes, or is even hostile to them. This attitude was adequate, as long as they did not have any dealings with opponents who were superior to them in strength, as is now the case with the Japanese, and it has naturally given the individual tribe and the chief of the tribe a greater measure of freedom and independence than if a portion of his rights and duties had been transferred to a superior institution. To create social organizations without subjection and on a footing of equal rights seems uncommonly difficult in political life as well as in cooperative labor; even for [48]primitive individuals it seems almost impossible, especially if one considers how much scientific effort and practical work has now been directed at this goal. Even under the pressure of the need to defend themselves against Japanese penetration, the Atayal tribes have not been able to unite. Only individual tribes have been able to unite for minor undertakings, and that not particularly satisfactorily. Nevertheless, some of the chiefs have not spared any effort to bring this about. In the tribes in the interior, the union of the clans in the tribe is so slight, that it is not sufficient to enable them to wage war as a joint effort. In their case, it might even be doubtful whether the social bond between the families by means of their clans in the tribe is so strong that they feel themselves to be members of the same tribe, or whether the tribe is only a union of the clan heads. The tribal feasts which are celebrated in common, the uniform and simple legal procedure of tribal decisions, and the fact that they actually seldom take the liberty to absent themselves from tribal wars, make the first assumption seem more probable,

especially since there is no doubt that this is the situation which prevails among the border tribes.

The natural reason for the existence side by side of two superior social institutions, i. e., the clan and the tribe, is space, together with the functions which naturally are incumbent upon them. The tribe occupies 8 to 10 times as much territory as the clan. It would not be feasible to eliminate one of the two organizations, and to give the remaining one all of its functions. The territory occupied by the tribe would be too large to enable the tribe to handle the economic functions of the clan, and to act as owner of all the land. Also, the solidarity of the members of the clan would be impaired by being spread out over too large an area. Reversing the situation, the territory of the clan would be too small to enable the clan to render military and political service. Even the territory covered by the tribe has now proved to be too small for this purpose. The carrying out of their legal customs and their legal procedure would in both cases meet difficulties which could only be overcome by far-reaching changes in the entire social structure. In the organization of society for political functions, the simultaneous existence of two institutions, one of which is subordinate to the other, one of which is regional and the other local, is a logical and necessary thing, which can not be avoided without impairing or even crippling the entire organism. A social organism springs up, however, as soon as we have several people living together. Not only do [49] controversies arise, which must be settled, but there are matters which demand community cooperation and a superior order.

Since children are not counted, the Atayal family consists of two members, whose activities complement each other and are equally necessary to their existence. Hence the two have, so to speak, equal rights. In spite of this favorable position of the woman, it is the man who is the head of the family. He decides where they are to live; he pays any fines, or the price of a bride for his son; he alone has the right to participate in the activities of the higher social institutions, and he alone is obligated to do so. The deduction drawn by many advocates of women's rights, that equal economic services lead to equal political rights, meets an exception in the forests of Formosa. There is no such thing as an Atayal living alone, for even widowhood is only a transitory state, or was only a transitory state, until the recent wars brought about a shortage of men. Previously, all the Atayals were members of a family, without exception.

Even more than the family needs a head do the populous institutions of the clan and the tribe need a head to direct them and act for them, for a large number of persons can only act through a representative. In addition, they also need, since they include many people, a body which will express and put into effect the will of the community. Since the dekan [MC: hunting association composed of several clans] lacks both bodies, it is not a social organism, but only a start in that direction. In the clan, this inclusive assembly consists of the heads of all the families, and the bachelors who have been tattooed. In the tribe, it consists of the clan heads and the honorary chiefs. The modern method of selecting the most suitable persons to represent the rest of the population by some kind of electoral procedure is unknown to the Atayals, even in the tribe, where it would be possible. Just as the head of the family represents the family in the clan, [50] so the hereditary heads of the clans are the natural representatives of the members of their clans in the tribal assembly. All the representatives to the assemblies have equal rights. Anyone who is absent is not counted, not even as a negative vote... This would be unnecessary anyway, for among the Atayals, everyone appears. The full assemblies have the authority to make decisions, and they pass on all matters of a general nature. The will of the totality is recognized by the mechanical means of a simple majority. If there is a tie between two opinions, the chief has the decisive voice.

If a resolution is passed, the chief is empowered and obligated to put it into effect, for example, a clan head may be authorized to buy a certain piece of land at a set price,

or a tribal chief may be authorized to carry on negotiations with the Japanese concerning the changes in the Aiyu line. The not unfamiliar contrast between representative and constituent has been rendered impossible among the Atayals by restricting the representative to limited powers. The clan assembly can hold the hereditary head of the clan responsible for voting as it desires in the tribal assembly, for as a rule the clan assembly precedes, and it does so. The corporate body does not relinquish its exclusive right to make decisions even under unfavorable circumstances.

22: Wiedfeldt--50-51 F-5 (1913) 1914 Formosan Aborigines
116, 622, 643, 648 Atayal

After an unsuccessful [MC: diplomatic] battle against the Japanese, the chief of the tribe was forced to break off the negotiations, as soon as circumstances arose which had not been foreseen when his powers were conferred upon him, and had to go back and question his tribal assembly anew, to the annoyance of the Japanese. In view of the fact that they are closely bound to observe the decisions of the full assembly, neither the head of the clan nor the chief of the tribe in particular becomes a real leader and authority, for example, in the protection of foreign envoys. They would not be able to develop any initiative if their position were not assured of a certain independence from another source. They are not chosen by election, and hence they are free from any influence from the side of the assembly or the members of the tribe. Both have inherited their positions as representatives from their forebears, chiefly from their fathers, who selected the most suitable successor on the basis of their long experience and their judgment, without any help from the body corporate. Just [51] as they enter upon their office at the death or retirement of their predecessor, without any particular ceremony, so the termination of their careers as representatives depends entirely on their own wishes. The chief of a tribe retires from his somewhat honorary position when he thinks that he can no longer perform important functions. . .

22: Wiedfeldt--51 F-5 (1913) 1914 Formosan Aborigines
116, 224, 262, 721 Atayal

If several of the men of a tribe are working together in the assembly, or in the hunt, or in a war, they are absent from their huts for days. In the first case, they are fed on the results of the community fishing expedition, and in the second, on the results of the hunt. In the third case, each man brings with him a supply of millet for several days. This is prepared by the women who live nearby. When the millet was consumed, the war was also at an end, as long as they were dealing with other "savages". In the long drawn-out campaigns waged by the Japanese, they had to suspend operations after a few days, in order to procure new food.

22: Wiedfeldt--52 F-5 (1913) 1914 Formosan Aborigines
116, 476, 614, 619, 622 Atayal

Although a lack of supplies and transportation seriously cripples the power of the Atayals to act, to act, they have not yet been able to rise to performing any services for the body corporate. [MC: i. e. the tribe] They have only their own persons and their own strength to offer... It is different in the case of the clan. Here the members of the clan join in raising the fines and the purchase prices. One might see in this custom the germ of a tax system. If one were to examine the conditions more closely, one might also discover other basic principles of taxation, such as the consideration of the capacity of the individual to pay, or the imposition of a heavier quota on those who are particularly concerned. The head of a clan who keeps the fines that are paid in may also be regarded as a kind of treasurer. One may see how difficult it is to organize a large number of people to united and permanent activity from the fact that economic means can be levied for the clan, with its social and economic functions which are easy to see, but it is not possible to do this for the tribe even in an emergency. One can see how this difficulty increases with the size of the superior body.

22: Wiedfeldt--52[2] F-5 (1913) 1914 Formosan Aborigines
116, 622, 623, 643, 646 Atayal

The Atayals possess, in addition to the family, two higher grades of social organizations [MC: ie. the clan and the tribe] with a clearly defined and suitable distribution of functions to both institutions. Each one of them has the two indispensable spokesmen: the assembly of the whole and the head, between whom the powers have up to now been adequately divided.

24: Anonymous--91 U-3 (no date) 1892 Formosan Aborigines
116, 551, 601, 769, 805

The aborigines of Formosa are very different from the Chinese. They have no family names and no calandar or units of time like ours. The aborigines recognize no other degree of relationship except that of parents, they do not offer sacrifices to their ancestors, and they are not even able to tell their own age.

24: Anonymous--91 [2] U-3 (no date) 1892 Formosan Aborigines
116, 291, 481

Both men and women go barefoot, but they do cover themselves with garments. They wear a short shirt (tuan-shan) and a loincloth made of wool (fu-pu). The women wrap grey cotton cloth around the calves of their legs and usually wear flowers in their hair. Boys and girls of fourteen or fifteen years usually tie a belt of plaited rattan around their loins, so that they learn to run with incredible speed and even outrun horses.

24: Anonymous--91 [3] U-3 (no date) 1892 Formosan Aborigines
116, 301, 302, 304, 554

When their hair has reached full growth, they cut off half of it and tie it with a string. They blacken their teeth with green herbs. They pierce their ears, and the opening is so large that they can insert a wooden ring (mu-huan) through it; a piece of ivory is suspended from the ring. Most of them are tatooed on the arms and back, those who like to boast of their deeds even cover their entire body with signs, using the Dutch alphabet. They wear bracelets of cast bronze (chuo) or iron, and they may wear as many as a dozen pairs of these. They try to impress others with a feather headdress which hangs down to their shoulders (niao-ch'-ih) or with shell ornaments (kauri-pei) which they wear on their forehead. These ornaments, besides commanding respect, also have an aesthetic value for them.

24: Anonymous--91[5] U-3 (no date) 1892 Formosan Aborigines
116, 462, 833, 837

If there is work to be done in the fields, the woman plows while the man stays at home to take care of the children. If the husband and wife cease to have intercourse, whether there are children or not, they live in promiscuity. During the warm season, one may see men and women having intercourse in the nude publicly, but adults avoid being seen by the younger people.

24: Anonymous--91 [4] U-3 (no date) 1892 Formosan Aborigines
116, 583, 591, 842

The natives regard the birth of a daughter as a fortunate event, for a boy will leave the house sooner or later to live with his wife's parents, while the daughter will bring home a son-in-law. When a girl desires to marry she goes into the community house (kung-chich). Her suitor seranades her with a jew's harp (k'-ou-ch'-in), and she comes out of the house to unite with him. If he is agreeable to her, she informs her parents, a drinking bout is held to which the neighbors are invited, and this concludes the ceremony.

24: Anonymous--91 [6] U-3 (no date) 1892 Formosan Aborigines
116, 757, 844

They wash the newborn children with cold water. They have neither doctors nor medicines, when they are sick, they bathe in the river for they believe that the Great Doctor has placed a healing power in the water. They believe that bathing is healthy at all times of the year.

24: Anonymous--91[7] U-3 (no date) 1892 Formosan Aborigines
116, 428, 764

When someone has died, they hang colored rags on the door of his house. All the belongings of the deceased; his tools, dishes, and garments are divided among the members of the family. They keep the body under the bed for three days, then all the neighbors assemble, carry the body outside, and sprinkle earth on it. They do not have coffins, but bury the body deep in the earth. If the family moves to another place they exhume the body and take it with them.

24: Anonymous--91 [8] U-3 (no date) 1892 Formosan Aborigines
116, 342, 351, 356

The houses of the aborigines are built four or five feet above the ground; they are narrow and high, like canoes. They sprinkle and clean the ground around the house constantly so that there is never a speck of dust. Behind the house they usually plant a bamboo hedge so that there is no access to the house during the warm season.

24: Anonymous--91 [9] U-3 (no date) 1892 Formosan Aborigines
116, 251, 262, 354, 415, 513

They have no blankets--when they sleep they cover themselves with their clothing. Nor do they have separate kitchens. Their stove consists of a rack three feet high on which they place a large pan. The members of the household stand around the pan on a stool and scoop out the liquids which are cooked in it, such as a soup made from rice or millet. Their spoons consist of an empty coconut shell. They eat dry rice with their hands. They crush rice in a mortar (ch'uang), preparing no more than is to be consumed at one time. They preserve millet, wheat, and clothing in a container made of a pumpkin shell (hu-lu-hu).

24: Anonymous--91 [10] U-3 (no date) 1892 Formosan Aborigines
116, 273, 574

They are very fond of wine. This is made of rice which they chew and then place in a hollow bamboo cane for a few days so that it will ferment. If they have a visitor they go out of the house and both parties pay their respects to each other. The guest must first taste of the wine and then is led into the house.

24: Anonymous--91-92 U-3 (no date) 1892 Formosan Aborigines
116, 202, 484

For long journeys, they use a cart drawn by cattle. If they come to a steep mountain path they slide down a rope made of rattan. They cross brooks on large rocks which they have placed in them to take the place of bridges. [92] Messengers who carry public notices wear bells attached so that they ring when they are shaken; these messengers run at incredible speeds.

24: Anonymous--92 U-3 (no date) 1892 Formosan Aborigines
116, 221, 411

The spears of the aborigines are more than five feet long. They can hit a target from a distance of a hundred paces without error. Their bows are made of bamboo, the string of hemp; the arrows are long and pointed, but they have no feathers. Those who work in the fields consider the last day of the harvest as the end of the year.

24: Anonymous--92 [2] U-3 (no date) 1892 Formosan Aborigines
116, 101

Far in the interior of the mountains lives a people who resemble monkeys; they are not quite three feet tall, that is four English feet. If they see someone coming they climb to the top of the highest trees. If one tries to catch them they hide behind the leaves and draw their cross-bow, aiming it at the enemy.

24: Anonymous--92 [3] U-3 (no date) 1892 Formosan Aborigines
116, 342, 554, 721

There is another people on this island; they live in caves and thus resemble the ancestors of the Chinese. They love to kill people and they hand to their enemies' skulls, after they have skinned them and adorned them with ornaments of gold, in their dwellings as a sign of their courage.

24: Anonymous--92 [4] U-3 (no date) 1892 Formosan Aborigines
116. 888

Among the members of one tribe it is the custom to hang the father from a tree when he has become very old, and the other members of the tribe may do anything they want with him. They kill him and carry him away and hang up a pig in his place.

24: Anonymous--92 [5] U-3 (no date) 1892 Formosan Aborigines
116, 177, 212, 622, 695

The chiefs of one tribe are divided into the head chief and assistant chiefs. There are five or six of these in a community, depending upon the number of families. Trials in one tribe are held in the community house; minor feud are settled elsewhere. Among the clerks of court, there are some who know the Dutch writing; these are called chiao-ts'ê (registrars), and they count all those who go in or out. They dip a goose feather quill into the ink and they write across the page from left to right, instead of up and down. It is said that in recent times, the aborigines have adopted Chinese customs, and that private teachers are trying to teach the children Chinese literature, customs, and music.

25: Plaut--28 U-4 (no date) 1903 Formosans
116, 175

During the course of her history, Japan had made two attempts to gain a foothold on Formosa before the much praised and highly abused island finally passed into her possession; the first time was in 1614-5, when the Shogun Iyeyasu ordered the Governor of Nagasaki, Murayama Toan to take 3-4,000 men, and to seize Takasago, as the Japanese called Formosa at that period. He succeeded in establishing himself, but a few years later he abandoned his conquered territory as he was not receiving sufficient support from his homeland. The second landing of Japanese troops occurred in 1874. Some shipwrecked Japanese had been murdered by the wild Butangs, and as the Chinese Government refused to make any compensation, General Saigo Tsugumichi was dispatched to Formosa with 3500 men. His forces conquered the savages without much difficulty, and then began to settle in the territory which they had conquered; but they were recalled that same year after China had pledged to pay an indemnity.

25: Plaut--28 [2] U-4 (no date) 1903 Formosans
116, 643, 648, 177.64 Japan
636.64

Finally on the 14th of April 1895, the treaty of Shimonoseki forced China to cede Formosa with all of its islands andthe Pescadores to Japan, and then the Japanese Government began rapidly and energetically to establish order in her new possession. The difficulties were formidable, for the Chinese residents of the island did not look upon the new masters with good grace; then, too, the Japanese were not sure about the best methods of procedure at first, so they were groping and uncertain, and several times they were forced to change their system. That was due to the fact that the local administration was often quite unsuitable for applying the good suggestions of the officials. But finally the administration was organized in an intelligent and permanent fashion, and since 1898 the island has progressed steadily under the energetic and intuitive guidance of the Governor General, Lieutenant General Kodama Gentaro, and the tireless labor of the skilled and discrete Civil Governor Dr. Goto Shimpei.

25: Plaut--28-29 U-4 (no date) 1903 Formosans-1-2
116, 114, 654, 177.65 Japan
636.65

Anyone who knew the conditions [EJ: previous to Japanese occupation] realized that if the new order were to be a permanent one, it would have to be based on the existing circumstances; these circumstances were the culture, customs, laws and habits of the [29] most important and largest element of the population, or the Chinese, and so the first thing to do was to make a thorough study of the old system. A number of capable men were set to this task, and they collected a great deal of material. An imperial decree established a Commission to inquire into the old customs on Formosa, and it was under the direction of Okamatsu Santaro, Professor of Law at Kyoto University. This group was charged to examine the available information and to get some more. That was on the 25th of October 1901. That same year Professor Okamatsu published his first report by order of the Governor General, and in 1902 it appeared in English under the title of: "Provisional Report on Investigations of Laws and Customs in the Island of Formosa compiled by order of the Governor-General of Formosa by Santaro Okamatsu."

The report begins with a brief survey of the history, administration and judicial procedures of the island, then there is a detailed description of the legal status of the lands, their division according to the nature and utilization of the soil, the land tax, inheritance and loss, purchase, sale and lease, as well as of the legal forms relating to these contracts, and there is also a discussion of irrigation and the rights and taxes which it entails. In conclusion he has a brief discussion of the family rights of the Chinese

inhabitant. In an appendix he has added a glossary of the Chinese terms which were used in the work, and then there are 89 "References", or examples of documents in Chinese, as they are used in various legal affairs.

All in all, the report is a valuable contribution not only to our knowledge of Formosa, but to the study of comparative jurisprudence as well.

25; Plaut--29 U-4 — (no date) 1903 Formosans
116, 115, 127

I obtained most of my material about the Chinese population of Formosa from the work of Okamatsu, but I have omitted the question of the properties, as that was given in too great detail. The data on the natives is based first on a report made by two assistants to the Civil Government of Formosa, the scholar Ino Yoshinori and Awano Dennojo; they prepared this for the Civil Governor Goto (Taiwan banjin jijo, Status of the savages on Formosa) January 9 Meiji 32 (1899). Taipei (Taihoku), Meiji 33 (1900) and secondly it is based on the first number of a periodical Banjo-Kenkyu-Kwai-shi that is the periodical of the Society to Investigate the Conditions of the Savages.) Tokyo, Meiji 31, (1898). This society was founded in 1898 to study the island of Formosa and the status of its native inhabitants.

25: Plaut--32 U-4 (no date) 1903 Formosans
116, 206, 496, 654, 177.65 China
636.65

Liu-Ming-Chüan [EJ: the Chinese Viceroy appointed in 1884] was eager to make Formosa more progressive. So he built a railroad from Kelung to the capital T'ai-pei-fu, and from there on to Hsin-chu; he connected the capital T'ai-pei to T'ai-nan and the Pescadores with a telegraph line, and then he made Formosa a part of the world telegraph system by constructing a cable to Futchou. He also established a well-regulated postal system. Industry, including sugar, also received his support. Although Liu-Ming-Chuang's administration was very beneficial for Formosa, he aroused much dissatisfaction by raising the taxes and levying an inland duty, for the previous revenues were not sufficient to defray the costs of his innovations.

25: Plaut--32-33 U-4 (no date) 1903 Formosan Aborigines-1-3
116, 647, 654, 721, 177.65 China
636.65

We should give particular attention to the viceroy's [EJ: i.e., the Chinese Viceroy Liu-Ming-Chuan, appointed in 1884] efforts to enclose the natives' territory. During the course of time the natives who lived in the western plain, the P'ing-pu-fan, Formosan Pe-po-huan "plain savages" and the Shou-fan, Formosan Sek-huan "ripe savages" or half-tamed ones, had been conquered or else they had retired into the inaccessible mountains of the eastern portion of the island, where the Sheng-fan, Formosan Tseng-huan, the most uncivilized tribes have lived in a state of complete independence for a long time. There was a continual battle between the settlers and the mountain savages; the settlers were eager to push their boundaries farther into the native domain, while the natives used every opportunity to attack isolated settlers or unprotected villages, and in this way they got their revenge and secured some more Chinese heads. Prior to the time of Liu-Ming-Chuan, the Governors had not followed any definite plan with regard to the savages, and in general they allowed the settlers to defend themselves as well as they could; the viceroy undertook to find a means of overcoming this handicap and he resolved to civilize the natives. For this purpose he established the "Training and Development Bureau", Fu-k'en-chu, (Japanese Bu-kon-kyoku). He had set himself the enormous task of educating the savages and of making the land arable.

To fulfill this plan, he established three principal bureaus in Ta-ku-kuan, Tung-shi-chiao and Pei-nan [33] and then had twelve branch offices, one in each of the Hsien

cities, I-lan, Yün-lin, Pu-li-she and Lien-hua-chiang, while the twelve others were in Su-ao, A-li, San-chiao-yung, Wu-chi-shan, Shuang-hsi, T'ien-wei, Hsien-ts'ai-weng, Ta-hu, Fang-liao, Nan-hu, Shui-chang-jung, and Hsiu-ku-luan. To attract settlers from the mainland, he set up settler recruiting bureaus in Amoi, Swatow and Hongkong.

The personnel of the bureaus consisted of 1 commisioner, 3 clerks, 5 policemen, 2 interpreters, 1 cook and 1 native maid. Then there was also 1 doctor and 1 barber. All of these employees were well paid: the commissioner, who was the superintendent of the branch office, received 30-80 taels a month, each clerk had 14-25, a policeman had 6-7, the first interpreter 20, the second 14-15, the maid 7, the cook 4-5 taels, and they all received free board. The interpreters had the hardest task, for they had to work with the savages and make them in favor of the Government's projects. The yearly expenditures of a branch office averaged about 6000 taels, and then in addition to that there was the food and equipment for the protecting troops. All of these expenses were defrayed by the revenue from the camphor monopoly.

As the savages are on a low cultural plane, it was necessary to be sparing with proofs of their good intentions, for it would have been an easy matter to have spoiled them. Accordingly interpreters went to them with gifts, and tried to persuade them to surrender; then at the same time the natives saw the protecting troops at frequent intervals, so any idea of insubordination was nipped in the bud. Those who showed their readiness

to collaborate were given rice, grain, meat, salt and vegetables; every month the barber paid them a visit, and at the end of the year they received clothing, oxen, and sows. Many of the natives entered the Chinese service as fire watchers and interpreters, in return for a monthly compensation, and then fathers sent their children to the school which was established for them in front of the south gate of T'ai-pei; there they received instruction in the dialect of the natives as well as in Classical Chinese.

As the viceroy realized that one of the chief means of civilizing wild peoples is to bring them into contact with educated people, he had the troops build an 80 kilometer road from Chang-hua diagonally across the mountain to Shui-wei on the east coast; the result was that many of the inhabitants of the interior and the eastern part of the island surrendered, they adopted the Manchu queue, and began to till the soil.

25: Plaut--33-34 U-4 (no date) 1903 Formosan Aborigines
116, 436, 609, 656, 177.65 China
636.65

The stations of the Training and Development Bureau [EJ: established by the Chinese in 1884 to facilitate the acculturation of the Formosan natives] did not have a conspicuous success. Part of the blame may be laid on the changeable and distrusting nature of the savages, but the greed of the Chinese settlers and officials was the principal cause of the failure. For example, the natives were accustomed to bring their products into the settlements and to exchange them for wares which they [34] used for farming or for decoration. But the Chinese, who were only thinking about the momentary profit and not about the consequences, also sold them weapons. Finally the Government forbade any unrestricted trade with the savages, and it set up a market in each bureau, and said that it was the only place where barter should be permitted. However, the officials, who were entrusted to superintend this, were not reliable. They used their position for personal profit, and they permitted the natives to be cheated. It is not surprising, therefore, that this aroused the old ire among the savages, and that they used every opportunity to gain revenge by beheading some of the Chinese.

25: Plaut--34 U-4 (no date) 1903 Formosan Aborigines
116, 654, 177.65 China
636.65

To be just to Liu-Ming-Chuan's attempts, we must remember that his civilizing activities only lasted for six years, [EJ: Liu-Ming-Chuan was Chinese Viceroy of Formosa from 1884 to 1891] and that is much too short a space of time to remedy some deep-rooted evils. It is true that he made the mistake of going too rapidly, and of trying to do too many things at once. Finally he was no longer able to pay the expenses for his undertakings, in spite of the increased taxes, and in 1891 he resigned his post. His successor was more economical, but he did not have time to accomplish very much, for the days of Chinese rule on Formosa were already numbered.

Administration of justice among the natives.

When peoples live as simply as the mountain natives of Formosa, they obtain practically everything that they need from nature, and so there is no necessity or even a desire to possess more than they need for the present day. Accordingly, there are no quarrels such as those which arise about property and possessions when people live close together and have to struggle to meet their daily needs. If a private disagreement arises about a piece of property, the whole native community is not disturbed, but leaves it to the wronged individual to take care of the matter. Some of the Formosan tribes, such as the Vonum in the central part of the island, say that there is no theft whatsoever, and that it is not a question of stealing to take fruits and vegetables which others have gathered. Other tribes, however, which engage in tilling the soil as well as hunting, have domestic animals and many valuable objects. There are rich and poor citizens, and they know the meaning of property infringements. In all of the tribes, however, there are certain actions which are regarded as an insult against their conception of law and as a disturbance of public order, and so these cannot be tolerated. In conformity with these ideas, some form of controlling and punishing these illegal actions has been devised. According to the prevailing views, the same deed may be judged a light or a severe offence by the different tribes, and the punishment will be a mild or a stringent one.

Administration of justice is always in the hands of the chief.

The chief examines the question, listens to the parties and some witnesses, and gives a verdict. Sometimes he puts his sentence into effect at once, or he may let the victim or his family attend to it. In doubtful cases, when there is no other way to reach a decision, the natives invoke the gods. In other words, the deceased ancestors of the contending parties are invoked to make the decision. There are two ways of obtaining this decision--they are head-hunting and single combat. Head-hunting is organized in this manner: the two opponents, who are frequently accompanied by their friends, go out separately and attack Chinese peasants who are working alone in the field, or they attack unprotected settlements, and then they behead those people whom they can overpower. The group which comes back with one, or several, or with the largest number of heads has won the suit. [40] The duel is fought by the two opponents, or, if one of them is accused of murder, it is between the accused and the accuser, who is usually a relative of the murdered man. They fight until one of them kills the other and cuts off his head. This indicates that the ancestors have given the victor strength to vanquish his opponent, and this demonstrates the innocence or justice of his accusation--the guilty man has received his punishment.

The affair is more serious when the opponents belong to different tribes. The chiefs generally try to reach a peaceful settlement, but they do not always succeed, and then there is no other recourse but to settle the quarrel by battle between the two tribes.

25: Plaut--40 U-4 (no date) 1903 Formosan Aborigines
116, 622, 681, 692

The chief's decision is invoked when there is a murder, in cases of adultery and seduction, theft, calumny, and quarrels. Nearly all of the tribes believe that each act has its price, and that if the guilty man pays this price, he can be exonerated from all blame. In many tribes it is left to the victim to decide whether he will accept the money, or whether he prefers the revenge.

25: Plaut --40 [2] U-4 (no date) 1903 Formosan Aborigines
116, 571, 682, 721

Murder and homicide. Among the natives of the Palisha district, the punishment for murder is exile. But life outside the clan society is a miserable existence, and the banished man's most ardent desire is to be allowed to return home. Head-hunting offers him an opportunity to win this permission. If he succeeds in capturing a Chinese head, he sends it to the tribe as a sign of victory, and then some time later he may return home without being in danger.

25: Plaut--40 [3] U-4 (no date) 1903 Formosan Aborigines
116. 682 Tsou

The Tsoo natives give the murderer to the family of the victim, and then they exact vengeance or take money compensation as they see fit. If the murderer is an opponent with whom the members of the family do not dare to deal, the men of the tribe are summoned to support them. At the close of the expiatory proceedings there is a general feast in the honor of the victim.

25: Plaut--40 [4] U-4 (no date) 1903 Formosan Aborigines
116, 622, 682, 692 Paiwan

The chief of the Paiwan convokes a tribunal of selected members of the tribe for the abjudication of capital crimes; the murderer is always permitted to pay a ransom, and its amount varies according to whether the perpetrator can show a "just cause" for his deed or not.

25: Plaut--40 [5] U-4 (no date) 1903 Formosan Aborigines
116, 682 Amis

Among the Amis and the Puyuma the murderer has to surrender all of his goods and chattels to the family of his victim. Revenge is not permitted and it is treated like ordinary homicide.

25: Plaut--40-41 U-4 (no date) 1903 Formosan Aborigines
116, 682

All of the tribes believe that homicide caused by negligence is the act of destiny, that the murderer has simply served as a blind tool [41] and, accordingly, that it would be unjust to punish him or to pursue him with hate.

25: Plaut--41 U-4 (no date) 1903 Formosan Aborigines
116. 684, 837 Amis

Adultery and seduction. Adultery and seduction are judged in as many different ways as murder. Among the Amis and the Puyuma the usual punishment for adultery is execution; but the adulterer can ransom himself by paying a sum to the offended husband, provided the latter agrees to this.

25: Plaut--41 [2] U-4 (no date) 1903 Formosan Aborigines
116, 436, 684, 837 Atayal

The Atayal in the central part of Formosa punish the guilty wife and her lover by killing them at once. The seducer of a girl is also slain unless the girl's parents agree to accept ransom. The Atayal, who live farther north, make the adulterer give the injured husband between five and ten shell strings (the current money) or a weapon or other objects as compensation.

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25: Plaut--41 [3] U-4 (no date) 1903 Formosan Aborigines
116, 684, 837 Tsou

The Tsoo require that the culprit give all of his personal property to the husband. If the adulterer is so poor that his possessions cannot be regarded as sufficient to constitute a ransom, the chief occasionally makes the payment for him, takes him as his servant and lets him work out the remainder. The wife's punishment is more severe. As her shame affects not only her husband, but her parents and brothers as well in an even greater degree, all take part in punishing her. After she has been bound and laid on the floor, each one comes up and whips the pubic region with rods. Then a vessel full of red pepper juice is brought, and each one in turn pours some of the biting sap into her vagina and spits in her face. After all of this they advise her to live a better life in the future, and finally she is given back to her husband.

25: Plaut--41 [4] U-4 (no date) 1903 Formosan Aborigines
116, 684, 837 Paiwan

Among the Paiwan all of the goods and chattels of the adulterer are given to the insulted husband; the woman is repudiated, and sent back to her parents or to her brothers. The seducer is seized by the members of the girl's family, taken to her house and forced to pay a fine which is commensurate with the position of the family in the tribe, and then he has to marry the girl.

25: Plaut--41 [5] U-4 (no date) 1903 Formosan Aborigines
116, 627, 674, 685

Theft is unknown among some of the tribes. Among others it is very rare, and it is usually handled in such a way that the thief is required to restore the stolen property, or its equivalent, and to pay an additional fine.

25: Plaut--41-42 U-4 (no date) 1903 Formosan Aborigines
116, 224, 423, 578, 628

Settlement of quarrels. Quarrels naturally arise from many sources, the most frequent being hunting, slander and, among bachelors, love. Each tribe has its hunting territory, which it has possessed for a long time, and it has definite boundaries which members of other tribes are not permitted to cross. If anyone is found hunting in a preserve where he has no right to be, he has to pay a fine [42] to the offended tribe. If his statement contradicts that of his accuser, his own chief forces him to fight a duel with the other man in order to avoid a general quarrel.

25: Plaut--42 U-4 (no date) 1903 Formosan Aborigines
116, 578, 582, 627

If a person has made some slanderous remark, he is forced to retract it and to ask for pardon. If he refuses to do that, he has to pay a fine to the insulted party.

If two men love the same girl and neither one is willing to give her up, there is usually no solution but for them to fight until one dies, and the other one has the bride.

25: Plaut--42 [2] U-4 (no date) 1903 Formosan Aborigines
116, 426, 685, 696 Paiwan

Since the Paiwan till the soil, they occasionally have quarrels about the ownership of a piece of property. The matter is usually arranged in this way. A wants to borrow a sum of money from B and he lets him work a field as security and as a return for his kindness. After one or two years he wants to pay back the loan, but B prefers to keep the field and claims that the business about the loan was purely an oral agreement, and that A owes him a much larger amount, or else he says that he has sold the field and that the alleged loan was the purchase price which he paid. The affair is taken to the chief. He summons both parties, examines the case, realizes that A's claim is a just one, and commands B to restore the field. In case B refuses, the chief takes the sum of money from A, goes to B's house with two men, hands him the money, and forces him to surrender the field. Then B also has to replace all the gifts which A has given to the chief and his companions for their trouble, or else he has to defray the expenses for the feast which A has as a thank offering. If the chief is unable to decide which man is right, he confiscates the field and declares that it is the common property of the tribe. This procedure is called Kuikon, a word which is probably borrowed from the vocabulary of the Chinese settlers, and which is derived from Kwi-kung, meaning "to fall back to the public", that is to the state.

25: Plaut--58-59 U-4 (no date) 1903 Formosan Aborigines
116, 551, 562, 594, 611

The family relationships among the savage tribes of Formosa present some striking variations. We do not have enough tradition to tell how these originated, but everything indicates that the form of the family today does not represent either the beginning or the end of its development. And as nature and humanity never develop along all lines simultaneously... there are many things in the family life of the natives which have come from earlier times, and which seem like an anachronism now. For example, all of the tribes are strictly monogamous on the basis of perfect equality between the sexes; yet along with that some of them have matrilineal succession from the time of the mother right, and in spite of that they consider that the husband's relatives are blood relatives. We also find that the same tribe is founded on the male line, and yet [59] the mother is the only one who has the right to name the children.

25: Plaut--59 U-4 (no date) 1903 Formosan Aborigines
116, 428, 591, 594, 601, 611

The family has two forms, depending upon whether it is continued in the woman's tribe or in the man's. Among the Puyuma and the Amis it is based entirely on female descendants. Here the oldest daughter is always the heiress of the house, the other daughters receive a share of the property but the sons do not have the right to inherit anything. They are obliged to leave the house and to marry into another....The Tsarisen, on the other hand, only consider the sons as members of the family, but they frequently marry into the woman's house, too. The same thing is true of the Peipo. In one part of the tribe it is customary for the husband to enter his wife's family. Today the Atayal only recognize the man's tribe, but the fact that they only have one word (yaki) to denote the terms ancestor and grandmother, seems to indicate that in former times they observed matrilineal succession too, and they have the custom that the mother is the only one entitled to name the newborn child.

In other tribes it is impossible to determine whether women ever played a similar role or not. Among the Tsoo, for example, the oldest son succeeds his father as master of the house, and the younger ones do not marry into other houses but found separate establishments with a part of their inheritance. The same thing is true among the Bonum. In the Spayowan tribe, the male line seems to have been the dominant one for centuries, for there is just one word, wonu, to designate the grandfather and the grandson.

25: Plaut--59 [2] U-4 (no date) 1903 Formosan Aborigines
116, 601

In spite of the variation in the forms of the family, and sometimes in contradiction to it, all of the tribes today have the same interpretation for the term blood relationship. These three classes are considered blood relatives, without regard for the direct or collateral lines:

1. class: self.
2. class: a) direct line: father and mother; your own children;
   b) collateral line: siblings of the father and mother; your own siblings.
3. class a) direct line: grandparents on the paternal and maternal side; your own grandchildren.
   b) collateral line: children of the siblings of the father and mother; children of your own siblings."

25: Plaut--59 [3] U-4 (no date) 1903 Formosan Aborigines
116, 582, 602, 736, 765

Blood relationship operates as follows:

1. Members of the three classes are not allowed to marry one another;
2. needy members of the three classes, that is widows and orphans, must be fed by the other members;
3. among the Tsarisen, Spayowan and Puyuma, the members of the three classes have to mourn the death of any one of their group."

25: Plaut--60 U-4 (no date) 1903 Formosan Aborigines
116, 304, 885

...Among all the tribes on Formosa we find that there is a distinction between the youth and the adult, at least among the men. As savages usually do not reckon their age, we cannot say that a man reaches the majority in a certain year, but it is usually when he is between sixteen and twenty. All the tribes have some external mark to denote that he is now one of the "men", but the Atayal make it depend upon the capture of a Chinese head in addition. Distinguishing marks of adults are:

among the Atayal: tattooing of the face and a gap in the row of incisors;
among the Vonum and Tsoo: a gap in the row of the incisors;
among the Tsarisen: tying up the hair of the head (children let it hang) and tattooing of the lower leg;
among the Spayowan: tattooing the upper part of the body (as one wishes);
among the Puyuma: tattooing the breast and the lower leg (as one wishes).

When a man is classed as an adult, he has certain rights:

1. the right to take part in the tribal councils;
2. the right to marry;
3. among the Tsarisen, Spayowan, Puyuma and Amis he also has the right to chew betel.

25: Plaut--60 [2] U-4 (no date) 1903 Formosan Aborigines
116, 582, 586, 589, 593

Usually young people marry at a very early age. The parents never force their children to marry but allow them to follow their own inclinations in the matter. Certain marriage formalities are observed among all the tribes. We have already stated that marriage is monogamous, that both husband and wife enjoy equal rights, and that blood relations are not permitted to marry. All witnesses agree that the husband and wife are devoted to each other, and that the wife is never regarded as a slave or beast of burden... Accordingly divorces are the exception, and adultery seldom occurs. Curiously enough, the Tsarisen consider that failure to have children is cause for divorce. Childless widows are allowed to marry again, but if a widow has a child, she cannot marry.

25: Plaut--60-61 U-4 (no date) 1903 Formosan Aborigines
116, 273, 585, 721 Atayal

There are a good many different marriage customs. The Atayal celebrate the wedding in the bride's house, and then the guests accompany the couple to the husband's home. The western Atayal have no ceremony other than the drinking feast; the eastern Atayal, on the other hand, have the curious custom of erecting in the open a scaffolding about twenty feet high; [61] the newly weds have to sleep on this platform the first five nights after the marriage.

Occasionally two young men woo the same girl. Then there is a race between them; they go out on a head hunting expedition, and the first one who returns home with his booty gets the bride.

25: Plaut--61 U-4 (no date) 1903 Formosan Aborigines
116, 273, 583, 787

The Vonum still observe the practice of kidnapping the bride. The young man goes to her house with a large group of his friends, he has a mock war with her relatives, then seizes her and carries her off to his house. After she has lived with him for several days, the relatives on both sides gather and celebrate the wedding with drinking and singing. During the feast the so-called Shui-sha-lien-hua-Vonum stage a mock battle, and it is considered a lucky omen for the marriage if blood flows. The Vonum also have exchange marriage, for a young man may wed the sister of his friend, and give him his own sister as a wife.

25: Plaut--61 [2] U-4 (no date) 1903 Formosan Aborigines
116, 273, 583 Tsou

Among the Tsoo a young man carves a hair pin of stag antlers, and then sends it to the girl he is courting. If she accepts the gift, she is engaged. The marriage consists in a kidnapping, which the groom accomplishes with the aid of his friends. Custom decrees that after the girl has spent one night with the groom, she must slip away and return to her parents; then after three days he comes in a ceremonious fashion to get her. The end of the festival is a drinking party.

25; Plaut--61 [3] U-4 (no date) 1903 Formosan Aborigines
116, 583, 586, 591 Tsalisen

The Tsarisen have a match-maker. If a young man decides that he wants to marry, he gets the consent of his parents and then arranges with a match-maker to woo the girl. If her parents agree to the wedding, the two families exchange a gift of wine, and that amounts to the conclusion of the contract. The marriage takes place about a month later, and at that time the young couple has to drink wine together. The wife lives in the house of her parents until her first child is born, and then she moves to her husband's home. If there is no child after a year and a day, the husband stays away from the home of his parents-in-law, and that amounts to a divorce.

25: Plaut--61 [4] U-4 (no date) 1903 Formosan Aborigines
116, 583, 591

When a young man of the Spayowan tribe wants to marry a girl, he carries a bundle of kindling and a vessel full of water in front of her house. If the family takes them inside the dwelling, it means that they look with favor upon the match. The youth moves to their house, helps them with the work for a year and then he can take the girl home and celebrate the wedding. At this time he has to give a present to the girl's relatives, and it consists of wine and betel nuts.

25: Plaut--61 [5] U-4 (no date) 1903 Formosan Aborigines
116, 583 Puyuma

In the Puyuma tribe the young man carries a bundle of kindling to the home of his future wife when he is wooing her.

25: Plaut--62 U-4 (no date) 1903 Formosan Aborigines
116, 583 Amis

The Amis act in a more ceremonious fashion. The suitor makes 20 bundles of faggots between 6 and 7 feet long out of the twigs of a bush, which is called Wahass. He carries four of them to the bride's house on the first day, and one a day from then on; then the wedding is held.

25: Plaut-- 62 [2] U-4 (no date) 1903 Formosan Aborigines
116, 177, 583, 836 Pepo-hoan

In recent times the Peipo seem to have adopted the custom of marriage for the groom has to give the parents-in-law a certain price for their daughter; this may be an imitation of the Chinese custom. One branch of the Peipo, the Tatso, have the custom of giving their daughters a hut of their own when they are of marriageable age; the girls may receive their lovers here.

26: Honda--469 N-3 (1896) 1897 Formosans
116, 133

Mt. Morrison is not only the highest mountain peak of the island of Formosa but of all of eastern Asia. It was first mentioned by an English Captain at the end of the last century and bears his name. But hitherto no one has climbed it since it is located in the midst of the mountain region inhabited exclusively by natives who often show themselves rather hostile. The absence of roads and villages is another factor weighing heavily against such an attempt. In clear weather the white peak of the mountain is visible from the town of Taiwan and the mountain serves seamen as a landmark over great distances. It is located at Lat. 23.5° North.

26: Honda--469 [2] N-3 (1896) 1897 Formosans-1-2
116, 122, 137

... I felt an urge to explore the hitherto unknown mountainous part of the island of Formosa. In the fall of last year the Imperial Government finally asked me to make a study of the forestry of that region. I departed at the beginning of October, 1896, and after seven days I landed in Kelung, the northernmost port of the island; we had briefly stopped at the Liukiu Islands in the course of our voyage. Together with four companions I set out on my march through the western slopes of the almost central mountain chain; we were headed south. Beautiful evergreen woods - ficus and palm trees, camphor trees, bamboos, fig trees, pineapple, banana trees and cinnamon trees - covered the western spurs of the mountains where several Chinese villages are still found. Towards the east, however, in the direction of the mountain ridge the population is exclusively native. As the elevation increases, the vegetation changes. The tropical appearance is lost and Crypto-meriae, pine-trees, and firs are reminiscent of the temperate zone. Fortunately the Chinese have not yet deeply penetrated into the mountain regions, for they certainly do not know any such thing as consideration of the forest. Wherever they go war is made on the forest with fire. The Chinese inhabit bare plains where nothing but bamboo groves are visible; they are planted close to the dwellings. Incalculable damage has already been done by barbaric devastation. After a journey of ten days we arrived in Ling-ki-ho, a place inhabited by Chinese where I encountered the last Japanese guards. From here on to Mt. Morrison there are no Chinese settlements. I

was unable to find horses anywhere although I needed them badly, nor were mules or donkeys available.

26: Honda--469-470 N-3 (1896) 1897 Formosans
116, 491, 499, 177.49 Japan
636.49

The roads on the whole island are nothing more than narrow paths extending irregularly with corners and curves through fields. Bridges are as good as non-existent. For that reason we had to cover the entire distance to Mount Morrison on foot. [470] When the Japanese started building wide roads, the Chinese farmers were not particularly pleased and expressed the opinion that it was rather wasteful to build wide roads at the cost of useful fields; they felt that narrow paths were perfectly sufficient for pedestrians. Thus it is easy to imagine what difficulties of transportation the Japanese militia encountered when it was sent out to subdue the rebels.

The actual ascent of Mount Morrison started from the village of Ling-ki-ho. It is surrounded by bare hills between which spread fields of rice and sweet potatoes. The little town has a population of about a thousand who initially showed themselves very hostile towards the Japanese; the ranks of the rebels included people engaged in the camphor trade. We had an extremely hard time finding porters in Ling-ki-ho and were completely unsuccessful in our search for guides. We had finally managed to engage twenty men who, when they learnt of our destination, promptly deserted us to the last man for fear of the aborigines, among whom individuals can distinguish themselves by capturing the heads of several Chinese. A youth of their group can think of marriage only after he has proved his courage by such an achievement. Once more twenty porters were hired; they were locked up overnight, examined by the doctor who eliminated four of them, and the next morning a load of about 24 kilograms was tied on the back of each one of them in the presence of armed soldiers, so that there was no opportunity for desertion. Our group included two officers with twenty-five men and their equipment and seven Japanese including a newspaper reporter, an interpreter, a doctor, geologist, and a topographer. I was not only supposed to be the leader of the expedition but was also entrusted with the task of studying the forest conditions in detail and of photographing everything of interest. Naturally we were well equipped with all kinds of scientific

26: Honda--470 N-3 (1896) 1897 Formosans-2
116, 122, 361, 482, 609

instruments and tools for clearing our way through the thicket, for building huts against the rain, etc.

26: Honda--470[2] N-3 (1896) 1897 Formosans-1-2
116, 137, 314

On the first day (November 13) we advanced from Ling-ki-ho 24 kilometers toward Mt. Morrison through hilly or cultivated land. On the second day we marched on through grass three meters in height or through bamboo woods which in the valleys were replaced by banana woods. As we climbed higher, we soon reached the evergreen foliaceous woods. In the past they had apparently occupied areas now claimed by bamboos and banana trees. But the leafy woods could not maintain themselves when they were attacked by fire, and thus had to give way to the bamboos. In places where the bamboo forests were frequently subjected to fire, vegetation is limited to the bothersome kaya grass (Imperata arundinacea, Cyr.). In the foliaceous woods most of the trees are fig or camphor trees occupying large areas in many instances and mixed with palm trees and creepers. Here the vegetation is extremely luxuriant. The camphor trees reach a circumference of up to ten meters and a height of 50 meters. Ferns twenty meters high fight their way up between the trees, giant aerial roots hang down, and often we were at a complete loss facing the impenetrable confusion of the thicket. This virgin forest detained us for two days. I noticed that unfortunately many of the huge camphor trees had been hacked at by men in search for camphor and that they had died as a consequence of this treatment. As a result many of the giant trees had fallen or had been blown over by the wind. Only about five percent of a tree had been used for the exploitation of camphor and then thousands of trunks of precious wood had simply been left to rot. Of

course, we immediately tried to stop such devastation and waste by strict regulations, but so far we have not yet the necessary personnel to create order in these dangerous parts of the country. In many cases the dead giants of the forest necessitated detours and we lost much time. We spent the second night in a lonely hut that must have been erected by camphor collectors.

26: Honda--470-471 N-3 (1896) 1897 Formosan Aborigines
116, 162, 576, 609 Bunun

On the third day [EJ: of the journey toward Mt. Morrison] we came upon the first settlement of the aborigines. The village comprised thirteen huts, inhabited by about 150 persons. It was called Namaka-ban. Shortly before we reached this village I had sent our armed soldiers back [471] with the thought that they would do more harm than good. My interpreter, a Chinese who had had frequent contact with the aborigines and had delivered salt to them, was very emphatic in his statement that the arrival of armed men would immediately start hostilities. As we approached the village, we saw the chief with about 30 of his men armed with rifles, spears, and bows and arrows; they had taken up their positions on a hill. Bur before we ourselves reached the village, I sent my interpreter to inform the inhabitants of our peaceful intentions. I went to meet the natives without any visible weapons and only with a gun in my pocket; whereupon the chief knelt down and folded his hands over his head as a greeting. I followed him into the village where I presented him with various gifts.

26: Honda--471 N-3 (1896) 1897 Formosan Aborigines
116, 291, 301 Bunun

The women wore some clothes, whereas the men were completely nude except for a loose loin-cloth. Some of them wore deer skins on their backs; this was true particularly of the chiefs. Necklaces and bracelets of shell or berries are worn by both men and women. My attention was attracted especially by the tight belly bands worn by both the young and old and made from fibers of the Calamus Rotang. I was told that their main purpose is to prevent excessive consumption of food.

26: Honda--471[2] N-3 (1896) 1897 Formosan Aborigines
116, 342, 411, 883 Bunun

In the village of Namaka I observed one extraordinarily large house occupying an area of about 140 square meters. It was the community sleeping-house for all unmarried men. The interior has a floor of bamboos. A fireplace is found in the center. There are no partition walls to mark off rooms. The house is open on two sides and on the remaining two the roof slopes down quite low and provides some protection against bad weather. As many as 85 skulls, all of the Chinese, were suspended from the ceiling. All of the men of the village were armed with daggers approximately 40 centimeters long.

26: Honda--471 [3] N-3 (1896) 1897 Formosan Aborigines
116, 579, 622 Bunun

Every village is headed by a chief who is completely independent. Frequently neighborin villages are hostile towards each other.

26: Honda--471 [4] N-3 (1896) 1897 Formosan Aborigines
116, 304, 535, 837 Bunun

A strange custom is the removal of the eye-teeth when the children are about five years old. Some of the people displayed tatooing on their hands and faces. The chief ordered the performance of a dance in my honor; ten or more women held hands and formed a large circle, swayed to and fro, and beat the rhythm with their feet as a monotonous song was heard. Men formed in a circle and engaged in the same movements. Marital faithfulness is very strictly maintained; even the chiefs have no more than one wife and are loyal to her.

26: Honda--471 [5] N-3 (1896) 1897 Formosan Aborigines
116, 173 Bunun

A tradition among them says that they are brothers of the Japanese, but that the Chinese have driven away these brothers. For that reason the victory of the Japanese was considered also as their victory over the Chinese.

The next day we marched for five hours through grassland at an altitude of about 2700 meters to the village of Ho-Sha, which has a population of about 300 persons. On the way we passed a hanging bridge of Calamus Rotang which spans the Tinalankei River in a spot where it is about 30 meters wide. In the village of Ho-Sha we were received as on the previous day and once more I had to spend the night in the community building surrounded by smells.

On the following day [EJ: of the journey toward Mt. Morrison] we marched for six hours to the village of Tom-bū. Our route was along a stream with steep banks; there were no paths or bridges and at times the water reached up to our stomachs. Tom-bū was the last human settlement. Here we had to pick up new provisions. We were able to get some chickens, sweet potatoes, and millet. We left behind a number of porters and all luggage that was not absolutely essential. With four aborigines, who knew the entire region well, we started the actual ascent of Mt. Morrison. After three hours and at an altitude of 5500 feet we found a hot spring on the bank of the river; the temperature of the water was 70° centigrade. Some similar hot springs gushed forth in the stream itself.

Up to this point large evergreen foliaceous woods prevail. But wherever the natives have burnt down the high grass the vegetation is limited to cork trees (Quercus variabilis Bl.), which indeed occupy large areas. [472] From here on we encountered coniferous woods; at an elevation of 6000 feet, they comprised giant Chamacypariae and Crypto-meriae, their trunks having a diameter from six to ten feet. At 7000 feet we reached the zone of splendid fir trees; some of the species had hitherto been unknown to me. The preceding two days of our march had been very strenuous because most of the time we had to wade through the water of a brook flowing between steep banks.

In the morning of the eighth day after a difficult ascent over barren slopes we reached

a grassy area at an altitude of 9500 feet; it sloped slightly to the south, measured several English square miles and constituted a watershed. The peak of Mt. Morrison rose before us in all its majesty. We made a big fire and spent the cool evening in a little valley. At 2 a.m., when the temperature was down to -3° centigrade, we started the final ascent. First we advanced on the north through Tsuga woods and then on the less steep south side with its pine forests; at times we were crossing grassy areas and finally moved along the high ridge itself; this ridge is crowned by several peaks and is covered with sharp rock fragments of argillaceous schists. We reached the summit at eleven o'clock; the cloudless sky allowed us the most splendid view over almost all of Formosa. Far in the east beyond numerous mountain peaks the ocean was visible. And once more the ocean appeared in the west at an even greater distance. We could see the villages of Taiwanfu in the west, and Tainan, Anping, and Takao in the south.

We took some photographs and finished our scientific observations when fog and strong winds forced us to start back. It was dark when we reached our base where we had left behind our luggage, the porters and our companions who had come down with fevers.

We did not have time to hunt deer or wild boars.... Some rain had fallen in the evening, and the water froze during the night so that we suffered a good deal as we were sleeping outside. The next morning all the Japanese had fevers; my temperature was up to 41.5°

centigrade and one of our native guides carried me on his back during the following three days. For this service I rewarded him with an old pair of pants since he had no use whatsoever for money.

26: Honda--472-473 N-3 (1896) 1897 Formosans-1-3
116, 133, 137, 314

I wish to stress the following points of our scientific observations:

1. The common notion that Mt. Morrison is of volcanic origin is erroneous. The main rock materials of the mountain and its environment are argillaceous schists and quartzite. The beds of the former strike with a dip of 70° from EN 10° to WS 10°. Therefore the northern slopes are much steeper than the southern slopes, and rock slides are frequent.

2. The height of the peak is not 12830 feet, as had been determined by means of trigonometric measurements from the sea, but our barometric observations showed that the height should be 14350 feet. It is likely that the peak itself, as seen from the ocean, may be hidden by another summit close to it.

3. At noon of November 21, our barometer stood at 453 mm and the thermometer at 4.5° centigrade with a relative humidity of 90%.

4. We did not find snow anywhere, not even in the rock fissures on the mountain. The notion prevalent among the Chinese of Formosa that eternal snow covers the mountain is due to the white quartz which from a great distance may be mistaken for snow.

5. The mountainland of Formosa by no means everywhere [473] consists of impenetrable virgin forest. The southern slopes of the mountains are often covered with extensive grass areas for which, in part, the fires started by the natives to facilitate hunting are responsible. Through the telescope from the peak, we have observed a good

deal of the mountain region, and have found that at the most forty per cent of the area visible from that position was occupied by forests.

6. Up to an altitude of 1700 feet, the lowland of Formosa is claimed by tropical vegetation among which ficus, pandanus, palm trees, and pineapple are predominant. From here to an elevation of 6000 feet above sea-level, we find sub-tropical evergreen foliaceous woods; camphor trees occur up to 6500 feet and the same is true of evergreen oak trees. At 6000 feet the region of coniferous trees begins; the species found are at first Cryptomeriae and Chamaesyparis then followed at 7000-8500 feet by firs (variety of Picea Glehni), and Tsuga diversifolia Maxim. at 8500-10,500 feet. Finally from 10,500 feet to the peak of Mt. Morrison, we find pine trees and juniperus and principally Abies Mariesti.

7. The abundance of water in the mountain lakes makes it possible to follow the watercourses into the region of the fir trees and the wood may be transported down the streams.

8. The exploitation of camphor on Formosa is still at a very primitive stage. If the methods of Kiushiu were employed production could easily be doubled.

9. The aborigines are by no means hunters. Only the chiefs and a few of their subjects go hunting. The main occupation of the people is agriculture. In particular,

sweet potatoes and millet are important products. In addition tobacco and a variety of pea are grown. The system of agriculture is communistic. Its advantages are that nothing is stolen because nobody is permitted to have private property. Both work and harvest are arranged on a cooperative basis.

10. The men are willing workers and like to use axes, which makes me believe that they would be good forestry workers.

27: Richthofen--964-967 N-4 (no date) 1902 Formosans-1-5
116, 133

The External and Internal Structure of Formosa.

The structure of Formosa has become known in its fundamental aspects. Until a short time ago, the knowledge was confined to limited information from peripheral points, especially from Takao in the southwest and Kilung and Tamsui in the extreme north. More detailed studies were begun by the Japanese after their occupation of the island. But they, too, encountered difficulties in their research due to the [965] hostility of the wild tribes in the mountains of the inland region and the eastern part and therefore detailed information is yet lacking on some points of importance.

The cartographical representation of the inland parts of the island is still quite incomplete. The coastal regions have been charted long ago on the maps of the British Admiralty. Besides, their flat character in the west was known and their steep topography in the east. Furthermore no one who has sailed along the east coast in clear weather has failed to realize the impressiveness of the rugged forms of the coastal line and the mountains visible behind them. Some of the highest peaks of these mountains were determined in their approximate height from the sea; the most important names are Mt. Sylvia and Mt. Morrison. These mountains are part of the mountain chain projected in an easterly direction and following the longitudinal direction of the island; from it lesser mountain ridges slope down to the low-lying west. That is the picture that until a short time ago found its expression on the available maps.

On the whole this picture has been proved correct by the Japanese explorations, as far as they go. But many detailed particulars have become known by a study of the geologic structure.

External Structure: One of the most important discoveries was that of the strange Taito trough, which sharply delimits the continuous massive of the older mountains on the east side along a completely straight line 155 kilometers long and oriented N 20° E. It is important to realize that it belongs to three river systems separated from one another by low passes (approximately 200 meters in height); two of the rivers pour out their waters at the two exits of the trough, whereas the third takes its way through the Taito mountain chain into which it has cut its narrow valley. This Taito chain is projected towards the east; it is 130 kilometers long and no more than 13 kilometers wide and reaches a maximum height of 1550 meters. It dates from the Tertiary Age and rises as a strange formation next to the old ridge. The settlements of Karenko (24° N) and Pinan (22° 45' N) mark the ends of this projected coastal mountain range. [966]

Between the Taito trough and a line west of it at a distance of fifty kilometers or more in some spots, which has approximately the same orientation, there rises the great mountain chain with its high crests which Ischii has called the Taiwan Mountains. The two dominant peaks, the Setsu-san (Mt. Sylvia, 3424 meters) and the Niitaka (Mt. Morrison, 4145 meters), are located on a line that also strikes N 20° E and passes through

the Kantaban peak (height, 3017 meters). Westward there follow Tertiary mountains. Here again, the orientation N 20° E is observed in the mountain range which Yamasaki calls the Kali chain; it does not serve as a watershed, but instead several rivers of the western slope of the Taiwan Mountains flow through it on their way to the coast.

The line of strike, mentioned N 20° E, is a basic feature of the structure of the Taiwan Mountains. This becomes even more obvious if we consider a factor which is always important for the judgment of mountain formations, namely the character of the small headwaters. Yamasaki has shown himself most conscientious in the charting on his map; the streams that have been definitely traced in their courses are carefully differentiated from those that have not been explored in all detail. It is easy to see that the valleys in the mountains, in so far as they adhere to a longitudinal orientation, strike N 15°-20° E; besides, a feature characteristic of the parallel structure may be observed, namely the connection by short transverse streams. This is very clearly shown by the main river of the island, the Dakusui-kei which crosses the connecting line between the two main peaks and takes its origin from headwaters which flow to both sides of this line in longitudinal valleys. A similar arrangement is found also within the Tertiary Mts. projected towards the west.

South of the Setsu-an, then, in the main section of the mountains, the orographical elements reveal the existence of a parallel structure. The total setup of the mountains, however, deviates, for the main watershed that connects the two principal peaks does

not follow the mentioned direction of strike, but extends in a slight arc, concave towards the west. This eastern regression, which in part obscures the parallel arrangement should probably be explained by the greater amount of precipitation on the west side. For at the time of the summer monsoon, southerly winds prevail whereas in the winter they are northerly and northnorth-easterly. It ought to be added [967] that even in case of equal amounts of precipitation on both sides, the more solid rocks of the east side would offer more resistance to the regression of erosion towards the west than the more destructible rocks of the west side would be able to muster in the easterly direction.

The northern part of the island differs from the structure just described. An east to west watershed extends under 24° 30' N from the promontory of Dom-kaku at the eastern coast by way of the Setsu, which it leaves slightly to the south, to the Kali-san. As far as they are known, the rivers of the northern side flow radially in relation to it, and their beds through the mountains which soon decrease very definitely in their elevation. This area is divided into strips, again arranged radially, all through the action of the streams.

In the attempt to construct the orographical main line of Formosa, either the high rib extending from the Setsu eastward to Dom-kaku has been taken as a starting point or the lower rib running northeastward and ending in Cape Santiau (the Sanschō-kaku of the Japanese). To it the cuspate watershed mentioned was added from the Setsu to the

Niitaka; from the latter mountain, the line was continued along the watershed, first S 20° W to the Nantaibu and from there meridionally to the southernmost promontory. Thus the idea of a mountain curve convex towards the west and slightly concave towards the east could develop.

Naturally the character of the divide line cannot be a decisive factor in a consideration of the morphology of the old mountain formations of Formosa because it has definitely been subject to erosive activity.

Internal Structure of the Older Mountains. Japanese geologists have determined definitely that the fundamental formation of the Taiwan Mts. is distinguished in its structure from the outer and later parts. In the east it ends almost abruptly at the straight line of the Taitō valley. If this line is continued beyond the two ends of the valley, it marks the approximate extent of the other parts of the eastern coast. Only in the north are two promontories slightly projected beyond it. Passing over more than two degrees of latitude from Paroye (22° 22') to Soō (24° 36') it marks the sharply defined eastern slope of the older mountains. Observations were made around Soō. The coastal strip with a length of 50 kilometers that extends from there to Schiyō by way of Cape Dom-kaku seems to be completely unexplored. It is renowned for its high and precipitous rocky descents that have an altitude of more than 1000 meters. Otherwise studies have been made of the entire line. [968]

The most valuable clue as to composition is found in a transverse member of the mountains which Ischii has charted between 23° 35' and 23° 48'. It starts at Bassi-schō in the Taitō valley and runs westward across the Bun-sui-rei pass that has an altitude of 3240 meters. But even previously, at an elevation of 3150 meters, the impressive ridge of the eastern side is reached; it stretches in great length and is formed by a thick layer of white crystalline limestone. Ischii started his observations at the foot and noticed a continuous western dip and mighty strata of sericite schists, graphitic-chloritic

chists, and chlorite schist (enumeration from the foot up). He calls this system of ayers "crystalline schists" and puts it in parallel with some of the Archeozoic formations f southern Japan. Then follows the crystalline limestone and, above it, argillaceous chist in which the pass is found. Ischii assumes that these two formations date from he Paleozoic. Others are inclined to think of the limestone as belonging to the Archeoioic and the argillaceous schist as dating from the Paleozoic. No traces of fossils have ver been found. Argillaceous schist prevails completely in the entire western part of he section.

When we consider the mentioned formations of the strike we find that the crystalline chists constitute a continuous zone along the eastern slope of the mountains and strike arallel to it, or N 20° E. Northward they continue as far as the eastern mountains are nown, i. e., as far as Schiyō and southward close to Pinan. But in the latter case a uzzling strip of argillaceous schist with a steep eastern dip (70-80°) is found adjoining. outh of Pinan the only rock formations investigated have been argillaceous schist. 'amasaki crossed several promontories of this type at the east coast.

Ischii claims that the argillaceous schist of the mountain heights describes first an nticline and later on a syncline. Over great distances the mountains are composed of his rock. The high peak of the Niitake (1) is made from it and southward it is known as

1. In 1896 Lieutenant Saitō and Dr. Honda climbed this mountain. They

brought back some rock specimens which Yamasaki identified as argillaceous schist. But Ischii found diorite in the environment of the mountain and granite close to Mt. Setsu, so that it is possible that the peaks may bear a definite relation to the occurrence of the eruptive rocks.

far as the parallel of Horyō (22° 22' N).

The results of later investigations are available concerning the composition and age of the "argillaceous schist formation." According to reports in Geology of Japan, the lowest rock materials are phyllite, quartzite, metamorphic [969] sandstone and crystalline limestone and the thick strata of argillaceous schists are not found until the very top. Higher up, sandstone intercalations are found in it and in the report the possibility is weighed that these upper formations may be Mesozoic. The difficulties of differentiating them accurately from the Tertiary are stressed.

In so far as the strike of the layers in the Taiwan mountains have been investigated and reported, they confirm the agreement with the strike assumed for the outer part of the mountains in the central and southern parts of the island. Some deviation in direction is found in the north. For the great precipitous descents at the Cape Domkaku, in spite of the fact that the line of descent is parallel to the direction of strike mentioned, have been

recognized as a transverse disruption of the strata which make up the mountain section that ends in them; this is a feature that very clearly distinguishes them from the slopes leading down to the Taito valley. Studies, however, seem to have been confined to the northern part of the mountains in the region of the triangular coastal plain of Giran. Here, near the small anchor bay of Soō, the strike of the layers is ENE-WSW whereas in the Geology of Japan, which was published later, it is E-W, with northerly folds. Yoschiwara has also visited the spot. In addition to the schists, he observed pyroxenite formations of the type characteristic of the lowest part of the Paleozoic Chichibu layers in Japan. In addition he claims that from here on everywhere in northern Formosa the direction of the strike is east to west.

The study of the deviating structure of the mountain section that ends with the Domkaku contributed a good deal to the assumption of a curved mountain chain concave towards the east. For the opinion now was that the mountains strike WSW around Soō, that there was a turn to the SW farther west, and that at the Setsu there was another change to the approximately meridional orientation of the watershed. The location of the Setsu, however, (W 10° S of Soō and at a distance of 55 kilometers from it) is not in agreement with this assumption, although it can easily be brought in line with the later ideas of an east-western strike. Then we are justified in the thought that we are here dealing with mountains of a structure different from that of the Taiwan Mts., that they [970] strike westward past the Setsu and that they may be interpreted as a

continuation of the Ryukyu curve.

The basic ideas are vital for a definite answer to the question and important for the morphological interpretation. But the regions beyond the borders of the Giran plain and the transitional zone from here to Kilung are inaccessible due to the fact that the land is inhabited by aboriginal tribes, therefore information is lacking. In so far as anything is known, the factors are not in favor of the assumed turn, but rather support the idea of a meeting of two different mountain curves that are harmonically in line with the structure of eastern Asia. A substantiation for this argument can be found in the fact that in the fundamental structure of the meridional mountains, the dip is exclusively to the west whereas in the case of the equatorial mountains it is always towards the north. In the mountain curve that is concave towards the east, we would have to expect the directly opposite dip in both instances.

Towards the north, the width of the equatorial mountain section seems to be slight. Ischii thought that the argillaceous schists extend northward as far as Tōi and that formations of this rock material found in the latter place date from the Mesozoic.(1) Yoschiwara

1. Tōi is located twelve kilometers north of Giran.

discovered Tertiary fossils in them, however. According to his own studies, the boundary between the Tertiary and the older schists lies south of Giran. In his opinion

the Tertiary takes the form of steep folds oriented east to west and accordingly the parts of the island north of about 24° 40' would belong to the Tertiary.

The younger encrustations: As far as we know, the older mountains constitute a ridge approximately fifty kilometers in width, narrowing somewhat in the southern part and oriented from S 20° W to N 20° E; in the north a transverse unit is added in a manner which cannot be clearly analysed. The continuous mass is encased in a mantle of younger formations that have been attributed to the Miocene and are interrupted only at some points of the eastern side. The younger strata have been disturbed and in the direction of the coasts they are in part hidden by later formations. In the northwest and in the Taitō chain they show intrusion or displacement by volcanic rock materials.

The pure Tertiary is confined to the Taitō chain, the mountain ridge that has previously been mentioned as having a length of 130 kilometers, and a width of no more than 13 kilometers, and as rising to a maximum elevation of 1550 meters between the Taitō [971] valley and the sea. It is said to consist of rocks dating from the Neogene. Sandy and clayey layers are followed by some of gravel; above them, in turn, appear volcanic tuffs and conglomerates; the peaks are of an andesite and are probably the remnants of old volcanoes. In various places incalcations of coral limestone point towards coastal formations. Above the present beach where corals are still found, Yamasaki observed three beach terraces. Together they have a width of 100-300 meters and it is here that the few human settlements of this area are found. Yamasaki also observed a coral reef fifty

meters above the sea.

In the narrow southern spur of the island which the Japanese call the Koschun peninsula, the Tertiary is represented by clastic rocks of lesser steepness. The maximum altitude is 1224 meters. Independent and apparently superimposed at a later time are coral reefs which constitute rugged hills up to 296 meters in height, and the two southern foothills.

The Tertiary is developed best on the west side of the island. The long twin rivers at first flow parallel to one another S 20° W, and later join and continue as the Tamsui-kei in the south: they have cut their beds into Tertiary mountains that in some places exceed 1300 meters in height. In its continuation, the northern half of the island contains the Kali mountain chain; it is 1200-2000 meters high and also strikes S 20° W-N 20° E. According to Yamasaki even the Tokansan with its altitude of 2830 meters, from which diorite rubble is washed down, is encased by Tertiary rocks.

In the west, this high Tertiary zone is followed by a Tertiary hilly region--in the northern part it is separated by a longitudinal valley with Chinese settlements--which continues to boast elevations up to 830 meters. The entire Tertiary land of the west side consists of clastic rock formations and is folded in the direction of strike mentioned. Fossils that could be identified have not been found here, nor on the south and east side.

Westward the Tertiary region is followed by the slopes leading down towards the coast; the formations are attributed to the Quaternary. South of Tainan reef, mountains of coral

limestones are included in it; the highest of them is the Takao-san (323 meters) on the coast near Takao. Farther north these features are not found. The large lowland area that claims more than one third of the total width of the island in some places between the twenty-third and the twenty-fourth parallel North, is a stepped plateau. It consists mainly of gravel deposits thought to be Diluvian in date and reaches a height up to 500 meters. [972]

The most intensive explorations have been carried on in the Tertiary region of the northern part of Formosa. For here coal seams near the popular port of Kilung have aroused industrial speculation and, besides, the occurrence of marine fossils in clayey incalcations have been of interest. Yamaschita found eight coal seams in the complex o layers which was in the main composed of coarse sandstones and shales; he was able to distinguish two anticlines and three synclines, all oriented from west to east.

The interpolated layers of limestone are up to ten feet thick. The fossils contained in them have been studied by Newton and Holland, who stress the Lithothamnium rosenberg Martin which occurs also in the Miocene of Timor and on the island of Ischigaki. Other fossils did not refute this dating. Yoschiwara supplements these studies by his own observations near the east coast. As I stated previously, he found the boundary of the Tertiary south of Giran, and believes that everything north of this latitude dates of the Tertiary and that the mountains are composed of folds striking west-east.

On the other hand, Yamasaki and reports in the Geology of Japan speak of a

southwestern-northeastern direction of strike in this part of the island, and of a turn of the Kali mountain chain in the same direction.

In the very north, the structure of Formosa includes a group of volcanoes which have previously attracted attention. The mountains are composed of andesites and their tuffs; they are located on both sides of the lower course of the northern Tamsui river, mainly in the north. They reach altitudes of 800-1100 meters and exhibit some solfataric action. A connection with the other group of volcanoes cannot be recognized.

The relief of the bottom of the ocean around Formosa is only superficially known since soundings have been limited. On the west coast a good deal of new land has appeared, and here the bottom slants down in a straight line. The flat bottom that has a consistent depth of fifty meters extends furthest just off the delta of the Dakusui-kei. Shallow water is found from here to the Chinese coast. The Pescadores Islands, basalt formations, rise from it and are separated from Formosa by a somewhat [973] deeper channel, although it does not exceed 200 meters. The submarine slope in the east is more pronounced and soon soundings for 1500 meters and 1900 meters did not reach bottom. But the few depths that could be charted on this side indicate that up to the 200 meter line this zone has in some places the fairly considerable width of 20 or thirty kilometers; this is especially true of the region of the steepest descent between Schiyō and Soō and from there to Cape Santiau.

Conclusions about the Relation of the Riukiu Curve to Formosa.

1. According to the available information, the basic structure of Formosa seems to consist of two parts:
   a. The Taiwan Mountains. On the whole, their various mountain units, and thei inner strata (with the exception of the section of the watershed) strike N 20° S-S 20° W. These mountains are composed mainly of rocks defined as Archean crystalline schists and a complex of layers predominantly of argillaceous schists thought to date from the Paleozoic. The dip is westward. Not until a western point is reached does the cross-section show a change from anticline to syncline and reveals a structure of great folds.
   b. Mountains extending from Cape Dom-kaku by way of the Setsu to the Kalisan; the strike is E-W and the rocks have been recognized as being of the type of the Paleozoic Chichibu layers. The dip is northerly.
2. The Tertiary mantle corresponds to these two directions of strike. South of the parallel of the Dom-kaku in the Tertiary formations of the west and east side, the strike is always parallel to the structure of the Taiwan Mountains. On the peninsula in the south, the formation seems to be less steep as it lies over the ended-up bed of argillaceous schist. North of the Dom-kaku line Yoshiwara and his assistants observed a strike that was W-E in all instances, but other men claim

that they also found a strike SW-NE.

3. The directions of dip in the old formations of the Taiwan Mts. point towards a thrust ESE whereas in the Dom-kaku chain the thrust was from north to south.
4. The Dom-kaku chain is located in the continuation of the outer curve of the Riukiu Islands and is a component part of it. This curve [974] is broken in the Sakischima group neighboring Formosa and is disturbed in the directions of strike of the inner structure, although the curved line is maintained. The Taiwan Mountains disappear in southern Formosa. There are no signs of a continuation towards the south. But the mountains are so massive that they must be thought of as the lonely remnant of a larger curved folded mountain ridge which, by analogy with all other curved mountain formations of eastern Asia, faced the Pacific with its outer side.
5. The volcanic inner curve of the Ryukyu islands continues westward in the ridge of the Dom-kaku chain. Here the Agincourt Islands and the volcanic group in the west of Kilung belong to it. In back of the Taiwan Mountains the only volcanic formations are the Pescadores; their main axis is again oriented NNE or more accurately N 15° E.
6. The Ryukyu Curve and the fragment of the curve contained in the Taiwan mountains have one characteristic in common, namely that on the outer side a zone of tertiary sediments is piedmont to it. That means that in both cases the basic

structures on the front side are found at a relatively great depth. But it is not possible to decide whether these are areas of marine abrasion on which debris washed down from the mountains was deposited and gradual subsidence went hand in hand with it, or whether the down warping was along fault lines. The latter is more probably on Formosa because volcanic formations are found in the Taitō Mts. In the case of the Ryukyu Curve, they have been observed only in the old volcano of Nosoko on the island of Ischigaki.

7. Later displacements have been of the same type in both curves. The Tertiary formations must have risen at least to their present height above sea level, and erosion must have given them a shape approximating that which they exhibit nowadays. Subsidence followed and the corals formed the reefs at that time, which later were exposed when a renewed vertical shift followed.
8. The Ryukyu Curve and the Taiwan curve fragment are distinguished from the curved formations of the mainland by their concordance of the inner structure and lines of down warping in the parts corresponding to the meridional component. [975] Exactly like the Japanese curve they appear, therefore, as mountains in which the outer shape bears a causative relation to the folding thrust from the inside to the outside. But as a rule only more or less curved tension faults could be recognized with some certainty and they were discordant to the directions of strike of the inner structure.

9. The idea that the structure and tectonic lines of the southern Kiuschiu remained without any influence on the shaping of the Ryukyu Curve but that the later processes of dislocation in its northern part exerted considerable influence on the outer appearance of the southern Kiuschiu, finds its analogy in the relation of the Ryukyu Curve to Formosa. For in the Taiwan Mts. no traces of morphological influence by the processes responsible for the tectonic lines of the Kiuschiu can be recognized. On the other hand, the dislocations which produced the final shape of the Taiwan Mts. and found their most characteristic expression in the delimitation of the old mountain stock by the straight Taitō valley have also broken up the Ryukyu Curve; they separated the Dom-kaku mountain section on Formosa from it and probably caused the disturbances which occurred only in the Sakischima group of the Ryukyu Curve.
10. Thus the factual material increases which allows us to make some conclusions as to a number of the manifold curved mountain formations of eastern Asia north of the 22nd parallel (i. e., with the exception of the Annamite Curve): the normal structure of the parts of every curve that belonged to the equatorial component was completed before the structure of the parts located in the meridional component. When the two were joined to constitute a curve, tectonic processes were active and gave the normal shape to the meridional unit by means

of later longitudinal downthrusts and disruptive longitudinal faults. They also had effect on the equatorial unit of the curve that originally was adjacent in the north and as abnormal dislocations they resulted in unusual transverse members and transversal dismemberment.

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28: Hervey de Saint-Denys--106-107 S-4 (no date) 1874 Formosans-1-2
116, 114, 175

Since the earliest days of our history, Chinese vessels cruised in the Chinese and Japanese waters...and in 109 B.C. a fleet of the Emperor Hiao-ou-ti transported an army of 50,000 men across the Pe-tche-li gulf to Korea.

When we consider all the facts, it is logical to believe that the Chinese did not know anything about Formosa until 1430? Klaproth's memoire [EJ: Tableaux historiques de l'Asie.] declares that this is incredible, but I think that it is just as impossible to assume, as he does, that Ma-touan-lin did not even mention the large island of Formosa, which is separated from Fo-kien by a narrow strait. This Ma-touan-lin enumerates and describes all of the countries which the Chinese knew and visited, and some of them were so far distant that it took six months, eight months, or even a year to reach them. He speaks of Luzon, Borneo, the Moluccas and perhaps even of California, which he calls by the mysterious name of Fou-sang. [107]

Klaproth says: "The Chinese historians did not mention Formosa because its inhabitants did not send any embassies, or pay any tribute."

We shall see later that this assertion contains a double error, and Ma-touan-lin mentions a large number of little countries which had never sent any ambassadors, or paid any tribute.

In my opinion, the question simply became a matter of deciding what name Ma-touan-lin had used for Formosa (as Taï-ouan, the modern name for the island, was not

28: Hervey de Saint-Denys--106-107 S-4 (no date) 1874 Formosans-2
116, 114, 175

employed until long after Ma-touan-lin's time).

According to Klaproth and his Tableaux historiques de l'Asie, the inhabitants of Formosa may have been called Man-ti from the third century B.C. until the fifth century of our era; but this term cannot be used as the title for any particular articles for the name Man-ti was a generic one which the Chinese authors used to designate all the foreigners in the south. From the fifth century to the twelfth, the Tableaux historiques omit Formosa, as if the Chinese had lost even the vague information which they had previously possessed about the island....

But I felt that I had to keep looking for some reference to Formosa in Ma-touan-lin before deciding to accept such an extraordinary fact as [108] the complete omission of the island. Finally I read this under the title of Lieou-kieou:

" The Lieou-kieou kingdom consists of an island or islands (the Chinese text does not show whether this should be singular or plural), which are in the open sea east of the city of Tsiouen-tcheou (Chinese province of Fo-kien). As you approach the coast of Fo-kien, there are some islands called Peng-hou, and from them you can see the smoke of the dwellings in this kingdom. It takes five days to sail there."

"During the Soui dynasty, the first of the Chinese years ta-nie (605 of our era), a sailor named Ho-man and several other Chinese of the same profession said: when the sky is fair and the sea is calm if you look east, it seems as if you can see some smoke rising from dwellings. About this same time the emperor Yang-ti ordered the military mandarin Tchu-kouan to sail in quest of unknown lands. Tchu-kouan had heard this tale of Ho-man, so he took this sailor with him, and they went together to the kingdom of Lieou-kieou. They could not understand the language of the inhabitants but they seized a native, who had come on board, and returned to China. [109]

The next year (606), the Emperor ordered Admiral Tchin-ling to assemble his forces and to lead an expedition to the Lieou-kieou kingdom. Tchin-ling left Y-ngan (now Tchao-tcheou-fou, in Kouang-tong province), sailed across the sea and stopped first

on the small island called Kao-hoa; then he sailed one day more, and reached the kingdom of Lieou-kieou.

The inhabitants of this kingdom refused to surrender. Then Tchin-ling attacked them, beat them, burned their houses and palaces, took several thousand prisoners and came back to China. Ma-touan-lin adds that after this time there was no connection with this kingdom."

If you look at a map you will see that the Chinese fleet must have landed on Formosa.

The fleet goes first from Y-ngan to Kao-hoa which is the most southern island of the Peng-hou group, that still bear this name today. The distance is about thirty-eight myriameters in a straight line, and it took them two days to make this voyage. Then they sail another two days and reach Youen-peï, at the northern tip of the Peng-hou archipelago. (The little island Youen-peï has not changed its name either, and you still find it on the Chinese maps). This time the distance seems short for the amount of time expended, but the navigating conditions in these waters [110] explain the difficulties which the expedition encountered.

The shores of Formosa are so steep and studded with reefs that they are practically inaccessible to anyone who is unfamiliar with them. Moreoever, from south to north there are such strong and dangerous currents that even a steamboat does not dare risk them today without an excellent pilot. So it is very probable that the expedition was

carried north while it was hunting for a good anchorage, and that the two days from Kao-hoa to Youen-pei were spent tacking and making fruitless attempts to land.

Finally on the fifth day the Chinese leave the anchorage at Youen-pei and that very day they land at the kingdom of Lieou-kieou.

This last statement furnishes adequate proof that Lieou-kieou must designate Formosa. We already kenw that it would have been impossible to see the smoke of the modern islands of Lieou-kieou from the Peng-hou islands; the distance is over two hundred leagues, and they are separated by Formosa, which raises its curtain of mountainous peaks between these two archipelagoes. As no ship can make that trip in one day (even Klaproth admits that it takes at least four, and then you have to have a good wind), we can say that the proof is sufficient and that [111] Formosa is the only place where the Chinese could have landed.

Accordingly, Lieuou-kieou is the original name which the Chinese gave to Formosa, and everything that Ma-touan-lin and his predecessors told about the kingdom of Lieou-kieou applies to Formosa.

28: Hervey de Saint-Denys--112-115 S-4 (no date) 1874 Formosans-1- 5
116, 114, 175

Here we must refer to the mistake which Klaproth made both in his memoire on Formosa and in the description of the Lieou-kieou islands. [EJ: i.e., in his Tableaux historique de l'Asie.] As he was deceived by the name Lieou-kieou, he assumed that the Chinese expedition of 606 had visited these islands, and as he attributed to them what was really the ancient history of Formosa, he did not have any documents to use for the history of the island. He thought that there was a gap in the accounts of the Chinese historians, whereas he was making this gap himself; and while he criticized the Peking missionaries for setting the discovery of Formosa at a much too recent date, he made the error which must have motivated their statements.

Now that we have established the main fact, we find that there is a great deal of supplementary proof to corroborate it....

The Chinese text says that the Lieou-kieou country has a great many mountains and caves, that it is governed by a large number of petty kings, that you find wolves, tigers and bears there, and that the customs of the natives in the northern part of the land were quite different from those of the inhabitants [112] in the central and southern portions of the kingdom. Such statements are perfectly applicable to such a large island as Formosa, but they do not fit the Lieou-kieou group, where the largest island is scarcely eighteen leagues long by eight leagues wide; it does not have a single wild animal, and the only mountain is in the north. This is according to the description

which Father Furet gave us recently.

The account of Ma-touan-lin adds that the inhabitants of the country spoke a language which they could not understand. Again this applies to Formosa, because its Oceanic population had never dealt with the Chinese, but it would not fit the people of the Lieou-kieou, whose language is simply a Japanese dialect. Then the Japanese annals show that these islanders had been on intimate terms with the empire since ancient times, since the mother of the famous first-m[illegible]o, Zin-mou, came from there.

Finally Ma-touan-lin's account accuses the inhabitants of this island of being cannibals, and this has never been imputed to the Lou-tchouans or to the Japanese populations. Then Klaproth mentions this very fact in his account of Formosa. He says that "Rightly or wrongly, the Chinese accuse the Formosans of being anthropophagous; they claim that the villagers gather to [113] feast upon the men who were slain in battle and even on the invalids, old men and orphans."

Ma-touan-lin says about the Lieou-kieou: "After a combat the dead are piled up together, and people gather to eat them. When a person dies in the southern part of the kingdom, the inhabitants of the village and the surrounding countryside collect to devour him."

On the contrary, when Klaproth describes the residents of the real Lieou-kieou islands, he writes: "The inhabitants are like the Chinese in venerating the dead. They

burn the bodies and preserve the ashes."

This contradiction, and several other similar ones, did not escape the scholar, but they did not show him the whole truth. He merely deleted from Ma-touan-lin's article about the Lieou-kieou the passages which were absolutely incompatible with the ethnography of these islands.

It is equally interesting to compare several passages of this article of Ma-touan-lin with a description of Tai-ouan of Formosa which was published by Father du Halde in 1735.

Father du Halde writes: "Although the Formosan islanders are subject to the Chinese, they have preserved some traces of their former government. Each village selects four or five of the elders who are reputed to be very honest, [114] and they become the chiefs of the village.

Ma-touan-lin wrote: "There are four or five head chiefs who govern each center or village. The villages select their own chiefs."

Father du Halde says: "You are amazed at the speed of these islanders; they can outrun galloping horses."

Ma-touan-lin wrote: "The men in the kingdom can run extraordinarily fast." Father du Halde said: "The men wear a cylindrical hat, and over it they have an aigrette of chicken or pheasant feathers."

Ma-touan-lin wrote: "The men wear high hats which they adorn with a tuft of feathers."
Father du Halde said: "They put several strange floral or animal designs on their skin."
Ma-touan-lin wrote: "They use a needle and a special kind of ink to mark their skin with figures of insects and snakes."
Father du Halde, and then Klaproth said: "Like many of the inhabitants of the Indian islands, the Formosans behead their dead enemies and keep these trophies."
Ma-touan-lin wrote: "They pile skulls around the dwelling of their king, and [115] they believe that this constitues a glorious monument.
Father du Halde says: "When a young man has found a girl whom he wants to marry, he takes a musical instrument to her door, and he does this several days in a row. If the girl loves him, she goes outside to join her suitor. They make their plans themselves, and then tell their fathers and mothers about them."
Ma-touan-lin wrote: "When a boy and girl love each other, they decide to get married and then tell their parents."

This final characteristic is interesting because it is so different from the Japanese customs which are observed on the Lieou-kieou islands, and which resemble the Chinese fashion of having the parents arrange the match; frequently the young people have never met before the wedding in that land.

28: Hervey de Saint-Denys--112-115 S-4 (no date) 1874 Formosans-5
116, 114, 175

Someone may think that Father du Halde simply drew these details from the work of Ma-touan-lin, but I do not believe that this is the case. I think that Father du Halde gathered the data which was available at his time. But even if we should admit this supposition, it would even serve to stregthen the evidence of this scholarly Jesuit, for it would show that Father du Halde did as I have done, that is, he applied to Formosa some Chinese documents which were recorded under the title of Lieou-kieou.

28: Hervey de Saint-Denys--116-121 S-4 (no date) 1874 Formosans-1-4
116, 175

It would be a simple matter to give more quotations [116] but it seems to me that I have given abundant proof that Tai-ouan or Formosa is indeed the land which the Chinese first visited in 605 or 606, and which had no further connection with the compatriots of Ma-touan-lin until the time of this writer. (1)

1. It is possible to raise the objection that Ma-touan-lin says that it took five days to go from the harbor of Y-ngan (Tchao-tcheou-fou) to the kingdom of Lieou-kieou by way of the Peng-hou islands, while that crossing can be done in a much shorter time today; but a vessel which is seeking its way is not like one following a definite course. Moreover, Ma-touan-lin himself says that at that time there was no communication with Lieou-kieou kingdom as no one had gone back there since 606; accordingly, the five days sailing is based on the amount of time which the expedition required in the seventh century.

We still have to explain a few obscurities and apparent contradictions which appear if you try to apply everything recorded by the Chinese writers, who came after Ma-touan-lin, to one country. Klaproth made this attempt.
In the seventh century, especially, there were envoys from Lieou-kieou at the Chinese

court, and they did not come from Formosa. But gradually we see that the identity of names makes it easy to get confused, and that the Chinese used the term Lieou-kieou for the whole group of islands formed by the chain of submarine mountains that extends from Fo-kien to Japan (Formosa, the Madjikosima and [117] the Lieou-kieou). This was true until the 16th century when they turned their attention on Formosa again, and finally gave it a special name; at first they called it Ki-long, from the Dutch port, and then Tai-ouan (the high peaks), its present name; this comes from the capital and the mountain at whose foot it lies.

Here are the proofs for this statement:

Ma-touan-lin explains why the name Lieou-kieou was applied to the country, which the expedition visited in 606. He declares that the Japanese embassy happened to be at the Chinese court at the time. When people asked them about the islands lying between Japan and China, they spoke of Riou-kiou (Chinese Lieou-kieou) islands, with which the Japanese had dealt for centuries. The Chinese evidently thought that the island which they had discovered was a prolongation of the archipelago to which the Japanese had referred, and so they use this collective name, which caused a number of errors.

Now let us look at the large Chinese geography Tai-tsing-y-tong-tchi, which was published during the last century. In the article entitled Lieou-kieou, it states that the central part of the island, where the expedition landed in 606, is in the same latitude

[118] as the Mei-ling chain of mountains, which separates the Chinese provinces of Fo-kien and Kouang-tong; this is true of Formosa. Then this same geography says that on the whole the Lieou-kieou islands lie east of the Chinese territories of Tchang-tcheou, Tsiouen-tcheou-Hing-tcheou and Feu-tcheou. If we look at good map, it is easy to see that Formosa is east of Tchang and Tsiouen-tcheou, while you find the Lieou-kieou islands east of Hing and Fou-tcheou.

Finally the Tai-tsing-y-tong-tchi geography observes that formerly there were two kingdom of Lieou-kieou, and that they were inhabited by barbarians of different colors; one group was similar to the Japanese, while the other was a coppery red in hue. This ethnographic indication shows the division between the yellow race of the modern Lieou-kieou islands and the Oceanic race of Formosa.

Let us add that on all the Chinese maps an islet placed south of Formosa is still called little Lieou-kieou (siao Lieou-kieou), and Klaproth himself had to mention the fact that Formosa was called big Lieou-kieou (ta Lieou-kieou) on a Chinese map of the sixteenth century, which he used to make his 25th picture of Tableaux historiques de l'-Asie. So there was a large and a small Lieou-kieou at least, in addition to the real Lieou-kieou, and [119] these two facts tally with each other....

We may accept these facts as proved:

1. Klaproth was wrong in believing that the names Fan and Man-ti were terms

which the Chinese applied particularly to the inhabitants of Formosa; they [120] were generic names for all the foreigners from the south.

2. It would be wrong to think that the Chinese had no term whatsoever to designate the island from the 5th to the 12th century.

3. The Chinese paid their first visit to Formosa in 605. They made an expedition to it the next year, and in Ma-touan-lin's description of it he refers to the island as Lieou-kieou.

4. During Ma-touan-lin's lifetime, no other Chinese expedition went to the country of Lieou-kieou and no embassy came from there. So Formosa was the only Lieou-kieou island which was known to the Chinese; we cannot tell exactly when they discovered the real Lieou-kieou islands, but we believe that it was not before the middle of the thirteenth century.

5. Gradually the Chinese made the acquaintance of the Madjikosima and Lieou-kieou archipelagoes, which lie in the direction of Japan, but for a long time this did not influence them to look for the new name. They included all of these islands under the same name until the 16th century, when they gave a special name to Formosa. [121]

6. Accordingly, all Chinese documents which referred to Lieou-kieou before the 13th century may be applied to Formosa.

29: Hervey de Saint-Denys--435-441 S-4 (no date) 1875 Formosans-1-7
116, 175

The review of the meeting of the Société asiatique, which was held on November 13, 1874, appeared in the Journal asiatique of last December, and it contained this note:

"In his article on Formosa [EJ: this article is source 28: Hervey de Saint Denys.] (Journal asiatique, August-September issue, 1874, p.119), M. d'Hervey de Saint-Denys expressed regret at not having been able to consult the Taï-tsing y-tong-tchi geography on the ancient history of Taï-ouan, and he added that the two leaves which he needed to examine were missing from the copy which is in the National Library. M. Specht says that the National Library has two copies of this Chinese work, one of which, catalogued as number 289, is a second edition which was published in 1764, and has several missing pages at the beginning of the kiouen 337; but the second copy, which is a first edition and appeared in 1744, has this article in the kiouen 271, column 21." [436]

I was busy teaching and working on the notes for my translation of Ma-touan-lin, which is is being published, and so I did not have time to refer to this at once; but I have just read these pages, and I am most grateful to M. Specht for having called my attention to the fact that there was a second copy of the Tai-tsing y-tong-tchi geography in the National Library. The historic section of the article on Tai-ouan is too brief to be of value, but a geographic appendix confirms what I have stated about the identity of Formosa with the country which the Chinese called Lieou-Kieou for a long time.

After describing Formosa as a department of the province of Fo-kien, and bearing the name Tai-ouan-fou, the Tai-tsing y-tong-tchi geography mentions the Peng-hou islands (the Pescadores) which belong to it, and says this:

"Peng-hou Islands. They lie in the sea, west of the district of Tai-ouan; and across from these islands, but still toward the west, is the place called Kin-men-so, which belongs to Tsiouen-tcheou (Fo-kien). In the Histoire des Song (1) we read that the kingdom

1. The Song dynasty reigned over China from 960 to 1279.

of Lieou-kieou is east of Tsiouen-tcheou, and that you can see the fires and smoke from the islands of Peng-hou. [437] The Histoire des Youen (2) says this: the Peng-hou

2. The Youen dynasty reigned from 1260 to 1279 with the Songs, and then alone from 1279 to 1368.

islands, which are across from the Lieou-kieou, are in the limits of the four territories of Tchang-tcheou, Tsiouen-tcheou, Hing-tcheou and Foutcheou. On the farther side of

the Peng-hou islands there is a current (or there are currents) which becomes (become) very strong as you approach the shores of Lieou-kieou. It is (or they are) called Lo-tsi (which throws at the coast). The waters drop rapidly and do not come back, so it is a very dangerous region. During the twenty-eighth year of tchi-youen (1293), Ou-tchi-teou, who was a native of Fo-kien, said that if they wanted to get possession of Lieou-kieou, they would have to get a foothold on the Peng-hou islands and send vessels (full of troops) from there. The next year (1294) an expedition set out from Ting-tcheou to do this. It failed, and the boats returned to the anchorage of the Peng-hou. According to an old geography (continues the Tai-tsing y-tong-tchi), the main island contains mountains which have a gentle slope and fertile valleys. It measures about fifty li from east to west and about twenty li from north to south. It is surrounded by a large number of islets. If you sail east from the city of Tsiouen-tcheou, you can reach it in three days."

[438] Every line of this document is important, but let us examine the date of publication first. Formosa is no longer the foreign land which the Chinese had formerly included in the collective term of the Lieou-kieou archipelago. The island has become the Chinese department of Tai-ouan, which contains a district of the same name, both of which are named for the very modern city of Tai-ouan which is the capital of the island. When it wants to give the location of the Peng-hou islands, the Tai-tsing y-tong-tchi

begins by stating that they are west of the Taï-ouan district, in the direction of Kin-men (the gates of gold), a harbor which is south and in the limits of Tsiouen-tcheou. After giving the contemporary place names, the geography of Tsin quotes two old books which tell some interesting information about the Peng-hou islands, and in both of these statements Formosa is naturally called Lieou-kieou, just as a Latin author would refer to Portugal as Lusitania.

Could anything be clearer and more precise:

He has just said that "the Peng-hou islands are west of Tai-ouan, and farther west is the Chinse city of Tsiouen-tcheou;" then he gives it another form by adding: "The Song history says that the kingdom of Lieou-kieou is east of Tsiouen-tcheou, and that you can see the fires and smoke from various places on the Peng-hou islands." And then he goes on to say that [439] the same fact is recorded in the History of the Youen, where it is written that "The Peng-hou islands, which are also across from Lieou-kieou, (3) are

3. The space occupied by the Peng-hou islands is much smaller than the History of the Youen assumes. They are all between lat. 23° and 24°, whereas Formosa extends from lat. 22° to 25° and beyond, so on the eastern side they cannot face any other country

than Formosa (Lieou-kieou). Moreover, these waters do not have any other islands or islets with which you could confuse them.

within the coastal limits of the four territories of Tchang-tcheou, Tsiouen-tcheou, Hing-tcheou and Fou-tcheou, that is in the canal of Fo-kien and Formosa."

That ought to be sufficient proof to dispel any doubts. However, the Tai-tsing y-tong-tchi does not stop there, and he becomes even more explicit; he speaks of the violent currents which you find between the Peng-hou islands and the shores of Lieou-kieou (Formosa), and he says that these currents are called Lo-tsi; Chinese sailors still use that name for them today. (4)

4. I obtained this decisive evidence from Baron de Méritens, who was formerly head of the southern customs for the Chinese Government; he lived for twelve years in Fou-tcheou, which is the capital of Fo-kien, and he made several trips from the Chinese coasts to Formosa, passing by way of the Peng-hou islands. For further information about the nature of the currents, which the Chinese call lo-tsi, and which cast vessels on the Formosan coast, see the Nautical Instructions, which were published by the Navy Department, no. 426, p. 21, 24, etc.

[440] He depicts the Chinese fleet which gathered on the Peng-hou islands to attempt a landing on the neighboring shores, and then its return to the same anchorage after the failure of the expedition. Finally he tells how long it took to make the trip in the Chinese vessels: "If you sail from Tsiouen-tcheou, you can reach the Peng-hou islands in three days." You could not have a better confirmation of what Ma-touan-lin tells in his article on the Lieou-kieou kingdom, and in his description of the Chinese expedition of 606, I have taken the essential facts about this from my memoire: Sur Formose et sur les iles appelées en chinois Lieou-kieou. [EJ: source 28: Hervey de Saint-Denys.]

The Chinese expedition of 606 left Y-ngan and sailed three days before it arrived at Youen-peï (one of the Peng-hou islands). Y-ngan, which is now called Tsiouen-tcheou-fou, is about the same distance from the Peng-hou islands as Tsiouen-tcheou (about forty myriameters, as the crow flies), while the distance from the Peng-hou islands to the real Lieou-kieou islands is four times as great. If it takes a ship three days to go from Y-ngan or Tsiouen-tcheou to the Peng-hou islands, it could not go from the Peng-hou to the real Lieou-kieou in less than ten or twelve days; yet Ma-touan-lin says definitely that 1) they went from Tsiouen-tcheou to Lieou-kieou in five days, and that 2) the expedition of 606 spent one day crossing from the Youen-pei (Peng-hou islands) anchorage [441] to the place where the Chinese soldiers landed on the Lieou-kieou soil.

29: Hervey de Saint-Denys--435-441 S-4 (no date) 1875 Formosans-7
116, 175

I have already presented this last point in my memoir, but the fragment of the Tai-tsing y-tong-tchi that I have just been reading stresses this fact, and then even a glance at the maps of the Chinese Sea will show you that no vessel from the Tsiouen-tcheou territory could ever have sailed toward the Peng-hou islands to go to the ones which are called the Lieou-kieou today.

This is the information which I found in the Tai-tsing y-tong-tchi. But I also consulted the special Fo-kien geography which is entitled Fo-kien tong-tchi. And the expedition of 606 against Lieou-kieou, which was undertaken at the command of Emperor Yang-ti and was under the orders of Tchin-ling, is described in the historical notice about Tai-ouan (K. 64, folio 1, verso), with the additional information that the fleet passed little Lieou-kieou (siao Lieou-kieou), and that you could still see on Kao-hoa the vestiges of the brick and stone constructions which the Chinese soldiers of the expeditionary force built; since they could not take possession of Formosa, they evidently tried to establish a naval base in this little harbor.

31: Hofmann--603 N-3 (1909) 1912 Formosans
116, 366, 543, 657, 177.65 Japanese
636.65

During my stay of one week in the capital and the neighboring regions, I was greatly impressed by the energy with which the Japanese had stimulated the culture of Taihoku. There were extensive government buildings, broad streets, water pipes, schools, barracks, hospitals, reformatories, railroads, telegraph and telephone connections; everything, in short, that is considered representative of western culture. Everywhere there are signs of Japanese patience, energy, and initiative which form a striking contrast to the confusion and negligence of the Chinese regime. There is a museum in Taihoku which is well worth seeing, with an extensive collection of the abundant fauna and flora of this island; it is because of the copious vegetation that Formosa for so many centuries has been the cynosure of all those nations who sought to expand their boundaries. There is also a botanical garden where a large number of useful and interesting plants has been systematically arranged and it is calculated to impress any visitor to the tropics. There is one hotel in Taihoku which, judged even by European standards, is excellent; it offers all the comforts of a tropical hotel.

31: Hofmann--603-604 N-3 (1909) 1912 Formosans
116, 634, 669, 697, 177.63 Japanese
636.63

In the house of the governor, Count Sakuma... I had the opportunity to meet the chief magistrates of the various provinces. Among these there was not one who did not speak either English or German. All of them had been sent to Europe by the government of Formosa to complete their studies there. In every respect, the achievements of the Japanese colonial administration are most impressive, and they become even more so if one takes into consideration the conditions under which the Japanese first took over the administration of the island. In 1895 there was complete anarchy among the Chinese elements of the population. There were organized bands of guerilla soldiers in all the regions that were accessible to foreigners, so that before the administration could proceed to the task of suppressing the Malayans in the mountain regions, [604] it was necessary to break the resistance of the Chinese. I saw some of the leaders of these guerilla bands, who had not been condemmed to capital punishment, in the large reformatory in the capital. There the prisoners were engaged in occupations such as cabinet making, in which they showed a great deal of skill and understanding.

31: Hofmann--604 N-3 (1909) 1912 Formosans
116, 135

In the vicinity of Taihoku, the most interesting features are the harbor of Tamsui and the Onsen sulphur springs near Hokuto. From there we went on an expedition which was to take us to the extreme boundaries of that section of the mountain region which could still be considered fairly safe.

31: Hofmann--604 [2] N-3 (1909) 1912 Formosans
116, 133, 231, 241, 311, 342

We travelled from Taihoku by train for 1 1/2 hours until we came to the small village of Toyen. Here the land is almost level and has been utilized to the fullest extent. The extensive rice plantations were green and threw into relief the picturesque houses of the Chinese; these are solid brick houses with a curved roof reminiscent of Buddhist temples. In the canals, for which the tributaries of the Tamsui are utilized, there are numerous tame ducks. In the small ponds one may see grey water buffalo, a domestic animal which occurs in large numbers of Formosa. It cannot be compared to European cattle as regards its usefulness in agriculture, and so far attempts to domesticate it have not been successful. Many times I saw the patient Chinese peasants threatened by the buffalo or saw that the animal had broken loose. Next to the rice fields there are extensive tea plantations. This is the region where the famous Oolong tea is produced. There are also banana and pineapple plantations on a smaller scale. The houses are surrounded by slender bamboo trees, and everywhere one may see betel palms, a tree which grows everywhere on Formosa.

31: Hofmann--604-605 N-3 (1909) 1912 Formosans
116, 132, 164

The climate is mild and saturated with humidity; it has a soothing, lulling effect. The greatest number of rainfalls occurs in the north of Formosa (3, 440 millimeters per year in Kilung), where they occur regularly throughout the year. In the south of the island there is a dry season during the winter months and a rainy season which begins about the end of May. It is, unfortunately, not possible to stamp out malaria altogether. This disease often occurs here in its most severe [605] form and is fatal after a short time. The agricultural districts, however, are dependent on the humidity which causes the miasma; for any visitor to the island, therefore, quinine is an absolute necessity.

From Toyen we travelled for 14 kilometers on a small vehicle on tracks (52 centimeter gauge); two Chinese coolies served to propel the car. We stopped at the steep bank of the Tamsui; the river rages far below, washing over the reddish-brown, muddy banks veined with large, round rocks. The rest of the way we went on foot or were carried in a sedan; the coolies were strong enough to carry these anywhere, always at the same regular pace. Every foot of land here has been utilized. Here and there we saw Acacia catechu trees; the sweet smell of their small, fragrant blossoms penetrated everywhere. The acacia, a small tree barely 10 meters high, is also important for tanning; this tree predominates in the plains of northern Formosa. Towards evening we came to Taikokan. (1) Our chief objection on this journey was to study the camphor production

1. The spelling of place names is based on the Japanese pronounciation; the Chinese use a somewhat different system of names.

of the Japanese Mitsui Company. The company had obtained a concession in the forested regions bordering on the territory of the aborigines. We did not succeed in this at first, since the region around Taikokan is a Chinese agricultural district.

31: Hofmann--605 [2] N-3 (1909) 1912 Formosans
116, 515

After visiting some Chinese farms, I cannot quite agree with the statement made by almost all observers that the Chinese are extremely dirty.

31: Hofmann--605-606 N-3 (1909) 1912 Formosans
116, 161, 241

The agricultural population [606] contrasts favorably with the migrant workers in the cities. Their agricultural methods are well organized, although it is true that they are based on experience rather than theory. A further testimony to the industry and diligence of the Chinese is the fact that in this field the Japanese cannot compete with them.... There are no Japanese farms on Formosa, although there is still enough land for this purpose. The island is thickly populated; there is an average of 86 inhabitants per square kilometer.

31: Hofmann--606 N-3 (1909) 1912 Formosans
116, 101, 162

In the region of Taikokan I was struck by the fact that the Chinese women did not have crippled feet. From this it is clear that the Chinese living there do not belong to the largest of the tribes, the Hòklos, among whom it is the custom to maim the feet; they belong to the smaller tribe, the Hakkas. It should also be stressed that, while two thirds of the population today is Chinese, there were no Chinese on Formosa until three hundred years ago.

31: Hofmann--606 [2] N-3 (1909) 1912 Formosan Aborigines
116, 177

At the beginning of the seventeenth century Holland ruled the entire island, and the original inhabitants, the Malayans, inhabited all the island-regions even down to the coast. The red barbarians from the west, as the Dutch and all other Europeans were and still are called by the Chinese, established excellent relations with the Malayan tribes, so that many of them were converted to Christianity and western civilization spread rapidly among them. This ought certainly to prove the adaptability of the aborigines to a new culture if they are treated well by the new regime. At the same time it is evident that the administration can win the confidence of the natives only if they intrude no further into their territory.

31; Hofmann--606-607 N-3 (1909) 1912 Formosan Aborigines
116, 131, 554, 721 Atayal

Beyond Taikokan, to the east, the mountains ascend steeply. During the bloody battles in 1907, the foothills were wrested from the Malayans. The tribe which lives here, the Atayal, belongs to the Seiban group (the "red savages"); this is a tribe of headhunters which is feared greatly. The practice of headhunting is or was characteristic of most of the Malayan tribes. [607] The natives decapitate their enemies, among whom they include neighboring tribes as well as Chinese, Japanese, and Europeans. The headhunters are not, however, a courageous people. They lie in ambush and take the enemy by surprise, usually while he is at work; then they cut off his head which they preserve as a trophy at home. If a native has taken the head of an enemy, this is his badge of courage. This cruel custom is so deeply rooted in the beliefs and traditions of the Malayans that all attempts to combat it so far have proved unsuccessful.

31: Hofmann--607 N-3 (1909) 1912 Formosan Aborigines
116, 171, 304 Atayal

Members of the Atayal group are tattooed, both the men and the women, while the tribe in the south of the island do not have this custom. I myself did not come into contact with the aborigines in this region; we were, moreover, safe from attacks since our expedition had sufficient arms. All the regions we saw showed evidence of the recent struggles. The forest had been destroyed and large areas were covered with Miscanthu grass which grew to the height of one meter; this grass offers excellent protection to the headhunters.

31: Hofmann--607-608 N-3 (1909) 1912 Formosan Aborigines-1-2
116, 131, 437, 712

The border between the cultivated land and that belonging to the aborigines is protecte by a method protected by a method which had been perfected by the Chinese settlers and which the Japanese have taken over and modernized. The pioneers had set up a wall, like a small wall of China, along the extreme boundary of the conquered territory; guards were stationed at regular intervals to resist all attempts of the aborigines to break through the wall. The Chinese had trained some troops especially for this purpos The Japanese restored these Ayu Lines; they stationed guards at intervals of 300 meter and set up fortresses at longer intervals. Thus the boundary is protected by an organiz military police who must live in this dangerous region with their families throughout the entire year. There is a permanent state of war. The soldiers shoot all Malayans at sight, while the Japanese and Chinese in this region are never safe. I walked along thi line for several kilometers. The Japanese have taken [608] advantage of all the natural fortifications; the wall is set up along the crest of the hills. In the section I visited the line had been moved further up the mountains recently to include the newly conquered territory. The innovation consists in the barbed wire which is strung along the entire line, 170 kilometers long in all; this serves to conduct an electric current with high voltage. To touch the wire would therefore be fatal. The guards make use of the electric current only in times of great danger, especially at night. By thus isolating the aborigines entirely, and preventing the greedy Chinese from smuggling, an occupation

hope eventually to wear down the resistance of the Seiban. It is through the smugglers that the aborigines obtain their powder and ammunition as well as salt; without these they cannot wage the battle for their existence for very long. They are still able to obtain these necessities, however, and it is characteristic of the greed of the Chinese that more of them are killed by the electric wire than by the aborigines themselves; I learned this fact from the district officer in Banshoryo, the main locality of that district. So far, eleven Chinese and only two natives had been killed by the electric wire. For barter between the aborigines and the Chinese, the antlers of deer killed by the latter are an important article of exchange. The Chinese pulverize these and use them for medicinal purposes; they pay a high price for them. The natives avoid the dangerous electrical wire by passing through the raging torrents in the valleys; the Japanese call the river which cuts through the boundary at the point where we passed it Kubitorigawa, that is, the river of headhunting.

31: Hofmann--608-609 N-3 (1909) 1912 Formosans
116, 245, 655

The newly conquered land [EJ: i. e., the Atayal] is now being cultivated with great industry and energy. We saw a settlement of the Mitsui Company where the forested areas had been cleared and were made ready for cultivation. Camphor trees are being planted along the steep inclines and the old camphor trees are felled and prepared for export. Since 1889 camphor has been a government monopoly and constitutes one of the most important sources of revenue on Formosa. "The problem of the aborigines is actually the problem of [609] camphor," according to Davidson, (1) and the truth of this

1. Davidson, J. W. The island of Formosa, Past and Present.

statement cannot be questioned.

It is because of the camphor industry that the Japanese seek to penetrate to the mountain regions inhabited by the aborigines and thus constantly furnish the latter with new motives for revenge. Honda (1) states that in 1896 the aborgines held the belief that

1. Honda, Dr. S. : "Eine Besteigung des Mount Morrison auf der Insel Formosa." Mitteilungen der deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens, Tokio, 1897.

the Japanese were their brothers who had become separated from them by the evil Chinese; this view has also been confirmed by ethnography, since the Malayan origin of the Japanese now seems fairly certain. The activities of the Japanese once they came into possession of the island, however, must have convinced the aborigines that their former brothers had changed a great deal. The belief mentioned by Honda may have originated among the Tsou aborigines on the Arisan River, a tribe which is far more good-natured than the rest.

31: Hofmann--609 [2] N-3 (1909) 1912 Formosan Aborigines
116, 137, 361

From the boundary, [EJ: separating the territory held by the aborigines from that held by the Japanese.] a fairly safe point of observation, I had a view of the mountains and the many deep chasms where the aborigines had their dwellings. There the inclines are covered with dense forests consisting almost altogether of leafy trees... Here and there the silvery leaves of the large camphor trees could be clearly distinguished among the green of the rest of the forest. A few of the houses of the natives could also be seen in the distance...

31: Hofmann--609-610 N-3 (1909) 1912 Formosan Aborigines
116, 554, 721

I tried, by asking the most reliable informants, to find out the reasons why the aborigines were headhunters; I did not limit [610] this inquiry to the natives in the north, the region I visited, but included those in the south as well. I made this attempt especially because, according to many sources, the aborigines are also cannibals; none of these sources, however, has advanced proof of this fact. Thus Fischer (1) tells the

1. Fischer: Streifzüge durch die Insel Formosa. Berlin, 1899.

story of a chieftain who offered his own child as food to a neighboring chieftain. These horror tales are hard to believe about a people which is not, comparatively speaking, on a very low level of development. The natives are not a nomadic group; they are a settled group living by agriculture, although it is true that their agriculture is very primitive. The motive for headhunting is simply that the head of an enemy forms a tangible proof of courage. The natives keep these trophies in the same way that they keep the antlers of stags or the tusks and heads of boar which they have hunted down.

The moral code of the natives demands that they take revenge on the enemy who robbed them of their fertile land and sent them to the barren mountains. This tradition is handed down from generation to generation, and it is believed that it is actually a good deed to obtain the head of one of the enemies of the country. (2) Their revenge

2. For that reason head hunting has increased during the first few years; the Japanese, without harming the natives themselves, have penetrated into their region and exploited it.

is therefore never personal. It is not a question of decapitating the man who has felled a certain camphor tree, for instance. Everyone who belongs to the enemy's party is liable for the common guilt with his head. Since it is also considered an act of courage to get the head of an enemy, this trophy is necessary to one who wants to marry. The bridegroom places the head, a bloody token of his ability to become a husband, at the feet of his bride. A second reason for this custom is a superstition which cannot be eradicated. Thus, in the north, the harvest festival in honor of the gods is celebrated by an offering consisting of several human heads.

On Formosa, headhunting takes the place of a procession held to implore the deity for rain or sun. Finally, headhunting also takes the place of a trial by ordeal. If a

31: Hofmann-610-611 N-3 (1909) 1912 Formosan Aborigines-2
116, 554, 583, 695, 721, 782

case cannot be decided, [611] the chief of a tribe, the guardian of the law, proclaims th
he who is the first to bring back the head of an enemy, is in the right.

31: Hofmann--611 N-3 (1909) 1912 Formosan Aborigines
116, 171

I cannot here discuss the customs and manner of living of the Seiban, [EJ: i. e. the Atayal] since I did not come into contact with them. I shall discuss the Tsou aborigines later on, but it must be emphasized that the customs of the different tribes vary considerably.

31: Hofmann--611 [2] N-3 (1909) 1912 Formosans
116, 769

In a Chinese village in the vicinity of Taikokan I had an opportunity to observe a peculiar mortuary custom of the Chinese. A young woman in mourning visited a cemetery together with a worker. The ceremonies began with prayers and with the burning of yellow paper, symbolizing money, which the deceased needs in the after-life, and similar ceremonies. The worker then opened the grave. The large wooden coffin was placed on the earth instead of in it; it was covered with earth so that a mound was formed above the grave. When I asked what the purpose of this was I was told that it was customary to exhume the remains of the body several years after the funeral. The young Hakka girl, a working girl dressed in shabby clothes, answered my questions willingly. She told me that she had been saving up money for a long time to have the body of her mother exhumed and buried anew I asked her whether she was sure that this was the right grave and that she might not have dug up another body by mistake; she answered that her mother was pregnant when she died and that signs of this might be seen in the grave. She was right: the gravedigger lifted up the top of the casket with little trouble and began to take out and clean the bones. They were then placed in a large urn to be presented there. When this container has been set up in the house, the ceremonies have been concluded. Ordinarily the bodies are exhumed after three years; by that time, since the body is hastily buried and little is done to preserve it, it is already a skeleton. If it should happen that some flesh and tissues still remain, the Chinese take this as a sign that the deceased was a bad man and cannot find peace in the after-life.

My stay in the region of the Tsou aborigines was longer and more rewarding than my visit to Taikokan. We started from the small village of Kagi approximately in the center of the island. We arrived there after a journey during hot weather, having traveled by train, on May 12th, 1909. We immediately become aware of the change in climate. While in the north there had been a great deal of rain and humidity, here there was drought; the humid northern winds which predominate in the spring do not penetrate to the center of Formosa. In Kilung and Tahoku the abundant rainfalls are evenly distributed throughout the entire year while in this region the rainy season begins at the end of May and lasts until October. The effect of these climatic differences may be seen in the vegetation; here there are far more xerophytic plants. In the north at this time of the year the rice fields are already green, while here the soil has not yet been plowed since the plants could not grow. There was not a cloud in the sky and we were exposed to the full heat of the sun. Kagi, a village which otherwise does not offer anything of interest, was shrouded in a cloud of yellow dust. In 1907 a violent earthquake occurred here; of the buildings of former times little has remained except the gates of the city. On Formosa all the cities in the Chinese region are enclosed by walls and ramparts (cf. Fig, 1); a European who visits these cities is reminded of the medieval cities of Europe.

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

31: Hofmann--613-614 N-3 (1909) 1912 Formosans
116, 137, 245, 283

From Kagi we went to Chikutoki; on that stretch the land is level and the railway has already been completed. This region was also still dry, and the natives had not yet tended the fields. A feature characteristic of tropical vegetation is the abundance of palm groves (betel palms); the trees have an average height of seven to eight meters. The Chinese and Malayans chew betel nuts as a stimulant. The vegetation in the river-beds, most of which are dry at this time of the year, is more copious. The plant most frequently found, which is also cultivated artificially, is the large Nephelium longana (called Ryugan by the Chinese and Japanese) the fruits of which are very tasty. There are also large, old Ficus trees, including several varieties of palm trees (Phoenix humilis), Passiflora (Carica Papaya), Anona squamosa, etc; all these are representative of tropical flora. On the barren slopes there are Pandanus tectorius with leaves like pineapple trees; this furnishes a fiber which is used for hats resembling panama hats. The flora on the whole is rich in textile, especially fibrous plants. There are, first of all, the rattan palms with prickly leaves. The tough fiber of this palm is an excellent substitute for hemp and is used for all sorts of household utensils everywhere on Formosa. I did not see artificial plantations of this palm anywhere, however, [614] the Chamaerops excelsa is planted everywhere by the Chinese as a textile plant. The Liquidambar formosana is also planted artificially in this region; the leaves are used as feed for silkworms and the Japanese government expects to develop a successful industry of this plant.

From Chikutoki we started to ascend the mountain; where the ground was fairly level we used sedan chairs made of two bamboo poles in which we sat in a half squatting, half lying position. Four strong Chinese were able to carry my weight, 78 kilograms, with no difficulty. They were able to climb ascents of 20 to 30 at the same steady pace. The carriers in back change about every fifteen minutes.

After an ascent of about five hours, at a height of about 600 to 700 meters, we found that the landscape had changed considerably. We went through bamboo forests, more dense and more extensive perhaps than anywhere else on the Japanese islands; forests like these are not found, so far as is known, anywhere else on Formosa. In an area of about 10,000 hectares the vegetation consists entirely of bamboo trees; these grow so close together that there is no space for other plants to develop. The average height of the bamboo trees is not more than 13 meters. Whether these bamboo forests represent the original vegetation or whether they have taken the place of leafy trees which were destroyed by a forest fire cannot be determined. The fact that they are spread over a large area supports the assumption that the vegetation is original and has a xerophilous character. The forests of bamboo trees grow on dry, low elevations composed of sandstone which are exposed to the sun; at the level at which they grow there are dry and rainy seasons. At a height of about 1,000 meters there are rainfalls of short duration with an intensity characteristic of the tropics almost every day; at this level bamboo trees no longer predominate. Chinese settlers have penetrated as far as the bamboo

forests, however, and from this it might be concluded that the original jungles were destroyed by the fires of the colonists [615] and that new shoots of bamboo took their place by a natural process. This has happened several times on the Japanese islands. On the other hand the settlements are sparse and do not penetrate very deeply into the region of the bamboo forests. The numerous places where trees have been burned down, which are also found in the sections entirely inhabited by the aborigines, are overgrown with stiff, tall reed plants, Imperata and Miscanthus which because of their dense growth prevent the growth of trees at least for the near future. It is well known that bamboo trees grow to their full height within one year. Since it has many uses, bamboo often takes the place of timber; for that reason the Chinese exploit the forests around their settlements since for their purposes bamboo alone is sufficient.

31: Hofmann--615 N-3 (1909) 1912 Formosans
116, 289, 313

In the Arisan Forest, the Chinese are exploiting some areas for the paper industry. They cut off the bamboo stems after one year and place them in grooves where they are exposed to caustic lime; after this mass has decomposed, it is crushed in a mill run by animal power and is ground by a second mill with the aid of water. Finally it placed in troughs where the workers stamp it with their feet until it has become a thin, fibrous, yellow paste. The wooden fiber is then taken out and made into thick yellow cardboard; next it is placed into kilns and dried. 1,200 of these cardboards of O. 75 square meters each is worth about 1. 70 K at the place where it is produced (70 sen in Japanese money).

31: Hofmann--615 [2] N-3 (1909) 1912 Formosans
116, 132

We spent the night in a small hut near the railway which was being built in Karapen, at an altitude of 1,080 meters, beyond the first mountain ridge. We arrived here in the afternoon; shortly afterwards it began to rain. The valley and the hill which we had passed during the day had been completely dry. From here on, however, as long as we remained above an altitude of 1,000 meters, there were copious rainfalls every day during the hot part of the day; the rain never lasted very long, and the morning and evening were always clear.

On the following day we advanced [EJ: from Karapen] about 18 kilometers and reached an altitude of approximately 1,400 meters. When we had reached our destination, a point which the Japanese had called Funkiko and which was to form the end station of the [616] future railway, the thermometer stood at 19° Celsius and the aneroid at 1,420 (corrected at sea level). Our way took us through depressions and over elevations. The mountains, which consist of schist, are broken up into numerous steep and narrow ranges. Here and there sandstone lies exposed; in most places, however, the ground is completely covered with vegetation. In the northeast the Tauzan (Devil's Mountain) drops down abruptly. This is an isolated limestone mountain with barren slopes; it has a height of 2,800 meters. Here the vegetation is entirely different from that we encountered on the previous day. Before we entered the subtropical forest of Lauraceae trees we were struck by the beautiful tree ferns (Fig. 3), which attain a height of 10 meters or more, and the large banana trees growing on the mountains (Musaceae) with their huge leaves. Both of these plants, in contrast to the dry bamboo forests, demand a high degree of moisture both in the soil and in the atmosphere while they cannot grow where there are strong air currents. On these elevations there is not even a breeze, which is all the more striking since the valley of Kagi, barely 20 kilometers distant in a direct line, is frequently ravaged by violent typhoons. Everywhere we saw banana leaves which were unharmed; these leaves would be easily torn if there were a strong wind. It is a remarkable fact that typhoons are limited to the lowest regions while above

an altitude of 100 meters they do not occur. Although tree ferns and Musaceae, which usually occur in groups, do not take up much space in a limited region and often grow between other trees in the forest, forests of fern and palm trees must be considered characteristic of Formosa. They form perhaps an example of Tertiary flora; according to a theory now accepted by geologists Tertiary flora; which demands a constantly humid, rainy and foggy climate which is at the same time warm and not windy, once predominated on the earth.

On the second day of our journey we again passed through beautiful Lauraceae forests; the most attractive scenes, however, were reserved for the third day, when we covered the distance from Funkiko to Goten (2,220 meters). On that day we crossed two mountain ridges so that we could reach the plateau of the Arisan mountain [617] by the shortest possible route. The region between 1,000 and 1,800 M. is covered with foliaceous forests; here as everywhere else camphor trees grow only singly, while evergreen oaks, Quercus gilva, acuta, etc., predominate, as well as Pasania cuspidata, Cinnamonum pedunculatum, Machilus Thunbergii. All the foliacious trees here are evergreen. There are huge tree trunks overgrown with epiphytic plants; the tops of the trees form an almost impenetrable roof so that neither rain nor sun is admitted here. The average height is over 30 meters. In this hothouse atmosphere there are numerous lianas which grow to great heights and develop strong aërial roots the size of an arm; they are suspended from the tops of the trees on which they live.... The lower

arboreal flora has its habitat among the tree tops. There are large white orchids and ferns, and on the long branches of the crown and the sides of the Lauraceae trees there are groups of hart's tongues. All of these plants...are engaged in a continual struggle for light. Our coolies were very careful not to step into the shrubs along the paths, where a dangerous venomous snake with green coloring has its habitat.... The densest part of this forest is found in the depressions and on the lower slopes. In the higher regions the forest is less dense and there is more light for the plants to develop so that even those on the ground are not hindered in their growth. There are various types of shrubs, among which the Fatsia, with its large digital leaves is especially striking. Gradually the Lauraceae grow further and further apart and less tall. At an altitude of about 2,000 meters conifers begin to appear, first singly and gradually growing taller and more numerous. These consist of species of Chamaecyparis; the evergreen foliaceous trees take the place of underbrush while these predominate. [618] After the gigantic proportions of the jungle through which we had just passed we did not immediately become aware of the size of these trees, which have stood for so many centuries. It was not until we took measurements that we realized that these must be among the tallest trees anywhere in the old world. There are some which grow as tall as 60 meters. The largest of the Chamaecyparis formosensis have a diameter of six meters;

they are about 52 meters high and furnish 280 cubic meters of timber. (cf. Fig. 4). A single tree thus offers more timber than a hectare of old pines in central Europe.

The largest trees may be found in the vicinity of Goten, which is to be the end station of the railway, where the Japanese have already built several houses. Here there is a wide, almost level depression with a deep layer of humus which is protected from the wind on all sides; this is an ideal habitat for the conifers, and the trees here are probably as large as those in California. Since 1907 a meteorological station has been set up in Goten...

We spent several days exploring the jungle area around the Arisan, an area comprising 10,000 hectares in all. At a level of 2,400 meters and above the Cupressi predominate. Here the trees do not attain the heights quoted above, but the average height is over 40 meters and the forest is so dense that one cannot see more than a few feet away. One elevation, which has been named Manzaisan, has an altitude of 2,670 meters and is overgrown with reeds; from here one has a good view of the surrounding mountains. There is a thick fog below so that we cannot see the route we had taken the previous day; in front of us, however, lies the imposing peak of Mount Morrison, which, according to the aneroid, has a height of 4,340 meters. The highest point visited by us in this region was the peak of the limestone mountain, Teufelsberg, with an altitude of 2,800 meters. Here the view is obscured by the dense forests.

31: Hofmann--618-619 N-3 (1909) 1912 Formosan Aborigines
116, 101, 177, 291, 721 Tsou

During our expedition through the forests we occasionally saw some of the natives who had come here to hunt or merely from curiosity. [619] They are a shy people, short, with beautiful bright eyes; they are clothed in deerskins, leaving their arms and legs bare. These are members of the Tsou tribe. The word tsou is equivalent to human being, but they do not apply this term to any other people, neither the Malayans nor the Chinese and Japanese. They are, comparatively speaking, quite civilized; I was told that they had given up headhunting several centuries ago, but this is probably due to the influence of a foreign culture more than moral conviction. There has been no perceptible progress in their culture. Since they are numerically inferior to the other tribes and since they are constantly at war with the neighboring tribe, the Hosha, they are probably forced to accept the rule of the Japanese.

31: Hofmann--619 N-3 (1909) 1912 Formosan Aborigines
116, 123, 482 Tsou

They may be hired as carriers; they carried our baggage quickly and efficiently through the chasms and over the mountains when we continue our expedition on the following day. I visited two villages inhabited by this tribe; I went inside some of their huts and stayed overnight in one of the villages, so that I have some first-hand information about this tribe.

31; Hofmann--619 [2] N-3 (1909) 1912 Formosan Aborigines
116, 342, 361, 513, 622 Tsou

When I entered the first village, Teboro, I was received by the chief and treated with great respect; the village is enclosed by a low stone wall, as is each of the houses in the village. The huts are oval in shape; they are made of rough stones taken from rivers and brooks. They are barely 1 1/2 meters high; the ratio between the length and width is 4 to 1. The post which supports the roof consists of a tree trunk which has not been shaped in any way; the roof itself consists of reeds. There is one, or at most two openings without a door; these are on the narrow sides of the house and serve both to give light and to admit air. The hut of the chieftain is somewhat larger. There are niches in the walls which serve as sleeping quarters; the natives sleep on clay which has been beaten flat, while the chieftain sleeps on a bamboo support which is in the center of the hut. The clay floor of the house I visited had been cleaned, but I do not know whether this is always the case.

31: Hofmann [illegible]
116, 281, 554, 721, 744

There were several huts [illegible] the tombs of deceased relatives. [illegible] trophies obtained through hunting. [illegible] tribe. In the huts I visited there were [illegible] than a hundred [illegible] natives hang in their huts the skins of animals [illegible] them dry out.

They have domestic dogs of a small black breed which guard the houses and are used in hunting.

Another domestic animal which is found everywhere is a small black pig. There are also chickens in the village, but there are no cattle. The entire tribe comprises 1,500 members, including 400 men able to bear arms; all the men know how to shoot.

31: Hofmann--620 [2] N-3 (1909) 1912 Formosan Aborigines
116, 224, 241

The aborigines of Formosa are not a nomadic people, nor do they live by hunting alone, although they are passionate hunters. They are an agricultural settled people and they move to another locality only when they are driven out of their homes. Their agricultural methods are quite primitive. Millet is cultivated chiefly; there is also a kind of rice plant which does not require irrigation, as well as the Colocasia antiquorum, a tuberous fruit of the Aroidea family which is very popular among the Japanese....

31: Hofmann--620 [3] N-3 (1909) 1912 Formosan Aborigines
116, 241, 462 Tsou

Most of the natives have small fields on the slopes. I did not see any traces of agriculture near the houses; in the depressions, because of the debris washed down by the rivers, there are few places fit for cultivation. Most of the labor in the fields is done by the women. Within the tribe or tribal village, both labor and profit are regulated according to the communistic principle. Hunting and agriculture are both communal undertakings and the profit is divided equally among all; the children get the same share as the adults.

31: Hofmann--620-621 N-3 (1909) 1912 Formosan Aborigines
116, 342, 561, 621 Tsou

The most striking feature in the villages of the aborigines are the houses for bachelors (cf. Fig. 5). Both of the villages I visited, Tebor and Tappan, have a large hut of this type; it may be easily distinguished from the rest since it is erected on pilework, while the other houses are built of stone. The lower story is open on all sides; the upper story is open along the front of the house and has a straw roof. The natives climb up to the hall on a tree trunk in which notches have been cut; this is by no means easy. [621] In this hall all the unmarried men live together. Here the natives also hold their councils of war and discuss all the important affairs of the tribe, so that this hut is, as it were, their ministry, parliament, and stock market. No woman may enter this sanctum under any conditions.

It is strange that, although the Tsou tribe supposedly has given up headhunting long ago, the natives preserve large numbers of human heads in nets; in Tappan I saw about 140 of these. Judging from their age and condition I would say that this tribe practiced headhunting until quite recently; I believe they have ceased to engage in this sport only from motives of self-preservation and from fear of the Chinese and Japanese. The respect with which they treat these trophies of war indicates that, if a war breaks out again, this old custom will be revived. The Tsou are the enemies of the neighboring tribe, the Hosha (cf. Fig. 6) these are a more savage people and I was not able for that reason to observe their villages as much as those of the Tsou. The presence of the Chinese and Japanese, and the guards posted along the boundaries of the latter, prevents warfare between these two tribes. I learned that the reason for the feud is that both claim the same hunting grounds.

31: Hofmann--621-622 N-3 (1909) 1912 Formosan Aborigines
116, 273, 292, 517 Tsou

When I visited the bachelors' quarters a festival was in progress. The chieftain was wearing a red jacket made of cloth; the other participants had taken off their deerskin garment and were squatting on the floor of the hall wearing nothing but a simple loincloth made of fiber. There were 60 men in all. All were drinking remi, a fermented beverage, in great quantities. They prepare this from rice and millet which has been chewed by the women; they spit this into a trough and the paste is left there to ferment. When this process is complete the paste is mixed with water and the drink is ready. The men used cups made of pieces of bamboo; one of them was drinking from a [622] beer bottle. They emptied the bamboo cups in a single draught. Some of the men went around to fill the cups and urged those who were slow to drink more. The men embraced each other and tried to empty their cups to the last drop.... They ate sugar with the Remi; the younger boys were given sugar without the beverage, although, when I tested the drink, I found that it had a very low alcoholic content. The men must have consumed large quantities, however, for late at night, when we retired, we heard them shouting and stamping their feet.

31: Hofmann--622 N-3 (1909) 1912 Formosan Aborigines
116, 301, 304 Tsou

The Tsou, like all the other tribes of southern Formosa, are not tattooed but they are fond of ornaments. They wear necklaces made of glass beads and shells (Fig. 7), as well as ear pendants made of rhomboid-shaped, polished wood which ends in a point. Some of them were wearing bracelets similar to the necklaces. Whether these represent medals or whether they merely satisfy the aesthetic impulse of the natives I cannot say.

31: Hofmann--622 [2] N-3 (1909) 1912 Formosan Aborigines
116, 181, 609 Tsou

On the whole the aborigines are good-natured, sociable, and gay. When they are together indoors they talk a great deal and they love to sing and to make noise. When they are outside, however, they are shy and their behavior toward strangers, even toward Malayans of another tribe, is modest and reserved.

31: Hofmann--622 [3] N-3 (1909) 1912 Formosan Aborigines
116, 276, 323 Tsou

All the natives smoke; the native term for tobacco is tamako. They have small pipes made of clay. They do not have the custom of chewing betel nuts, however....

31: Hofmann--622-623 [illegible]
116, 291, 304, 881

The men remove their eye teeth. [illegible] since it is done when the boys are 12 years old, it is likely that this is associated with puberty rites. They also tear out their beards, so that all have bare [illegible] face. The natives as well as the Chinese and Japanese have only a very slight beard. The custom of tying up the prepuce of boys is [illegible] (1924). Though this is not done in every case it is probably done only for prostitutes on the [illegible] through the woods which are overgrown with [illegible] and thorny shrubs. They have [illegible] of light bellyband made of fiber. This is probably also done to prevent the penis, as [illegible] to help them bear their hunger more easily if there is no food. It may also have the purpose of helping them to keep their bodies straight and [illegible].

31: Hofmann--623 N-3 (1909) 1912 Formosan Aborigines
116, 224, 261, 411 Tsou

Although the natives consume great quantities of food and drink at banquets, they are able to go without food for days. When they are hunting, they often lie in wait for a whole day and night; they shoot the game only when they are very close. They are therefore not very good marksmen; they get their guns, which are not of a very good quality, from the Chinese. Since powder is difficult to get they are forced to use it sparingly. They do not hunt for beasts of prey such as bears (Ursus malayanus), leopards, wild cats, etc., and they seldom shoot birds.

31: Hofmann--623 [2] N-3 (1909) 1912 Formosan Aborigines
116, 721

On the whole the Malayans on this island do not possess a high degree of courage. The practice of headhunting is to be regarded not as a display of primitive aggressiveness but as the result of a constant desire for revenge. I believe that it corresponds to the blood vengeance found among other primitive peoples.

31: Hofmann--623 [3] N-3 (1909) 1912 Formosan Aborigines
116, 291, 609, 301, 592, 837 Tsou

Members of the Tsou tribe are monogamous; adultery on the part of the woman does not occur at all. The women are very shy; they do not look strangers in the face, and they go about with their eyes downcast. Some of them wear garments made of cloth from China, others weave their own garments on primitive looms. I saw few women who were wearing ornaments; the men here are far more vain than the women.

31: Hofmann--623 [4] N-3 (1909) 1912 Formosan Aborigines
116, 514, 834, 844 Tsou

After the delivery, the mother cuts the sharp umbilical cord with a sharp piece of reed; the newly-born infant is washed in a brook. Both men and women are modest to a very high degree. The men who were our carriers for several days had a high sense of decency, and, if they had to relieve themselves, always hid from the rest.

In their marital relations they show a great respect for the women. The bachelors are not admitted to the houses and are therefore forced to practice continence. For that reason they inflict severe punishment on any member of the tribe who has violated a woman within the tribe, and in the case of a stranger, this offense is a casus belli.

In 1908 a Japanese forester violated the wife of a native in Rantaisan, in the region of the Hosha, an aggressive tribe; this led to a long headhunting expedition. The aborigines, even the women, were curious about the conquerors and therefore often went near their dwellings. The Japanese foreman was especially attracted by one woman and abducted her. She remained with him, probably because she was afraid of the severe punishment which the chieftain would administer. Her husband did not take the offense as seriously as her father-in-law, who forced his son to take revenge. Four Japanese workers who had had nothing to do with the affair were attacked by a group of natives and decapitated. The man who had abducted the woman was not one of the victims.

31: Hofmann--624-625 N-3 (1909) 1912 Formosan Aborigines
116, 173 Tsou

The Tsou tell the following story about the origin of headhunting, at least as regards their enmity with the Chinese:

About 150 years ago, when the Tsou tribe still practiced headhunting, a Chinese, Gofo, had made friends with the chieftain and therefore was greatly respected by the entire tribe. There was a drought which lasted for a long time so that the chieftain became worried. He thought that the god might be angry since, because of the persuasions of the Chinese, had not been given any offerings consisting of human heads for a long time. He consulted with Gofo, who tried in vain to convince the chief that to offer human sacrifice was a futile undertaking. Finally he proposed to the chief that, if a human head was demanded by the god, it should be his own. The chieftain accepted this offer and killed Gofo. After this there was rain, but in a short time the Tsou tribe was decimated by an epidemic of smallpox. Gofo appeared to the chieftain in a dream and thus the epidemic was considered another punishment of the gods; from then on the natives became headhunters. [625]

In the Chinese settlements there are several temples consecrated to Gofo and his picture has been preserved there. His rash offer has made him a demi-god among the Chinese.

As far as we know, the office of chieftain today is passed on through inheritance; the chieftain is also the only judge in the tribe. Each tribal village also has its local chief, chosen by the people themselves; these subordinate chiefs, however, exercise very little power.

31: Hofmann--625 [2] N-3 (1909) 1912 Formosan Aborigines
116, 262, 343, 784 Tsou

The food of the natives consists chiefly of millet, rice, and Colocasiae. This is supplemented by game, deer and boars, as well as pork and chicken. The natives also eat fish, which they obtain in abundance in the many streams on the mountains. The Tsou natives are not allowed to eat fish in their homes; the reason for this taboo is not known. If they want to eat trout, they must eat in a house built for this purpose. There is an open shed with a straw roof erected on pilework in Tappan which is used on those occasions.

31: Hofmann--625 [3] N-3 (1909) 1912 Formosan Aborigines
116, 181, 774, 802 Tsou

The aborigines believe in a life after death. They believe that everyone has two souls; one of these remains in the house after death, while the other lives in the jungles on Arisan. The natives therefore enter this region with all signs of awe and reverence. They seem to be an intelligent people on the whole; one indication of this is that they have terms for high numbers such as hundred, thousand, and million. There would be no difficulties in giving them instruction except that they value their freedom and their own customs above everything else and thus fear and avoid the fetters of civilization.

31: Hofmann--625-626 N-3 (1909) 1912 Formosan Aborigines
116, 181, 555, 609 Tsou

On our way back from the Arisan Mountain to Kagi a native, an older man, carried our baggage all the way. This is not the custom ordinarily; most of the natives offer their services only within their own region and return home as soon as they see the first houses of a Chinese settlement. In this case, however, the man wanted to call for his son, a good-for-nothing who had left the leisure of his native village in order to obtain work in Kagi. In another case, a young man had made friends with the Japanese and joined the police force. His work was very satisfactory; [626] he learned to read and write Japanese. After two years, however, he let himself be persuaded by the other members of his tribe to leave the police force and was chosen as a local chief. Thus, although relations between the Japanese and the Tsou natives are fairly good, there is a tendency among the latter to live apart and to retain their freedom. It is only natural that the Japanese scheme for exploiting the island, including the forests sacred to the natives as well as game, is not favored by the natives. While on the surface the Tsou natives now seem by no means hostile to the Japanese, it is not certain that these peaceful conditions will prevail in the future; it is possible that the Tsou natives may ally themselves with the other Malayan tribes against the foreign conquerors. It must be emphasized, however, that these are not bloodthirsty savages; rather they have the mentality of children and are easily swayed by an impulse of the moment. Their gay, happy mood may change in a moment to fear and distrust; then they cry like children. These sudden changes in temperament are frightening to a stranger.

31: Hofmann--626 N-3 (1909) 1912 Formosan Aborigines
116, 411 Tsou

All the natives carry a sharp knife (this is imported from China, since the natives themselves are still in the paleolithic age and have no wrought metals) at all times. Whenever they stop on a longer march, they take out the knife and whet it on a sandstone.

31: Hofmann--626 [2] N-3 (1909) 1912 Formosan Aborigines
116, 291, 481 Tsou

In warfare the natives have the advantage in the mountains since they are very agile, skillful climbers. I was often able to observe this myself; they climbed even very steep slopes at a running pace, and although they were loaded down with baggage, they were secure on overhanging rocks. In the plains, however, they tire very easily, and they cannot make a long march on level ground. When they go on longer walks, the natives protect their heads from the sun with a covering of leaves or flowers; dressed thus they certainly do not inspire fear.

31: Hofmann--626-627 N-3 (1909) 1912 Formosan Aborigines
116, 436, 461, 804 Tsou

The natives do not know the value of money. They have several articles used for barter and pay, chiefly cloth. They measure length by spans. [627] Since they have a communist economy they pay by the day, so that the strongest man is hired as a carrier at the same price as the weakest boy. If a distinction were made, they would consider this unjust. In the same way they divide food among themselves so that everyone gets an equal share.

31: Hofmann--627 N-3 (1909) 1912 Formosan Aborigines
116, 161 Tsou

In spite of their favorable living conditions, the population of the Tsou natives has hardly increased at all. There are no large families among the Malayans on this island....

31: Hofmann--627 [2] N-3 (1909) 1912 Formosans
116, 701

When we had returned to the valley... we watched a parade of the guards. These men are stationed along the boundary; they are Chinese who have been drilled by Japanese officers and evidently have had an excellent training.

31: Hofmann--627 [3] N-3 (1909) 1912 Formosans
116, 311

After a short stay in Kagi we proceeded to the south by train. A few kilometers to the south we saw the pillar which marks the point where the railway cuts across the Tropic of Cancer. Our journey proceeded without interruptions to the end station in the south, Takao, the harbor city. On the whole the vegetation here is not so copious as in the north; this is due, of course, to differences in the climate and the frequency of rainfalls. Here, too, most of the soil which is fit for cultivation has been used for rice plantations; instead of tea plantations, however, there are fields of sugar cane here and there.

31: Hofmann--627-628 N-3 (1909) 1912 Formosans
116, 132, 311, 249

The sugar industry on Formosa has increased considerably; this industry will become [628] still more profitable when the projected plan for a system of irrigation with artificial dams has become a reality. In this way the tributary of the southern Tamsui may be utilized and more soil than hitherto will be irrigated. Southern Formosa is affected by the drought every winter.

31: Hofmann--628-629 N-3 (1909) 1912 Formosans-1-2
116, 132, 137, 504

The bay and lagoon of Takao offer a beautiful sight. The lagoon is connected with the ocean by a narrow opening, hemmed in by coral reefs; large boats therefore cannot enter the bay. Work on harbor installations is still in progress; this is an ambitious and costly project, but it is a necessary step in establishing communication with the south. It will also be necessary to make the harbor safe, especially since the roadstead of Takao offers no protection even to large steamers during the frequent and violent typhoons. The most dangerous months for typhoons are June, July, and August. The direction of the wind, which may develop a velocity of 100 miles per hour, is from east to west. For those harbor installations which are made of wood, the Teredo navalis is extremely destructive. Pine wood may be destroyed by these worms within three months, while Chamaecyparis wood may last for one year. Timber which is used for buildings on land (for railways, telegraph poles, etc.) is destroyed by white termites, but if the wood is impregnated with tar, this forms a sufficint, though costly, protection. The bay within the lagoon is about 22 kilometers long and 5 kilometers wide at its widest point. Around the bay there are artificial sea gardens. Among the plants growing wild there are first of all pandanus groves, which probably form one of the most unusual features in the vegetation of Formosa; while in other regions of the island pandanus grows only in the form of shrubs here it is tree-like and forms a plant typical of coastal regions.

Another unusual form of vegetation of a purely xerophilous character is a species of

tropical Euphorbia Tirucalli (spurge); here it has hardly any leaves, since their place is taken by green branches. Its habitat is among the rocks on the beach, and it may grow as high as ten meters. [629] Finally, there are several species of mangrove along the level coast of the lagoon of Takao.

31: Hofmann--629 N-3 (1909) 1912 Formosans
116, 249, 311

From the coast I went to Ako and visited the extensive sugar plantations there. These are run with modern equipment on a large scale; there are large factories and there is a great deal of activity. Aside from these plantations, however, the land around here has not been exploited to the fullest possible extent.

3h: Hofmann--629 [2] N-3 (1909) 1912 Formosans
116, 361

On my return I stayed for some time in Tainan, the southern capital. This is still one of the most important cities on the island because of its nearness to the shallow Amping Harbor, although it is likely that Takao, with the increase in trade, will assume a greater importance.

31: Hofmann--630-631 N-3 (1909) 1912 Formosans
116, 342, 423, 556

In Tainan I stayed in an old house which belonged to a member of the Chinese nobility; there I was able to observe the luxury with which the Chinese surround themselves. Many of the Chinese have accumulated considerable wealth on Formosa; there are several millionaires among them who had remained after the conquest of the island, while others fled to the mainland with all their possessions. In contrast to the Japanese, who throughout their history have looked down upon capitalists and traders, who even despise merchants and today still do not always accept them socially, the Chinese are all motivated by a desire for profit. The pioneers among them took large areas of the most fertile land from the natives; these were leased and subleased to later immigrants. Thus when the Japanese took possession of Formosa they encountered a complicated system of land ownership and tenure which yielded great profits to some individuals. In the management of real estate problems, [631] which resulted in the large-scale exploitation of tenants and subtenants, the new regime has constantly taken the side of the exploited and it has succeeded in bringing order into the system as a whole. There is still a wide field of activity for the Chinese capitalists, however, since they apply only to their compatriots for credit, never to the Japanese.

31: Hofmann--631 N-3 (1909) 1912 Formosans
116, 563, 609

Japanese industrial products do not sell well among the Chinese. Most of the Japanese on Formosa are high or low officials. While in view of the large population it might be expected that the Japanese would develop an active and extensive retail trade, the relations between the Chinese and Japanese so far have made this impossible; this may be due to the fact that the Chinese isolate themselves intentionally as well as to an inherent antagonism between the two groups and a lack of confidence on both sides.

31: Hofmann--631 [2] N-3 (1909) 1912 Formosans
116, 342, 351, 871

These Chinese capitalists know how to live luxuriously; their houses are beautiful even by European standards. A drive leads from the street to a large garden enclosed by the house and annexes. There are high, cool porticos leading to the residence proper. Many of the houses have a small theater. Since in former times there were no public schools in China, or at least none that were attended by the children of the rich, the Chinese here have set aside one wing of the building for the children and their tutors. As the Chinese ideal is to have a large family and this ideal is often realized, this wing is usually very large. In the center of the courtyard, there is a pond. There are small arbors and arcades arranged in excellent taste. From the terrace one has a beautiful view of the estate, which is hidden from the observer on the street. The house where I stayed had been made into a Japanese hotel but the features characteristic of the original estate had been retained.

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Yami

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[Frontispiece]

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COAST OF KOTOSHO

"The present essay written some years ago when Formosa was still a Japanese colony, appeared in the review 'Marco Polo'. As a result of the war and the loss or dispersal of much valuable source material, I have unfortunately been unable to pursue, as I should have wished my researches in this interesting field. I have however, re-arranged the content and made other necessary changes in the text, adding a number of new photographs.

This brief preliminary account of some of the Formosan creation-myths is mainly concerned with those found in the Yami tribe on the island of Botal-Tobago (Kô-tô-sho). It makes no claim to be a contribution to cultural anthropology; I hope, however, that it may serve to draw the attention of foreign specialists to this too-long neglected field, before it is too late. This is my only justification for republishing this essay.

I wish to take this opportunity to pay a tribute to the memory of my friend, the late Dr. N. Utsurikawa, founder of the Ethnological Institute of the ex-Taihoku Imperial University. In the space of a few years, he built up a unique if small museum mainly devoted to the [6] savage tribes of Formosa, and trained a team of able researchers. It is thanks to their labours that the customs, traditions, arts and music of the Formosan natives were preserved and systematically studied. Without his encouragement and help and that of Dr. Erin Asai, himself a brilliant ethnologist and linguistician to whom I am also indebted for many of the photographs which illustrate it, this essay would never have

been written. Sincere thanks are also due to Mr. K. Matsuyama who has kindly placed his fine collection of photographs of the savage districts of Formosa, at my disposal."

34: Del Re--7-8 U-4 (no date) No Date Formosan Aborigines
116, 101

"It is now generally accepted by ethnologists that the savage tribes of Formosa (Taiwan) belong, racially, to the Indonesian race while linguistically they are a group of the Austronesian family. Among the Japanese they are known by the generic name of Banzoku or Takasago-zoku. Literally, the first means alien (ban) tribes (zoku), the second, tribes of Takasago (the ancient name given to Taiwan). These have further been divided (by the Japanese) into two categories; Seiban ('raw' savages) and Jikuban ('ripe' savages). The former live for the most part among the mountains of the interior or along the East coast of the island, generally in reservations, and have largely preserved their ancient languages and customs; the latter are sinicized and frequently indistinguishable except to the expert, from the Hakkas, Cantonese and Amoy Chinese who at various periods emigrated to Formosa. The noticeable linguistic, cultural and ethnic differences between many of the tribes have led to the surmise that, in general, the inland island tribes had their original homes somewhere on the South-Eastern Asiatic continent, while the [8] Yami of Botel-Tobago and, possibly some of those inhabiting the Eastern coast, came from Austronesia. Whatever the true facts may be, it is certain that they represent various strata of Indonesian peoples having different levels of culture, who in remote times settled in Taiwan, which lies at the Northern end of the Indonesian territory."

34: Del Re--8 [1] U-4 (no date) No Date Formosan Aboriginés
116, 101, 103

"The Aboriginal Department of the Japanese Government General of Taiwan divided the Seiban into seven groups viz: (i) Tayal, (ii) Saisyat or Saiset (North), (iii) Bunum, (iv) Tsou (Centre), (v) Paiwan (South-East), (vi) Ami (East), (vii) Yami (Botal-Tobago island, Jap. Kô-tô-sho). To these should be added the following sub-groups: (Ia) Sedeq, (IV a) Kanakanavu, (IV b) Saaroa, (V a) Rukai, (V b) Puyuma. (1)"

1. See map.

34: Del Re--8 [2] U-4 (no date) No Date Formosan Aborigines
116, 171, 197 Yami

"The creation-myths which will be dealt with are, in the main, peculiar to the Yami and differ considerably from those of the inland tribes, while having a certain affinity with those of the Puyuma. The latter, as well as those of the Ami, seem to be related to myths found among other Indonesian peoples. In the case of the Yami, it has been ascertained that their language is allied to that of the inhabitants of the islands of Batan or Basay (Vasay), Itbayat and Satung situated in the Phillippine group. (2)"

2. see Dr. E. Asai, A Study of the Yami Language, spoken on Botel-Tobago Island (subsequently cited as AYL) Leiden, Universiteitsboekhandel J. Ginsberg, pp. 4, 9ff. That some direct and, possibly, frequent intercourse existed between the Yami and the Batanese and Ibatanese is further substantiated by the internal evidence of text 5 (p. 73) and text 1 (p. 55 ff.) appended to AYL. See also the important article on this subject contributed by the late Dr. N. Utsurikawa (Director of the Ethnological Institute, Taihoku, Imperial University) to Ethnological Journal of South Eastern Asia and Oceania, Taihoku. Vol. I, n. 1 (1931).

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Yami

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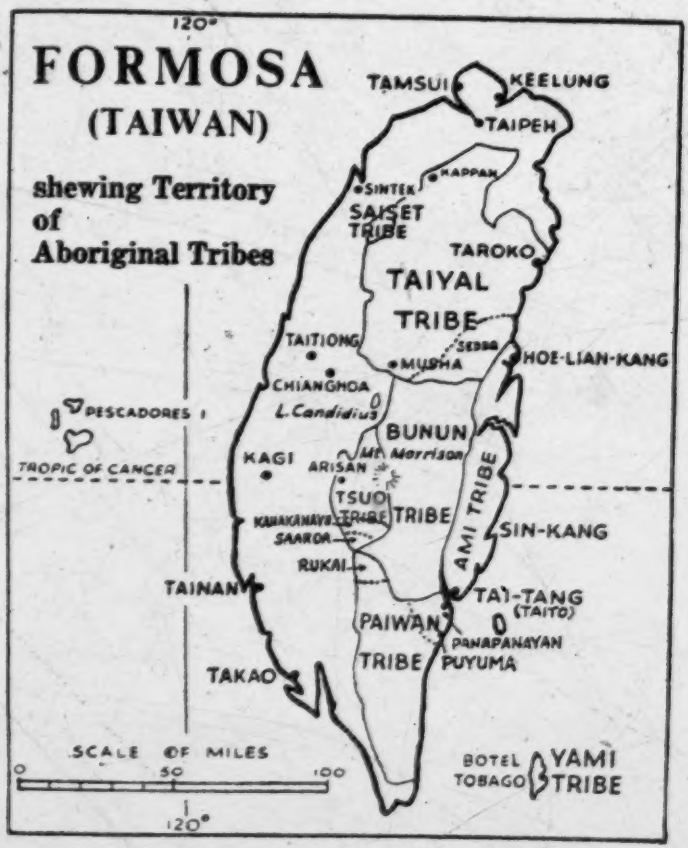

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MOUNTAIN TRIBES AND SUB-GROUPS

TRIBE	SUB-GROUP	POPULATION IN 1935
TAIYAL	Sedeq	34,957
SAISET	—	1,461
BUNUN	—	18,048
TSUO	Kanakanavu Saaroa	2,191
PAIWAN	Rukai Puyuma	42,614
AMI	—	47,064
YAMI	—	1,682
	Total	148,017

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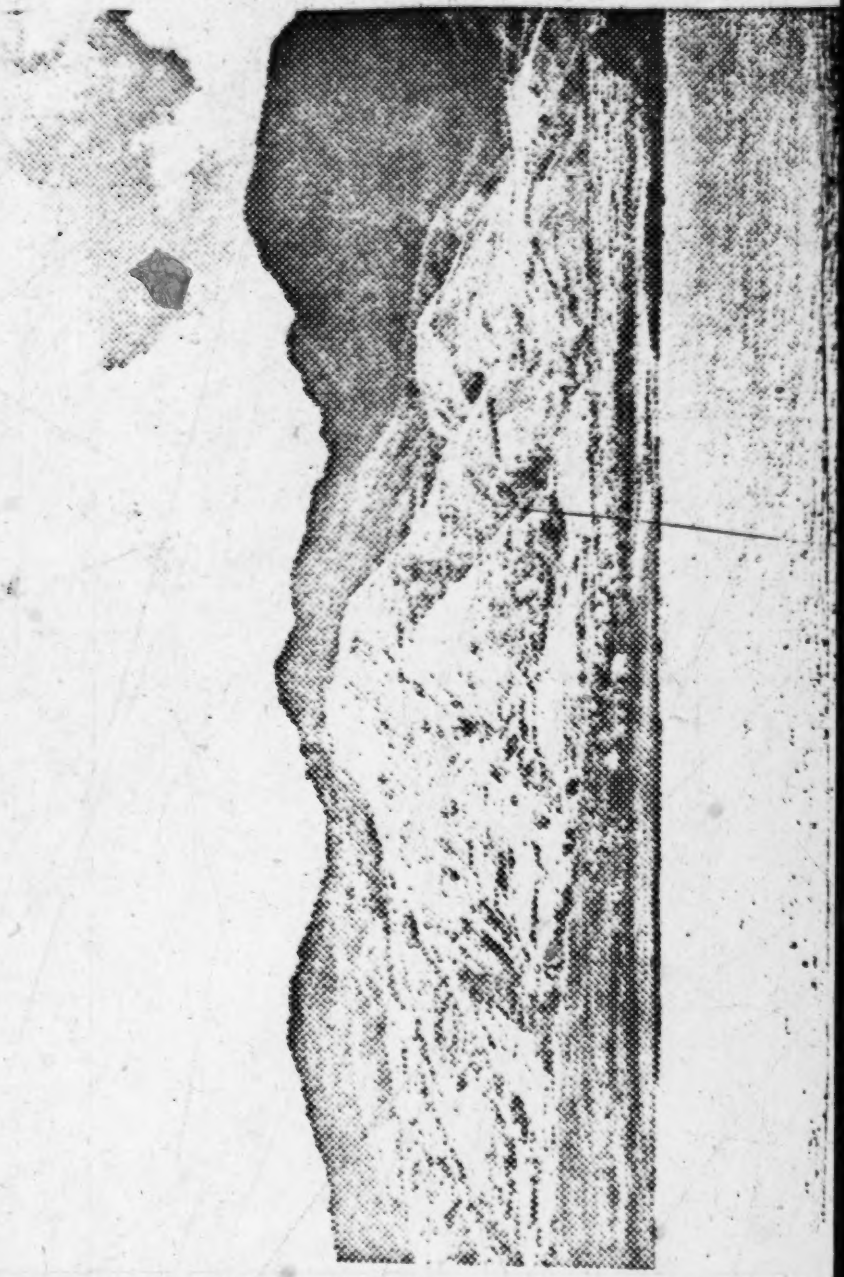


Kôtôsho From The Sea (Northwest Side)

34: Del Re--11-12 U-4 (no date) No Date Formosan--Aborigines-1-2
116, 101, 131, 103 Yami

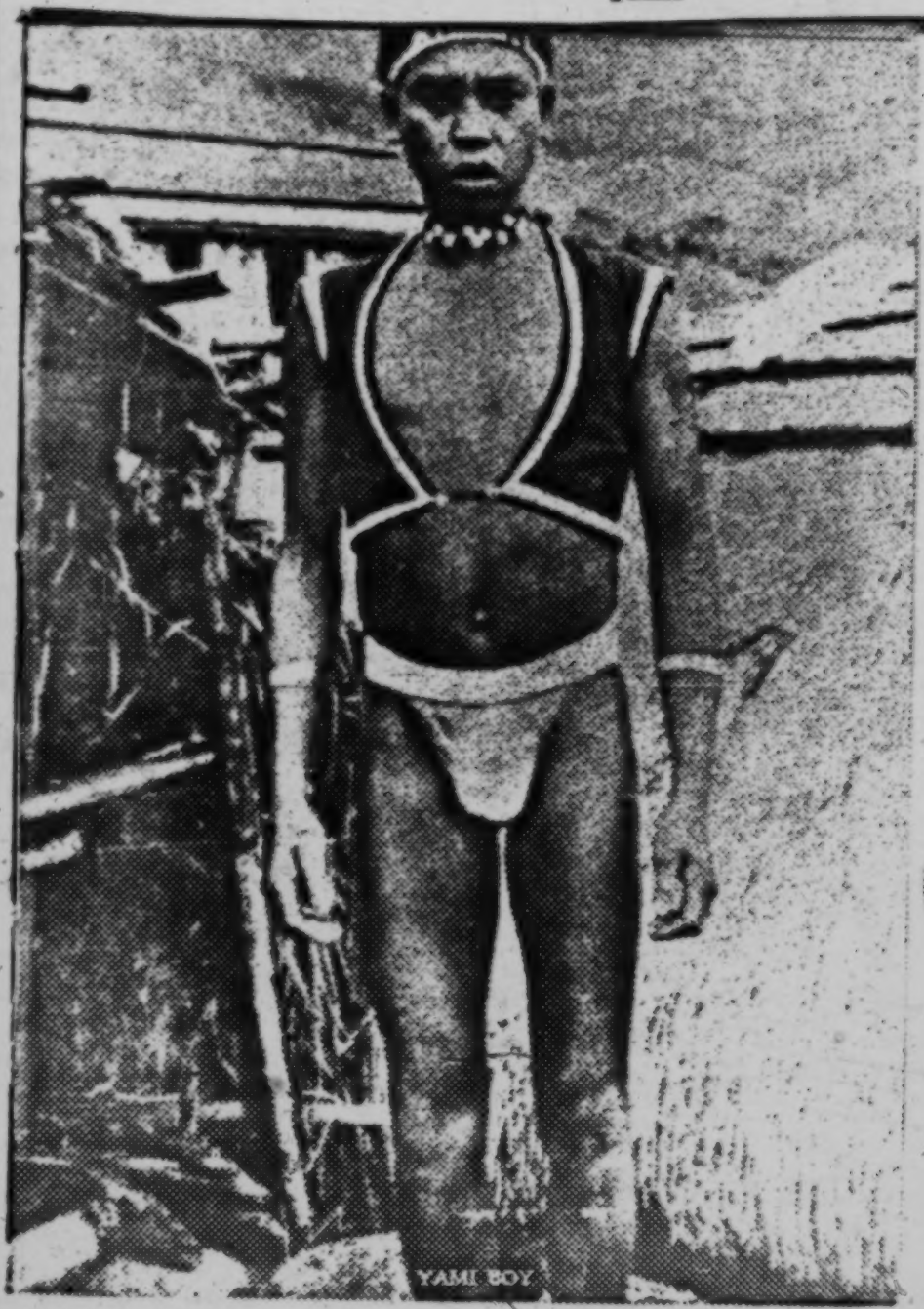
"The small coral island of Kô-tô-sho (island of the red heads), exclusively inhabited by Yami, has an area of about 45 square miles and lies between Formosa and the Philippines at a distance of 45 miles and lies between Formosa and the Philippines at a distance of 45 miles from the S.E. coast of Formosa. According to the census of 1934 it had a population of 1682 including a few Japanese policemen and their families. The name of Yami appears to have been due to Dr. R. Torii who, on visiting the island in 1897, reported that, when asked the name of their tribe, the savages replied; 'Yami Kami' (Yami we), kami being the personal pronoun used exclusively to denote the first person plural. Later investigations have shown, however, that the Yami have merely accepted the name given them by the Japanese. It should be added that the Western name for the island (Botal-Tobago) first appeared in Robert Broughton's map of the N. E. coast of Asia and the Japanese Islands (Weimar, 1805). Sanson d'Abbeville's map of the Philippines (1654), gives Tabaco Xima, the latter word being obviously the transcription of shima, (island), which also appears on an old Japanese chart of (?) 1607-08. In Chinese maps of the Sung Dynasty it is called Tabako or Tambako but later, in the Ching Dynasty, it appears as An-tau-su, pronounced by the Japanese Kô-tô-sho. XVIIIth [12] century maps give its name as Botrol (1720) and Bottol (1792), the latter names being derived from Botol and Buturu, by which it is known to the Puyuma and the Ami tribes of the East coast of Formosa, geographically nearest to it. From the evidence

available Dr. Asai concludes that 'Tobago' comes from the Chinese via Japan, and 'Botai' direct from the aborigenes, and that the two names were subsequently combined by Western cartographers, possibly to avoid confusion with the other island called Tobago in the British West Indies."

34: Del Re--12 U-4 (no date) No Date Formosan Aborigines
116, 101, 171 Yami

"Compared with other Formosan tribes, the Yami occupy numerically, a somewhat insignificant place more than compensated, however, by the fact that they constitute a remarkably interesting and original ethnographic unit divorced linguistically and culturally from those found on the main island, and revealing considerably developed cultural patterns."

34: DelRe U-4 (no date) No Date Formosan Aborigines
Yami



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34: Del Re--12-15 U-4 (no date) No Date Formosan Aborigines
116, 291, 302, 142 Yami

"Except for ceremonial occasions, the men only wear a 'G-string' and the women a short skirt and, sometimes, a kind of cloak reaching down to the waist. They anoint their dark coffee-coloured skin with pig-fat in order to beautify themselves as well as for hygienic reasons. Their hair of a reddish hue--hence the name Kô-tô-sho--is worn long and bobbed, by the men as well as by the women. This seems to be a custom now peculiar to this tribe. Referring to the Formosan style of hairdressing an anonymous XVIIIth century Dutch writer noted that no [pages 13 and 14 contain illustrations] [15] male was allowed to wear his hair below his ears until he had reached the age of 16 or 17 after which he let his hair grow as long as the women do in Europe. The women, however, have long hair, which they never cut. Only when their hair has grown long do they begin courting. (3) Another peculiarity is that they neither smoke nor drink

3. cpr. Veerwaarlooside Formosa, Amsterdam, 1675 (subsequently cited as VF), Part I, p. 7, an invaluable and, on the whole, reliable source of information concerning the Formosan savages, particularly those inhabiting the West central and Southwestern part of the island (Sinkan) in the neighbourhood of Tayouan (present day Tainan-Anping) with whom the Dutch settlers came into closer contact.

any kind of intoxicating beverage."

34:Del Re U-4 (no date) No Date Formosan Aborigines
Yami

Yami Woman Spinning

14

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34: Del Re--15-16 U-4 (no date) No Date Formosan Aborigines
116, 161, 181, 625, 177.16 Yami

"On the whole they appear to have preserved almost intact their traditional social organization and religious beliefs which the Japanese not only did not attempt to modify, except in certain minor points, but took care that the natives should not be contaminated by outside contacts. These were infrequent, partly by reason of the island's inaccessibility, and partly because the authorities following a policy of segregation and in order to avoid exploitation, did not encourage casual visitors, whether Japanese or foreign. The same was true, to a lesser degree, in the case of the 'wild' savages of the interior. One of the results of this policy was an increase in the savage population. The relations between the latter and the specially chosen police force were on the whole very harmonious. Some of these policemen indeed, elected to make their permanent home among the savages [16] rather than be transferred elsewhere. The unfortunate Musha insurrection (1930) which cost the lives of a considerable number of Japanese women and children as well as policemen, and was ruthlessly suppressed, was due to the conduct of individual policemen and not the result of government policy."

34: Del Re--16 U-4 (no date) No Date Formosan Aborigines
116, 181, 609, 674, 829 Yami

"According to the reports published by scientific expeditions, the Yami live in a kind of idyllic natural state which might, indeed, have served as model for some of the 'naturist' utopias beloved of XVIIIth century philosophers, the essential features of which may be seen practised on Botel-Tobago. To give one instance. As far back as the oldest inhabitant is able to recollect, or at least since forty years ago when the Japanese first stationed a couple of policemen on the island, there has been no record of a single case of theft or violence among the natives. The wholesale execution of the crew of an American vessel wrecked there a few years previously of whom only two managed to escape, can hardly be considered as an exception since it appears to have been due to ritual reasons. Apart from the naturally peaceful temper of the Yami, the absence of crime is attributable less to the fact that these and other misdemeanours such as adultery are considered as crimes in themselves or as immoral actions, than to the fact that the tribe looks upon them as undesirable."

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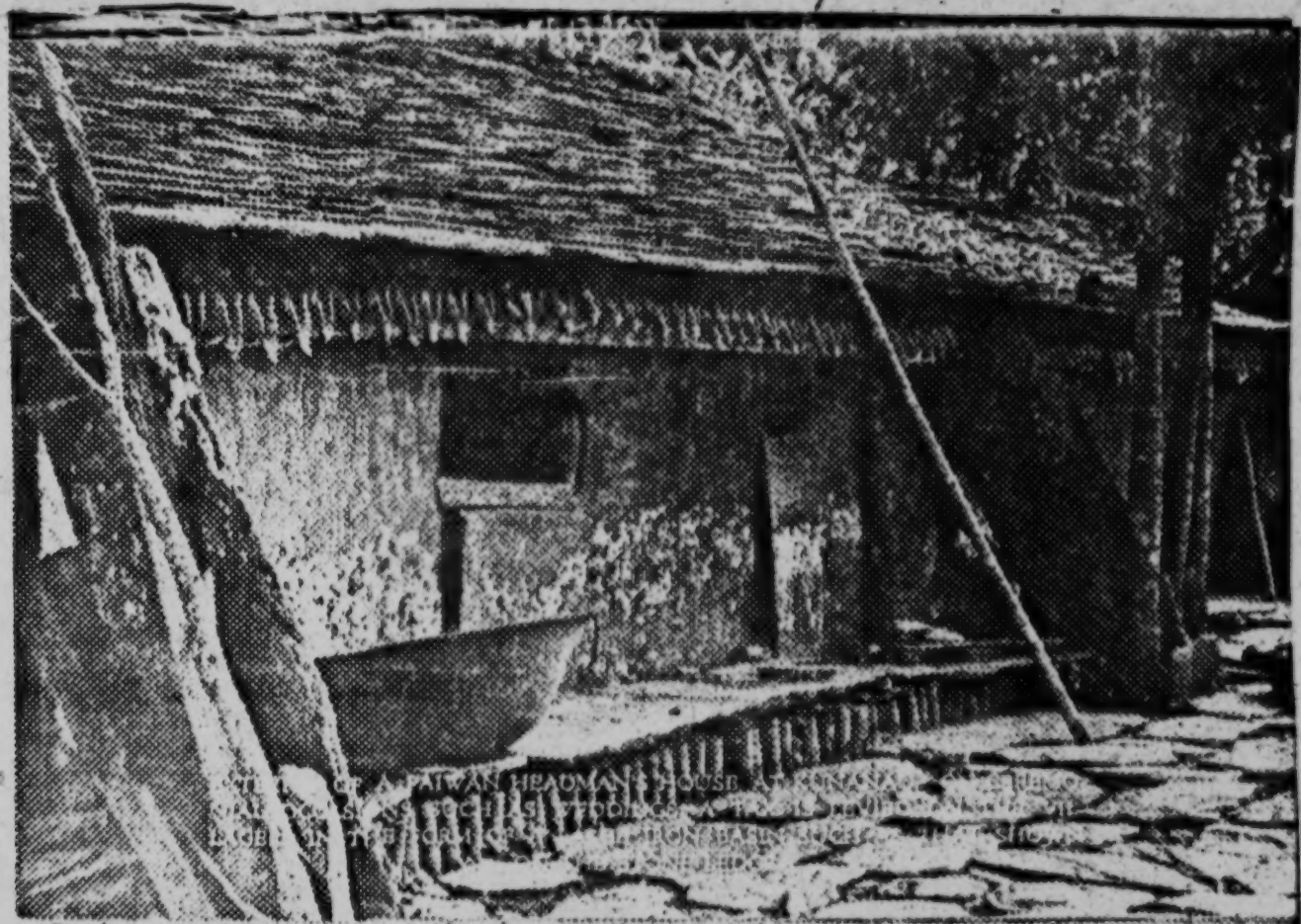
34: Del Re U-4 (no date) No Date Formosan Aborigines

Paiwan

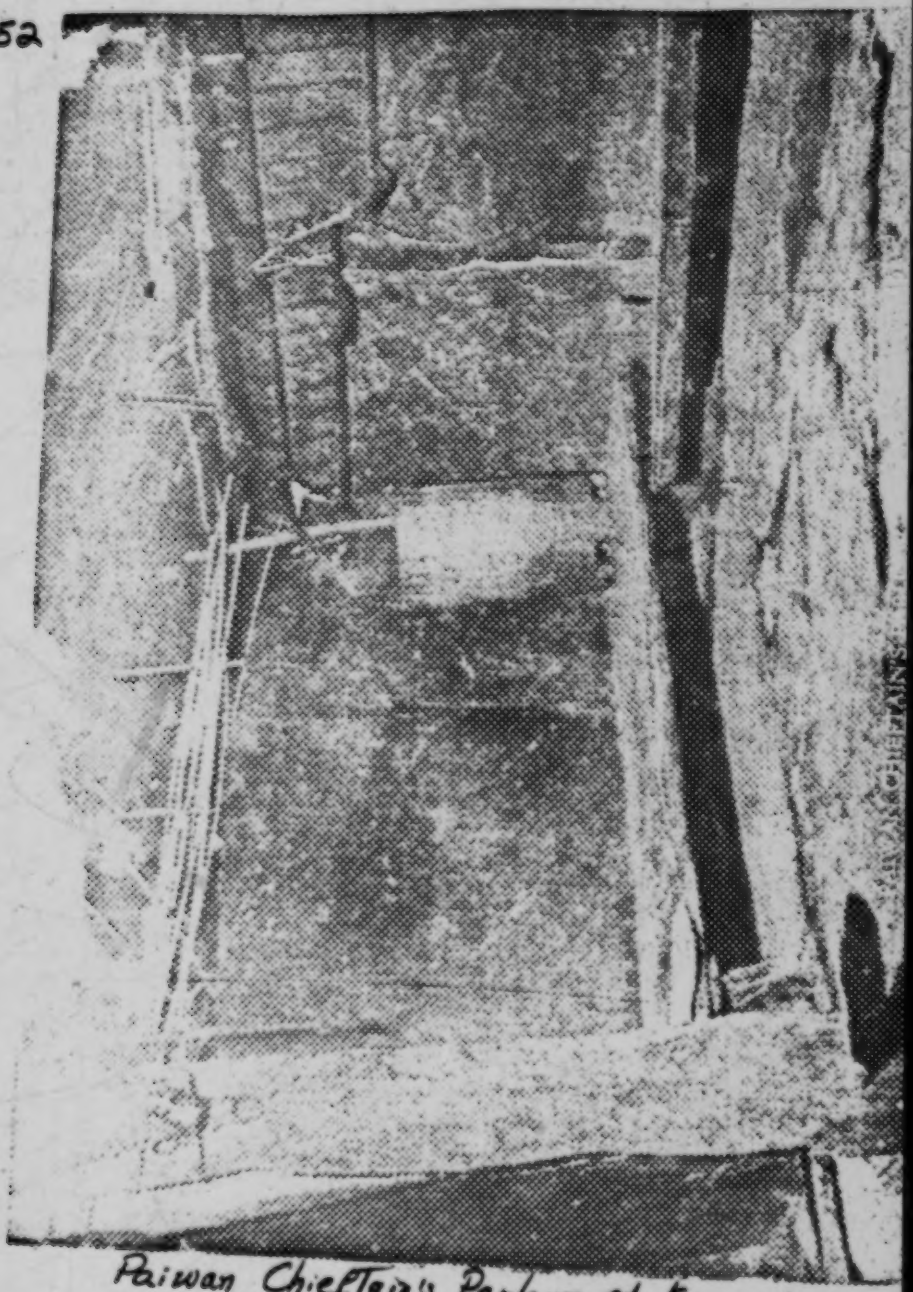


Exterior of a Paiwan Headman's House at Kunanu. On Ceremonial Occasions

17

34:Del Re U-4 (no date) No Date Formosan Aborigines
Tam: Paiwan

352



Paiwan Chieftain's Parlour at Kunanu

10

34: ~Del Re--16-19 U-4 (no date) No Date Formosan Aborigines
116, 554, 561, 888 Yami

"The respect paid to and the great prestige enjoyed by senior members of the community is not based merely [pages 17 and 18 contain illustrations] [19] on seniority but on the personal qualities and skills of the individual as evidenced by his actions. Thus when, for whatever reason, they are considered to have outgrown their usefulness to the tribe, they automatically lose their position."

34: Del Re--19 [1] U-4 (no date) No Date Formosan Aborigines
116, 621, 623 Yami

"No hierarchic distinction exists among the islanders nor is the rotation-system practised. Village councils, called 'Quaty', consisted of 12 elders, of over fifty years of age elected by the villagers. Their powers were merely advisory and the community was not obliged to abide by their decisions. In case of offences against the gods or the community, the 'Quatys' had authority to impose a fine in kind--a custom still practised--proportionate to the gravity of the offence. (4)"

4. See below p. 62.

"When the Japanese, for administrative reasons, tried to induce the members of each village community to elect their own headsman, they met with such opposition that they were obliged to select and appoint one themselves. In practice, however, this Japanese appointee is not recognized by the natives as being anything more than a useful link between themselves and the authorities. (5) Furthermore, unlike what is the

5. cpr. VF, (Pt. I. p.5 f.)

case among other Formosan tribes, it was very difficult before the war to get youths to wear uniform or act as police assistants in spite of the considerable inducements offered them to enter government service."

34: Del Re--19-20 U-4 (no date) No Date Formosan Aborigines
116, 619, 621, 183, 577, 421, 437 Yami

"The above [MLB: reluctance of Yami youths to enter government service] follows naturally from the basic principle of [20] their community life, namely that all members of the tribe have full and equal rights and freedom of action limited only by tribal custom which represents the collective will of the community freely accepted by and identifired with that of the individual. This also finds practical expression in their communal attitude towards all except a very few strictly personal belongings such as small canoes and ornaments. Everything else is held in common by the village. Uncultivated land, or land that has ceased to be cultivated, is the property of the community, but anyone who so wishes may take and cultivate it and in this sense it may be called his. Should he allow it to run wild, however, he cannot prevent another from cultivating it and enjoying its fruits. The large canoes and articles of clothing are also communal. In the event of a native wishing for something in the temporary possession of another he need only ask the present owner for it, but is in turn expected, as a matter of course, to do likewise. Such transactions are not necessarily in the nature of an exchange nor is a regular system of barter practised except for goods from outside."

34:Del Re U-4 (no date) No Date Formosan Aborigines

Yami

YAMI TRIBESMEN. NOTE BASKETWORK FISHING-HELMETS WORN ON SPECIAL OCCASIONS AND BAMBOO SPEARS

292
411

34:Del Re U-4 (no date) No Date Formosan Aborigines
Yami

- 22 -

501
531

34: Del Re--20-23 U-4 (no date) No Date Formosan Aborigines
116, 183, 421, 577, 627, 777 Yami

"The real secret of the smooth working of their system of life may be attributed to the absence of any selfish possessive feeling in respect of things and persons based on deep-rooted 'natural' ethical principles which allow the reciprocal claims of the individual and the community to be harmoniously adjusted in a spirit of freedom and equality. An illuminating instance of [pages 21 and 22 contain illustrations] [23] the application of these principles (6) is seen in the custom, which still persists though

6. According to VF (Pt. I, p. 9) community of property is not usual among other Formosan savages.

frowned upon by the police, of settling every community dispute by means of a wrestling match followed, in cases where the two parties are not satisfied, by a bloodless duel. When this occurs, the two opponents armed with bamboo lances and wearing rattan armour proceed to the seashore accompanied by their seconds and there fight it out. It rarely happens that either is seriously injured or killed, because this would be considered highly unlucky and must therefore be avoided."

34: Del Re--23-24 U-4 (no date) No Date Formosan Aborigines
116, 436, 292, 301 Yami

"The Yami have no use for money except as metal which is highly prized, especially silver which, like iron, seems to have been known to the islanders from the earliest times. (7) The former is beaten out into thin silver leaves with [24]

7. See below p. 39 (Legend of Imulud).

which they cover their characteristic large 'extinguisher' ceremonial helmets worn during the Flying-Fish Festival, which are handed down as a communal treasure from generation to generation."

34: Del Re--23 U-4 (no date) No Date Formosan Aborigines
116, 625, 437, 178, 415, 396, 531 Yami

"Besides acting as schoolmasters and, when necessary, as doctors, the police control (as in the case of other tribes) the exchange of local products against implements imported from Formosa, which are replacing the primitive stone and shell ones used for cultivating the land, or for working wood out of which they make their domestic utensils, some of which are very handsomely carved. The Yami are particularly skilful in building canoes, no less graceful than swift and seaworthy, decorated with elaborate designs and painted sometimes in red, white and black."

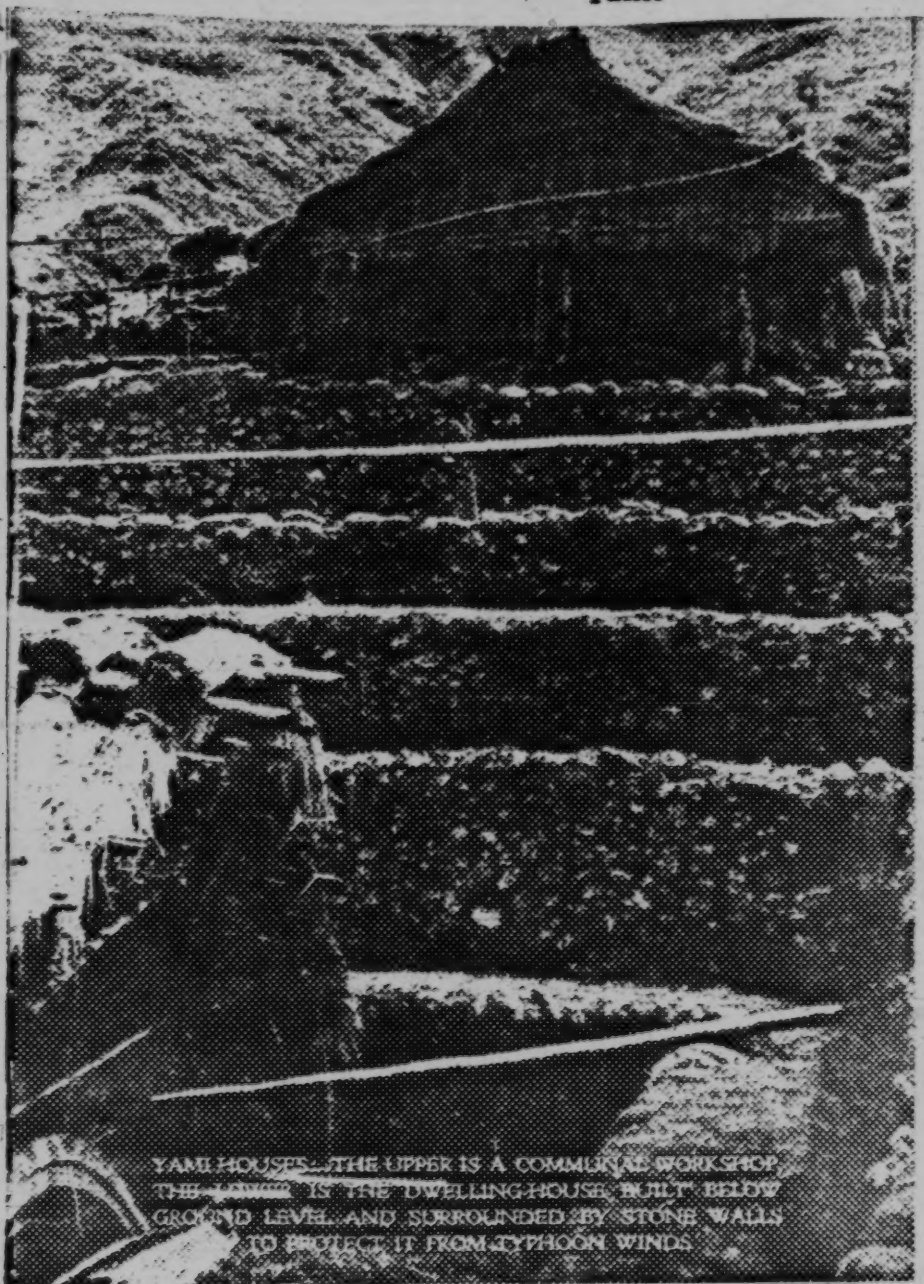
34: Del Re--24-27 U-4 (no date) No Date Formosan Aborigines
116, 133, 361, 504, 342, 491 Yami

"A small steamship calls at the island once every ten days, weather permitting. As the sea is frequently rough and Botel-Tobago is surrounded by dangerous breakers, the ship anchors some distance out and passengers and cargo are transferred to land on a catamaran made out of heavy bamboo trunks lashed together. Apart from a small rest-house, police headquarters and the policemen's houses, all the rest are native buildings. The walls of these houses are built of large pebbles piled upon each other without mortar and covered with thatched roofs held down by large stones to prevent them being torn off by the wind. As this blows strongly practically all the year round, the houses are mainly constructed well below the level of the ground and protected by high stone walls over which only the roofs can be seen. The villages are scattered over the island, generally on the foreshore, but a few shacks and storehouses--covered with bamboo and branches of several varieties of trees--are found on the cultivated uplands and in the hills which rise steeply from the shore except where the coast forms a few open bays. During the twenties a good road was built round the island making it possible for the villagers to communicate with each other by cart or bycicle [sic]--a recent and much [pages 25 and 26 contain illustrations] [27] appreciated novelty."

34: Del Re U-4 (no date) No Date Formosan Aborigines

Yami

342
349



Yami houses: the upper is a communal workshop, the lower is the dwelling-house built below ground level and surrounded by stone walls to protect it from typhoon win

34:Del Re U-4 (no date) No Date Formosan Aborig
Yami

142

A Young Yami Girl

26

34: Del Re--27 U-4 (no date) No Date Formosan Aborigines
116, 832, 584 Yami

"As might be expected, the family life of the Yami is also largely communal. When a youth wishes to court a girl, he approaches her and winks: if she winks back, generally speaking, all is well. Before being [sic] accepted him as a regular 'follower', the pair must have winked at one another several times after which the youth is allowed to speak to the girl and pinch her. The latter seems to be the acid test. If she pinches him back or slaps the youth's face it means that all is over between them. If, on the other hand, she has decided to accept him, she answers with a smile and they go together to a deserted hut or secluded spot where they stretch a mat on the ground and sit down on it facing each other. The youth then lays his hand on her breast and they tell each other ancient tales of love interspersed with poems which he usually improvises, to which she must reply with poems of her own. At a further stage they rub noses and embrace. In this way they spend many nights together without any more intimate intercourse. When the cock crows they separate, each returning to his own house. This preliminary stage of the courtship, which may even last several months, is called 'remembering.' During all this time the male is required to play a passive role. Indeed if he were to attempt the slightest liberty he would be at once repulsed. When the girl has finally decided to accept him as a husband, she unties his 'G-string.' "

34: Del Re--27-28 U-4 (no date) No Date Formosan Aborigines
116 583 Yami

"Unlike what is [28] the case in other Formosan tribes, the prospective bridegroom does not have recourse to his female relatives as go-betweens, nor does he need to present his bride with a rich dowry in the shape of petticoats, amulets or other ornaments, the gift of a few blue beads being considered sufficient. (8)"

8 cpr. VF, Pt. I, p. 7 for an interesting description of the nature of the dowry.

34: Del Re--28 U-4 (no date) No Date Formosan Aborigines
116, 584 Yami

"The following passages from a short dialogue translated by Asai entitled 'Visiting a girl' (9), gives a vivid picture of how the Formosan youths conduct their courting:

9. Asai in Some Observations on the Sedik language of Formosa (Philologia Orientalis, I, 1934, p. 69, n.)

'....Bring your Jew's harp with four reeds! We must play on it. We must visit the girl with it. This is her house, so keep quiet! ...Walk stealthily as if you were trying to escape (from an enemy). We have arrived at the girl's house. Catch her. Make her sit here! Don't let her sit there and turn (her head) sideways! Let us really sit up till morning and amuse ourselves. Go and shut the door.' "

34: Del Re--28-29 U-4 (no date) No Date Formosan Aborigines
116, 581, 585, 833 Yami

"In accordance with the parents' wishes, or because the girl wants to postpone the marriage, it sometimes happens that the union is not immediately consummated. The validity of a marriage does not appear to be affected by its actual consummation. This seems to have also been the case with other tribes since the author of Forsaken Formosa, writing obviously from direct knowledge of these Western savages in the middle of the XVIIIth [29] century, observes concerning this custom, that the savages apply in the fullest sense the dictum 'nuptias non concubitus sed consensus facit.' The essential requirement for a marriage, at least among the Yami, seems to be a proper fulfilment of the terms of the ritual courtship known as 'remembering.' "

34: Del Re--29 U-4 (no date) No Date Formosan Aborigines
116, 591 Yami

"The wife works for her husband's family who, in turn, keep her. She is none the less free (as is also the man) to return home occasionally or to go and stay with friends. This is not the case in other tribes where the wife and the husband continue to reside in their own homes even after marriage, the woman being visited by her husband when he wishes to sleep with her and, even then, only by stealth and at night or, if by day, when no one else is in the house, and always provided his wife grants him permission to do so. (10)"

10. cpr. account of marriage customs etc. among Western tribes in VF, Pt. I, p. 8-10. This is of special interest as referring to a period in their social evolution anterior to their partial conversion to Christianity by Dutch missionaries in the South and Spanish Catholic fathers in the North, which temporarily affected their gradual sinicization. Among the former was the famous Georgius Candidius, who arrived in Formosa in 1627.

34: Del Re--29-30 U-4 (no date) No Date Formosan Aborigines
116, 586, 595, 562, 831, 183 Yami

"The Yami are strictly monogamous in so far as they may only have one wife at a time. Divorce, however, is easy and merely determined by the wish of the party concerned, nor does it carry any stigma for the woman who, in this respect, has equal rights with the man. There are among the islanders women who have been divorced as [30] many as fifteen times. Contrary to what might be thought, this does not lead to laxity of morals. The level of morality in this tribe is very high notwithstanding, or perhaps because of, the conspicuous absence of any sense of moral or social guilt attached to sexual intercourse."

34: Del Re--30 [1] U-4 (no date) No Date Formosan Aborigines
116, 855, 882 Yami

"The children born from various unions spend their earliest years with their mother whom they must obey unconditionally. As soon as they reach maturity boys as well as girls are allowed to choose whom they will live with, contributing their quota of work in exchange for food; or they may sleep away from home in the houses of their friends or relations. Each village has furthermore a house reserved for men alone."

34: Del Re--30 [2] U-4 (no date) No Date Formosan Aborigines
116, 262, 226 Yami

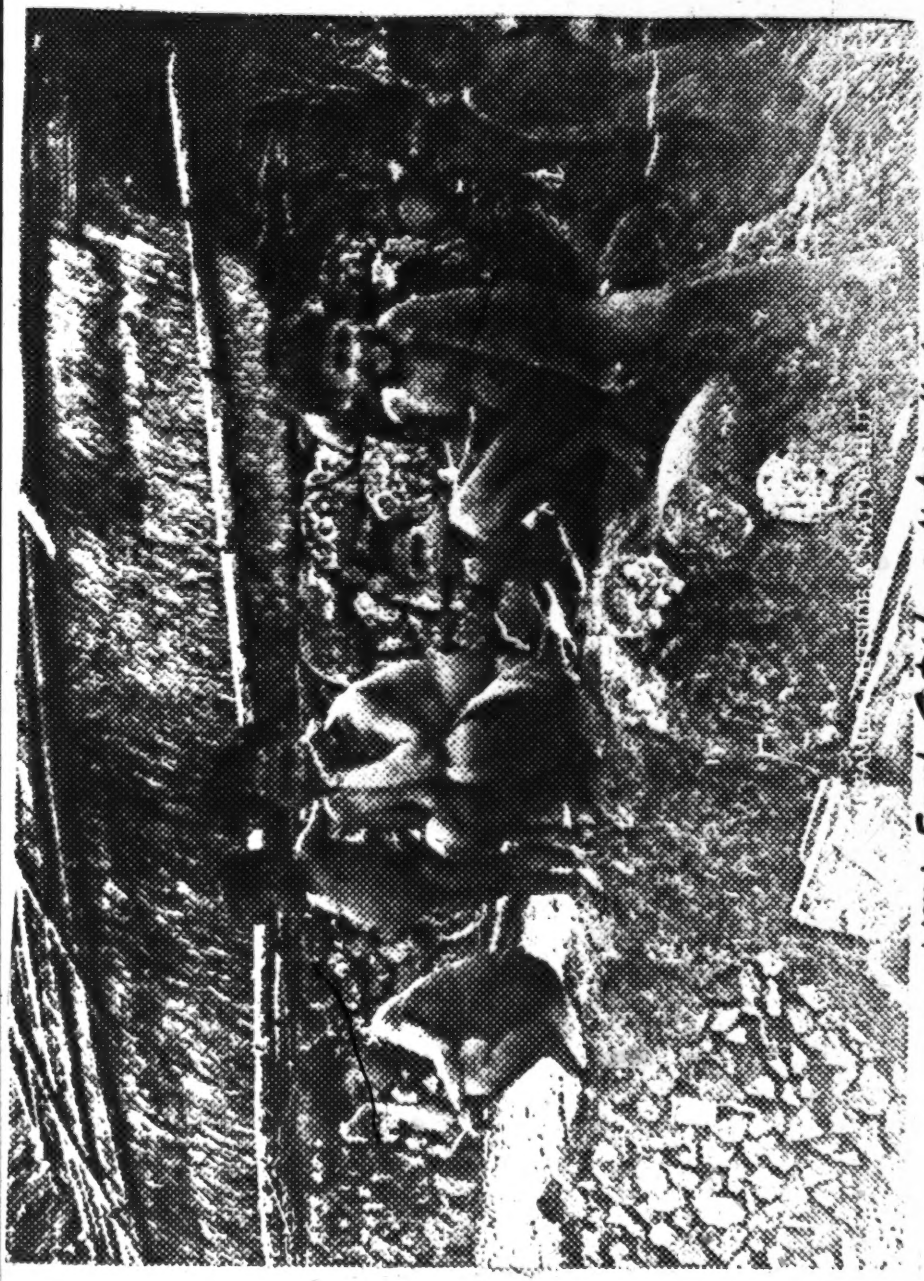
"The Yami are economically self-sufficient. They live mainly on tarô (a species of sweet potato), suli (yams), millet (sometimes referred to as Chinese corn in their poems), fish (fresh and dried), besides poultry, eggs, pork and goat. The last three, however, may not be eaten except during festival seasons, while the eating of flying-fish (exocoetus) is taboo between July and October. During several months of the year ordinary fishing is practically impossible owing to bad weather, while at others is forbidden "

34: Del Re--30-33 U-4 (no date) No Date Formosan Aborigines
116, 796, 825 Yami

"The Flying-Fish Festival is not only the central event of the Yami year but the whole of the communal life of the tribe revolves around it. Not without reason, indeed, since these fish not only constitute their most valued article [pages 31 and 32 contain illustrations] [33] of food, but are regarded as symbols of the tribal spirit."

34:Del Re U-4 (no date) No Date Formosan Aborigines
Yami

142
592



Yami Family Outside a Native Hut

Old Yami Couple in ceremonial costume: Note the silver flying-fish ceremony helmet and the silver headgear and plaques worn by the woman.

298
301

34: Del Re--33 U-4 (no date) No Date Formosan Aborigines
116, 796, 805, 622, 756, 226 Yami

"The ceremony of 'calling' the flying-fish opens the year which begins, according to the Yami system, in April corresponding, in the solar calendar, to October. It is accompanied by most elaborate ritual observances the purpose of which is to secure a good season and to celebrate the arrival of the fish. On this occasion the tribe annually chooses the man whom it considered best fitted to exercise the role of high priest and to represent it. It may be noted in passing that, contrary to what occurs in other tribes, the Yami have no medicine-women, all ritual observances being restricted to men alone."

34: Del Re--33-34 U-4 (no date) No Date Formosan Aborigines
116, 784, 562, 823, 226, 793 Yami

"So great is the importance attributed to the visit of the flying fish, that during this period fishermen are required to observe a large number of prescriptive taboos, as well as others connected with the numerous rituals observed during the actual ceremonies. These are summed up in the following commandments:---'When you go fishing, do not look down into the water.' 'Do not spit into the sea: spit into the air so that your spittle may fall upon the sea like rain.' 'Do not cast stones into the sea' ---and many others of a like nature. Another important taboo connected with the sea and most stringently enforced at this time, is that no woman shall touch or have anything to do with the flying-fish ceremony, or approach close to, much less enter, the sea. It would appear that this is related to the early creation myth in which a pregnant woman by enter-[34]ing the sea was the cause of the great flood which covered the island and destroyed all life upon it. (11)"

11. See Legand of Imulud, AYL, p. 92 lines 1 ff.

34: Del Re--34-37 U-4 (no date) No Date Formosan Aborigines
116, 221, 226, 241, 796 Yami

"In the Yami calendar the months of May, June and July (i. e. November, December and January) are almost wholly given up to catching flying-fish, the greater part of which are dried. The fishing is done by night, from small canoes and in large ones during the first two months, but, on the third, only by day. During the fourth month however, fishing by night and by day and with small canoes is permitted. Meanwhile the womenfolk collect the fibrous bark of certain shrubs, mainly the abaka, which they dye, spin and weave on primitive handlooms into cloth with admirably decorative designs in colour. When the flying-fish season is over, and during the months of August and September (February, March) the crops of taro and suli are gathered in and the fields worked over October (April) is the month set aside specially for the making of the earthenware dishes and pots used in the flying-fish ceremony. During November (May) they finish eating their store of dried flying-fish, while December (June) is mainly devoted to preparing the lime the savages chew with their betel-nuts, used for both medical and dyeing purposes. In January (July) they cut down the onigaya (misacanthus) out of which they fashion torches for the flying-fish ceremony, and celebrate the mil- [pages 35 and 36 contain illustrations] [37] let harvest. Millet, suli and taro are sown in February (August), while March (September) is principally given up to catching mamibiki, a largish flat fish which is found in considerable quantities in these waters."

34: Del Re U-4 (no date) No Date Formosan Aborigines

Yami

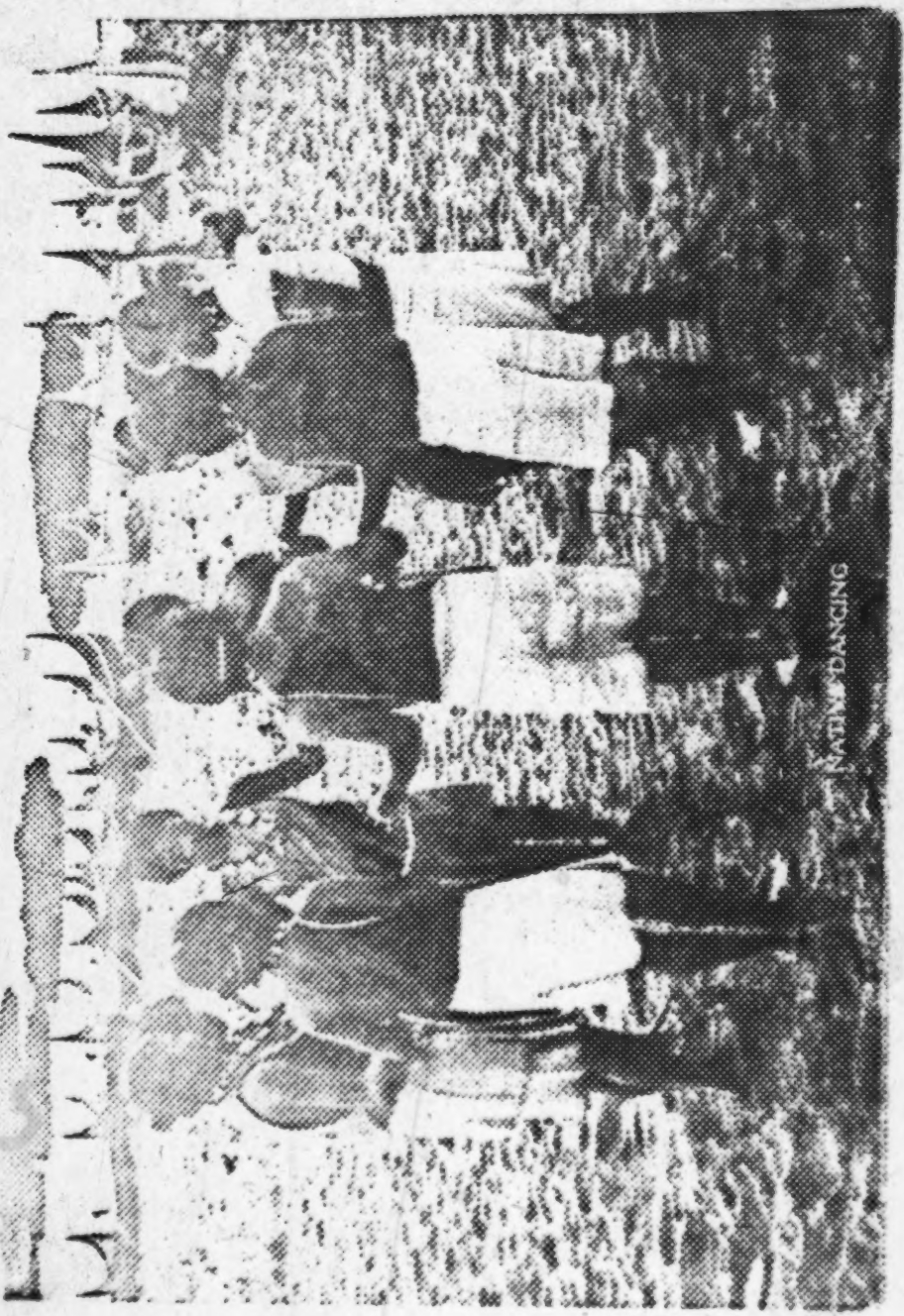
DRYING FLYING FISH ABOVE THE ROOF OF A NATIVE HOUSE

Drying flying fish above the roof of a native house

251

34:Del Re U-4 (no date) No Date Formosan Aborigines
Yami

535



34: Del Re--37 U-4 (no date) No Date Formosan Aborigines
116, 533, 535 Yami

"The above necessarily brief account may serve, to give a general idea of the characteristics of Yami island life in which story-telling, singing and dancing play a very important part. As frequent among primitive tribes, these songs or chants are of the 'carol' type and are accompanied by rythmic movements of various kinds, stamping of feet, clapping of hands etc. The dances do not appear to have a set air which sometimes changes in the middle of the dance. The songs are not specially composed for the purpose and are frequently chosen from among those improvised and sung by men on special occasions--love songs, songs about flying-fish, travel or harvest, which reflect the life, customs and beliefs of the community. In general girls alone take part in the dances which last each for only a few minutes, some being danced in a circle, some in single rows or in two rows facing one another."

34: Del Re--37-38 U-4 (no date) No Date Formosan Aborigines
116, 621, 626, 796 Yami

"In concluding these remarks it should be stressed that while each individual must contribute by his work to the welfare of the community, he is otherwise free to join or not as he pleases in the communal life without exposing himself to criticism or censure except, of course, during the flying-fish festival where failure to comply with the tribal customs would not only involve him but the whole [38] community in the direst misfortunes."

34: Del Re--38 U-4 (no date) No Date Formosans Aborigines
116, 114, 127

"The island has been occasionally visited by Japanese scientific expeditions which have collected much valuable data that still remain to be fully studied. In 1937, Dr. Stewart of Columbia University (New York), accompanied by two other foreigners, made a stay there of about two months studying the life of the islanders from the point of view of analytical psychology. To him I am indebted for the account of the Yami cosmos, as well as for a number of native drawings and photographs."

34: Del Re--38 U-4 (no date) No Date Formosan Aborigines
116, 619, 868 Yami

"Possessing neither written language, laws nor a religious caste to preserve their traditions and taboos, it is the duty of the elders to pass on to their children the treasures handed down to them by their forefathers, to which they add the fruits of their personal experience. All such traditional or new material is embodied into gnomic sentences, legends and tales which they tell by the seashore or on the slopes of the hills, thus preserving the ancient tribal spirit."

34: Del Re--38-42 U-4 (no date) No Date Formosan Aborigines-16
116, 539 Yami

"Among the traditional folk-tales of the Yami, the creation myth and the account of the Yamic cosmos given below are of special interest. The former, which presents notable variants among the various tribes, has been written down and translated into Japanese by Dr. N. Ogawa (emeritus professor of the Taihoku Imperial University) and by Dr. E. Asai professor of comparative linguistics in [39] the same university. (12)

12. Myths and Traditions of the Formosan Native Tribes. Texts, Notes. Taihoku, 1935. The Yami legends are given on pp. 751-783.

While not written in verse, such accounts are rhapsodic as will be seen from the creation myth known as the Legend of Imulud--from the village whence it was collected --portions of which are quoted below. It should be added that the legend in question properly speaking combines myth and historical events into a kind of epos.

.....The God saw the flat ground and said: 'Good is the island of Yami!' (Then) he dropped a large stone on Ipaptok. (13) The stone burst and gave birth to a human

13. Ipaptok: i.e. the place where 'paptok' (a coarse leguminous plant) grows, now the name of a village. i is a locative prefix and is affixed to all Yami village names. (AYL, p. 34)

being. (14) The human being ate paptok as there was no other food. He went down

14. Asai (AYL, p. 73) gives the text (n. 4) and translation of the short Yami tale of the two sisters of Imasik who carried a 'lalitan' stone to Ilalai and poured water on the top of it saying 'I baptize you on the crown of the head, and you shall be a man.' The baptism was imitated by the Yami. 'I point the finger at the crown of your head, and your name shall be Sitoronan.' At first his hands and next his hands grew, then his eyes opened. His nose and his ears came out; the hairs grew. He began to speak; he spoke fluently. (He was) a man called Sitoronan.

towards the sea. A bamboo sprang up near the sea. The bamboo split open and gave birth to a human being. (15) The son of the stone descended towards the sea-plain. The

15. cpr. below, p. 62 ff., Creation Myth of the Puyuma tribe.

son of the bamboo climbed up to the uplands weeping. The two met in a misacanthus grove. 'What is our [40] name?' said the one. 'We are tau (human beings) replied the

other. They walked here and there. The son of the bamboo went to Ivalinu. He stopped at Kasavilugan where he found silver. The son of the stone went to Ilatai. He stopped at Imasapau and there he found iron. Then they went to their house at Ikavusidan where they lived. And the son of the stone beat out the hard iron, and the son of the bamboo beat out silver -- soft silver. (16)

16. A more specific account of the finding of iron is given in the following passage from the Legend of Ilalai (AYL, p. 65): 'The ancestors had no iron mattocks. They took stones, split and ground. Those were the ploughing instruments for the fields. A little later one man went to the shore and found a-float, a drifting board. He saw it. There was much iron, used by overseas people for joining boats together. He took it to the village. He broke it and hammered it, and made an axe, and a blade for digging out yams. He sharpened it, and went to cut wood in the mountain....'

Long were the penes of these two and they were joined to their knee-joints. And the knee-joints swelled and itched. And from the knee-joints of the son of the bamboo issued offspring: a male from the right knee-joint and a female from the left. And a male

issued from the right knee-joint of the son of the stone and a female from the left. These brothers and sisters married and a blind child was born to them, (17) wherefore they

17. A similar misadventure occurred to the child of the first bamboo couple in the Puyuma myth.

exchanged wives. And the daughter of the son of the stone was married to the male child of the [41] son of the bamboo, and the daughter of the son of the bamboo was married to the male child of the son of the stone. And they begat three generations of children.

They built themselves canoes. (But) the (soft) silver bent against the (hard wood of the) tree. 'Let us exchange' (said the son of the bamboo to the son of the stone), 'you take (the) silver and I'll take (the) iron!'

(And they made the following song):----

(Though) I love silver
I have nothing like unto this iron!
We (want to) hew wood,
We (want to) fell a large tree.

They performed the lauching ceremony: finished were the canoes. The canoes were launched: they were pushed down (into the sea). Ribs were fixed on the outside of the canoe of the son of the stone: ribs were fixed on the inside of the canoe of the son of the bamboo. The canoe of the son of the bamboo was cast aside: it was broken up. The canoe of the son of the stone was launched: it entered the sea. It floated (and) filled with water. 'Bad' said he. He took fibre of the kulan (tree) and stopped the leaks. 'Mended already' said he. He discovered how to make plugs out of the kulan (tree)....

....For five generations those named tau (hu-[42]mans) lived on the uplands. (They said): 'Let us go down to Iminavuit (the sea).' (18)....It was the season of flying

18. The succeeding passage (AYL, p. 51) tells how the ancestors of the upland (bamboo) people taught their descendants the names of certain animals--swine, fowls, goats. After five generations the 'out-bursters from the bamboo,' now sixty in number, appear to have established themselves as fishermen and were taught by their grandsires the names of many fishes and that of some 77 trees and plants. (AYL, p. 53).

fish; they caught flying-fish at Imalamai. (And they made this song):---
From Ipaptok, the place of the bursting-forth of humans,

Descending here, to the plain of the sea,
He performed the fish-calling ceremony (19) at Imalamai.

19. min-apa-i-vanua, lit. obj. prefix-caused-to-come-to-land. The fishing is done by torchlight, the flares being fixed to the curved stern of the canoes.

I landed at Isakawalanan.
A torch was lighted:
the fish were dazzled by the fire-flames."

796
532

THE BEGINNING OF CEREMONY (*Nature Drawing*): Note decorated communal canoe and silver helmets

34:Del Re U-4 (no date) No Date Formosan Aborigines
Yami

501
133

A 'Ten-Man Fishing Boat' (Chinsikau) Setting Out Between the Coral Reefs

44

34: Del Re-42-53 U-4 (no date) No Date Formosan Aborigines-1-8
116, 539

"Another interesting creation myth is that of the Puyuma tribe which, geographically, is located nearest to the Island of Kô-tô-sho. It has some points of resemblance with the traditions current among the Yami, and is of value as a piece of documentary evidence. According to tradition, the first home of the Puyuma was near the village of Chipon, a few chilometres from Taito, on the coast of Formosa, at a place called Panapanayan (see map) where [pages 43 and 44 contain illustrations] [45] in times of emergency, it was customary for the Puyuma tribesmen to gather to deliberate. The founders of the Puyuma tribe were the god Pacomarai and the goddess Paconsel, both of whom issued from a bamboo. The myth is also common to the island of Ka-sho-tô and to the Paiwan tribe. The account is based on the story told Dr. Stewart by a young Yami tribesman.

In ancient days the god called Ibago caused bamboos and other trees to grow on the islands (i.e. Kashotô, Kôtôsho and possibly Taiwan itself). The god then ordered the wind to blow first in one direction and then in the other until the bamboo split open. First a woman sprang out of it, then a man. The god ordered the woman to take the path on the right round the village and to go to his house by the sea. Then he ordered the man to do likewise, but to take the path on the left. The god married them on the sea-shore. The woman gave birth to a female child who had no bones and was blind. Then the god was angry and said: 'This is not good. You are both wicked.' Shortly after the baby died and the god caused the man and the woman both to die.

34: Del Re--42-53 U-4 (no date) No Date Formosan Aborigines-2
116, 539

And again Ibago caused a large bamboo to sprout. This time the man came out first and the woman second. The god then ordered them to go down to the sea-shore, the man taking the path on his right, the woman on his [46] left. Then he married them. From this union was born a male child perfect in body, followed by a girl. Later, another boy and another girl were born, in the same order. But when the first elder children grew older a skin disease covered the whole of their bodies. Then the god said to himself: 'This couple also is not very good. But Ill treat them differently from the other one and shall send them to Saffran (Kashoto).' And the god threw a wooden bridge over the sea, joining the coast to the island. In the island there was a very tall pole which touched the sky, for the sky in those days was lower than it is now. Flocks of black birds flew round and round the pole, and the sky was lifted up to where it is at present.

The younger children of the union married and they too had four children, in the same order. These, notwithstanding the strict order of the god Ibago, ate so much of the fruit of the kira tree, that the god became angry and said to them: 'Because I wish you to be ashamed of having disobeyed my orders and eaten so much of my fruit, from henceforth you shall bear upon your bodies the mark of your shame.' Saying thus he made a hole in the earth and cast them into it. From that day they, who had not known shame and went about naked, began to cover their genitals with strips of tree fibre.

Thus originated the habit of wearing clothes.

For some years they lived in the underworld. Then the eldest pair came up on to the earth again while the [47] younger brothers continued to live underground and earned their living by tilling the soil and cultivating the land for their elder brothers. Then their buffaloes died and they were no longer able to till the fields, so they went down to the sea to fish. But no sooner had they entered the sea than they were changed into large fish and never were seen again. (20)

> 20. It seems that the natives, believing that these large fish cause storms, instituted an annual ceremony of pacification in which only youths and girls take part, since the original couple changed into fish were also young.

Meanwhile the eldest children of the first coupld (who had remained in heaven) had married each other and had had two children. The girl, who was exceedingly beautiful, obtained permission from Ibago to descend upon the earth in order to visit her cousins. All the youths of the village fell in love with her and wished to marry her, so she chose one. But the unfortunate bridegroom while consummating the union had his penis severed by the sharp teeth that encircled her vulva. The parents of the youth indignant at the death of their son, seized the girl and wrapping her in a red cloth, put her inside

a box which they tied up in a red blanket and cast into the sea.

The current carried the box to a small island. The chieftain of the island seeing something red floating on the sea ordered the box to be brought to shore. When the box was opened and the beautiful girl was discovered [48] he fell desperately in love with her and determined to make her his wife. Having found out in time that her vulva had sharp teeth, he ordered that the lower set should be broken off by means of a stone. Having done this they inserted a sweet potato which, in spite of the precautions previously taken, was severed in two. The chieftain, however, refused to give up hope and having finally managed to extract all the teeth by means of a bamboo joint, he married her and had two children. (21) When these grew up they also married one

21. Similar legends which, according to some psychologists, are connected with the castration complex, are found among the Australian aborigenes. (see Roheim, Australian Totemism, pp. 64, 420.

another and had two children, one female the other male.

One day, returning from hunting in the mountains, the father saw two birds flying overhead and cawing like crows. Surprised at this unusual occurrence, he looked at them carefully and observed that their heads and legs were like those of his children. Hurrying home he asked his wife where his children were. 'They have gone out to play' --she answered--' and I do not know where they are.' The children had gone down to the river to play without telling their mother and when they returned she got very angry and threw boiling fat on them. As soon as the fat touched them, they leaped up into the air lifting their arms crying ka-ka, and were changed into crows. (22) [49]

22. cpr. The Scottish legend of the Twa Corbies which presents some interesting analogies.

Day after day the father waited anxiously for their return, and the longer he waited the more suspicious he grew that his wife had done them some mischief. At last, overcome with sorrow, he died and was changed into a large rock, called bara in the Puyuma language.

After several years had passed, the rock opened and two children issued from it and went to visit the wicked widow and asked her for food. The woman threw them some potato parings. The elder cleaned them and gave them to his little brother who was very hungry. As they could not live on such meagre fare they began to steal sugarcane from

the field of a neighbour in the village. To avoid being discovered they used to cry kît-kîte imitating the voice of a small lizard, so that the villagers should think that spirits were stealing their cane. (23) But the villagers having grown suspicious,

23. cpr. below, p. 64, the malicious activities of the anitos who inhabit the bodies of rats.

spread cinders all round the cane field and so were able to catch the thieves whom they tied and threw into a hut where they fed them on insects, snakes, snails and centipedes. The youngest brother being unable to eat such food, grew daily thinner and weaker. The elder one, however, managed to bite through the rope and to free himself. Hiding in a cave, he built himself a large kite. Launching it into the air he scrambled up the rope and reached heaven (24) [50] where he seized a large knife and flew back to earth with

24. cpr. the reference to the visit to the goddess Siturijau who lived in one of the heavenly villages of the Tau-rô-tô. (AYL, p. 57)

the knife between his teeth. After cutting open the belly of a pregnant woman to avenge himself over the Bunum tribe who had treated him so shamefully, he ran to free his little brother and carried him to the cave. The boy was crying and complaining of pains in his stomach due to the insects which he had eaten, whereupon the elder brother threatened to drive the knife down his throat if he did not shut up, and frightened him so much that he vomited all the insects into a pool called Tomonya, where they still may be seen.

The brothers lived for some time near this pool. Then they went into the mountains where they built themselves a house by the road leading to the village from which they had stolen the sugarcane. One day the younger brother went to visit his aunt (25)

25. The legend appears to be somewhat confused. It is to be supposed that the aunt was a descendant of the stone men.

taking with him a number of small bells which he hung from the rafters of the house and told her that they were going to send an earthquake in order to punish the villagers. He warned her that when the earthquake came the bells would ring, but that she need not be afraid because her house would be protected by their peal. He also told her to impress upon his uncle that when the bells began to ring, he must not leave the house under any pretext. Shortly afterwards the promised earthquake took place, destroying the [pages 51 and 52 contain illustrations] [53] village and killing everyone except the uncle and aunt. But the former, forgetting his nephews' orders, ran into the street and the elder brother thinking he was a villager trying to escape, ran him through with his lance. The elder brother was stricken with remorse over this mishap. Soon afterwards his hands and feet became paralysed. Being now entirely unable to do anything for himself, he was cared for very lovingly by his younger brother whom he had looked after when he

was young and feeble.

The house built by the brothers and the roof-tree of their uncle's house may still be seen at Panapanayan in the country of the Puyumas."

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A Paiwan village in the mountains of Southeast Formosa

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Paiwan Chief in full dress

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Yami

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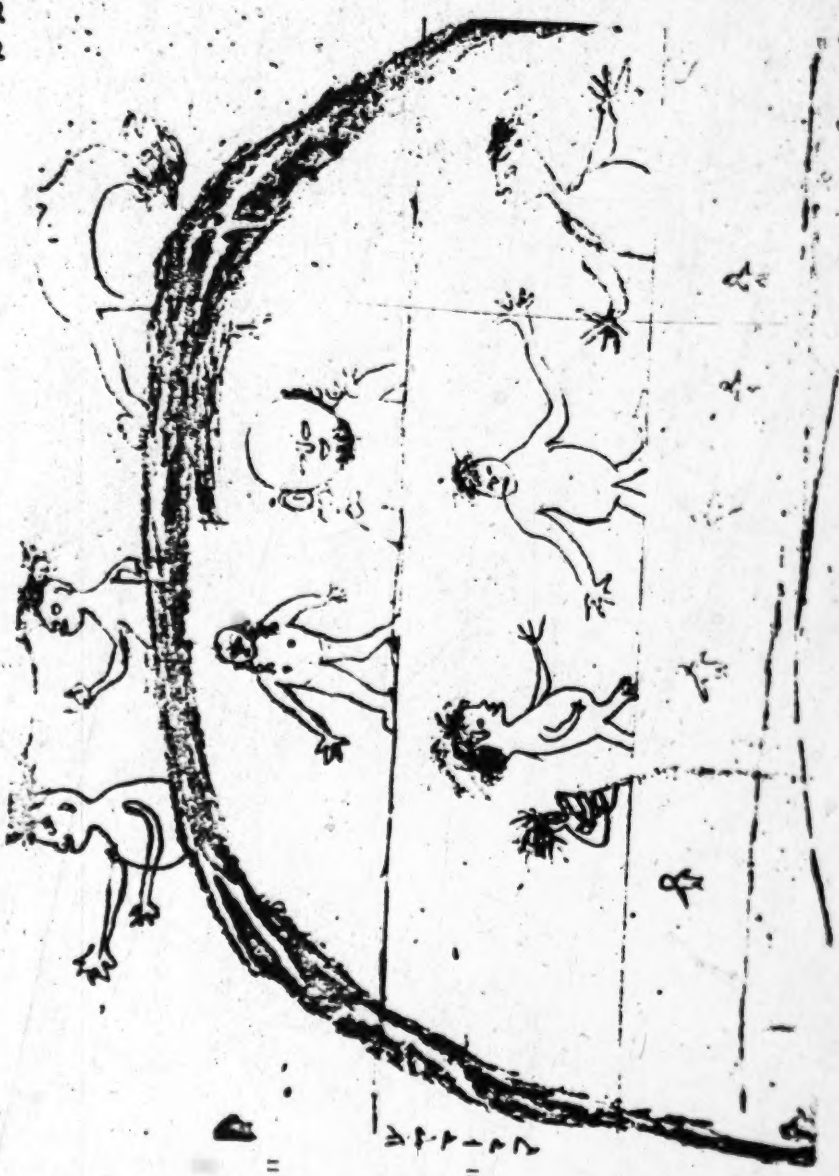

(The yami Cosmos -- See p. 55 for explanation -- analyst]

34: Del Re--53-58 U-4 (no date) No Date Formosan Aborigines-1-3
116, 772 Yami

"Unlike other Formosan tribes on the main island, the Yami have an elaborate and well-organized conception of their cosmos, as may be seen from the two drawings executed by natives for which I am indebted to Dr. Stewart, as well as for the accompanying descriptive notes collected by him directly from his informants. [MLB: see pp. 54-56, cat. 116] The ideas embodied in it have still to be studied critically and in relation to possible connections that may exist between this and similar traditions current among Indonesian tribes. Here it is offered merely [sic] illustrate the Yami conception of the universe.

The Yami cosmos consists of eight or, in some accounts, nine (figs. I & II), superimposed elliptic planes [pages 54-56 contain illustrations] [57] supported by five massive tree trunks on the lowest plane. It is known as the world of the 'anito gods' who are differentiated from 'anito demigods,' 'anito humans,' 'Yami anitos,' disembodied anitos and anito spirits which live in the bodies of snakes, rats, butterflies, etc. In addition to these it also contains 'earth-gods,' men, Yami and animals.

According to the Yami, their universe is the work of the goddess Nunurao. In the Dutch work already referred to however, the creator of human beings called Tamagisangah, lived in the South and made them beautiful or ugly according to whether or not they sacrificed to him. His wife was the goddess Teraychapada (or Takarupada) who lived in the East and loved humanity greatly. When it thunders in the East 'they

say that the Goddess speaks with her husband and scolds him because he does not let it rain. When her husband hears her voice he at once causes rain to fall. This Goddess is mostly worshipped by women. (There is another god) Sariasap who lives in the North and is always angry with mankind. Thus while Tamagisangah makes the men beautiful, he changes them to ugly and pock-marked, for which reason all men daily pray to this god not to do them harm and to the other to ask him to defend them from Sariasap and to punish him for doing them wrong. Besides these they have still other gods whom they invoke, two of whom--one called Tolasulo and the other Tapalisepe--look after their wars, as well as other gods and [58] goddesses to each one of whom they attribute special powers.' (26)

26. VF (Pt. I, p. 12).

The divinities of the first plane (fig. 1) live in a region above the firmament and seem to form a special category of their own. To them alone is entrusted the task of making rain, thunder and lightning. In the drawing just mentioned the first figure on the left is that of the highest god. The central figure represents the anito storm-god who has a son (extreme right) who is often lazy and disobedient. To punish him, his

his father places him in a box which he sends rolling across the heavens with a mighty clatter. This, say the Yami, is the cause of thunder. These gods have no direct relation with the Yami who neither invoke nor make sacrifices to them. Some believe, however, that should the tribe be guilty of some exceptional misdeed, the gods would afflict the island with some terrible natural disaster. Though not directly stated, the flood which wiped out life on Kô-tô-sho mentioned in the legend of Imulud may have been caused by something of this kind. Generally speaking, however, the conduct of the tribe does not concern them."

34: Del Re U-4 [no date] Northern Formosan Aborigines
Yami

THE YAMI COSMOS FIG. 1 (*Native Drawing*)

I. The Future on the right is that of the lazy sun rolling across the heavens.
II. Tao-ro-to Gods: Shimo-ra-po and Shimo-mi-ma.
III. Anito Gods: Shivairai (C), Shiparind (R). Note the wild hair and pot-bellies which characterize the Anitos in this and lower planes.
IV. Pi-na-lung-ao goddesses.
V. Yami Plane.
VI. Yami-Anitos.
VII. (Upper part): Anito (L), Entrance to human underworld (C), Humans (C), (R).
(Lower part): Yami couple (R) and subterranean house (C), Humans (L). Note the peculiarly round-faced appearance of the Yami, similar to that of and plane gods.
VIII. Bases of the tree trunks supporting the Yami Cosmos.

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34: Del Re--58-59 U-4 (no date) No Date Formosan Aborigines
116. 775 Yami

"It is worth noting that the Yami--unlike most of the main-island tribes who have no traditions concerning a creator of the world and believe that it will continue for all eternity--do not appear to have any idea of an after-[59] life or of retribution, such as is found, for instance, among the Tayals who believe that those who have done evil will be punished, and those who have done good will enter, through a narrow gate placed at the end of a steep and difficult path, into a kind of paradise. None of the planes of the Yami cosmos are in the nature of retributory abodes after death, akin to the place of voluptuous pleasures and of filth assigned to the good and the bad by certain tribes (27),

27. VF, Pt. I, p. 12.

which suggest eschatological ideas of Chinese origin."

34: Del Re--59-62 U-4 (no date) No Date Formosan Aborigines-1-3
116, 772 Yami

"The anito of the first plane differs from all other anitos in that he was an anito before becoming a god, although no one seems to know when or how long he previously existed as a god. In some respects he may be regarded as the spirit (anito) of the dead god or as a divine spirit. All the gods of this plane, whether living or in the state of anito, have to work, but are endowed with the power of creation by a simple act of will.

The shaded arch that separates the first from the second plane symbolizes rain (figure 1). The circles (in figure II) represent the sun which is found on this (2nd) plane as well as on the 7th, the 5th one having two. This alternation of sunless planes is explained by the fact that since each day is divided into darkness and light, the planes lying between those having suns, are necessarily [60] dark. It may be noted that these planes--except the 4th, 9th and the 7th of human beings living underground--are anito planes. The gods of plane 2, are called Shimo-ra-po (left) and Shio-mi-ma (right) and are, respectively, male and female. They are the most important divinities of the Yami and the only ones on this plane known by name, all the others bearing the generic name of Tau-rô-tô i.e., humans who live in heaven. More numerous than the Yami, it is believed that the tribe learned from them the art of weaving and that of building houses. The first man who issued from a stone, built himself a great house divided into several compartments each of which capable of containing... fifty persons. (28) Later, when the

28. Presumably the house at Ivakusidan mentioned in the

Legend of Imulud.

families grew too numerous they built other houses of the same size and design examples of which may still be seen in many parts of Botel-Tobago. Large houses of the same type are also frequent in other savage districts of Formosa 'made of bamboo and with many ornaments, but without ceiling, having four doors, which are placed crosswise opposite each other in the North, East, South and West. Sometimes they have six doors, i.e., two facing East, two West and two North. The houses are erected about four feet above the ground on clay foundations.' (29) In some parts, however, they

29. VF, Pt. I, page 4.

are built on piles or stones. The [61] building of what may have been the first Yami house is thus described in the Legend of Ilalai. (30)'...He cut poles for his house.

30. AYL, page 67.

He cut a broad board, and called many men and returned. He fed the helpers with a large pig and taros, and he served the helpers substantially. The boards were completed, and so a house was built. The standing poles for the house were thirty.

They fastened a beam, and continued to build, and there were many men who helped him to thatch. When they had finished thatching, they took taros. They prepared food, and invited relatives. Those who were invited came. They wore silver helmets and sang in the evening. . . . '

The silver helmets mentioned call vulagnat, are worn on ceremonial occasions. As is well-known communal houses are found elsewhere in Indonesia which serves to confirm the opinion held by some ethnologists that the Yami are not, properly speaking, aborigenes but immigrants from some other part of the Malay Archipelago or further afield. These Tau-rô-tô or Tau-du-to are all good divinities whose main business it is to provide the Yami with the necessaries of life. They are divided into two classes the lower, more numerous than the others, serving as messengers or attendants of the higher gods. The chief of these is known as si torijau or si umina. The in-[62] ferior gods are called si animus or si vidai. They all use silver plates and spoons."

34: Del Re--62 U-4 (no date) No Date Formosan Aborigines
116, 753, 772, 173, 582, 776 Yami

"Unnatural death, failure of crops, death of livestock are considered punishments meted out by them. (31) [MLB: i.e., the inferior gods] Like the gods of the upper

31. AYL, p. 80, n.

plane, they are endowed with the power to will the creation of anything. Their life, food and dress are, in all respects, similar to those of the Yami save that their houses are built entirely of gold, and are found in the seven heavenly villages, corresponding to the seven villages of the island, each of which is under the protection of the god of its respective heavenly village. The gods must always reside in their own village and may not take to wife a goddess from another village. This suggests that, in earlier days, intermarriage between the different communities on the island was taboo. At present, however, such a prescription appears no longer to be enforced. During the annual festivals the islanders call upon and make offerings to these gods of yams, taro, millet and other fruits of the earth to ensure a good harvest and a plentiful catch of flying-fish. There are also anitos on this plane, but they are harmless."

"The direct interest taken by these gods in the welfare of the tribe is illustrated by the following legend:---

Once upon a time there lived on Kô-tô-sho a very handsome youth who was very poor. One of the Tau-[63]rô-tô goddesses being sorry for him, told her niece to descend upon the island and to marry him. The niece at first refused, but later the aunt succeeded in making her take pity on the youth. Having reached the island, she approached the youth and asked him to marry her. The youth, however, refused her offer saying that he was too poor to keep himself much less a family. The girl finally got her way by promising that she would make him rich. After nine years of marriage, during which she bore him two sons, the mother returned to heaven taking with her the youngest child, leaving the husband and the eldest son behind.

A man still lives in one of the villages of Kô-tô-sho who claims to be directly descended from this goddess.

The figures shown in the 3rd plane (fig. I), Shipariud (right) and Shivairai (centre), are the principal gods of this heaven which is also inhabited by many other divinities the names of which are unknown. The latter are 'anito-demigods' whose main function seems to be that of living at the expense of the other inferior beings of the Yami universe. Being unable to make a living by themselves, and unwilling to work, they steal food from the Yami entering for that purpose into the bodies of rats and other rodents. Whenever a rat

is killed the anito has to find another abode, which often is the body of a bird or a butterfly. In the course of this transmigration, however, he loses his power to harm. In earlier times the [64] island is supposed to have had no rats which--so the tradition goes --were brought over by a (?) Japanese boat and and [sic] spreading over it ravaged the crops. In view of this, it is easy to understand how it came about that the Yami later added to their universe a plane peopled entirely by a special class of wicked anitos. According to some, these anitos are not naturally evil but only become so when they pass into the body of a rat. It is generally believed that they take pleasure in preventing plants from coming to fruition, or in causing the seed to rot in the earth, or spoiling the crops after they have been harvested."

34: Del Re--64-67 U-4 (no date) No Date Formosan Aborigines
116, 539, 772, 842 Yami

"The 4th plane (figure I) is entirely peopled by divinities of female sex called Pi-na-lung-ao, the chief of whom is the goddess Shi-nun-manuri, who exercise a function somewhat akin to that of the classical Moirai. When a child is about to be born the goddess must be consulted to ensure--as far [sic] possible--that an equal number of males and females are born in each generation. Sometimes, however, Shi-nun-manuri forgets the correct number and confusion arises, but this is at once set right in the following generation. At the time of birth the goddesses pour water into a bowl and shake it: if only a small amount of water is spilled the new-born child will have a long life, but if all the water is spilled it will die soon. Length of life depends entirely on the amount of water spilled, nor is it affected by any preceding action of the parents or by what the individual may subsequently do, since once [pages 65 and 66 contain illustrations] [67] determined at birth, nothing can alter man's span of life."

"The 5th plane is inhabited by the Yami. The two islands shown in the drawing (fig. 1) probably represent Formosa and the near-by island of Ka-sho-to. It will be noticed that the artist has been at pains to distinguish the Yami from the anitos (planes 2 & 4) with their wild looks, dishevelled hair and pot-bellies, from the humans (planes 7 & 8) and, conversely, their marked resemblance to the gods of the second plane.

'Yami-anitos' occupy the 6th plane (fig. I). These seem to be the doubles rather than the spirits of the Yami. According to some, each individual may have as many as eight anitos who, after the death of the host body, continue to live in the same place, as disembodied spirits. Such a belief presents an interesting analogy with the ancient Egyptian ideas concerning the ka. There are certain places reputed to be haunted by these anitos which the savages fear to visit at night or even during the daytime. They are furthermore regarded as harbingers of death. Like the anitos on the 3rd plane, they too may enter into the bodies of rats which makes them evil and, in this form, are undistinguishable from those just mentioned and from the 'anito-men' who live on the 8th plane. They may also enter into butterflies, mantises and cocoons. Rats, too, are believed to have several anitos, one of which acts as the animal's vital spirit. Whether in the form of Yami, men, animals or gods, it is clear that anitos [68] have a double function and can exist with or without bodies. It will be noticed that the 3rd, 6th and 8th planes of existence (in the 9 plane scheme) are, in effect, anito counterparts of the

corresponding divine (2nd), Yami (5th) and human (7th) planes immediately above them, the only difference being that the anitos of the 3rd plane are considered evil spirits, while those of the 2nd are gods and harmless.

The World of Men is situated on the 7th plane (fig. I). About it the Yami have little to say. This, in itself, might be adduced as a proof of their long period of isolation from the outer world. It is believed however that, in the remote past, two Yami, led by the gods, visited the land of men, situated underground (plane 7 (a)(b)), and on their return handed down the following legend told Dr. Stewart, by a young native. The story makes an interesting addition to the numerous Celtic legends of what Alfred Nutt called the 'Hollow Hill' type of Happy Otherworld, except for the important fact that the Yami underworld is inhabited by living beings not ghosts.(31).

31. cpr. also the underworld in the Puyuma legend, p. 46.

Once upon a time there was a family of Yami which had several children. For some unknown reason the father and mother treated the elder brother and sister very cruelly, feeding them only on scraps and refuse. One night the elder brother dreamed of a country under [69] the earth where there was food and gold in abundance and where he and his sister might live happily and in plenty. All next day while at work in the

his just anger using the Yami merely as the instruments of his vengeance. This plane is also inhabited by many snakes and rats.

The second native drawing of the Yami cosmos (fig. II) substantially preserves in a much simplified form, the arrangement of planes of the one described above. It is of special interest, however, because it introduces a new feature, namely the suns which, as previously noted, appear on alternate planes. Such an explanation of the phenomenon of day and night is not found elsewhere among the Formosan savages nor is it clear whether the planes without suns are those inhabited by anitos."

34: Del Re--71 U-4 (no date) No Date Formosan Aborigines
116, 772, 821 Yami

"The whole conception of a cosmos consisting of a number of superimposed elliptical planes the upper four of which inhabited each by a different category of god or demigod, not only seems to set the Yami apart from the other savage tribes of the Formosan mainland, but gives rise to many speculations as to whence such ideas may have derived."

34:Del Re U-4 (no date) No Date Formosan Aborigines
Yami

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"Reference has been made in the preceding pages to those Yami myths and tales which have analogues among other Formosan tribes, particularly the Puyuma sub-tribe whose relationship with the Puyuma still remains to be studied. In the field of comparative anthropological research, the University of Michigan Museum of Anthropology has recently issued a useful monograph by Mr. Edward Norbeck on the Folklore of the Atayal of Formosa and the Mountain Tribes of Luzon. (32) Availing

32. Anthropological Papers, No. 5, University of Michigan Press, Ann Arbor, 1950.

himself of the materials published by Ogawa, Asai and Utsurikawa, the author has grouped the Atayal folktales under motifs and compared them with those of similar type found in Luzon. A few of these have characteristics in common with those referred to in the present study, such as the transformation of children into crows. (33)

33. q.v. above p. 26, and Norbeck, loc. cit. p. 9 ff. 36.

It is interesting to note among the motifs listed by Norbeck, the absence of any developed cosmological or anthropological creation myth and, on the other hand, the

constant recurrence, among most main-island Formosan tribes, including the Atayal, of the flood motif. It is to be hoped that Mr. Norbeck and others will continue and extend their researches and systematize, collate and critically examine the available native texts collected by Japanese scholars in order to determine the interdependence of Formosan native folk-[pages 73 and 74 contain illustrations] [75]lore and its eventual transoceanic origins and parallels Such studies, apart from their intrinsic interest, would undoubtedly be of great value and shed new light upon the northern migrations of the Indonesian tribes."

35: Collingwood--135 [2] D-2 (1866) 1867 Formosans
116, 609

"On the approach of the vessel, numbers of people assembled on the beach from the large Chinese village of Sano, attracted by the unusual circumstance; among them the gamins were conspicuous, capering about on the sand, while their more sober elders formed a long line in the background, squatting on their hams, and discussing over their pipes the cause of the phenomenon. As soon as we landed, we were escorted into the village by the crowd, and, on reaching it, were received by sundry explosions, which we were fain to consider a salute of honour."

fields he could do nothing but think of his dream wondering how he might find the way to that beautiful land. When he had finished his day's work, he asked his sister to go with him to the place called Gimu-awungo. Having reached the spot he pulled up a clump of balung-bung grass and found that the roots had left a large hole which seemed to lead into the bowels of the earth. Filled with curiosity he wriggled down the hole followed by his sister and found himself in a world similar to that of the Yami except that there was plenty to eat and the people treated them very kindly. After some years they both married and had children, the brother two sons, the sister only one. Meanwhile the peasant who had seen them disappear into the earth and fail to return, ran to tell their parents, but when these reached the spot the hole had closed up.

After many years the brother and sister came back to their native village bringing their children with them, and were received with much joy and surprise by their parents. A great feast was held to celebrate their return to which all the neighbours were invited. When the mother heard of all the wonders of the underground world, she implored them to take her back with them. They refused to do so reminding her how cruelly she [70] had treated them when they were small. The time having come for them to return to the underworld, the mother announced her determination to accompany them. Upon reaching the spot, pretending that they would let her come too, they told their [sic] her to turn her back; at that very moment the earth opened and they slipped

down the hole while the ground closed over them for evermore, leaving their mother weeping with rage over their disappearance.

The subterranean house of these Yami is depicted on the lower right-hand side of the 7th plane (fig. I). The figure on the upper left seems to be that of an anito which should properly belong to the 8th plane where 'anito-humans' live who, in (fig. II), have a plane to themselves, not here marked. These anitos are in every respect the same as those of the 6th plane (Yami-anitos).

The 8th or lowest plane is the foundation upon which the Yami world rests. The drawing (plane 8) shows the supporting tree-trunks and the serpent Kamurai who causes the universe to snake and tremble every time he coils himself around or touches one of them. When he draws in his breath the wind blows, when he exhales it, the ocean is churned up into furious waves, but when he coils and uncoils himself the earth is shaken by an earthquake. The violence of these disturbances depends upon the violence of his movements and are generally dictated by the caprice of the moment. His anger is [71] mostly directed against other countries. The Yami also believe that if someone were to attempt to escape from the island after committing some evil deed, Kamurai would raise a tempest and sink his ship as he did in the case of the American sailors shipwrecked upon Kô-tô-sho whom he considered to be criminals and upon whom he wreaked

35: Collingwood--135 D-2 (1866) 1867 Formosans
116, 131, 133, 361

"On the 13th June, 1866, I visited Sano Bay, on the east coast of Formosa, in H. M. S. Serpent, Commander Bullock, proceeding thither from the harbour of Kelung. The object of this visit was chiefly the verification of some supposed dangers in the harbour, which is spacious and not difficult of approach, and, although little frequented, is of importance as the only available harbour upon the whole east coast of the island. Our visit acquired additional interest from the fact that there was believed to be a village in the bay, occupied by the aborigines of the island, whom we were anxious to meet with. We found four villages in the bay: the first and smallest upon the northern side was a mere hamlet of Chinese fishermen, consisting of half-a-dozen cottages upon the hill-side, their boats drawn up on the beach in front. Passing by this, we proceeded up the harbour, and anchored near a sandy beach, beyond which we could see some roofs of houses. All the rest of the bay had a desolate and lifeless appearance, the lofty hills sweeping down to the water's edge, generally densely wooded, and presenting an aspect of wildness, which accorded well with our belief that they were inhabited by the still savage aborigines of Formosa."

35: Collingwood--135-136 D-2 (1866) 1867 Formosans
116, 411, 609

"Sundry warlike-looking personages, armed with matchlocks, had turned out to meet the suspicious-looking strangers; but seeing us walking unarmed and amicably among the citizens, they fired their weapons harmlessly in the air for effect. They allowed us to examine their matchlocks, which we were told were manufactured at Amoy; and their ammu-[136]nition, consisting of very coarse powder, with a finer grain for the priming, and bullets—some round, some oblong, some rectangular."

35: Collingwood--136 D-2 (1866) 1867 Formosans
116, 563

"We found nothing remarkable in this village, [MLB: The large Chinese village of Sano on the east coast of Formosa.] which was essentially Chinese in its dirt, its pigs, and its inhabitants—closely resembling in character the other towns of Formosa; but our attention was arrested by a woman, whose handsome and European-looking features, and peculiar voice, at once marked her as non-Chinese, and shewed her to be one of the aboriginal inhabitants. How she came thus domesticated among the Chinese we could not learn, but we heard from various quarters that a system of petty warfare is kept up between the two races, and that occasionally some of the women are carried off by the opposing parties."

35: Collingwood--136 [2] D-2 (1866) 1867 Formosan Aborigines
116, 342, 361, 609 Sek-hoan

"The following morning we landed on the southern side of the bay, where we were to find the native village, of which no trace however was visible from the ship. We were met upon the beach by a number of men and women, who were in no respect, either of dress or feature, similar to the Chinese, and along with them, after the first expressions of surprise and curiosity, we entered the village. This is rudely walled, the entrance being through doors at either side, by which we passed into an assemblage of huts constructed chiefly of grass and bamboos. The grass is woven into a kind of trellis or mat, which is placed against the sides, while the chief part of the walls is constructed of upright sticks, the interstices being imperfectly plastered with mud to keep out the weather. The door is of bamboo, and fixed upon a rude hinge, the lower part revolving sometimes upon the bottom of an earthern cup, to give freedom of motion. The roof is a thick thatch of grass and herbs (in which a species of Turk's-cap lily is largely used), and is supported by bamboos irregularly disposed among it. At one end is often an overhanging shed, containing a supply of firewood, of which there is everywhere abundance."

35: Collingwood--136 [3] D-2 (1866) 1867 Formosan Aborigines
116, 352 Sek-hoan

"The interior of these huts contained but little; a stone stove, and a square flat board in one corner, which did service for a bed—apparently for the whole family—appearing to constitute nearly the whole furniture. Articles employed in fishing might be seen stuck into the thatch, and a stool or two was to be found in most cottages. Besides these, a few small articles of convenience existed which could be found when required by the owner."

35: Collingwood--136-137 D-2 (1866) 1867 Formosan Aborigines
116, 142 Sek-hoan

"The occupants of these habitations were a fine race of people, much superior in good looks to the Chinese; their features being more regular and well formed, and their expression decidedly more intelligent. The complexion was olive, the eyes [137] wanting the obliquity so characteristic of the Mongol race, the cheek-bones less high and prominent, the lips somewhat thick, and the chin well turned, giving altogether a very pleasing expression, neither stupid nor savage. The hair was usually black, but sometimes had a decidedly reddish cast, and that of the women was luxuriant and tied with a loose knot, while the men had adopted the Chinese custom of shaving the forehead, though not so far back as the vertex, and wearing a pigtail. Their physical proportions were in many cases very striking, and among them we saw both men and women of stalwart proportions. Some of the young girls were decidedly pretty, and exhibited all the coquetry, the love of finery, and other characteristics, which distinguish the sex in general in other parts of the world."

"The costume of these people was somewhat slight. The men were attired similarly to Chinese coolies, that is, usually in a simple pair of short drawers, to which in some cases a blouse was added. The dress of the women consisted of a sarong (1) or petticoat,

1. Meaning literally a sheath or scabbard, but here that part of the dress of both sexes which covers the lower portion of the person, and is in the form of a sack open at both ends. —Editor.

folded round the loins and meeting in front, where it overlapped, but was not fastened. This petticoat did not reach so far as the knees, and the feet and legs were bare. A sort of loose jacket, open in front, completed their attire, though some of the matrons did not make use of this addition. The young children of both sexes were entirely naked. This, however, appears to be a costume not always considered necessary, and those who landed at the village early on the second morning report that the population was more scantily clad, the men being entirely naked, and the women wearing only a flap round the loins. Seeing, however, the strangers arrive, they retired with deliberation to their huts, closed the doors, and reappeared in the costume above described. The women possessed necklaces of beads, which they wore round their necks, and some of them had stone bangles round their arms; their ears were pierced in three or four places from the lobe upwards, though none of them seemed to have ornaments in them, except buttons,

often of the commonest kind. Most of the young children had objects round their necks, such as coins, beads, or buttons."

35: Collingwood--137-138 D-2 (1866) 1867 Formosan Aborigines
116, 283, 294 Sek-hoan

"It should be mentioned that, in most cases, the garments worn by these people were made from a cloth of their own manufacture. This was a stout material, the threads of which were usually arranged in a zigzag pattern, and of a whitish or [138] bluish-white colour. Many of the younger girls were employed in spinning the thread from fibres of hemp; and the cloth was woven by the older women, in pieces about a yard and a half long and a foot broad; three of which pieces they were willing to dispose of for one dollar."

35: Collingwood--138 D-2 (1866) 1867 Formosan Aborigines
116. 101, 177 Sek-hoan

"These people [MLB: occupants of a village on the southern side of Sano Bay] are called by themselves Kibalan, and are, I believe, known by the Chinese as the tame aborigines, in contradistinction to the raw savages which dwell on the mountains, and on the east coast more particularly. These latter are at deadly enmity with the Chinese; while the Kibalan live in close proximity, though isolated from them. An officious half-caste among them informed us that there was another village close by; so, guided by him, we proceeded about a furlong along the beach, but were rather disgusted to find it a Chinese village, differing in no respect from other dirty Chinese villages."

35: Collingwood--138-139 D-2 (1866) 1867 Formosan Aborigines-1-2
116, 124, 133, 487 Sek-hoan

"Returning to the Kibalan village, the name of which I believe is Shek-fan, we made known to them by signs that we were anxious to visit the mountains, and to meet with the savages. They, however, did their best to persuade us not to go, assuring us that we should be shot. On shewing them our revolvers, however, they seemed to think we should be safer; but, when we inquired for a guide, one and all declared that their throats would be cut if they ventured among the hills. After considerable parley, the sight of a dollar induced one to accompany us, and, having armed himself with his matchlock, we set out; our guide, however, taking good care to keep in the rear of the party. Crossing some paddy fields, and proceeding along a sandy bay to the southward, our path was arrested by rocks, while on our right was a range of hills covered with a seemingly impenetrable forest. On closer examination, however, we discovered a beaten track, and up it we climbed, through a dense vegetation of tree ferns, camphor trees, etc., among which were some beautiful flowers, and many gaudy butterflies, although the overarching trees shut out most of the light. We ascended a considerable distance, tracing the path, which, although faint, was evident, and marking the trees as we ascended; but no trace could we find of the savages of whom we were in search. At length, finding the path less and less distinct, and time failing, we gave up the chase, and descended to the Kibalan village. The track which we had followed, however, was so evidently a more or less frequented one, that, considering the dread professed by the inhabitants of the village of their savage neighbours, it is difficult to understand by whom

it could have been used, unless by the mountain aborigines descending to the plain in search of supplies. Subsequent inquires at Sano, as well as some [139] signs made by the Kibalans, elicited the information (whether true or false) that the aborigines of the mountains could not be reached under two days' journey from Sano Bay."

35: Collingwood--139 D-2 (1866) 1867 Formosan Aborigines-1-2
116, 123, 157, 609 Sek-hoan

"We unpacked our basket of provisions in the middle of the village, and were soon surrounded by the entire population, who pressed curiously about us, but withal civilly; and seemed to think our eatables not bad, particularly the loaf sugar, which young and old appeared to appreciate. Captain Bullock had brought with him some old numbers of the Illustrated London News, which he distributed among them; but I remarked that though all seemed anxious to get a leaf, they did not look at the woodcuts, but immediately folded it up and put it in some part of their dress—nor could I interest them by pointing out to them the most striking illustrations, which they did not appear to comprehend. They did not, however, show any lack of interest and curiosity in most things, and the men particularly most inquisitively examined every part of our dress, feeling its texture, looking into our pockets, and shewing by signs that they wished to see the interior of any box or bag we happened to carry. Nor were they content with looking once, but the same objects must be inspected again and again. The women more particularly exhibited a great anxiety to obtain as presents anything we could give them, particularly anything ornamental. The naval buttons were a great temptation, and over and over again they pointed to them, and intimated their desire to be the fortunate possessors of them. When denied, they would point to a young child and ask it for him, as though we could not refuse it. Darwin, I may observe, makes the same remark when speaking of the Fuegians. If the button was given under these circumstances, it was immediately fastened on a string and tied round the child's forehead. But so importunate were they, that I might have

completely stripped myself and found candidates for every article I possessed. Notwithstanding this, however, and that they repeatedly put their hands into our pockets, not a single article was lost, and no attempt was made to steal, but upon its being re-demanded they never offered to retain any object whatever. After our meal was over, the empty bottles were eagerly sought after, and we soon learned that no more acceptable present than a bottle could be made to them. This, which they called brasco, and tobacco, (1)

1. Both words, no doubt, from the Spanish or Portuguese, frasco and tobaco. —Editor.

were the only two things which they specially applied for."

35: Collingwood--139-140 D-2 (1866) 1867 Formosan Aborigines
116, 249, 276 Sek-hoan

"Nearly everyone, men and women, smoked; and almost our first greeting was a demand for tobacco, a word which they appeared [140] to have previously learned. A small plantation of tobacco grew and was in flower within the walls of the village, and in several places the leaves were laid out in the sun to dry. It is smoked by them in pipes about a foot long, which the woman sticks in her hair when she is not using it, and not unfrequently we observed them smoking a bundle of scarcely dried leaves, rolled up and forming a rude uncouth cigar."

35: Collingwood--140 - D-2 (1866) 1867 Formosan Aborigines
116, 123, 461, 512 Sek-hoan

"It will not be supposed, however, that they were without occupation. In many huts the men were asleep, but towards evening they might be seen with their nets wending their way to the beach. Others I observed engaged over some seething vessels, in which I found they were extracting oil from the bones of turtle. The women had, several of them, naked babies hanging to their bare breasts; others came in from the country with pruning-knives, and laden with large bundles of grass and lily straw, which they laid down to dry in the sun, and which it appeared was ultimately intended for the repair of the thatch. These women had cloths wound round their legs, as a protection while in the field, and broad bamboo hats hanging by their side for wear in the hot sun. Others were spinning thread or weaving cloth, while some were engaged in beating rice out of the husks, which they did by placing it in a hollow stone vessel, under which they put a mat, and then two of them beating it alternately with the end of a heavy bamboo. While some were thus engaged, the idlers allowed themselves to be amused by some of our party, who showed them little tricks, which caused hearty laughter, and which they tried their best to imitate."

35: Collingwood--140 [2] D-2 (1866) 1867 Formosan Aborigines
116, 721 Sek-hoan

"Seeing a revolver, they were very anxious to see it shot off, and stuck up a leaf upon a door to be shot at, which was done twice, upon which there immediately appeared two or three men armed with matchlocks, who had evidently turned out at the sound of the pistol to protect the community in case of need. This little incident seemed to prove that they were always on the alert, and gave colour to the general report that they, like the Chinese, are subject to the raids of the raw mountain savages, against whom they are always more or less prepared to defend themselves. This was also corroborated by the fact, that in the midst of the village a building was in course of construction, which was evidently of a defensive character."

35: Collingwood--140-141 D-2 (1866) 1867 Formosan Aborigines
116, 177, 344 Sek-hoan

"It [MLB: A Kibalan building apparently intended for defense against raids by mountain savages.] was in a very unfinished state, having at present no roof, and the walls not all completed; but the loopholes in the walls of the finished sides, as well as the accounts of the natives themselves, showed for what purpose it was intended. Men were engaged in sawing wood, and doing other business of construction.

By the side of this unfinished building was piled a great [141] heap of tiles of a dark colour, and of a most rubbishy brittle character, which they had purchased of the Chinese for roofing their fort. It seemed the greater pity, inasmuch as the rocks of Sano Bay are of a slaty character, with very distinct cleavage; and, close by the village, slates might have been obtained by a little trouble and intelligence, and these would have answered the purpose better than the wretched tiles they were about to use. A herd of water-buffalos, brought home late in the afternoon, repaired to a muddy pool in front of this building, and, with their characteristic timidity and stupidity, after eyeing us curiously for some time, they took alarm at some movement of one of our party, and bolting helter-skelter out of the mud, floundered over the heap of tiles, crushing numbers of them to pieces, and all but overset some of the native huts in their mad career. Besides buffalos, they have pigs (always black), Chinese dogs, Japanese cats with short twisted tails, and fowls."

35: Collingwood--141 D-2 (1866) 1867 Formosan Aborigines
116, 123, 156, 526, 562 Sek-hoan

"The following morning a number of natives visited the ship in their boats, and, on bottles being shown to them, they eagerly demanded them. When thrown into the water, half-a-dozen men leaped after them, and vigorous swimming-matches took place for the prizes. They would also dive for buttons of any kind that were thrown in. Soon afterwards several boats, full of people of all ages and both sexes, came alongside and readily ventured on board. Indeed, one great distinction between these people and the Chinese was the entire absence of timidity on the part of the females, who, instead of running away and hiding themselves as soon as they are even looked at, showed the most perfect confidence and freedom from mauvaise honte. They immediately commenced eagerly inquiring for brascos (bottles), and as our supply of these desirable articles was limited (owing to the custom of throwing empty bottles overboard), considerable jealousy was excited among the unsuccessful competitors. There was no idea of barter, and perhaps it was our own fault that we obtained nothing in return for our valuable presents. A number of our visitors were induced to descend to the captain's cabin, where, as lunch was going on, they readily partook of the edibles, and made themselves quite at home. Captain Bullock good naturedly cut off the tassels from his cushions, which were immediately transferred to the hair of the native beauties. After going about the ship, and conducting themselves with the greatest propriety, they returned to the village."

35: Collingwood--141-142 D-2 (1866) 1867 Formosan Aborigines
116, 576 Sek-hoan

"A little incident struck me as worth recording. One of the men passing the ward-room sky-light, where some [142] of the officers were at lunch, looked down, and lingered, when he was pulled away gently by another man who was with him. It was a slight movement, but Chinamen would have remained and stared till their eyes started from their heads before such native politeness would have occurred to them."

35: Collingwood--142 D-2 (1866) 1867 Formosan Aborigines
116, 123, 157 Sek-hoan

"The people readily acceded to the desire that they should sit, and several picturesque groups were formed, some of which were successfully fixed by the camera: of course it was very difficult to keep them all quiet, and impossible to make them comprehend the necessity of absolute stillness during the critical moments. The result, however, was in several instances very satisfactory."

35: Collingwood--142 [2] D-2 (1866) 1867 Formosan Aborigines
116, 123, 194, 562 Sek-hoan

"The attempt to learn some of their words, and to form as good a vocabulary of their language as the time would permit, was met by perfect good will on their part; and many words, as well as their mode of counting, were obtained, chiefly from the women, who appeared to take considerable interest in imparting the information. Considerable amusement, too, was excited by our mistakes in pronunciation, etc., and our efforts elicited a considerable show of intelligence on their part. We found the women much more serviceable than the men for this purpose, chiefly on account of their clear pronunciation, which was much more distinct than that of the men. Thus, for example, the attempt of the women to pronounce English words was much more successful than that of the men. The word 'flint,' for instance, being given them, a man would not approach it nearer than plin-iss, while the women at once said fil-lint. The voice of the women was remarkably agreeable, having a plaintiveness and softness which were really striking, and sometimes sounded more like a gentle singing than speaking."

35: Collingwood--142 [3] D-2 (1866) 1867 Formosan Aborigines
116, 771 Sek-hoan

"We looked in vain for any indication of their religious ideas. Over the door of the village, by which we entered, some one had stuck a joss paper, after the manner of the Chinese, and probably some Chinese had done it, but there were no joss-houses or temples in the hamlet, nor did we find any in the houses, though among the poorer Chinese almost every house has a little altar to the lares in the principal room. We inquired as well as we were able of the inhabitants on this point, but were able to elicit nothing from them."

35: Collingwood--142-143 D-2 (1866) 1867 Formosan Aborigines
116, 142, 161, 165, 732 Sek-hoan

"With regard to their diseases, we had no means of learning anything of the mortality of the village. One young woman appeared to be recovering from small-pox, and one old woman [143] was covered with a skin disease, which gave her a leprous appearance, but the people in general were healthy-looking and physically strong, hardy, and well made. We observed no deformities among them, with the exception of one child of three or four years old, which crawled nimbly about on its hands and knees, and appeared to be physically unable to stand or walk. The village may have contained, at a rough estimate, two hundred and fifty inhabitants. There were plenty of children, but old grey-headed persons were not numerous."

35: Collingwood --143 D-2 (1866) 1867 Formosan Aborigines
116, 144, 157, 186 Sek-hoan

"In conclusion, I think it is evident that the race of people inhabiting this village is distinct from the Chinese. Among the women, particularly, there was scarcely one who had a Chinese feature, and their habits and modes of life also differ considerably. The feet were in no instance bandaged, as is universally the custom among the neighbouring Chinese. With regard to the men, it was not always so easy to discriminate, although in many, or rather most, instances, the Kibalan man was bigger and more stalwart, and with a cast of features superior to that of the Chinese. Some of them may have been half-castes, but I am of opinion that the majority of the inhabitants were of pure aboriginal descent, though how they became separated from the mountain savages, and the process and reason of their domestication, I have no means of knowing. Their present isolation in their own special village in a great measure accounts for the apparent purity of their blood. They were in all respects a more intelligent and more engaging people than the Chinese of Formosa, though these latter affect superiority. Thus, when I inquired of a man in the Chinese village of Sano, who I imagined had a dash of Kibalan in his face, if he belonged to that race, he replied, 'No, I am a man' (that is, a Chinese), 'not a foreigner.' "

36: Dodd--69 U-2 1865 (1885) Formosan Aborigines
116, 101

"It is my present object to give a description of the aboriginal tribes living in the hills in rear of Banca extending in various directions towards Sû-oh Bay on the East coast, and more especially of those tribes living nearest to the western borderland in the neighbourhood of Kŏt Chiu formerly a Chinese border outpost, as well as of those residing in the mountains at the back of San Ko Yeng and to the East also of To Ko Ham extending down to the 'Sylvian and Dodd' ranges in the vicinity of the 'Petroleum Wells' discovered by myself in the spring of the year 1865."

36: Dodd--70 U-2 1865 (1885) Formosan Aborigines
116, 142, 212

"The Hill Savages of North Formosa are, without doubt, exactly like other human beings in the shape of their bodies and number of their limbs, and although they are as wild as the animals which roam about their country, have no written language of their own, and live in a most primitive style, yet there are no signs of a Darwinian tail, neither do they at all give you the idea that their progenitors were of the monkey species."

36: Dodd--70 [2] U-2 1865 (1885) Formosan Aborigines
116, 141

"The men are not remarkably tall; in fact I should say that few of them measure over five feet nine inches, and the majority of them are, probably, under five feet six inches. In the South of the island, it is said, the men are of a larger mould than those residing North of Latitude 24 N."

"The complexion of old men of the tribes [MLB: of North Formosa] is very sallow and often swarthy; that of young, healthy warriors much lighter and clearer, but there is observable in the majority of faces a dark tinge not to be seen in the faces of Chinese, not quite so dark as the complexion of mixed descendants of Portuguese settlers in Macao, but resembling more the tint to be seen in the faces of fair-complexioned Japanese. They are, if anything, darker-skinned than ordinary Chinamen who have not been exposed to the sun; but the peculiar strain referred to, does not appear so distinctly in the younger members of the tribe, or so strong, as it does in the complexions of those who have taken an active part in hunting, fighting, and in the hard daily struggle for existence.

The skin of the darkest savage of the North of the island is not so dark as the complexions of many representatives of Spain, southern France and Italy, and in higher latitudes, many faces of Celtic type shew as dark a hue as that observable in the faces of the aborigines of the North. In old members of the tribes, the colour of the skin assumes a duskier and sallower tint, constant on the frequent exposure to the sun and to the weather, but with all this, there is no similarity of colour to that visible in the faces of African negroes.

The strain of negro blood was plainly visible in the faces of the wrecked Pellew Islanders, but in the colour [71] of the skin and in the texture of the hair of the northern tribes there are no signs of negro extraction. Their hair is invariably dark and lank,

not curly or frizzled, their lips are not so thick even as those of Malays, and the high noses possessed by many approach often the European type. With these evidences before us, it is safe to assume that these savages have inherited an intermediate colour not apparently traceable to negro admixture... The colour of the skin of all the Northern tribes I have seen appears to be of a uniform hue, without any variety, beyond a darker or lighter complexion observable when comparing bronzed and swarthy old men with younger members of the tribe who have never been much exposed to the weather."

36: Dodd--71-72 U-2 1865 (1885) Formosan Aborigines
116, 142

"The general contour of the face resembles somewhat that [72] of a Malay, but the lips of the Formosan savage are not so thick, neither are their noses (excepting in few instances) quite so flat as those of the Malays whom I have seen at Singapore and in China. It may safely be said that there is nothing in their physiognomy which resembles the Chinese, their natural enemies, whom they imagine to be the only other inhabitants of Formosa or indeed of the world."

36: Dodd--72 U-2 1865 (1885) Formosan Aborigines
116, 142, 152

"On first meeting a savage of the true type (not beggar savages who are to be found on the borders and often in Chinese villages), you notice immediately the wide difference between him and the Celestial whom you have left on the opposite side of the borders, not only in the shape of his head, but particularly in the expression of the eye, which reminds you more than anything else of the wild and anxious gaze of a Scotch deer-hound. The eyes of most of the young warriors are strikingly black and piercing, they always appear to be on the move, staring to their full extent and gazing with a clear but eager look as it were at some far distant object beyond you. In the eye of the younger huntsmen and warriors, you cannot recognise care, but the look of those in their prime speaks of anxious thought for the morrow and is an index of the general feeling of insecurity, which must frequently and naturally exist amongst men who almost daily encounter dangers from contact with their human enemies, in the shape of neighbouring unfriendly tribes or the wily Chinese invader, as well as at times the wild animals of the forests, on the flesh of which they are, for the most part, dependent for their subsistence. The expression referred to is not one of fear, but denotes rather a life of care and anxiety."

36: Dodd--72-73 U-2 1865 (1885) Formosan Aborigines
116, 142, 302

"The head [MLB: of the "savage of the true type."] being generally small and round, the face is not particularly large or full. The eyes are very dark-coloured and straight cut, not at all oblique. In those of good-looking young men and women, the lashes are dark and long, eyebrows black, strong and thick, but not overhanging. In some faces they often nearly meet at the root of the nose. They are decidedly a very distinct feature of the face, as beards and whiskers are unknown and a moustache is seldom attempted, though I have seen certain old members of tribes [73] wearing a resembiance to one: as a rule all hairs appearing on the chin or cheek are plucked out by the roots, a small pair of tweezers being used for the purpose."

36: Dodd--73 U-2 1865 (1885) Formosan Aborigines
116, 142

"The shape of the heads of savages varies considerably, though the majority of them appear round and rather small. Their faces are for the most part of a Malayan type, some have a Jewish cast, and again you observe faces whose profiles resemble those of Europeans. I am inclined to think that these differences in physiognomies are attributable to the mixture of Malay, Philippine and Polynesian blood with the original ancient stocks previously existing in the island.

36: Dodd--73 [2] U-2 1865 (1885) Formosan Aborigines
116, 302

"The men of the northern tribes are in the habit of tatobing the forehead and chin in horizontal lines of about three quarters of an inch in length, and one-sixteenth part of an inch in breadth right in the centre of the forehead from the parting of the hair, which is always in the middle, to the root of the nose.

On the chin, also, are similar horizontal lines, and these are, as a rule, the only tattoo marks that are visible on the faces of the men. On the body they tattoo slightly, but it is not very general amongst them."

36: Dodd--73-74 U-2 1865 (1885) Formosan Aborigines
116, 301

"The men [MLB: of the northern tribes] have also a curious custom of piercing the lobes of their ears. Each lobe has a hole through it, large enough to receive a piece of bamboo about the size of a Manila cheroot. They usually wear therein hollow pieces of young bamboo with tufts of scarlet long-ells sticking out of the opening at the upper end; others insert pieces of what appears to be white cuttle-fish bone, about four inches long, with a disc made of the same material in the outer end. On the foreheads of some of the men may be seen similar flat but round pieces of cuttle-fish bone, fixed there by means of a piece of string round the head or attached to a circlet or wreath of embroidered camlets or native-made cloth. On their small, tight-fitting caps, they frequently fix circular pieces of this white cuttle-fish bone, or whatever it is. It seems to be quite a common article of barter amongst them. They use strings of small beads made of cuttle-fish bone not only as ornaments for their heads and necks, but as a 'circulating medium.' Necklaces, earrings and trinkets of various kinds are made of it. The [74] aborigines of the northern and central mountains are immensely fond of all sorts of trinkets. Round the necks of old men and young warriors are seen necklaces of wild boars' tusks and teeth of animals. They are worn often as heirlooms, but principally as symbols of individual prowess. They often load their necks with metal trinkets, cuttle-fish beads, &c., to which they attach numerous little appliances connected with the priming and loading of their matchlocks, a motley sort of collection, which excites the curiosity of the beholder."

36: Dodd--74 U-2 1865 (1885) Formosan Aborigines
116, 293, 411

"Every man [MLB: of the northern tribes] who possesses a gun (pâhtûs) wears round his neck curious-looking priming-flasks full of powder, and over his shoulder, or round his waist, an oblong-shaped case, made of skin, often containing several cylindrical-shaped wooden receptacles full of powder. He has generally about him a small bag containing shot and long iron projectiles almost the size of the little finger, which are slipped down the muzzle of the long-barrelled matchlock on top of the powder without any wad between. Matchlocks, however, are not very common in the interior, and even the border tribes are only scantily furnished with them. The majority of the men are armed with bows and arrows, with which they make good practice at stationary objects. Bowmen wear round their waists a deer skin strap, or arrow-belt, and not a man is without a long knife called lalāo. Another common appendage is a bag made either of hempen cloth or skin, about four or five inches broad and nine or ten inches long, in which they place dried tobacco leaves."

36: Dodd--74-75 U-2 1865 (1885) Formosan Aborigines
116, 137, 249, 276

"Tobacco grows wild in many parts of the country inhabited by the savages, and in Chinese territory it is cultivated to a large extent in certain districts. The savages simply sun-dry it, then rub it in their hands and place it in their pipes. In this form it is very mild. Foreigners make it into blocks by placing the leaves one above the other; a little water is then sprinkled over them, sometimes a dash of rum, the leaves are then pressed into a compact block, or are compressed into a circular shape about the size of the wrist and tapering to a point at both ends. Tobacco made in this form is tied round tightly together with rope, and is a very good substitute for what is called ship's tobacco. Native-grown tobacco, has been often prepared in this way by sailors on board [75] British gunboats visiting Tamsui, and has been much appreciated by every one fond of a pipe.

Chinese cultivate the tobacco plant, and large quantities are exported in junks to the mainland, where it is 'cured' according to Chinese taste, and in this form is re-imported for the use of Chinese only. The plant seems to thrive in Formosa luxuriantly, and it is a wonder that no attempt has been made here to manufacture cigars and cheroots for foreign exportation. Judging from the quality and size of the leaf, there ought to be no difficulty in producing cigars equal to those made in Manila."

36: Dodd--75 U-2 1865 (1885) Formosan Aborigines
116, 276, 531

"The aborigines of the North one and all smoke tobacco. Men and women invariably do so, and even young boys and girls are addicted to this pleasant vice, and as the plant grows wild and Formosa is a feverish and aguish country, it is not astonishing that smoking is such a common habit amongst them. Their pipes are made of hollowed bamboo and the stem (tûtû bidnâ kûi) is also made of very thin bamboo reed, being about half a foot to a foot in length, according to the taste of the owner. The bowls are often very tastefully and prettily carved and are frequently ornamented with pieces of metal. When not in use, the pipe is generally struck in the hair at the back of the head by both men and women."

36: Dodd--75-76 U-2 1865 (1885) Formosan Aborigines-1-2
116, 291, 531

"The clothing of these so-called savages living in the lower hills [MLB: of North Formosa] adjoining Chinese territory is, especially in the summer months, very scant. It consists chiefly of a coat, called lûkûs resembling very much an enlarged singlet open in the front and as a rule without sleeves. Four straight pieces of native hempen cloth are sewn together two to the back and two in front, leaving room for the arms to pass through, sewn also at the top over the shoulders, but open in front, exposing the chest and stomach. Sometimes they are buttoned across the chest, and sleeves are occasionally worn by border savages. These coats cover the back entirely, and reach down nearly as far as the knees, and although they are usually made of plain, coarse, bleached, hempen cloth, they are almost always embroidered from the waist downwards, or interwoven with either blue or scarlet threads of long-ells, which they obtain from the [76] Chinese borderers.

The patterns vary very much, resembling somewhat the carvings to be seen on their pipe stems and not unlike the tattoo lines and bars on the faces of the women. They shew great diversity as well as regularity of design, and if not imitations derived from outside sources, they indicate not only originality but great taste. In addition to the lûkûs the men wear round their waists a strip of woven hemp four or five inches broad, embroidered in the same way as the lower part of the lûkûs. This girdle or belt is called habbock, and is worn next to the skin as a rule, but sometimes outside the coat. The

lûkûs and habbock are almost the only articles of clothing worn by the men in the lower ranges of hills, but on the higher levels many wear coats with sleeves, and sometimes clothes made of the skins of animals.

In the summer months, one often meets men and boys roaming about with absolutely no clothes on at all. Some consider 'full dress' to consist of a rattan wicker-work closely fitting cap (mobu), others strut about all day long with only the belt or habbock round their waists, with the lalāo stuck in it."

36: Dodd--76-77 U-2 1865 (1885) Formosan Aborigines
116, 411, 531

[MLB: The author is discussing the knives used by the northern tribes.] "The blade of the lalão is about a foot and a half long and is always kept sharp. It is set in a haft of wood, which is usually adorned in the same way as their pipes, with carvings and pieces of metal. The blade is protected by a sheath of wood on one side and an open wire work guard on the other. At the end of this scabbard is often fixed part of the tail of a Chinaman, or other enemy, who has fallen a victim in some border war or on some head-hunting expedition. The lalão is a most necessary article to possess, for with it they cut their way through the jungle and thick undergrowth, with it they give the death-blow to the game they hunt; they use it in dividing the animals they kill, they eat with it as sailors do with their knives, they cut and split firewood with it, and last of all they cut off the heads of their enemies with this most useful implement. The blades are made by Chinese and are obtained by the savages in barter for deer's horns, &c.; often they are taken from the bodies of Chinese killed by them [77] in their numerous encounters with their would-be exterminators."

36: Dodd--77 U-2 1865 (1885) Formosan Aborigines
116, 292

"On occasions the men [MLB: of the northern tribes] sometimes wear tied over their right shoulder and flowing down the back and across the chest, a square piece of variegated cloth (worn by women as a sort of petticoat, tied round the waist and reaching to the knees), but this article of apparel is worn more by the women than the men."

36: Dodd--77-78 U-2 1865 (1885) Formosan Aborigines-1-2
116, 171, 291

"They [MLB: men of the northern tribes] wear another kind of coat, or rather jacket, called the fighting jacket. It is made in every way like the lûkûs, but in its size. Instead of extending low down the body, it only reaches as far as the waist, and is more like a shell jacket without sleeves than anything else. It is made of hemp, very closely interwoven with threads of scarlet long-ells, a colour which, amongst the northern tribes, seems to be the favourite. Further south, towards the Sylvian Range, coats embroidered with blue thread of long-ells are more the fashion. The long-ells and camlets used by the border savages are obtained from their neighbours, the Chinese hillmen. In describing the dress of the savages, I am alluding at present more especially to that worn by men living in the hills to the North of N. Lat. 24, and to East of 121 E. Long. There appears to be very little variety in the costumes worn in this region, that is, in the lower ranges of hills, but at 6,000 to 8,000 feet above the sea level, great differences in the appearance of the dresses as well as in the manners and ways of the people are observable. A rather curious apology for a great coat is worn in damp or rainy weather, of which they get a very full share at all times of the year, for the lofty mountain ranges, varying from 4,000 to 12,000 feet running nearly the whole length of the island, offer a great attraction to rain clouds.

This coat is made generally of the skin of the large brown deer, only partially cured by exposure to the sun and wind. The design is about as rude as anything can be, a slit of about six inches in length is made in the hide and at the end of the slit a circular piece

of the skin is cut out, allowing just room for the neck. The stiffness of the hide and the narrow space [78] allowed for the neck prevent the coat dropping off the shoulders. A man with a covering of this kind can screw himself into such a position that no part of his body is exposed, excepting his head, and on this he places his jockey-cap-shaped rattan cap, with the peak at the back, thus securing perfect protection from rain."

36: Dodd--78 U-2 1865 (1885) Formosan Aborigines
116, 293

"A few other articles besides those named are carried, [MLB: by the men of the northern tribes. For enumeration of articles used, see pp. 75-78, cat. 116.] such as hand nets, fishing gear, rope port-fires (made of hemp or the bark of a tree), worn round the wrists of men armed with matchlocks, &c."

37: Steere--302 S-3 (1873-74?) 1875 Formosan Aborigines
116, 101, 162

"The aborigines of Formosa naturally fall under two divisions: First, the ancient inhabitants of the great plains to the west, who possessed some of the elements of civilization, and who, from their exposed situtation, soon fell under the dominion of the Chinese, when they entered the island, over two hundred years ago. They are now found scattered nearly the whole length of the island, and generally driven back from the rich lands that were their ancient inheritance, to the sterile and hilly lands near the foot of the mountains, where they are subject to continual attacks from the savages. They have frequently migrated to rid themselves of unpleasant neighbors, both Chinese and savages, and there are known to be large colonies of them who have penetrated the mountains, and have settled in unknown valleys on the east coast. They are generally known by the name of Pepo-whan, which, literally translated from the Chinese, means barbarians of the plain, and demonstrates the fact that the Chinese found them inhabiting the plains on their arrival. A large division of the Pepo-whan, near the center of the island, who still speak their native language, are called Lek-whan--ripe or cultivated barbarians. At the time of the Dutch occupation there were several tribes or nations of this people, each speaking its own language."

37: Steere--302-303 S-3 (1873-74?) 1875 Formosan: Aborigines
116, 162, 101, 177 Chin-hoan

"The second great division of the aborigines of Formosa is of those who are still wild and savage, and who inhabit the steep and rocky mountains running through the east part of the island. They occupy about half of the island, but their territory, where it has been visited, is steep and rocky. They are probably but little changed by [303] their intercourse with the Chinese, and there may be tribes who have not yet heard of the Chinese. The gradual advance of the Chinese in their search after timber and cultivable lands has no doubt caused wars among the different tribes, by crowding the more exposed tribes back upon those behind. They are divided up into many small tribes and nations, but their languages, as well as the general customs of tattooing and of cutting off and preserving the heads of their enemies, point to their descent from a common stock. They live much by hunting, but cultivate their steep hill-sides in millet, sweet potatoes, tobacco, etc. They are known by the general name of Che-whan--raw or unripe barbarians. Of those visited, I have called those living east of the Lek-whan settlement of Polisia, by the common name Che-whan, while the others are designated by their tribal names of Tsui-whan and Kale-whan."

37: Steere-303-304 S-3 (1873-74?) 1875 Formosan Aborigines-1-2
116, 162, 171, 177, 197, 212 Pepo-hoan

"The Pepo-whans of the south part of the island occupy a large tract of country to the east of Takow and Taiwanfu. They inhabit the villages of Kongana, Kamana, Alukang, Backsa, Lakuli, Baukimseng, etc., and they may number five thousand people, while there is a large colony formed from them on the east coast of the island. They no longer speak their aboriginal language, using Chinese instead, and the Fuh-kien dialect of this, though they are in contact with the Hak-kas on the south and south-east. I procured the two lists of words, [MLB: see category 194, pp. 332-333.] Nos. 4 and 5, from very old women, No. 4 at Kongana and No. 5 at Baukimseng. They both said that their language was very little spoken, even in the time of their parents, Chinese having already become general. The two lists are not identical, and seem to show that there has been a coalescing of tribes, the supposition being strengthened by differences in dress, etc., still apparent among them. I found in existence among them a number of old manuscripts in Roman letter, most of them apparently business papers, such as deeds and contracts. The Pepo-whans still preserve these among their valuables, though no one can read them. Some of them have Chinese pawnshop marks upon them. They seem to be indubitable proofs and remains of the Dutch occupation, when many teachers and missionaries were employed among the aborigines, and many thousands of them are said to have become Christians. When the Dutch were driven out, and the teachers and missionaries murdered by the Chinese, the whole work was supposed to have gone out in darkness, but these manuscripts seem to show that for

37: Steere-303-304 S-3 (1873-74?) 1875 Formosan: Aborigines-2
116, 162, 171, 177, 197, 212 Pepo-hoan

nearly a hundred and fifty years afterward, these poor people, oppressed and driven back to the hills by the Chinese, still kept enough of the knowledge taught them to read and write their [304] own language, and almost necessarily books and a knowledge of the Christian religion also. The manuscripts are in the ancient Pepo-whan language, spelled out in Roman letters, the dates generally being in Chinese, spelled out in the same way. Of the manuscripts procured, a few of them are of the reign of Young Ching, who reigned from 1723 to 1736; the most of them are of the reign of Keen Lung, who reigned from 1736 to 1796; and there is one of the reign of Kaking, who began to reign in 1796. Curiously, the oldest of the documents are dated eighty years after the Dutch were driven out. There may yet be found books and manuscripts giving some account of the struggles of this people with the Chinese."

37: Steere--304 S-3 (1873-74?) 1875 Formosan Aborigines
116, 144, 291 Pepo-hoan

"The Pepo-whans are a large and well-formed race, showing little of Chinese features, except where it can easily be traced to intermarriage between the races, which seldom occurs. The men have no distinctive dress, unless the turban may be considered such, though the Chinese also use this to some extent. The women have a peculiar and very becoming dress, consisting of wide trowsers and a short and wide-sleeved jacket, meeting the trowsers at the waist and fastened with a sash. The head is wrapped in a blue turban, the ends of which are drawn out at the sides of the head like wings and giving them a peculiarly jaunty and coquettish appearance."

37: Steere --304-305 S-3 (1873-74?) 1875 Formosan Aborigines
116, 511, 427, 779, 771, 166 Pepo-hoan

"The Pepo-whans are very poor, having mortgaged the poor lands they now occupy to the Chinese, so that they live principally upon sweet potatoes, the one rice crop that the land produces going to pay rent or the interest on their debts. They burn charcoal and the women carry it in baskets upon their heads to the Chinese villages for sale. They were visited about three years ago by Dr. Maxwell, a Scotch missionary, and they received Christianity readily, the Chinese worship of idols and ancestors having but little root among them, while the traditions they still possess of their ancient teachers probably influenced them to some extent. There are now several hundred christians among them at Kamana, Backsa, etc., with a number of schools and chapels established. The Pepo-whans of Baukimseng, differ from their brethren farther north in their ancient language, and the women, instead of a turban, wear a broad conical hat, like the Hak-kas near them, and this is highly ornamented with tinsel and bits of glass. They are crowded back upon the poor stony lands near the mountains, and they go to their fields armed with lances and fire-locks to protect themselves from attack. The Pepo-whans have nearly lost their love for hunting and fishing, and support themselves almost entirely from the produce of their fields. There seems to be but little hope of regaining a foot-hold on the [305] western side of the island, and they will probably be compelled to migrate, like their brethren who have gone before them, to the east coast."

37; Steere--305 [1] S-3 (1873-74?) 1875 Formosan: Aborigines
116, 101, 131, 162, 578, 721 Sek-hoan

"The Lek-whan, a large division of the Pepo-whan, living near the center of the island, seem to have originally come from near Chang-wha. A few miles to the north of this city there are still toward two thousand living in the towns of Loisia and Toasia, though, like the Pepo-whan near Taiwanfu, badly in debt to the Chinese. There is a large settlement of them in a mountain valley, two days' journey to the east of Changwha, called Posia or Polisia, to which, according to their own account, they began migrating forty or fifty years ago, and they are still going, there now being some four or five thousand there. This valley is entirely surrounded by mountains and forests inhabited by savages. They are nominally at peace with these, and pay them a yearly tribute of rice and cattle, but in spite of this they are continually losing their lives from attacks by the savages, some twelve or fourteen persons from the valley being killed annually, while at work in their fields or fishing or hunting. The only news of the manner or cause of the loss the friends and relatives receive, being often the headless trunk lying where it fell."

37: Steere--305 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 191, 174, 142, 292 Sek-hoan

"The Lek-whan call themselves Paijek in their own tongue, which all speak in their families, though all, but the very old, speak Chinese also, and some of the younger ones can write it with some readiness. There seem to be no manuscripts or other proofs that they formerly had any connection with the Dutch, and their position at nearly equal distances from Taiwanfu and Tamsni, the two points occupied by the Dutch, would have made them among the last visited by them, and the least influenced. Their language shows them to be closely connected with the savage tribes of the island, and with the Pepo-whans of the south. They are large and strongly framed as compared with the Chinese, but their faces are coarse, and the teeth of the women protrude; but their countenances show much good nature and kindly feeling. Their dress is much that of the poorer classes of Chinese, though for weddings and great ceremonies they use a national dress, consisting of two or three long sleeveless mantles, open in front, and the under one reaching to the heels, while those above are shorter. These are ornamented with a large amount of red embroidery about the bottom. They raise a species of nettle, from which they make a coarse but lasting cloth."

37: Steere--305-306 S-3 (1873-74?) 1875 Formosan Aborigines
116, 286, 241, 231, 621 Sek-hoan

"They irrigate and cultivate the soil in the same way as the Chinese do, using buffaloes for plowing and for drawing rude carts, that are used in all parts of the island, and are said to be of Dutch origin. They live like the [306] Chinese, gathered together in villages of huts made of adobes and covered with grass roofs."

37: Steere--306 [1] S-3 (1873-74?) 1875 Formosan Aborigines
116, 181, 224, 411, 226 Sek-hoan

"They are great lovers of hunting and fishing, and are very skillful in making snares for deer and other kinds of game. They generally hunt and fish in large bands, for the sake of protection from the savages, from whom they are always liable to attack. They frequently surround a space of country and drive the deer and other game through a ravine or some other place, when they are easily shot. They use fire-locks quite generally for defense and for hunting, though some of the poorer ones still carry bows and arrows, and many go to their fields or from one village to another armed with lances. They have a curious but very effectual way of fishing the shallow streams that flow through their country, this by damming them and turning the water to one side of the channel, leaving most of the bed of the stream dry, and the fish and shrimps in little pools and under rocks, where they are easily captured."

37: Steere--306 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 177, 797, 212 Sek-hoan

"The Lek-whan first learned something of Christianity a little over two years ago, when one of the tribe, an old hunter, strayed down to Taiwanfu, and into the missionary hospital there, where he was cured of an ulcer, and took back with him some idea of the Christian religion. This rapidly spread among the Lek-whans, and there are now four or five hundred church members among them, with many more who have thrown away their Chinese idols and their own idolatry, and have become regular attendants upon the Christian services. There are five or six chapels established among them, and the same number of schools, where the Romanized coloquial is taught them, and I saw many girls and boys who had learned to read and write it. This Romanized colloquial is Chinese of the Fuh Kien dialect, spelled out in Roman letters, with certain marks to show the Chinese accents. There is a lack of school-books, there being nothing but the new testament and a hymn book yet translated into this dialect."

37: Steere--306-307 S-3 (1873-74?) 1875 Formosan Aborigines
116, 157, 771, 533 Sek-hoan

"The ancient worship of the Lek-whan, like that of the Pepo-whan of the South, seems to have consisted of certain idolations, dances and songs, and the worshiping of a boar's or deer's skull. They differ materially from the Chinese in a natural love and taste for music. They have fitted several of their wild idolation tunes to Christian hymns, which they sing with great spirit. They learn European music readily, but seem to prefer their own. They are [307] naturally honest and hospitable, and we had great trouble in getting them to take pay for the articles of food we bought of them."

Th Steere S-3 (1873-74?) Formosan Aborigines: Chin-hoan

opposite page 307

Method of tattooing the face practiced by the women of the tribe of Chewhan living east of Posia, Formosa.

37: Steere--307 [1] S-3 (1873-74?) 1875 Formosan Aborigines
116, 622, 627, 553 Sek-hoan

"There are still some remains of their ancient tribal government among them, but the lineal chiefs or head men seem to have purchased small mandarinships, and thus unite the Chinese authority with that inherited. Justice is generally administered as among the Chinese by the elders and head men of the village. They have a curious custom of naming their children after the different kinds of trees in the forests."

37: Steere--307 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 101, 131, 142, 621, 291 Chin-hoan

"The savages that I visited east of the Lek-whan settlement of Posia, I have left with the general designation of Che-whan. The Chinese and Pepo-whans often call them Bon-whan. They occupy a part of the water shed of the island about the head-waters of the river that flows through the valley of Posia and into the Formosan channel near Changwha, and of other streams that flow into the Pacific. They are said to belong to a nation or confederacy, of over thirty villages, under one chief. They are very small and inferior looking, hardly averaging five feet in height, but very muscular from their life spent in climbing up and down their steep mountains. Their dress is made of a species of nettle, perhaps the ramil plant, which they cultivate, and which the women weave into narrow strips of very strong and durable, but somewhat coarse cloth, which is generally ornamented with red and blue stripes woven in. The only clothing of the men is a coarse sleeveless shirt of this cloth, which comes down to the middle of the thigh. I saw a couple of men among them wearing nothing but narrow (tapa rabos), not so wide as the hand, made apparently from the hair of some animal, woven, and colored red. They were said to belong to another, but friendly tribe. The women wear a sort of short tunic or kilt."

37: Steere--307 [3] S-3 (1873-74?) 1875 Formosan Aborigines
116, 142, 301, 516 Chin-hoan

"Both sexes go barefooted, and from long usage, their feet get as hard as horn, so that spines and sharp rocks do not penetrate them. They appeared to be very flat-footed, the arch of the foot being almost entirely wanting, while the toes were much spread, the big toe turning round toward the heel, so that it almost made a right angle. The women are very fond of wearing ear-rings of white shell, and bands of beads of the same about the head. The men stretch their ears, generally by putting in pieces of bamboo, but upon occasions of display, those who are able, put in disks of white shell two inches or more in diameter."

37: Steere--307-308 S-3 (1873-74?) 1875 Formosan Aborigines
116, 302, 304, 881 Chin-hoan

"Both sexes wear the hair long, the men doing it up in a knot behind, while the women take more pains in braiding and decorating it. They have a practice of knocking out the eye teeth of the boys when they are about reaching man's estate. Both [308] men and women tattoo, the men generally being content with a perpendicular bar upon the forehead and another upon the chin, while the women tattoo several horizontal bars upon the forehead, and a complex system of lines upon the lower part of the face, that gives it a decidedly blue look. They also tattoo several horizontal bars upon the forepart of the leg below the knee. The tattooing is done near the age of puberty, and the first part tattooed is the bands upon the forehead, the complicated work upon the lower face being left until later."

37 Shaw 5-2 (1873-74?) Formosan Aborigines
Chia-hsin

opposite page 308

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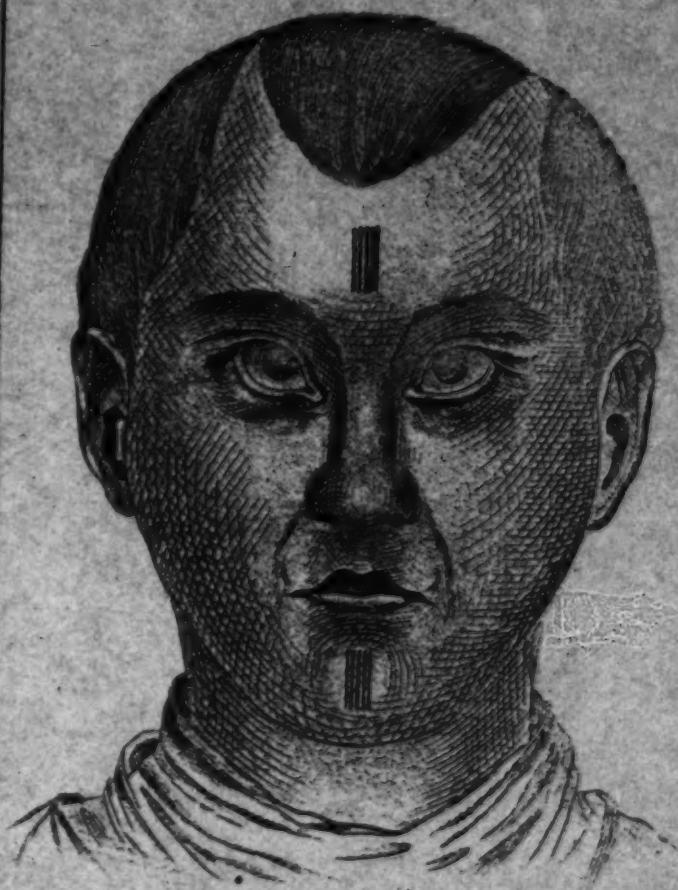


Method of tattooing the face practiced by the men of the tribe of Chewhan living east of Posia.

Steere--308 [1] S-3 (1873-74?) 1875 Formosan: Aborigines
116, 293, 411, 554, 721, 266 Chin-hoan

"The arms of these savages consist of a few fire-locks procured of the Chinese, and used principally in hunting, and lances and large knives used in hunting Chinese heads. They decorate these weapons with tresses of Chinese hair, and when upon the hunt for Chinese, carry highly ornamented red bags for carrying home the captured heads. They make regular expeditions every year down to the border land, where they lie in wait for the Chinese who come into the forest after rattan, bamboo shoots, etc. Human heads have a recognized value among them, and a man's importance depends upon the number of heads he has taken. The base of the skull is cut off, and the brain extracted, and the head then thoroughly dried, the teeth being generally knocked out--to make necklaces. We saw twenty-four of these skulls upon one small platform, and apparently the property of one man. I could find no proof that they are cannibals, though this charge is frequently laid to them. They may drink the blood of their enemies, as I saw the Lek-whan drinking warm deer's blood, but the bodies of the Chinese killed by them are generally left lying where they fell."

37: Steere--308 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 224, 342, 352, 592 Chin-hoan

"They are good hunters, and I saw several bear's skulls among them, and many of deer and wild boar. They generally hunt in bands, and surround their game. Their houses are made by digging a little below the surface of the ground, and then building up heavy stone walls to a height of two or three feet, in which are planted upright posts, and limbs and trunks of trees are interwoven among these to the proper height, and then all is covered with grass. There are no windows, the low door serving for the entrance of light, and an outlet for smoke. One house generally serves for two families, a fire being built at each end, and a couple of low banks of bamboo that serve for seats and beds."

37: Steere--308-309 S-3 (1873-74?) 1875 Formosan Aborigines
116, 343, 251, 513 Chin-hoan

"They construct various little rat-proof granaries for storing their millet and rice. These are square, and are made of the bark of trees, and covered with grass, and raised upon four posts three or four feet above the ground. These posts are crowned with round wooden caps to keep the rats and other vermin from ascending. These little granaries are perched all about among the houses. There were in [309] the village several little huts of wattled grass, and not more than four feet square, perched upon bamboo poles twenty-five or thirty feet above ground. I inquired the use of these, but could get no other answer than that the children were sometimes put to sleep in them, perhaps connected with some superstitious custom or rite."

37: Steere--309 [1] S-3 (1873-74?) 1875 Formosan Aborigines
116, 415, 311, 313, 241 Chin-hoan

"Their household utensils consist of a Chinese iron pot, and a few gourds and water-tight baskets of rattan for holding water. The light they furnished us was a pine torch. I saw no native pottery among these or other savages of the island. They seem to possess no cultivable valleys, so that they are compelled to cultivate hill sides so steep that we were compelled to use both hands and feet in climbing them. They cut down the timber and let it lie until dry, and then set fire to it, burning off the leaves and small limbs, leaving the trunks and stumps upon the ground. They then build low irregular terraces of the small pieces of slate with which the hills are covered, to keep the soil and crops from washing away. They plant sweet potatoes, and a kind of rice that needs no irrigation, but their principal food is millet. After a couple of years or more of use, they allow the lands to grow up again, the second growth generally being a species of alder. After a few years of rest, the land is again ready to be cleared and planted. Their implements are their knives and sharpened sticks, the very steepness of the land cultivated, rendering it more easily cultivated with such poor tools. A mis-step would often send a hundred pounds of stones and earth sliding down."

37: Steere--309 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 771, 764, 534 Chin-hoan

"They do not appear to have any settled religious system, but to be terribly troubled with superstitions and fears of supernatural beings and causes. They are said to bury their dead with terrible fear, hastily covering the body with earth, and then all running away, and no more visiting the spot.

While hunting birds with some boys of the tribe, I strayed into a thick dark grove of bamboos near the village, and when I came out, the people motioned me away with their hands, and would not allow me to come near until the old Lek-whan guide who accompanied us, had baptized me upon the face, and hands, and breast, with water. I afterward understood that I had entered one of their burial places. When we got ready to return, they begged us not to drink of the springs on our way down the mountain, for fear that we should enchant them. They make curious little musical instruments by cutting a tongue in a piece of bamboo, which is put between the teeth, and the tongue made to vibrate by pulling a string tied to the end of the bamboo. The tone is modulated by the breath, as in a jews-harp, which it much resembles in sound."

37: Steere--310 [1] S-3 (1873-74?) 1875 Formosan Aborigines
116, 131, 621, 142 Chin-hoan

"The Tsui-whan--Chinese Tsui, water, and whan, savage--are so called from living about a small lake, which is situated about ten or fifteen miles to the south of Posia, from which they get a great part of their living by fishing. This lake, with the flat, cultivable lands about it, is entirely shut in by wooded mountains, those to the east rising to great height. The lake is over two miles in length, and contains a number of species of fish and eels. There are three villages of Tsui-whan about the lake, containing perhaps in all a thousand people, under one chief, and apparently entirely separate and independent of any other tribes of savages. They are a small but well-formed race, with regular and rather pleasing features."

37: Steere--310 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 291, 304, 411, 226, 501 Chin-hoan

"The dress of the men is a hunting shirt made of deer or monkey skins, that does not protect the arms nor legs. The women wear a sort of tunic of Chinese cloth, and protect the fore-part of the leg with a sort of close-fitting gaiter from the thorns and spines with which the forest is filled. They do not tattoo, but have a custom of knocking out the eye-teeth of the boys, so that they reminded me of squirrels. They are not warlike, but use rude bows and arrows for hunting and protection when they are too poor to get firelocks. They are great hunters, and large strings of monkeys' and bears' skulls hung about their dwellings. I saw them fishing with small dip-nets among the pond-lily roots and leaves, and catching a species of cat-fish (Silurus). They also fish with rude spears. They use, in navigating the lake, huge hollowed trunks of camphor trees, that look as if they may have been in use a hundred years. They are very awkward and heavy, and appear to have been hollowed with fire. They are open at both ends, the water being kept out with earth and sods."

37: Steere--310 [3] S-3 (1873-74?) 1875 Formosan Aborigines
116. 342, 592, 311, 427 Chin-hoan

"Their houses are large, grass-covered barracks, made of bamboos and wattles, daubed with mud. The roof is supported by a large central post, and to this are hung the firelocks, bows and arrows, etc., that belong to the four or five families that occupy the house in common. The locality of each family is shown by the fire burning on the ground, and by the low bank of bamboo that serves for a seat and bed. The lands about the lake are rich and easily irrigated, and well fitted for rice; but the Tsui-whan have allowed the Chinese to enter, and these, taking advantage of the savage love for strong drink and feasting, are fast gaining possession of all the lands, and the poor Tsui-whan are becoming serfs of the crafty Chinese."

37: Steere--310-311 S-3 (1873-74?) 1875 Formosan Aborigines
116, 249, 276, 533 Chin-hoan

"The Tsui-whan raise their own tobacco, and all smoke, even little girls of six and eight years of age. They are great lovers of music, and those who were at work, harvesting and carrying home rice for their Chinese masters, were continually droning a musical but monotonous refrain. I was [311] several times awakened, while stopping in their village by their wild mountain songs, which they sang while at their feasts."

37: Steere--311 [1] S-3 (1873-74?) 1875 Formosan Aborigines
116, 482, 771, 609, 787, 825 Chin-hoan

"They carry burdens upon a high wooden frame that is strapped to the back, instead of by the universal Chinese method of a pole across the shoulder. I could find but little traces of religion, but plenty of superstitions. I was one day astonished by the band with which I was traveling suddenly all dropping to the ground and beginning to groan as if they expected to die. Inquiring the cause of this, I found that a certain bird, to which ominous powers are attributed, had cried out on the left side of the path we were traveling, and this was considered a bad omen for us. After a few minutes the party got up and moved on, though all were still groaning and beating their gunstocks with their knives; and they did not regain their composure until the same bird was heard to call out on the right side of the path, when they moved on as usual. They seem to have little or no connection with the other savages, but to live in mortal fear of them. If they ever were in the habit of taking the heads of their enemies, it must have been long ago, as the proofs have disappeared."

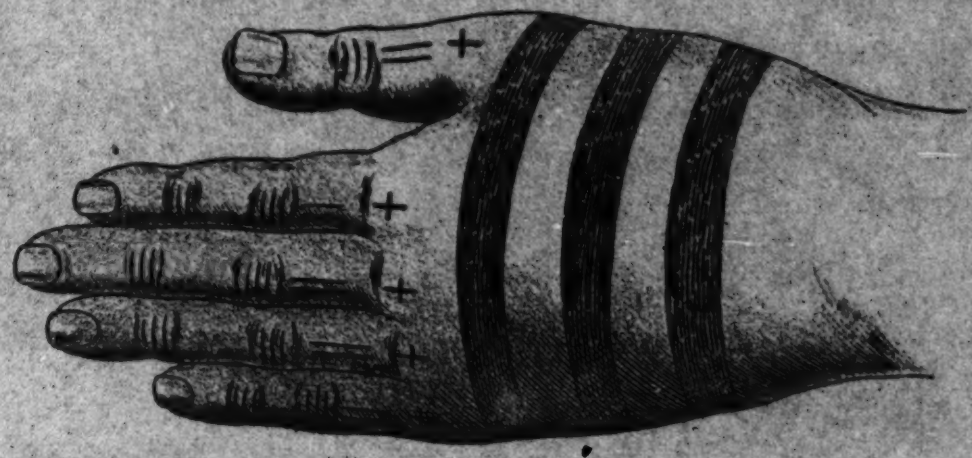
37: Steere--311 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 131, 162, 621 Chin-hoan

"The Kale-whan are a tribe of Che-whan inhabiting the mountains east of Takou. The territory they occupy is not extensive, not reaching over the dividing line of mountains, but all lying toward the west. They live in two villages, which are called by the Chinese Toasia and Taosia--large and small towns. The first and lowest contains perhaps two hundred inhabitants, while Taosia is properly a collection of villages, with toward a thousand inhabitants. They can look down from these villages, which must be at a height of four or five thousand feet, upon the great plain below, thickly dotted with Chinese villages and covered with rice fields, and they can even see the sea in the distance."

37: Steere--311-312 S-3 (1873-74?) 1875 Formosan Aborigines
116, 142, 291, 622, 301 Chin-hoan

"The Kale-whan are very small in stature, averaging about five feet. The features of the younger ones are quite regular and pleasant, but among the old, want and vice have almost made them to look like brutes. They dress in Chinese cloth--the men in the short coat or hunting shirt, that leaves the legs and arms exposed. The chief was dressed in the skin of a tiger cat, which seemed to be his badge of office. The women dress much as the Chinese and Pepo-whans in the plain below, but they sometimes spend much time in embroidering their sleeves and trowsers. The women were always, while we were among them, whether at work in the fields or in the villages, crowned with wreaths of vines and flowers. These were often nothing more than sweet potato vines, but in some cases beautiful wild plants and flowers. Many of the men were also decorated in this way, and it would almost seem to be [312]a distinguishing mark of the tribe."

37: Sheets - 5-3 (1873-74?): Formosan Aborigines
Chin-hom



Form of tattooing the hands practised by the women of the tribe of Kale-whau, living east of Takab Formosa, and near the village of Bankimseng.

37: Steere--312 [1] S-3 (1873-74?) 1875 Formosan Aborigines
116, 302, 326, 411 Chin-hoan

"The hair of the men was allowed to grow long on the back of the head, but was cut square across the forehead, above the eyes. The women do not tattoo the face, but tattoo three bands across the back of the hands, with crosses over the knuckles, and two lines down the back of the lower joint of the fingers. The men tattoo the inside of the arms in bands that run to the shoulders and cross the breast. Tattooing among the men did not appear to be general, and may be confined to the chiefs and head men. They are armed with bows and arrows, firelocks and lances, though the latter weapons were the most common, being in the hands of every one. I saw a very heavy, rude gun-barrel, said to have been forged by them, and there was a hut in the village that was evidently used as a blacksmith shop."

37: Steere--312 [2] S-3 (1873-74?) 1875 Formosan Aborigines
116, 721, 861, 622 Chin-hoan

"From the fact that they have become so dependent upon their trade with the Pepo-whans, the practice of head hunting seems to have nearly gone into disuse. There were several skulls in niches in their houses, and I was shown a grass hut, with seven or eight skulls heaped in a corner. There were a number of small seats upon the ground, and as nearly as I could ascertain, this hut was used as a dormitory for the small boys, that they might get accustomed to the sight of the skulls of their enemies, and learn to prize them. The villages are upon steep hill-sides. The houses are built solidly, but rudely, of slabs of slate stone. Places are excavated in the hill-side, and the walls built up and covered with slate, the roofs slanting in but one direction, and that with the direction of the hill, so that the houses are hardly seen at a little distance. The roofs are supported by heavy cross walls inside, and by timbers, some of which have been rudely ornamented with carving. The doors, which also serve for windows, are so low that we had to creep on our hands and knees to enter. They are secured by slabs of slate set upright."

37: Steere--312 [3] S-3 (1873-74?) 1875 Formosan Aborigines
116, 352, 286, 231 Chin-hoan

"The interior of the houses was clean and paved with slate, with low stone banks running around the sides for beds and seats. These were covered with mats, and such of the family as were not in the fields were sitting upon them, the women engaged in weaving mats and an open sack that is much used by them for containing burdens to be carried on the back. Many swarms of honey bees entered through crevices in the walls to cells made for them beneath these banks, and the savages make quite an article of trade of the honey and wax. They keep a few pigs and chickens beside."

37: Steere--312-313 S-3 (1873-74?) 1875 Formosan Aborigines
116. 137, 313, 311, 241 Chin-hoan

"The mountains all about the villages of the Kale-whan are almost entirely free from timber, there being only a little in the deep ravines, where it is almost inaccessible. The timber has probably been [313] cut off and sold by the savages to the Pepo-whans. Coarse grass and reeds have spring up, and this, by giving food for annual fires during the dry season, keeps a new growth of timber from springing up. The only timber that we could see, of any extent, was upon a high ridge that showed a few miles to the east and which we supposed must be the water-shed of the island. This timber appeared to be pine, and probably the common Chinese pine which we saw growing farther north. The Kale-whan were cultivating the steep hill-sides, much as the Che-whan of the north, by drawing weeds and bits of slate stone together into little ridges to keep the soil and crops from going down hill with the first rain. Their principal crops were millet and sweet potatoes. They also raised a small species of taro that grows without irrigation, though the large plant cultivated by the Chinese must be continually covered with water. While we were among them, toward the end of February, they were planting their millet. Their agricultural implements are sharpened sticks, some of them two or three pronged, like pitch forks, and some of them shod with iron. Many mango trees just in blossom were scattered over the hills among their little plantations, and had apparently been planted or at least protected by the savages. Their villages were nearly hidden in trees, among them oranges and plantains and betel nut palms, for which latter the savages have a great liking."

37; Steere--313 S-3 (1873-74?) 1875 Formosan Aborigines
116, 251, 226, 343 Chin-hoan

"Like the Che-whan at the north they build granaries raised upon posts crowned with flat disks of slate stone to keep squirrels and rats from climbing up. These little grass-thatched structures, apparently perched upon stilts, formed the most conspicuous part of the villages. The Kale-whan seem to do little hunting but make out to add a few small fish and shrimps to their stock of food from the stream that flows through the valley below. We saw some of the young men fishing with a curious little circular net with pockets in several places for the fish to enter. They would inclose one of the large boulders, with which the bed of the stream was filled, with the net and then pry up the stone with poles and let it drop back into its place, scaring the fish that sheltered under it out into the pockets of the net. This style of fishing did not appear to be very productive, as they had caught but two or three small fish and a few shrimps."

37: Steere--313-314 S-3 (1873-74?) 1875 Formosan Aborigines
116, 437, 487, 493 Chin-hoan

"The Kale-whan are in the habit of coming down every third day to trade with the Pepo-whans in the mouth of a large ravine that opens into the plain. The Pepo-whans have a well-beaten cart road leading to the market place, and some fifteen carts, each drawn by two buffaloes, wound creaking along the base of the mountains to the general rendezvous. The day we visited them I noticed [314] that all the time the bartering was going on two or three of each party, savages and Pepo-whans, held upright long lances in the center of the market-place as if this was a signal of peaceful trade. The Kale-whan brought down back loads of wood and grass which they traded for a little cloth and salt and rum, this latter being an article as eagerly desired by these savages as by other savages the world over."

37: Steere--314 S-3 (1873-74?) 1875 Formosan Aborigines-1-2
116, 583, 241, 533, 784, 609 Chin-hoan

"The Kale-whan, in times of scarcity, frequently sell their daughters to the Chinese and Pepo-whans, who take them as supplementary wives and make them useful as interpreters in thus bartering with the savages. While we were among the Kale-whan the chief offered to sell us three girls of the tribe at twenty dollars each, or its equivalent, in barter on fee simple. The poor girls were dressed up in all the finery the tribe possessed, one of them having a beautiful stem of wild red lilies in her hair, and were kept singing nearly all night before our door. They are a very musical people, and at night a large number collected in the house of the chief and the women would sing a monotonous but musical chant apparently as long as they could hold their breath, and then the men would answer in the same strain, winding up every time with a loud inspiration. We went among them during their seed time, and there seemed to be some taboo connected with it that forbade them entering their houses, and we found them all sitting around outside with closed doors, or at least with the slabs of slate that served for doors in their places. About midnight the taboo passed off enough so that they entered their houses, but there was still something that forbade them trading with us or assisting us, they even refusing at first to give us fire. Whenever one of the tribe, led by the display of cloth, scissors, etc., that we had with us, was tempted to trade us a pipe or an ornamented knife-scabbard, some one would pronounce the fatal word parici, and the trade was immediately dropped. There were

37: Steere--314 S-3 (1873-74?) 1875 Formosan Aborigines-2
116, 583, 241, 533, 784, 609 Chin-hoan

some rare plants and land shells in the ravines which I wished to collect, but the savages seemed to think that it would bring some great evil upon them if they allowed me to take away any thing, and they almost compelled me by force to desist, pulling me by the arms and shouting parici in my ears. We were told that this taboo would pass off within four or five days, but we had no time to wait and so did not see them in their usual state."

37: Steere--314-315 S-3 (1873-74?) 1875 Formosan Aborigines 1-2
116, 157, 177, 721

"The numbers of the savages of Formosa are hard to estimate. They are certainly more numerous than would be expected from the rough and mountainous character of the country they inhabit. They are weak and cowardly and badly armed, and their only safety is in [315] their woods and rocks, through and over which they make their way with almost the facility of wild beasts. Those who inhabit the sea coasts to the west are in the habit of plundering wrecked vessels and adding the heads of those of the crew who escape drowning to their treasures. They are said to be a fierce race and better armed than those of the mountains. The Chinese are slowly encroaching upon them where the soil and timber is worth possessing, but it will take centuries at the present rate for them to gain entire possession of the island, and it is probable that they never will conquer the whole island but will leave the most mountainous parts of the island in the hands of the savages, just as they have done in the interior of China itself, where there are many tribes of savages who do not recognize Chinese authority. There is probably no day of the year that passes without bloodshed along the savage border in Formosa. The savages are continually coming out and lying in wait for the Chinese, and the Chinese are in no way particular how they get the savages in their power and revenge themselves, but the Chinese government seems to have no concern in it. Those who live along the border understand that they do it at their peril, and that their death will not be noticed. The only means for defense or warning that we saw upon the border were undertaken by private individuals, and we saw one man,

37: Steere--314-315 S-3 (1873-74?) 1875 Formosan Aborigines-2
116, 157, 177, 721

whose lands and property were exposed, who was offering ten dollars per head for savages."

37: Steere--315-316 S-3 (1873-74?) 1875 Formosans
116, 131, 133

"The Island of Formosa lies about eighty miles from the main land of China, and is two hundred and fifty miles in length and eighty or ninety in breadth. Physically considered it is made up of a lofty range, or system of ranges, of mountains on the east-side, with a rocky and precipitous coast on the Pacific, and rich level plains on the west, extending down to shallow seas in the Formosa channel, with immense sand flats, which are uncovered at low tide, and are apparently rapidly rising and adding to the cultivable lands. Several of the mountains are over twelve thousand feet in height, and the whole range from east of Takao for a hundred miles to the north must stand at near eleven thousand feet. In January, 1874, this whole extent was covered with snow, and it is probably so covered every winter. The highest mountains when visited were very steep, and were composed of slate rock with veins of quartz from an inch to several feet in thickness. The bases of the mountains and the foot hills are generally composed of coarse, friable sandstone, containing tertiary fossils. There are numerous plateaus among the foot hills and below them, evidently the remains of ancient plains that are now left far above the great plain below, the rivers having [316] cut down through to a lower level. Many of these plateaus are tilted out of level apparently by the rising of the mountain chain behind them, and the foot hills are evidently thrown up in this way, especially those east of Taiwanfu that were like great furrows in the general direction of the mountain range, the strata of sandstone of which they are composed being tilted at an angle of 20°, but growing greater toward the mountains."

37: Steere--316 [1] | S-3 (1873-74?) 1875 Formosans
116, 135

"The beds of coal which is found in great abundance at Kelung, at the north end of the island, are apparently in these superficial strata of sandstone. There has been considerable volcanic disturbances toward the north end of the island, and there are large boiling springs of mineral water and jets of steam bursting out in a valley a few miles east of Tamsni. Sulphur is deposited in great quantities, and the Chinese have manufactured it at some time. Petroleum is found flowing from the earth near Onlau toward the north end of the island, and we saw signs of coal on our way out from Posia to the east of Changwha. Gold is said to exist in the island, but this does not seem to be authenticated. There is a curious outcrop of limestone at Takao, near the south end of the island, comprisihg Ape's-hill, Whale's-back, and several smaller ridges connecting these and extending them. The dip of this outcrop is toward the southeast, almost opposite to the general dip of the strata in that part of the island. The rock is a porous limestone with many eaves and crevices in it. There is much fossil coral and a few shells that appear to be of the same age as those found in the sandstone. Whale's-back is thrown up at an angle of about 45° in a great level plain of alluvium, and appears like a great broken piece of ice that has been thrown up and frozen fast in its place."

37: Steere--316 [2] S-3 (1873-74?) 1875 Formosans
116, 132, 311, 241

"The southern part of the island is in the tropics. There is much rain in the north part of the island, especially at Kelung. At Takao and Taiwanfu, it is dry from October to April, but it rains much sooner in the mountains to the east, the rains already beginning there in February. Rice is the principal crop cultivated upon the low level lands to the west, and there is much exported to China. The best lands produce three crops annually. Lands that are harder to irrigate are planted to sugar cane, and large quantities of sugar are exported in foreign vessels to Japan and Australia. Upon the first of March ten or twelve vessels were lying at the ports of Takao and Taiwanfu, all loading with sugar."

37: Steere--316-317 S-3 (1873-74?) 1875 Formosans
116, 245, 311, 314

"The culture of tea has but just commenced, but has already reached considerable importance at Tamsni. The kind mostly cultivated is Oolong, which goes most of it to the United States. The cultivation can be carried to any [317] extent in the north of the island, as there are great plains of high rolling lands lying from Changwha to Tamsni, of the rich red clay which is so favorable for tea. These high plains are the home of the camphor tree, many trunks and stumps of which still lie over the ground, and of the wild tea-tree, of which I saw one specimen, with the trunk a foot in diameter and thirty feet high. The inhabitants gather the wild tea, but it is of bad quality, either by nature or from being badly cured. These high plains are now lying desert, as they cannot be irrigated, while tea is one of the few plants that needs no irrigation. These lands lie near the sea where transportation is easy, while much, or most, of the Chinese tea country is almost inaccessible, the tea having to be carried many days on men's backs and then transported by boats down rapid and dangerous streams, before it can reach a market. Camphor is exported from the island, and most of the mountain land seems to have camphor upon it, but the drug is only procured by the destruction of the tree, and there is no replanting done. There is also quite a trade with China in camphor planks."

37: Steere--317 S-3 (1873-74?) 1875 Formosans
116, 161, 563

"The Chinese population of Formosa is estimated generally at about three million, but this seems to be rather an under estimation of the real population. The most of them are from the province of Fuh-kien, which lies opposite, and many of them are descendants of the rebels, who took possession of the island with Koxinga. They are considered a turbulent race, and a rebellion happens as often as once in ten years, at least. They almost universally bind the feet of their female children, and child murder is not at all rare among them. At Tamsni, two little girls were picked up from the little jetty belonging to Dodd & Co., one of them still living, and it is not rare at all to find them wrapped in straw lying along the banks of the river, where they have been left by the tide. There are also quite a number of people called Hak-kas, who are supposed to come from the province of Canton. They speak a different language and live in separate villages, and they allow the feet of their females to grow to their normal size. The Hak-kas are especially numerous toward the north end of the island, though they are found nearly the whole length, occupying generally the lands near the mountains and most exposed to the savages."

37: Steere--317-318 S-3 (1873-74?) 1875 Formosans
116, 361

"Formosa, though it has been settled by the Chinese within the last two hundred years, possesses some seven or eight walled cities, among them Taiwanfu, the nominal capital, Pitao, Kagee, and Changwha. Though of such modern date, they are built after the old Chinese model, which is probably very much that of the walls of ancient Troy, and they are intended to be defended by archers. There is no provision for attack or de-[318]fense with cannon. The walls of Taiwanfu are said to be seven miles in circumference; they are from twenty to twenty-five feet in height, and the same in thickness. They are faced with brick and stone, but are probably earth in the interior. Taiwanfu is built upon the sight of the old Dutch colony, and there are still remains of a small fort standing in the middle of the city, beside the ruins of the large fort called Zelandia, which was built to protect the harbor below. The present population of Taiwanfu, with the uncertainty that seems always to apply to Chinese cities, is estimated to contain all the way from thirty to sixty thousand people."

37: Steere--318 S-3 (1873-74?) 1875 Formosans
116, 131, 311, 161, 563, 157

"The Pescadores are a group of low flat islands between Formosa and the mainland. They seem to be composed almost entirely of basaltic rock, which is partly columnar in many of the cliffs. There is iron ore found upon Fisher's island. The rock of the island is barely covered with soil, but nearly their whole surface is cultivated during the south-west monsoon, in sweet potatoes, pea-nuts, and millet. The inhabitants are estimated at eighty thousand, and there are said to be thirty towns and villages. The town of Makang, which is the largest, probably has twelve or fifteen thousand inhabitants. Its harbor is good, but the entrance is intricate. The Chinese live generally in houses made of coral rock that is frequently cut into blocks. They are descendants of the Fuh-kienese, and are all fishermen. They have considerable trade with the mainland and with Formosa in dried fish and in hogs, which are fattened upon pea-nuts, and in pea-nut oil. The feet of all the women are small, though their hard and laborious life must make this custom troublesome enough. I saw one small-footed woman ploughing and driving the buffalo, though the wind was blowing a gale at the time, so that we could hardly stand before it. The islanders are a rough and uncivilized race, accustomed to hardships, and the charges of piracy and wrecking made against them, are, without doubt, true. They are the boldest of fisherman, and during the warm monsoon, are almost amphibious. I was there in January, when the weather was cold and the wind and sea high, but when they found that I wished coral and shells, they procured me large quantities living. The islands make a good place for shelter for Chinese junks

37: Steere--318-319 S-3 (1873-74?) 1875 Formosans
116, 121

"The map used in traveling was one made by General Legendre, who was formerly United States consul for Amoy and Formosa. The only means of telling distance was the Chinese report and our own fatigue, and the only method we had of telling the direction traveled was by a pocket compass. [319]

General Legendre's map seems to be very correct when he had the opportunity of personal observation; outside of this, as might be expected, when dependence has to be placed on Chinese data, there is little reliance to be put upon it. The arrangement of the mountain ranges appears to be imaginary."

37: Steere--319-320 S-3 (1873-74?) 1875 Formosans -1-3
116, 133, 361

"The first journey made was from Taiwanfu north following General Legendre's track to Kagee. From here we left his track on the left and turned toward the mountains. After one day's travel we entered the mountains by the bed of a stream, and then we traveled a day and a half through a mountainous country partly covered with timber, with here and there a Chinese village. This country seems to be a sort of neutral ground, and all were armed for the last six or eight miles before reaching the lake of Tsuisia. We passed through a wild country covered with timber, where there was said to be much danger from savages, and only large bands of armed men passed. We found a fresh water lake, surrounded by cultivated lands, and with three villages of Trin-whan. An old Chinaman, living upon a small island in the lake, owned most of the lands, and had begun the cultivation of tea. There was a very high and steep mountain at the distance of a few miles, directly to the east of the lake. The lake has several species of eels and of fish, the latter mostly of the Siluridal. From the lake, a day's march, most of the way through rough, mountainous country, brought us to the valley of Posia or Polisia. There were many beautiful tree ferns seen on this trip and camphor trees. The valley of Posia is six or seven miles in diameter, and is not all cultivated yet, as rice cannot be carried up such a distance to market, and the inhabitants only cultivate for their own use. There are several beautiful streams flowing through the valley, which, when they unite at the bottom, are well deserving the name of a river. The settlement of Posia seems to be very near the situation of a town on

Legendre's map called Ou-gitang. We inquired in vain for this town, and came to the conclusion that it was imaginary. Posia is surrounded on all sides by mountains that are covered with timber. We saw several species of oak growing here with a pine and a wild apple, which the Lek-whan gather and boil for eating. There is also much camphor-wood, but distance to market makes it impossible to use it as yet. From Posia we went a day and a half's journey almost due east up a roaring stream that forms part of the river at Posia. For the first ten or twelve miles the rock was mostly sandstone, and on the north side of the stream the timber was composed of dwarf pine and oak, with no undergrowth but coarse grass. On [320] the south side, the mountain, though just as steep, was covered with almost tropical vegetation, among which were tree ferns, wild plantains, rattans, etc. As we went farther up, the vegetation became more scanty on both sides. We found the savages cultivating the steep hill sides, the rock now being slate and quartz. At last we reached the water-shed, having followed the stream we were upon to its heads, while we could see the country descending on the east toward the Pacific. Most of the country here seemed to have been under cultivation at some time, and had grown up to a second growth of timber, twenty and thirty feet in height, of a species of alder, closely resembling the one called tag alder in the United States.

Upon our return to Posia we started out toward the coast with a large band of Lek-whans as guides and guard. We followed the river for the first day through a rough,

but rich and timbered region. At night we camped on the river, and near a fine valley, where there were still walls of houses and remains of ditches for irrigation, made by a body of Lek-whans, who settled there some twelve or fifteen years before. They were harassed so determinedly by the savages that they had to desert the settlement. Soon we broke out of the mountains, having left the river on the right. There were several guard-houses, with soldiers guarding the ravine we came down from inroads of savages. We hove here in sight of Changwha in the distance, and of the goat-plain, but we turned to the north and stopped at the Lek-whan town of Toasia. They have rich rice fields about here, and the country is very productive, but they are in debt to the Chinese. From Toasia, a day's journey took us to Laisia, part of the way being over a dry plain that had once been part of the great valley, but had been left high and dry by the streams cutting through to a lower level. Laisia lies in a beautiful valley among the hills and plateaus. There are two small villages, a few yards apart. On my journey toward Tamsni, I passed large quantities of camphor, most of it cut and lying on the ground, a short distance to the north of Laisia. The timber has been cut by the Chinese for the best part to be sawn into planks; the rest will lie until it is packed up and carried away to be distilled for the camphor. Between Laisia and Tamsni I passed many places fitted for the cultivation of tea. After reaching Tankiang, I followed General Legendre's track for the rest of the way."

37: Steere--320-321 S-3 (1873-74?) 1875 Formosans
116, 126, 193

"Lists of words were procured of the native tribes. The first list belongs to the Tsui-whan. The second list belongs to the Lek-whans, [321] who have their principal settlement at Posia and two neighboring villages.

The Che-whans, from whom the third list was procured, inhabit the adjoining district. The Pepo-whans, from whom the fourth and fifth lists were taken, occupy the large track of country to the east of Takao and Taiwanfu; while the Kale-whans are among the mountains further east. From these was procured the sixth list of words."

One may judge with a greater degree of certainty the intellectual capacity of the seemingly alert Atayal. They have a concept of space and measurement of space. As a measure of length, which they need in building their houses and in weaving, they use the measures provided by nature, i.e. the ell and the arm span with both arms outstretched. They have no means of measuring an area or a weight. They speak of a large field, or a heavy antelope, but they are unable to be more specific about it. As dry measure they use the men's caps, if, for example, one neighbor helps another out with a cap full of millet or salt. For gunpowder they are said to have recently begun to use bamboo sticks a span long.

39: Wiedfeldt--10-11 F-3 (1913) 1917 Formosan Aborigines
116, 241, 581, 805, 822 Atayal

The concept of time... is not strange to the Atayals, although they also lack a system of measuring time. They have no word or idea for month or for day. They only have two designations for hot time and cool time. Some tribes have words for sunrise, the zenith of the sun, and sunset, but as far as I have been able to ascertain they have no word for midnight. [11] For their practical needs they make use of other means. The length of time that it is possible to plant a field is given in the terms of the number of harvests obtained from the field. Since none of them know how old they are, marriageability is indicated by tattooing. When I asked if one could give his age according to the number of harvests, there being only one harvest a year, I was always told... that one could only obtain three harvests from one field, and that their people had experienced many more harvests. In summoning their clan and tribal assemblies, as well as in negotiations with the Japanese, the day is fixed according to the number of times they would normally sleep up to that time, and by the nodes in a bamboo staff, or the Japanese indicate the time by the knots in a string. According to the Japanese, it is not unusual for an Atayal to turn up a day early, because, for example, he slept twice in one day when he was hunting, and hence had counted two knots. Harvest time is easily recognized by the ripening of the fruit. The time to plant millet is determined according to the time when the Formosa maple has young red shoots...Rice is planted when the tse-tung-non, a tree of average size, is covered with white blossoms.

39: Wiedfeldt--11-12 F-3 (1913) 1917 Formosan Aborigines
116, 177, 436, 555, 622, 802 Atayal

The Atayals have a better idea of counting than they have of measuring time. Most of them, to be sure, can only count up to three or five, and that is sufficient for their purposes. Anyone who can count up to thirty is considered clever, and only a few individuals in the border tribes can count up to a hundred. Some of the Japanese maintain that a smart Atayal of the interior can count up to a thousand, but most people say that this is just talk. Most of the tribes are said to have names for numbers up to five only, and to count further by saying five and one, five and two, five and three, five and four. They have a special word for ten, and also for twenty and thirty. Some tribes are said to know more words for numbers, but they seem to have acquired them recently through Chinese or Japanese interpreters. Most of the clan heads can count this way up to twenty or thirty. If they need to go beyond that, they call in a wise man to help them, if fines are to be paid. They also have to count when they are fixing the price of the bride or the price for adopted children. They count 25 rokosch-kaha, or 250 yen, by putting down 20 rokosch-kaha, or garments with precious [12] materials, and 10 bintoan, breastpieces with precious materials. Presumably the calculation is made at once in this way, and the reduction to a common denominator is made by the interpreter. In tribes that have lived for years inside the Aitu line, and that accept Japanese money, families will sell a rokosch-kaha together with their profit on it for 13 or 15 yen, because they can conceive only of 13 as 1 rokosch-kaha plus 1 binrai, or 15 as 1 rokosch-kaha plus 1 bintoan, but they can not imagine 11, 12, or 14 yen.

39: Wiedfeldt--12 F-3 (1913) 1917 Formosan Aborigines
116, 212, 811, 821 Atayal

The Atayals know nothing about fields of knowledge which are somehow connected in thought, or have some sort of a slight connection. They have not yet progressed to the point of having written characters, or even to the point of having definite marks. ... — Even a rudimentary knowledge of astronomy... is foreign to the Atayals. They know nothing about the moon and its phases, and they have no names for constellations... The only celestial phenomenon that they are acquainted with and have spun fancies about is the rainbow. They think it is a bridge which connects the island with the mainland for their dead. ...

39: Wiedfeldt--12 [2] F-3 (1913) 1917 Formosan Aborigines
116, 156, 437 Atayal

The Atayals are shrewd, and know how to act with thought and calculation in everything that concerns their vital needs. Among the border tribes, they have learned how to trade quickly, and they are quick to press their own advantage, the women in barter with the Japanese traders, and the men in their political dealings with the Japanese officials.

39: Wiedfeldt--12-13 F-3 (1913) 1917 Formosan Aborigines
116, 625, 723, 177.62 Atayal
636.62 Japanese

They succeeded over and over again in taking Japanese troups by surprise through their stratagems in battle, so that the Japanese army, which is admitted to be good, [13] proved to be of little use in these battles, and has been replaced by numerous policemen, who live there for long periods and are not so easily outwitted.

After a period of years in which many Atayals were killed by coming in contact with the wire of the Aiyu line, which is charged with 2,000 volts, they have now found out that they can slip between the wires without harming themselves by holding them apart by long bamboo sticks, to the ends of which they have attached empty sake bottles. To think beyond immediate necessities to more remote ends and to provide for these in advance, seems too difficult to most of the Atayals. In spite of occasional crop failures, they accumulate no stores of provisions, nor do they observe a closed season in hunting or spare the young game.

Some of them, of course, are able to think further agead. For years, some of the tribal chiefs have understood and have attempted to make the others understand that individual fights against the Japanese on the part of different tribes mean useless shedding of blood, and that their only hope lies in common action by all the tribes. They have not achieved a great measure of success, due largely to the difficulty of introducing new ideas into the mind of the Atayals, who do not follow their heads, but the prize skulls. ...They are capable of observing closely, and often make slow but correct deductions from their observations...

39: Wiedfeldt--13-14 F-3 (1913) 1917 Formosan Aborigines
116, 184, 535 Atayal

...The extent to which the Atayals possess imagination may be deduced from their accomplishments in those fields in which imagination is freest: in art forms and in religious concepts. In the field of the simplest artistic endeavor, the dance, [14] the Atayals have the round dance, in which men and women join hands and walk, rather than dance, about... They have no pantomime dances, nor do the individual dancers execute varying rhythmical movements....

Many of the round dances are accompanied by songs. Apart from this, the young people also sing little songs when they are sitting in the bush. These songs have simple variations in tone, which might be described as melodies. As an accompaniment, or more correctly, as a prelude and finale, they blow a small bamboo pipe, called a dohdonn. By blowing it and pulling at the same time at a thread, a tongue of wood is set swinging and producing soft notes like those of an Aeolian harp. They have no other musical instruments, even in battle, where they would merely be a hindrance to their technique of surprise attack. Their poetry is limited to little songs, an example of which is the touching lament of a widower. Among the songs translated by Professor Florenz Yokohama and printed in Vol. VII of these reports, there are some that are quite interesting. They deal with the hunt, love festivals, work, praise of the ancestors. In other words, they deal with immediate realities in general, without rising to more inclusive concepts.

39: Wiedfeldt--14 [2] F-3 (1913) 1917 Formosan Aborigines
116, 302, 341, 531 Atayal

The Atayal huts are functional structures with no pretence at artistry. One is made just like the next. They have no temples or public halls. They know nothing of plastic art, having no figures of wood or clay. In contrast to the other peoples of Formosa, they do not decorate their weapons and tools with carvings. They have only two kinds of decoration: interwoven stripes of color and designs in their garments, and tattooing on the face and breast. Both are repeated without change in a definite, fixed manner, according to tradition.

39: Wiedfeldt--14 [3] F-3 (1913) 1917 Formosan Aborigines
116, 771 Atayal

Their imagination is not much more productive in religious matters... The Atayals have neither God nor devil; they worship neither heaven, nor sun, nor earth.

39: Wiedfeldt--14 [4] F-3 (1913) 1917 Formosan Aborigines
116, 773 Atayal

They have not worked out for themselves any ideas concerning the origin of the earth. According to them, the first people were a brother and sister who were brought into existence by an earthquake in the mountains, and who, after tattooing the woman, made the first marriage.

39: Wiedfeldt--14-15 F-3 (1913) 1917 Formosan Aborigines
116, 555, 761, 775 Atayal

According to their ideas, worthy [15] people live on after death. Such persons would include successful skull-hunters and women skilled at weaving. Hence, worth does not include merely the manly virtues... The dead cross the sea to the "great land" by way of the rainbow, and in the process, the unworthy, that is, those who are not tattooed, fall into the sea, or are cast down among the Taroku by the ancestors. The others continue to live together with their ancestors, just as they had lived before, and with the tools and weapons that were buried in the grave with them. This whole story is possibly an attempt to explain the incomprehensible manner in which a person is living and then is dead. In any event, the idea of reward or punishment after death for their actions during life is foreign to them, although their expression, "the wrath of the ancestors", which is applied to infractions of the law, seems to indicate the existence of such a concept.

39: Wiedfeldt--15-16 F-3 (1913) 1917 Formosan Aborigines
116, 241, 769, 778 Atayal

There is a trace of ancestor worship in the tribal celebrations and also in the clan celebrations, which...are held for such members of the clan as can not attend the tribal celebration. Members of other tribes are not permitted to attend these celebrations, which unite all the members of the tribe, even if they were members before marriage. In the festival of the millet planting the chief of the tribe is said to thrust four bamboo stakes into the ground in a field that has been cleared of weeds early in the morning. Into the square thus formed he pours millet wine and millet mush, and standing in the middle, he says: "According to old customs and usages handed down to us we celebrate today, as our ancestors in this land have always celebrated. We thank our ancestors that we and our children are well. We wish that the millet which we are planting may bring us a rich harvest. We wish that our ancestors would protect us against illness. We thank our ancestors from the bottom of our hearts." Then he says to the assembled members of the tribe] "Everything is done", and they drink to gether the millet wine which they have brought with them. The harvest celebration is the same, except that the wish for a rich harvest is replaced by a prayer of thanks. In spite of my efforts, I have never been able to find out how they think their ancestors will protect them against illness or just how they procure them a rich harvest. I have also not been able to determine whether any special festivals or religious acts take place on Mt. Sylvia, which according to the Japanese is sacred to the Atayals. [16] The Atayals themselves say nothing about it, and foreigners have not yet penetrated that far into Atayal territory.

39: Wiedfeldt--16 F-3 (1913) 1917 Formosan Aborigines
116, 755, 776, 787, 791 Atayal

Superstitions, fear of spirits, or similar things...are unknown to them. The old woman of the clan, the hamangoppu, tattooes, administers medicines in case of illness, and foretells whether the patient will recover, or whether the woman will have a child. She does this by dropping pieces of elder pith on a bamboo board which she holds on her knees and counting the number of pieces that fall. A raven that lights on a hut is considered an evil omen. This belief does not exist among the Chinese or Japanese. Their imagination has produced no other superstitions or spells.

39: Wiedfeldt--16 [2] F-3 (1913) 1917 Formosan Aborigines
116, 153, 811, 177.65 Atayal
636.65 Japanese

The capacity of the Atayals to grasp something that has been told them is also limited. If one attempts to tell them something through the medium of an interpreter, one runs up against a complete lack of comprehension, even if it is only a question of their forming a new concept out of elements already known to them. They do not even have an idea of the power of the Japanese, of which they should have been clearly conscious in view of the bloody battles that they have had with them. In order to make them aware of this, and to scare them off from making further attacks, the Japanese have very cleverly taken a number of highly respected Atayals to Tokyo every year at the expense of the state, so that they could get an idea there by what they themselves could see of the power and the resources of Japan, and could then tell the members of their tribe. The sum total of all this is that the Atayals do not completely lack imagination...but it has been employed only in a few fields, and has not been very productive even in these...

39: Wiedfeldt--22-23 F-3 (1913) 1917 Formosan Aborigines
116, 133, 181, 501 Atayal

The Atayals live on an island but they are not a seafaring people. On the eastern coast of Formosa, where they have settled right down to the shore, navigation is so difficult, even for modern coastal steamers, as a result of an exceptionally strong current, [23] that getting from a boat to a ship even in good weather is sure to mean a ducking, as I know from experience. In bad weather it is impossible to get from a boat to a ship, or vice versa...For the Atayals, who could make only the simplest kind of boats with their few tools, such as hollowed-out tree trunks, or rafts, no navigation is possible here.

39: Wiedfeldt--23 F-3 (1913) 1917 Formosan Aborigines
116, 121, 173 Atayal

Whether the Atayals of the west coast, where navigation is easier, have ever settled close to the sea, does not seem probable to me. Their traditions speak of their mountains and also of the plain which lies before the mountains, but they do not mention the sea. They would not have been able to plant the swampy plains near the sea, which today yield a rich crop of rice under Chinese hands, just as they even now do not make use of places in their territory which are very fertile, but which require a great deal of work. If they had gone to sea, they would have had to know a few constellations, whereas they are unacquainted with stars and points of the compass...

As inhabitants of an island, they have been spared the fate of being overrun and annihilated by a foreign culture...

39: Wiedfeldt--25 F-3 (1913) 1917 Formosan Aborigines
116, 157, 186, 609 Atayal

I have not been able to determine the basic reasons for their reserve. Perhaps it is rooted in excessive pride of race, not to say, haughtiness of race, as some of the Japanese maintain... It is also partly due to a certain shyness. In the presence of people who belong to other races, the Atayals drop their voices to a whisper, and display a prudent reserve in spite of the curiosity of the others. The sources of this attitude, however, continue to be a mystery; the only thing that is clear is their attitude of reserve.

" The aborigines of the plains may have become more or less accommodated to a civilized order, although it is too much to claim that they are already assimilated; it is also certainly true to say that the mountain savages, the Atayal, the Bunun, and the Paiwan, are still in a fighting mood. The Japanese lay the blame for this hostility upon the [11] Chinese, who started the trouble centuries ago when they first drove the primitives from their ancestral lands. According to the Japanese version,

> When these unscrupulous and utterly heartless creatures wished to obtain possession of the land belonging to the savages, they would give them a present promising to repeat the same each year. But once the savages had listened to their request and allowed them to use the land, the wily celestials collected other equally wily and unscrupulous men around them, and as soon as they felt themselves strong enough, repudiated all their promises and falling upon the too trustful savages, drove them off by force."

40: Kirk--11 S-2 (no date) 1941 Formosan Aborigines
116, 177, 609, 721

"It is only natural, say the Japanese, that the savages have developed an intense hatred for all foreigners and look upon Japanese, as well as Chinese, as deadly foes. So many Japanese, in the decade following 1895, lost their lives in a vain effort to subjugate the savages that some officials looked upon the campaign as hopeless and were in favor of giving the savages up as untamable wild men. Others held to the opinion that the aborigines would become civilized if they could be exposed to Japanese culture."

40: Kirk--11 [2] S-2 (no date) 1941 Formosan Aborigines
116, 178

"In 1903, according to Takekoshi, several savage girls were taken to the Domestic Exhibition at Osaka. After a few months stay in Japan, they had changed their manners and appearance so much that they looked at first glance like Japanese girls. When they returned home, their mothers did not approve of the way in which they wore their hair, Japanese fashion of course, and angrily declared that the foreign styles, including facial powder and rouge, were most unbecoming. The girls laughed and replied, 'You only say so because you are savages.' The Japanese have often used this incident to prove that the aborigines may be tamed and 'Japanized.'"

40: Kirk--11-12 S-2 (no date) 1941 Formosan Aborigines
116, 311, 177.31 Japanese

"But the Japanese, above all, are looking for new food supplies. Overpopulated Nippon is anxious to bring the [12] savage-controlled lands of Formosa speedily under cultivation and the Nipponese cannot afford to stand by and wait patiently over the years for the policy of kindness and good will to work its slow way to the hearts and minds of the primitive peoples. It is far better, the rulers think, to gain complete control over the forbidden territory now by force of arms if necessary, and speed up the processes of accommodation and assimilation."

40: Kirk--12 S-2 (no date) 1941 Formosan Aborigines
116, 712, 725, 563, 177.71 Japanese

"As one result of this aggressive policy, the Japanese have built a 'guard line' by cutting a wide path along the crest of mountains and thus surrounding the districts in which the 'wild men' dwell. Beyond this picket line near the districts most thickly populated with savage tribes, the jungle is cleared for a distance of one hundred to three hundred feet. This open space makes it possible to detect the approach of hostile bands and gives the Japanese soldiers a good firing range. Guardhouses of wood, bamboo, earth, or stone are built at strategic points with loopholes in the walls. These tiny fortifications are further protected by wooden barricades and entrenchments. Wire fences and entanglements, charged with electricity, have encircled some districts. Mines have sometimes been sunk, grenades have been thrown during a battle, and three-inch guns have been used with telling effect. One gun, carried up steep slopes and mounted at a commanding point, will hold back many savage warriors. (1)"

1. Report on the Control of the Aborigines, Bureau of Aboriginal Affairs, Taihoku, 1911.

40: Kirk-- 12-13 S-2 (no date) 1941 Formosan Aborogines
116, 726, 177.72 Japanese

"The repeated campaigns to subdue the savages by force of arms in the years following 1895 met with slight success. The Japanese soldiers knew so little about the geography of the country and were so poorly equipped to deal with the guerilla warfare of the savages that they not only were defeated again and again but were often forced to beat a disorderly retreat and leave their weapons behind to fall into the hands of the enemy. The Japanese had to [13] grope through creeping vines and underbrush because they did not know the trails, while the savages could run like deer and climb like monkeys.

The Japanese gradually learned through costly experience how to stretch out and defend the guard line successfully."

"The camphor companies came to the aid of the puzzled soldiers with well-trained guards of their own, until in 1907 the guard line, which had measured only fifty miles under the Chinese administration and one hundred miles in 1896, extended for three hundred miles over hill and dale. Every half mile or so the line is fortified by guardhouses or pillboxes. Two or three guards live at each station, and there is one superintendent to every four or five guardhouses. A policeman and his family live at the superintendent's station. The sentinels, who patrol the path between the guardhouses, challenge all savages--even the peaceful ones must get special permission to travel and must approach the line only at certain designated places. The guards are ordered to use their rifles if the savages disregard the challenge. The superintendents communicate with one another by means of a system of alarms which will bring immediate aid to any station in trouble. These guardhouses, for the most part, are located far up on the mountain slopes in the midst of dense forests."

40: Kirk --13 [2] S-2 (no date) 1941 Formosan Aborigines
116, 411, 437, 486, 712, 177.43 Japanese

"According to Japanese reports, these outposts of the Empire are no longer sorely needed. (2) The wire fence is not electrified, and the guard line is no longer heavily

2. Yosaburo Takekoshi, Japanese Rule in Formosa (New York: Longmans, Green and Company, 1907).

patrolled. Certain Japanese traders who obtain special permits may go beyond the guard lines and barter with the natives, but they must not bring into the mountains either arms or ammunition. Consequently, the only way the primitive can get modern weapons is by smuggling them into the hills."

40: Kirk-- 14 S-2 (no date) 1941 Formosan Aborigines
116, 411, 181, 224, 177, 22 Japanese

"As the Japanese have carried away all firearms found in native villages, the savages have complained that this policy of confiscation has worked an unnecessary hardship on many nonhostile groups. Without guns, the aborigines are seriously handicapped in one of the absorbing interests of their lives--bird shooting and bear hunting.

The officials have replied that hunting, after all, is 'contrary to the principles of humanity' and that the primitive should turn their attention away from warlike pursuits to tilling the soil and raising corn and potatoes. The Japanese are hoping that this plan will force the savages to adopt 'gentler ways of living.' As late as 1934, headlines in the newspapers, such as 'Rebellious Savages Found-- Leader Anatex Killed by Machine Gun Fire,' would seem to indicate that the mountain tribes are by no means entirely subjugated."

"At the close of 1934 there were 536 stations with 5,509 policemen, whose duty it is to maintain peace and order, to give industrial and agricultural training to the villagers, especially the young folks, and to provide medical care. The chief objectives of this work may be briefly summarized: an invigoration of the national spirit, diffusion of the national language, abolition of long-standing evil customs, cultivation of a love for labor, of thrift, and of settled farming. (3)

3. Kokusai Nippon Kyokai, A Record of Taiwan's Progress, Taihoku, p. 62.

This ambitious program to assimilate the aborigines of Formosa, 154,255 strong, is entrusted to a Bureau of Aborigines Affairs within the Police Affairs Section of the Government General. The work of the policeman among the Takasagozoku, as the primitives are called, is in many respects decidedly unique. This guardian of the law, to repeat, is teacher, counselor, financial and agricultural adviser, doctor, nurse, and religious leader all in one. To educate the savages in Japanese manners and ideals, to [15] destroy native customs, beliefs, and traditions, and to accelerate the process of ko-min-ka (i.e., change to Imperial people) are the policeman's main duties in each village. Notwithstanding certain difficulties which have arisen in the past because of unfortunate relations of some policemen with native women, high officials, report that the teacher-policemen, assigned to the special task of savage administration, seem to

have done creditable work.

In addition to schools, young men's associations are formed to stimulate an interest in the study of the Japanese language."

40: Kirk--15 S-2 (no date) 1941 Formosan Aborigines
116, 166, 311, 361, 657, 177.36 Japanese

"The government of Formosa, as a part of ko-min-ka, has adopted a policy of removing the aborigines from their remote mountain homes to small parcels of land on the plains where they can be more easily watched and where they may acquire some skill as tillers of the soil. The agricultural possibilities of the lowlands include rice fields, livestock, sericulture, and sugar cane. Not infrequently, when the authorities have tried to pull a village up by the roots and transplant it at the foot of the mountain, the natives have openly rebelled against their rulers. But the soldiers quickly subdue the ringleaders and continue their policy of 'removals' according to schedule. The government errects huts on the plains, rent free, for the mountain families and prepares rice fields and vegetable plots, which are also free from tax. Free medical care is provided."

40: Kirk--15 [2] S-2 (no date) 1941 Formosan Aborigines
116, 437, 625

"The Japanese claim that the savages know nothing about business and that the usual run of merchants and traders take an unfair advantage when they get a chance to bartar with the natives. Consequently, the policeman assumes complete control over native affairs and decides with whom the primitives are to trade."

40: Kirk--15-16 S-2 (no date) 1941 Formosan Aborigines
116, 241, 311

"Since the savage is in the habit of burning off the grass and then planting the seed, there is constant danger of forests fires in the mountains. The soil is soon exhausted [16] under this rough treatment, and the native then moves to a new area and repeats the process of setting fire to the underbrush and sowing the seed. The Japanese hope to teach the aborigines how to use fertilizers on their new lands and to cultivate one plot or field from season to season."

40: Kirk--16 S-2 (no date) 1941 Formosan Aborigines
116, 182, 177.18

"With the introduction of agricultural pursuits and Japanese clothing, the primitives are going through a social revolution. In the mountain homes the women have done the weaving for centuries, and the native garments were all homespun. Now the Japanese are taking raw materials from the villagers, and the women who have been transplanted to the lowlands must learn new ways of doing things 'down on the farm.' "

"Naturally enough, the tribes living farthest up in the high mountains are most resistant to change. The Atayal, the Bunun, and the Paiwan, for example, will continue to annoy their Japanese rulers for some time to come. The Atayal huddle together in colonies and are most difficult to move; the Bunun live apart from one another in the mountains and are more easily moved to the foothills, where small villages are ready to receive these involuntary migrants. (4)

4. Interview with T. Soda, Professor of Public Health, Taihoku Imperial University.

In the course of a few years the old culture of the Formosan primitive will probably be only a memory, for the Japanese will have pushed their policy of ko-min-ka far into the high mountains. Fortunately, several scholars of the Imperial University have done extensive research in the origin, history, and customs of the aborigines, and these men are trying to preserve for future generations a true picture of native Formosan culture as it was before the coming of Chinese and Japanese."

116, 798

"Christian missionaries came to Formosa in the nineteenth century and carried on evangelical work among the [17] aborigines, but now under Japanese rule religious teaching is prohibited in administrative districts. A member of the Atayal tribe, who received his training in Taihoku, spent three months in prison, it is said, because he 'preached the gospel' among his own people in administrative districts. Previously the young man had been appointed to work among the Ami, who are considered as having been assimilated by the Japanese, and the military police did not interfere with his mission there. His personal efforts in behalf of his own people, the Atayal, however, led to his arrest on the grounds of religious propaganda. Specifically, he was charged with failure to show proper respect to the 'god-shelf,' or Shinto Shrine, in his own home."

40: Kirk--17 S-2 (no date) 1941 Formosan Aborigines
116, 788, 177. 78

"The worship of the shrine in every household is a part of the larger program to transform 'wild savages' into good imperialistic Japanese."

40: Kirk--17 [2] S-2 (no date) 1941 Formosan Aborigines
116, 177, 157

"The government, likewise, hopes to make the aborigines more productive economically. Their temperament, like that of the North American Indians and so many other primitives, does not fit them to be factory workers, dock laborers, or members of construction gangs. They might be pressed into service as road or brush workers in the mountain passes."

"The Ami to a greater extent than any other tribe have become assimilated or 'Japanized,' and it may be more than a coincidence that this East Coast group seems to have the best physique and enjoy the best health and cultural conditions.

The Ami have schools for their children, a young men's association for their youth, and credit organizations in several villages. Some of the more prosperous natives are in possession of more than ten ko, i.e. hectares, of cultivated fields, while others have annual incomes of one thousand yen or more in currency. Some villagers also [18] have postal savings. 'The Ami are now enjoying their life as subjects of the Japanese Empire,'

With regard to the natives living on the West Coast plains it can be said that they have practically adopted the tenents of ordinary civilization. The aborigines in the mountainous districts still remain impervious to the light of civilization, and their districts, thus debarred from the beneficence of civilization, are still under special administrative control. In general, the aborigines are not put under legal control, and are accordingly living their own lives in consonance with their own traditional customs. At present, however, most of the aborigines have come to obey the order of supervisory police officials, and have in other ways become law-abiding people ready to

submit to administrative authority. (5)

5. Kokusai Nippon Kyokai, op. cit., pp. 7, 9-10.

40: Kirk --18 S-2 (no date) 1941 Formosans
116, 208, 177.20 Japanese

"Japanization of the people of Taiwan. The social significance of these attempts on the part of Japan to assimilate the savages will stand out much more clearly if we look upon this process as part of a much larger movement known as ko-min-ka, which means literally 'change to Imperial people.'

This economic, social, political, and religious movement dates from the beginning of the China incident and is of particular importance because the Japanese are planning to apply this same program with variations to the conquered and occupied territories of Asia.

First of all, certain slogans appear again and again in newspapers, in theaters, in public addresses, and in public places, which are intended to take the place of independent thinking on the part of the masses.

'Spiritual Mobilization,' 'The New Order in East Asia,' '100,000,000 People of 1 Mind,' 'The Great Mission of Taiwan,' 'The Resolve of the People of Taiwan,' 'Annihilate the Unsound Doctrines Which Oppose Understanding of the Present Situation' are popular phrases which every Japanese in Formosa hears or sees several times a day."

40: Kirk --19 S-2 (no date) 1941 Formosans
116, 185, 208, 461, 656, 177.20 Japanese

"The common people today are called upon to make so many sacrifices that the government is appealing to their sense of loyalty to the Empire and to their intense national patriotism to keep the masses united and in a mood to endure further privations. The present campaign for 'Spiritual Mobilization' includes (1) encouragement of savings, spending nothing for luxuries and very little for necessities ; (2) mobilization of gold; (3) free gifts of labor, money, and materials to help carry on the war; (4) improvement of health and training to increase the stature. Very few persons are exempt from labor services. Road and bridge building, flood prevention, cleaning and caring for shrines and shrine grounds, clearing and cleaning airports, and tree planting are types of labor which any ablebodied person may be called upon to do. When a worker receives notice to report on a certain day and at a certain time and place, he usually thinks twice before he dares to ignore the summons."

40: Kirk--19 [2] S-2 (no date) 1941 Formosans
116, 651, 177.65 Japanese

"Money contributions are made through the chokai (municipal system) and the hoko (the rural system). The government raises considerable sums also by promoting 'one vegetable' meals and soliciting the savings of the frugal peasants. 'One house-one thing' campaigns have brought thousands of yen to the colonial treasury from the sale of goods which patriotic Taiwanese have contributed from their scanty store of personal effects. The overburdened farmers frequently find that the government has made a levy on their crops; and, in addition, they feel obliged to make contributions of animals, fruit, vegetables, and currency to help maintain the Japanese soldiers abroad."

40: Kirk--19-20 S-2 (no date) 1941 Formosans
116, 191, 626, 177.19 Japanese

"The Japanese language. Japan has undertaken the immense task of changing the language of nearly 5,000,000 people. First of all, those who are struggling to acquire a workable knowledge of Japanese are listed in the 'blue book' and are given special privileges and exemp- [20] tions. Those who speak no Japanese have little chance of holding any elective political office. In banks and government offices Japanese alone is spoken. Above the doorways of Formosan homes where Japanese is spoken appears the legend: 'This household speaks the national language.' Signs frequently appear in busses and public places admonishing the people to 'Speak only the National Language.'"

40: Kirk--20 S-2 (no date) 1941 Formosans
116, 191, 658, 871, 177.87

"Koshusho, or national language training schools, which have sprung up to facilitate the teaching of Japanese to adults, numbered 7,306 in 1939. The classes meet in schoolrooms, public halls, or private homes under the leadership usually of Japanese-speaking Formosans who contribute their services free. From the year 1934 Formosan children will attend primary school for at least six years under a cumpulsory education law similar to the law in Japan proper."

40: Kirk--20 [2] S-2 (no date) 1941 Formosans
116, 563, 759, 871, 177.56 Japanese

"Theoretically, Japanese and Formosans may attend the middle and high school as well as the university, but in practice the Formosans find many difficulties in their path. The more important positions in business and the professions, with one exception, seem to be held by Japanese exclusively. Medicine is the one profession open to educated Formosans on equal terms with the Japanese."

40: Kirk --20 [3] S-2 (no date) 1941 Formosans
116, 178, 185, 553

"Beginning with 1940, the 2,600th anniversary year of the Empire, Formosans have been permitted to take Japanese names. It may be significant that in the eight months just prior to the writer's visit only 367 families had signified their willingness to change their Chinese names.

In striking contrast to this nonconformity in Formosa, the Koreans, who received the same invitation, have adopted Japanese names almost 100 per cent. A distinguished American religious leader explained to the writer that the Koreans are docile and easily led, while the Formosans are more stubborn in their resistance to change."

40: Kirk--21 S-2 (no date) 1941 Formosans
116, 191, 177.19 Japanese

"Japanese-speaking Formosans

Year	Men	Women	Total	Per cent of Total Population
1905	10,801	469	11,270	0.4
1915	50,143	4,194	54,337	1.6
1920	87,897	11,168	99,065	2.9
1930	294,677	70,750	365,427	8.5
1937	...	...	...	37.8
1938	...	...	...	41.9
1939	...	...	...	45.6"

"Chinese culture. The government officials of Taiwan are trying to abolish the Chinese culture patterns of the Formosan people. The 'Spiritual Mobilization' program formulated as a result of the 'China Incident' involves radical changes in social customs and religion as well as the substitution of Japanese for the Formosan language. A numbe of social customs are particularly objectionable to the Taiwan government. (1) Foot-binding is still practiced among the Taiwanese women, especially among those whose forefathers came originally from Fukien, China, although the custom is now prohibited by law. In 1905, according to official statistics, 59.6 per cent of the entire female population had deformed feet, in 1915 the percentage had dropped to 17.4 per cent, and in 1920 only 11.8 per cent of the women were victims of foot-binding. Today the young wome are practically free from this affliction, but many of the older women are cruelly mis-shapen and walk with extreme difficulty. (2) The Japanese are trying to change the burial customs of the Formosans by urging cremation to promote sanitation and to conserve the land. The Chinese are reluctant to give up [22] the time-honored practice of depositing their dead in concrete mounds and vaults, and resent any interference on the part of the government. (3) Firecrackers, so dear to young and old, are no longer permitted. The Chinese find that the noise quickly brings the military police to the scene; so they comply with this law. (4) Another law which the subject people frequently disobey, however, is the prohibition of gold and silver religious papers, which the

Chinese persist in burning at their temple ceremonies. (5) Traditional Chinese costumes no longer meet with the approval of the ruling class. The Taiwanese who discard their native dress are more apt to receive favors from the military police. Guardians of the law have been known to cut cloth buttons from the garments of Formosan Chinese in public. (6) The traditional Chinese theater is no longer free to give performances of classical plays in the old style. Actors must appear in modern or Japanese clothes, and preferably in plays which dwell upon Japanese themes of loyalty and Bushido. The Taiwan puppet plays are illegal except by police permission. (7) 'Due to the present situation,' storytellers are no longer allowed free speech. (8) The Japanese are opposed to betel-nut chewing and are anxious to put a stop to the habit, but they have not yet taken positive action. The natives buy and use betel nuts without police interference. (9) As opium is a government monopoly, the Japanese are in a position to exercise strict control. Opium smoking, it is claimed, is declining rapidly. (10) The Taiwan officials do not approve of native dances and festivals, but permit a few savage tribes to stage their traditional dances under close supervision."

40: Kirk--22-23 S-2 (no date) 1941 Formosans
116, 123, 626, 797, 177.79 Japanese

"Religion. Besides changing the language and social customs of the people, the Japanese wish to destroy the Taiwan religion and the local temples, and substitute in their place the Japanese torii, shrine, and the Shinto [23] ritual. This policy is well illustrated by a personal experience. During his stay in Formosa, the writer was closely guarded by the military police. One gendarme, and sometimes two, always accompanied the 'foreign suspect' on his visits to the Chinese and primitive settlements. Even in Taihoku, the principal city, a policeman in plain clothes was invariably on hand when the writer would appear in the morning, and this 'guard-of-honor ' would not take his leave until the day's work was done. The 'foreigner' made a useful discovery very early in his Formosan career. Whenever a new 'guard' appeared, a visit to the nearest Shrine came first on the day's schedule. At once the whole attitude of the policeman toward his non-Japanese companion seemed to change from one suspicion to friendliness and he unconsciously became more or less an interested 'research assistant.' Unfortunately, the Japanese system seemed to call for a change of policemen as soon as one 'guard' showed signs of proving his worth as 'a social investigator.'

The residents of Formosa today, it appears, if they with to gain status in the eyes of public officials, may do well to forsake all other religions and follow the teachings of Shintoism."

40: Kirk--23-24 S-2 (no date) 1941 Formosans
116, 797

"Christianity. Christian missionaries are facing formidable obstacles in their daily work. In fact, the white families (February, 1941) have already left for their home countries in despair, and the native pastors of local Christian churches are being closely watched by the police. In general, the government is unfriendly to the missionaries; and, in turn, the missionaries, as a rule, have not been in sympathy with the policy of ko-min-ka. The white Christians have taught the natives in the Formosan Chinese dialects rather than in Japanese, and they have mingled almost exclusively with Formosan people. The government has naturally suspected that the influence of the [24] missionaries has been thrown on the side of the Chinese and against national unity."

40: Kirk--24 S-2 (no date) 1941 Formosans
116, 185, 208, 177.18 Japanese

"Spiritual mobilization. As an integral part of the Japanization program, the 'Ten Commandments of Taiwan' are given wide publicity.

1. Revere the Emperor. Make your body, as well as soul, that of a Japanese.
2. Revere the Shinto Shrine. Discard superstition.
3. Use the Japanese language. Discard Formosan Chinese.
4. Keep your body clean. Be neat in your dress.
5. Pay attention to hygiene. Stop the habit of eating in public.
6. Build sanitary facilities.
7. Think of the comfort of others; do good to them.
8. Follow the path of an honest man. Let us abolish thieves and liars.
9. Stop gambling. Work hard and earnestly.
10. Be polite and quiet. Stop quarrels and avoid speaking in loud tones."

40: Kirk--24 [2] S-2 (no date) 1941 Formosans
116, 207, 526

"Men, women, and children among the Japanese, wherever the radio is heard, follow the physical exercises which are designed to promote health and increase their stature. Morning, noon, and night the people are supposed to take advantage of setting-up drills. One of the most impressive sights in Taihoku, the capital, is the ten-to-fifteen-minute daily workout which employees of all ranks in the government offices take at twelve o'clock, just before eating their noonday meal."

40: Kirk--24-25 S-2 (no date) 1941 Formosans
116, 157, 185, 177. 18 Japanese

"The Japanese are ambitious and aggressive; the Formosan Chinese are good natured and easygoing. The general opinion seems to be that Japan will succeed in its policy of assimilation, although old-timers whisper that the Formosan temperament is outwardly docile, but inwardly rebellious, and often finds ways of getting what it wants [25] in spite of official regulations. This control by force, combined with the passive temperament of the people, makes open resistance extremely unlikely, but as one Formosan told the writer, 'Many reforms are changes in outward appearance only. They do not transform the spirit within.'

It is probable that many specially qualified Formosans who have accepted the 'New Order' in Taiwan will find increasing opportunity to participate in the 'reconstruction' of China under Japanese rule; for the Taiwan plan of administration may by extended to the mainland in pursuit of a 'New Order' for South China."

40: Kirk--25-26 S-2 (no date) 1941 Formosans-1-2
116, 561, 575, 658, 883, 177.88 Japanese

"Youth movements. The Japanese are laying great stress upon the various youth movements which are actively sponsored in Taiwan by the Government General and the local provincial governments. There are young men's associations, young women's associations, and Boy Scouts. These organizations aim to

> train and drill youth spiritually and physically to inculcate loyalty, to improve character as loyal subjects, to instill a spirit of public service, to encourage self-help, self-control and initiative, to increase knowledge and skill necessary for practical life, to encourage diligence and thrift, and to improve general health conditions of the nation.

The specific purpose of the young women's association (Joshi Seinen Dan), especially among Formosan Chinese, is 'to encourage and propagate the use of the national language, to inculcate female virtue, to educate women in housekeeping, to improve home-life, to cultivate sentiments through recreation, to improve health conditions, and thus to train women in sound womanhood.' The young woman's movements, however, are far less active than the men's associations. The local territory covered by each association corresponds to a public school district. Young people under 20 years of age

who are graduates of [26] public schools may join the youth movement. The young Formosan Chinese members are particularly interested in spreading the use of the Japanese language and in raising the Formosan standards of living. The young men are called upon to assist the police in traffic control during celebrations, to serve on watch duty or to run errands, and even to do hard manual labor, on occasion, when additional workers are needed.

The geographical position of Formosa and the ethnic factors in the overwhelming non-Japanese population are largely responsible for the determined drive of the Imperial government to assimilate the Formosans as speedily as possible."

42: Schetelig--385-386 T-2 (no date) 1868 Formosans
116, 501, 503

The river system of the northern part of the island of Formosa has been put to most excellent use by the Chinese, so distinguished for their skill in canal building and irrigation. From Tamsui, in the conveniently fitted up river boats, the so-called rapid boats, one can easily make a whole day's journey into the interior in three directions: 1) on the so-called Kilung Canal to within half an hour of the town of Kilung; 2) on the Tamsui River, properly speaking, upstream to the southeast and 3) on the [386] southern arm region of the western slopes of the large Central Range.

42: Schetelig--386 T- 2 (no date) 1868 Formosans
116, 135, 501, 505

I decided to visit Kilung first. On the journey thither by water we saw the now celebrated sulphur springs in the so-called Hell Valley. In addition to the plentiful sulphur springs, they have high pressure water vapor impregnated with SH, and also bring up a mass of clay similar to the contents of the mud volcanoes. From this the Chinese obtain large quantities of sulphur by simply boiling it off. The surroundings of the river become ever more beautiful once one has left the broader part of the lower Tamsui course and has passed through the so-called Manka Plain (Manka is the name of the chief town of the district of Tamsui-Ting). Gently rising and luxuriantly coated clay schist hills come down almost to the river bed, while in the distance picturesquely grouped and precipitous sandstone mountains offer a varied picture to the eye. But soon hard work is called for, for the rapids, which now occur in great numbers, can be passed only with difficulty and our crew stand up to their shoulders in water to shove the loaded vessel over the pebbles, while the traveler must also quite frequently jump out in order to lighten the boat and to help. Other boats sweep down past us at a great speed for the most part laden with hemp, indigo, potatoes or coal. On the seaward journey the force of the water does all that is necessary, and the skillful Chinese has equipped the boat only with a rudder at the back and, remarkably enough, in front also, in order to steer round the rocks without danger. Before coming to Kilung one crosses the watershed, a small height of some 200 to 300 feet, which sinks sharply towards Kilung and the sea.

42: Schetelig--386-387 T-2 (no date) 1868 Formosans
116, 135, 177, 361, 439

Kilung is a Chinese town with walls and gates. It is open to European commerce and is distinguished for the by no means inconsiderable beds of coal in the neighborhood and by the traces of a Spanish fort. For as, in the south near Taiwan-fu and in the north near Tamsui, quite substantial remains of Dutch strongholds are to be found, similarly the Spaniards, [387] during their brief period of settlement in the 17th century, seem to have made Kilung the chief point for their operations.

42: Schetelig--387 T-2 (no date) 1868 Formosans
116, 133

Above all else I desired to become acquainted with part of the west coast, so I hired a junk to transport all of us, with all our belongings, to the Caponlan Plain, the only piece of land suited for agriculture on the whole northeast coast. This plain stretches out for some miles from north to south and is everywhere dominated by steep and inaccessible sandstone cliffs some 2,000 to 3,000 feet high which form the last spurs of the Central Range. We remained for some days in this very fertile colony which, however, is cut off from the rest of the world.

The harbor of Sawo has been repeatedly visited by warships and on some occasions by trading vessels, generally only for passing protection against wind and weather or in order to survey the coast. The transport "Elbe," belonging to the Prussian fleet, was also there in 1860 (1). Shortly before us the "Sylvia" had left the harbor, this being

1. This is a mistake, commited also by Dr. Hermann Maron, Japan und China, Berlin 1863, Vol. II, p. 73. The "Elbe" touched only at the south and southwest coasts of Formosa, but the Prussian frigate "Thetis" was involved in an incident with Chinese pirate junks in the neighborhood of Sawo Bay (see Die preuss. Edpedition nach Ost-Asien, Vol. II, 1866, pp. 112 ff.).

an English survey ship which, be it remarked in parenthesis, has just now finished the survey of the Formosan coast begun about one and one half years ago. This survey will considerably transform the shape of the west coast on the map.

42: Schetelig--387-388 T-2 (no date) 1868 Formosans
116, 133, 504

The harbor of Sawo is deep, in places 10 fathoms deep; It is protected on the south, west and north, but entry is rendered much more difficult by many sandstone rocks. The place itself appears to be hewn out of the rock, for on all sides the mountains sink precipitously into the sea, and even the small valley in which the village of Sawo is situated is only about 1/4 of a German mile long and much narrower. [388] Behind, in rapid succession, steep mountains rise up, the first chain already rising to a height of 2,000 feet.

42: Schetelig--388 T-2 (no date) 1868 Formosans
116, 162, 186, 463, 609

The population of Sawo, which is cut off from all communication by land with the rest of the island (except with the Caponlan Plain), is consequently made up of the dregs of the Chinese population. Since agriculture is impossible, they belong to a genus of seaman such as exists only in China, for on occasion they can transform themselves into pirates, shore robbers, camphor wood thieves or mandarin's soldiers, as required. Sawo is a place with an evil reputation even among the Chinese.... Shortly after we had arrived camphor agents landed and, although they were extremely polite to us on the surface, they nevertheless looked at us suspiciously for they thought that their secret trade might be unfavorably influenced by us. These persons then stirred up the inhabitants against us and spread the rumor that we were traveling in the interests of a foreign government, the Prussian Government, and they hampered us in all our movements. The web of intrigue that was thrown around us was extremely finely spun, and every day there were new troubles and new affronts; for the Chinese, when he is evil, observes the principle that evil must be profitable to him, or it is not worth the trouble. Finally, after they had tried in vain to starve us out, for we were well supplied, we had to forego water transportation. The boats and junks were hidden from us and we were compelled to travel by land over the ridge of hills to the north to the plain of Caponlan, since we could not leave behind the instruments, etc. Fortunately there were five of us and we were all armed, for among these rogues a single man would have perhaps had a hard time.

42: Schetelig--388 [2] T-2 (no date) 1868 Formosans
116, 133

I had convinced myself personally, by means of several excursions, of the isolated position of Sawo and of the impossibility of finding any connection with the interior. One must picture the land as rising precipitously from here to the highest point on the island. The mountains, up which I went to a height of 3,000 feet, are covered with primeval forest, particularly with camphor wood. Like all mountains in northern Formosa they consist of graywacke and coal-bearing clay schist, and because of their great steepness they give use to quite insignificant but very cold streams.

42: Schetelig--389 T-2 (no date) 1868 Formosans-1-2
116, 311, 361, 487

Starting from Manka, the point common to the three chief arms of the Tamsui River, I undertook a second expedition up the middle river to the interior. Chintamki, i.e., "the way to the indigo fields," is a small locality at the bend of this river arm where the river changes its southwesterly course for a north-northeasterly one. Up to this point the boats are forced through the rapids at the cost of some exertion, but then the river must be abandoned and the march to the interior must be undertaken on the roughest mountain paths, close to precipices and with the constant danger of plunging into the depths, into the swirling streams below. The traveler is richly compensated for all his labors and his dangerous slips by a delightful journey through the most remote cultural areas of Chinese colonization. On the highest mountain passes, at 2,000 feet and more, year in and year out the camphor trees and tree ferns are uprooted and, untiringly, Convulvulus edulis, the sweet potato, and the profitable indigo are planted; and although every summer terrific downfalls wash away the delicate plants from the very steep cliff walls, the industrious Chinese is not discouraged by the necessity of repeating his work.... It is clear at the first glance that there, along the upper course of the Tamsui River, the world of the primeval forest and the former haunts of the natives are disappearing more and more beneath the axe of the woodcutter. People who took the same path 5 or 6 years ago, in order to investigate the interior, still found primeval forest and natives living their undisturbed and unchanged lives in places where today

there are flourishing Chinese villages. The valley in which lies the village of Takau (this should not be confused with the port of the same name in the district of Fung-schan on the southwest coast), the terminus for our bearers and our assembly point, seems to have been taken in hand during the last few years only, for everywhere charred tree stumps may still be seen between the indigo plants. This valley is reached via a pass more than 2,000 feet high, and one is surprised by the sight of the upper course of the river tumbling and winding in the depths below, and also by the view of the mountain chains, uncountable as they stretch out to the south. Our aim was soon reached, namely to determine the situation of this upper valley and to survey and to measure the mountain ranges round about.

42: Schetelig--390 T-2 (no date) 1868 Formosans
116, 162, 578

So, while it is possible to get to know the land in its original form on a journey up the middle course of the Tamsui River...a journey up the southern arm gives one a view of the old, original colonial system of the Chinese on Formosa. First we travel along the road from Tamsui to the southern locality of Taiwanfu, consequently covering well trodden ground. But this region of the western plain was the first that the Chinese developed, after the occupation 200 years ago and, accordingly, it is here that we found Chinese law and Chinese customs in their greatest purity. Worthy of note, at the same time, are the number of Chinese dialects and consequently of Chinese provinces that are represented here. Here the Fokien Chinese live in colonies beside their sworn enemy, the Hakka, from the province of Kwangtiang, and the Hoklo, the sugar-cane cultivator of Swatau, while between them all, hated by all and getting the better of them all, there wanders the sly Cantonese, the merchant, scribe, land owner or camphor agent. We kept on our way in the old fashion and did not unload our baggage until the boats sat motionless on the stone rubble of the rapids. This happened near the old fortress of Tokscham, the possession of a wealthy and influential Chinese family which has been in residence here since the earliest period of Chinese colonization.

42: Schetelig--390-391 T-2 (no date) 1868 Formosans-1-2
116, 423, 556, 565

Formosa was not colonized by the government. The Chinese were, and are, too practical not to know the drawbacks of state interference in colonization in all its extent, and both on the mainland and here in Formosa [391] they have taken good care not to transfer the center of gravity of the Empire to the outside. Consequently... northern and western Formosa must be looked on as a colony of squatters who, however, in the course of the years, have received titles and documents from the mandarins for the land which they had often acquired by the sword. All this was done by means of contracts and compromise, and so it comes about that today, in the midst of a population already numbering millions, and who immigrated comparatively recently, we find a number of old families who, having lived here for centuries, have developed a power that far exceeds that of the Imperial officials, due to the great forces that the possession of land has always put at their disposal. But it is clear that these various parties lend each other support in view of the chaotic condition of a population that has come together from the most varied provinces of the Empire, and in view of the need of exploiting the camphor forests in their own interests both against the Europeans outside the country and the mountain-dwelling natives within. The rich and independent settler of long standing supported the mandarin in maintaining and extending Imperial rights, at least insofar as he himself was not included in them, and on the other hand the mandarin has always been intelligent enough to respect the traditional rights of such an independent leader,

exacting no transport tax for his merchandise and not even hampering him in his destructive war against the extensive camphor woods, although otherwise every infringement of the law concerning the sacredness of the camphor monopoly is looked on as a kind of high treason directed against the Crown.

42: Schetelig--391-392 T-2 (no date) 1868 Formosans
116, 133, 609

In one house of this kind in Tokscham, the fortress of an old and immensely wealthy leader, we met with the greatest hospitality that it is possible to show strangers, and from here we made excursions to the camphor forests of the interior as well as up the extremely curious river valley to the south.

Here it is still possible to trace the successive stages that distinguish the history of the formation of the river. On either side the river is surrounded by a plateau some 600 to 700 feet high, and from this various terraces go down to the river itself and show, even today, that formerly the bed must have been extremely broad and deep, though now the water , which the Chinese lead away on all sides to their fields, is rarely more than a few feet above the point of lowest water level, as we found it [392]. So large does the area of evaporation of a once swift and deep stream become owing to the efforts made in cultivating fields and maintaining meadows.

42: Schetelig--392 T-2 (no date) 1868 Formosans
116, 133, 311

The following brief remarks will be made concerning the distribution of heights and plains in the north of Formosa. I have shown that within one day it is possible, from the meeting point of the three chief streams in the Manka Plain, to reach the foot of the mountains in almost every direction. A further day's journey brings one right into the mountains, but generally one is still within the frontiers where Chinese colonists are to be found, and then, after crossing the first and second ridges, one enters the primeval forests. If one considers that, from our observation point near Takau in the middle of the northernmost third of the island and on the upper course of the Tamsui River, 400 feet above sea level, the nearest ranges are 200 to 300 feet high, that from there in a southerly direction mountains up to 5,000 feet high were measured by us and, finally, that the central connecting point of the Central Range, formerly thought to be 12,000 feet, is now known to be more than 13,000 feet with the surveying of Mount Sylvia, and that this highest point on the island is only 2 to 3 miles to the south; considering all this, it becomes clear that everything lying in between must be mountainous, and steep at that, with no tablelands or cultivated plateaus. Yet all the land lying to the north of the lower course of the middle stream, or that which is situated round the Kilung River, is of surprising fertility, as is also the already mentioned Manka Plain which, strangely enough, is irrigated not by the Tamsui River itself but by one of those admirable Chinese artificial systems of irrigation that brings the water from distant mountains.

42: Schetelig--392-393 T-2 (no date) 1868 Formosans
116, 135, 314, 433

Among the products of the country I mention those of special interest for Europeans; coal, camphor and sulphur, for indigo and hemp are sent to the Chinese market only. No great quantities of sulphur are found, but more could be obtained nevertheless by the improvement of the methods used. Camphor alone makes a treasure chamber of the island of Formosa. It is known that the Laurus camphora is found only in Japan and Formosa, and there only in some districts. Since only trees of a particular age can be used for obtaining the valuable resin, and since every time, unfortunately, the whole tree with trunk and branches is thrown into the subliming pot, one can foresee a time when camphor will go up in price in geometric progression [393] and when finally production will become so small that not even Germany alone can be provided with it. This matter of camphor production seems to me to be of no means inconsiderable economic importance...

42: Schetelig--393 T-2 (no date) 1868 Formosans
116, 135, 316

Coal is found everywhere in narrow beds that are almost always horizontal and lie between graywack and clay schist. It is not of the first quality and is of light specific gravity, but when mixed with English or Australian coal it provides a fairly satisfactory fuel. Of the galleries I visited, some were 600 paces long before one reached dimensions of 6 to 7 feet vertically and 20 to 40 feet horizontally. Statements have also been made about precious metals that are said to occur in Formosa. I myself have seen nothing of the kind, but before all else I wish to stress the fact that the value of precious metals does not depend on their inherent worth alone, but on the location and the surroundings.

45 Stanford U. S-4, 5 1956 AD1 Formosa AD1

PREFACE

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C. T. Hu
HRAF Research Associate
For Far East

Milton D. Graham
HRAF Research Coordinator

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PREFACE

This is one of five monographs prepared by the staff of the China Project at Stanford University in fulfillment of a twelve-month subcontract with the Human Relations Area Files, Incorporated, New Haven, Connecticut.

The main purpose of this monograph is to present insofar as possible a concise account of the social, economic, and political conditions and problems of Formosa. Lying midway between Japan and the Philippines, Formosa forms a most important link in the anti-Communist line of defense from the Aleutians to Australia. With an area larger than that of the Netherlands and with a population now exceeding that of Sweden or Greece, the island serves as a show-window for democracy and as an advance base from which anti-Communist campaigns may be launched. Its present position may be likened to that of Great Britain in the days prior to the Allied invasion of Europe. On the success of the Nationalist cause depends not only the security of the western Pacific, but also the liberation of six hundred million Chinese from the bondage of Communism. Formosa has become a bulwark against Communist expansion in Asia and a rallying point for all freedom-loving Chinese.

000 Although primary emphasis is placed on developments since World War II, whenever necessary Formosa's past, especially under Japanese domination, is touched upon. Every attempt has been made to comply with the format provided by HRAF. However, additional topics, including a review of political institutions and a general survey of economic conditions, have been added in order to provide a more complete background.

An excellent collection of source material on Formosa is available at the libraries of Stanford University. Only the time limitations of our subcontract make it impracticable for us to make more exhaustive use of such material.

This monograph is to be regarded as a co-operative project, and no attempt will be made to identify the authors of the studies. It is proper, however, for me to single out the efforts of Tsung-lien Shen and David S. Huang, who are responsible for the majority of the studies. We are grateful to our consultants who have rendered us invaluable assistance: Professors Shao-hsing Ch'en, Ch'ao-ying Li, and Kuo-hsin Ch'en, all of the Taiwan National University. We are also grateful to Professor Joseph E. Williams, executive head of the Department of Geography, Stanford University, for his supervision of our cartographic work. We should like to express our sincere appreciation to the staff of the Hoover Library, Stanford University, for their patient co-operation, and par-

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000 ticularly to Dr. Mary C. Wright, curator of Chinese Collections, for her unfailing support.

The views and opinions expressed in this monograph are those of the staff of the China Project and are not necessarily those of Stanford University.

Shau Wing Chan
Director

March 26, 1956
Stanford University
Stanford, California

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*Appears in back cover in Monograph Volume I.

Annex "A," Subparagraph 1a',
Sociological Background

GEOGRAPHICAL SETTING

101 The island of Formosa is called Taiwan by the Chinese and the Japanese. The name may have been derived from an aboriginal tribe called Tai-yuan who inhabited the western coast of the island and with whom the Chinese first came into contact in the early sixteenth century. Taiwan means "Terraced Bay". Later, the Portuguese appeared as regular traders in the China Sea. Plying between the coast of China and Japan, they often sighted the island. Apparently impressed by its scenic grandeur, they gave it the name "Ihla Formosa", the beautiful isle.

I. LOCATION AND AREA

131 Taiwan, as a province, comprises the islands of Formosa and the Pescadores. It is situated in the western Pacific astride the Tropic of Cancer, between latitudes 21° 45' 25" N and 25° 37' 53" N, and longitudes 122° 10' 25" E and 119° 18' 13" E. To the west, the Formosa Strait separates the islands from the China Mainland by less than one hundred miles of water at the closest point; to the south, the Philippines lie beyond the 230 miles of Bashi (Luzon) Strait; to the east is the Pacific Ocean. The islands of Formosa are midway on the water route between Shanghai and Hong Kong, 400 miles southwest of Okinawa, and 720 miles south of Japan.

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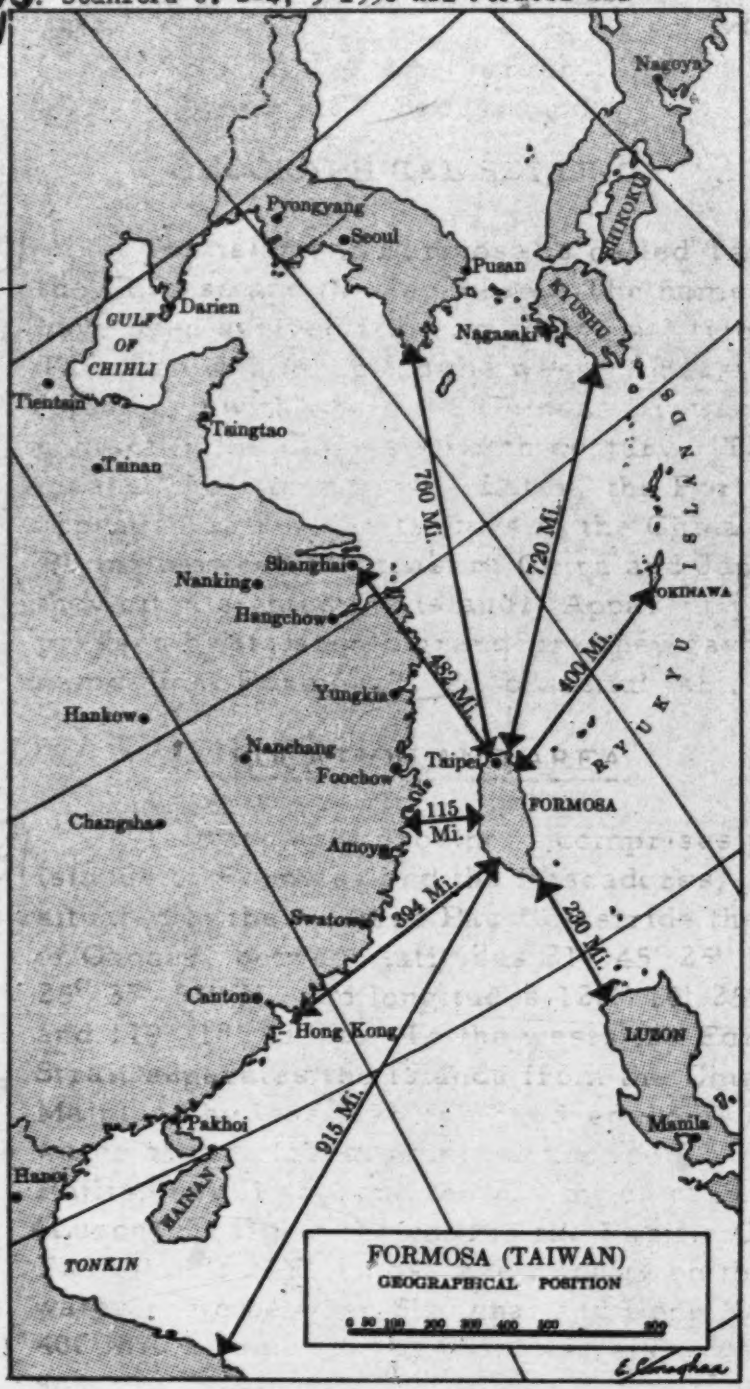

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131 The total area of Taiwan Province covers 13,880 square miles with a coastline of 970 miles. The main island of Formosa is 250 miles long and 60 to 80 miles wide, comprising an area of 13,800 square miles, with a coastline extending 710 miles. The strategic Pescadores, lying between the China Mainland and Formosa and 25 miles from the latter, guard the Formosa Strait and give shelter to distressed vessels caught in the storms that rage often during the course of the year.

II. TOPOGRAPHY

133 About two-thirds of the main island is composed of rugged foothill ranges and massive mountain chains, of which more than thirty summits exceed 10,000 feet above sea level. Only about 35 per cent of the land is under an elevation of 100 meters (328 ft.). The mountains, towering along the eastern coast of the island, run roughly from northeast to southwest. A low flat coastal plain, extending from north to south, occupies the western third.

The major part of the main island is formed by a tilted mass of earth and rock which extends along the central mountains and slopes steeply to the east and more gradually

133 to the west. The Central Range, the T'zu-kao-shan Range, and the A-li-shan Range form this tilted block. The Ta-tun group of volcanic peaks occupies the northern extremity; the Taitung Range forms the narrow downfaulted block separated from the Central Range by the Taitung Trench (rift valley).

The main island's strata are mainly formed by sedimentary rock and are vulnerable to erosion. The erosion is intensified by the frequent torrential storms. It is not rare to find swift streams in the midst of steep valley cliffs in the mountainous areas and disastrous seasonal floods on the plains.

The main island lies in a Pacific volcanic belt, but none of the northern mountains or the coastal mountains is active at present. The frequent seismic activity found is believed to be caused by the gradual uplift of the Asiatic Continental Shelf, as a result of which the eastern section of the main island is often heavily affected by earthquakes.

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Major Mountains of Formosa*

Name	Elevation (meters)	Location
Yü (Mt. Morrison)	3,950	Nantou, Chiayi, Koahsiung
Ta'u-kao (Mt. Sylvia)	3,931	Miaoli, Taichung
Tung-tz'u-kao	3,884	Nantou, Kaohsiung
Hsiu-ku-luan	3,833	Nantou, Hualien
Pei-hsin-kao	3,833	Nantou
Nan-hsin-kao	3,815	Kaohsiung
Nan-hu-ta	3,797	Taipei, Taichung, Hualien
Kuan	3,667	Kaohsiung, Taitung

* Adapted from China Handbook 1953-54, Taipei, 1953, p. 343.

133 The rivers have short courses and rapid streams. The longest river is the Cho-shui, only 107 miles long. The rivers are usually shallow except in the rainy seasons. The upper streams generally run through steep canyons, but on the plains numerous branches are formed. Because of the mountain floods, rivers on the western plain rise during the summer; in winter, the dry season, river beds are sometimes exposed.

There are two important lakes on Formosa, namely, Jitsugetsutan[1] [Sun-Moon Lake, or Lake Candidus] and Shan-hu Lake [Chia-nan Irrigation Reservoir]. The former is a natural lake found in the geographical center of the island at an altitude of 2,700 feet. The island derives a major portion of its electricity from the waters of this lake. Shan-hu is an artificial lake damming the Chia-nan River at an altitude of 210 feet. It is located just below the Tropic of Cancer.

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1. This is Jih-yueh-t'an in Chinese. However, this Japanese name seems to be more widely accepted in current literature on Formosa than the Chinese name.

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Important Rivers of Formosa*

Name	Length (km.)	Area (square km.)	Course of Drainage (counties)
Cho-shui	170	3,114	Nantou, Changhua, Yunlin
Lower Tan-shui	159	3,310	Kaohsiung, Pingtung
Tanshui	144	2,705	Hsinchu, Taoyuan, Taipei
Tsent-wen	137	1,212	Chiayi, Tainan
Ta-chia	124	1,272	Taichung

* Ch'en Cheng-hsiang, T'ai-wan T'u-ti Li-yung [Land Utilization of Taiwan], Taipei, National Taiwan University and Joint Commission on Rural Reconstruction, 1950, p. 6.

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III. COASTLINE AND MARINE FLOOR

133 The long coastline of the main island has very few indentations. The east coast is precipitious, with a fault shoreline connecting Hualien and Suao. For all practical purposes, it has no natural harbor except Suao Bay on the northern coast. The west coast is marked by wide tidal flats and is generally swampy. The sea is so shallow that sea-going vessels have to keep almost out of sight of land and can find ingress only at a few river mouths. These approaches, however, are often choked with sand bars. Kaohsiung, the southern port, is situated in a long lagoon called Kaohsiung Bay. The northern coast is winding, with many inlets. Keelung Harbor is a deep indentation there.

The main island sits on the southeastern part of the China Continental Shelf. Formosa Strait is shallow; the depth is generally under 300 feet and not exceeding 700 feet at the deepest point. However, the sea deepens abruptly along the east coast; it drops to a depth of 13,000 feet only 31 miles offshore.

IV. SOILS

134 Three distinct types of soil are found in the mountainous area, and two types of alluvial soils exist in the plains.

134 In areas above 9,800 feet elevation podsols (generally associated with coniferous forest cover) and slightly podsolized alpine soils are found. Grey-brown and yellow podsolic soils are found on the mountain slopes between 6,500 and 8,500 feet. In the foothill areas less than 6,000 feet above sea level, lateritic soils -- yellow, light red, and deep red, depending upon the altitude at which they are found -- constitute a major part of the soil.

Alluvial soils, important for agricultural use, cover an area of about 3,300 square miles, or 24 per cent of the island's surface, and are found principally in the southwestern part of the island. Small tracts of alluvial parent materials are widely scattered throughout lowland Formosa. In the middle and northern plains are generally acid alluvial soils; alkaline alluvial soils spread over the southern plains, Taitung Trench, and Yilan Plain.

V. VEGETATION

137 Most of the mountains are heavily forested. About 68 per cent of the main island is covered with three dominant plant formations -- broad-leaved evergreen forests, mixed forests of broad-leaved deciduous trees and conifers, and coniferous forests. Two minor types of vegetation are seen on the foothills,

137 the relatively small bamboo forest along the western foothills and steppe, and shrubs over the low slopes of the mountains.

VI. CLIMATE

132 Latitude, ocean currents, topographic features, and of most importance, the monsoons determine the climate of Formosa.

Generally speaking, the main island is semi-tropical. It separates, at its southern end, the Kuro-shio (ocean current) which flows northward, and lies within the great Asian monsoon system which provides strong northeast winds in winter and less pronounced southwest winds in summer. The result is that the island is windy and has generally high temperature and precipitation. However, dry winters are experienced in the southern plains.

The warm and humid summer lasts from May until September, the mild winter from December until February. The highest temperature rarely exceeds 100°F in the hottest summer months, July and August; the lowest has never been below 35° F in the coldest month of January.

Average annual rainfall ranges from 50 inches on the low eastern coast to 250 inches

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132 and more on exposed mountain slopes. Although the northeast has no distinct dry season, the southwestern parts of the island have a marked winter dry season.

Typhoons occur between June and October as a result of the tropical cyclonic storms which sweep out of the western Pacific. The tremendous winds are usually accompanied by torrential rains which may destroy buildings, cause floods, and damage agricultural crops and forests. During the fifty-year period 1897-1946, there occurred 71 typhoons, of which twenty-seven were highly destructive.

Distinct climatic characteristics are found in the seven regions divided by Cheng-hsiang Chen.[2] The regions are shown on the map in the following page and are described briefly below:

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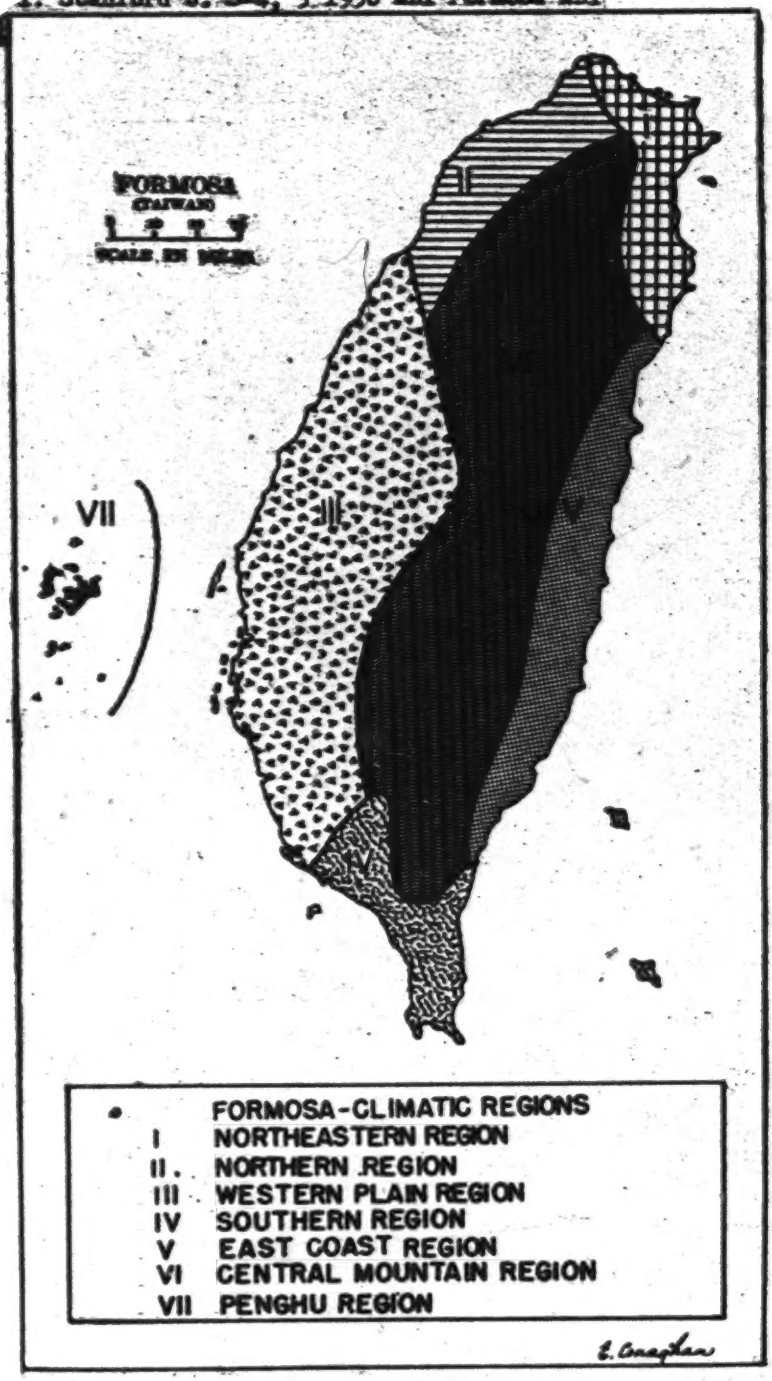
2. Cheng-hsiang Chen, op. cit., pp. 31-35.


FORMOSA
(TAIWAN)
SCALE IN MILES
I
II
III
IV
V
VI
VII
FORMOSA-CLIMATIC REGIONS
I NORTHEASTERN REGION
II NORTHERN REGION
III WESTERN PLAIN REGION
IV SOUTHERN REGION
V EAST COAST REGION
VI CENTRAL MOUNTAIN REGION
VII PENGHU REGION
E. Cooghan

[Facing p. 11]

Northeastern Region

132 This region covers the northern corner of the main island. The northeast winds blow from the sea during most of the year. Annual precipitation in Keelung is 114 inches, and there is an average of 213 cloudy days a year. On the mountain slopes, precipitation varies from 150 to 200 inches a year. The summer rains are heavy and short in duration; the winter rains are, more or less, a continual drizzle. The average temperatures for the hottest and the coldest months are 82.4° F and 59° F respectively.

Northern Region

This region encompasses the southwestern section of Taipei hsien and the entire Hsinchu hsien. The coolest winters of the island occur here on the lowlands. However, average temperature of the coldest month, February, is just below 59° F. Frosts are seen very rarely and snow is non-existent except in the mountains at high altitude. Hsinchu and the adjacent coast are subject to strong winter winds.

Western Plain Region

The region is composed of the Tainan Plain and the foothills to the east. Winters are

132 warm and dry, with the average temperature varying from 60 to 80 degrees. The rainy period, created by the southwest monsoon, is concentrated in the summer months of May through August, bringing a monthly average rainfall of 8 inches.

Southern Region

Pingtung Plain and Hengtsun Peninsula constitute this region. It has a tropical climate. Annual average temperature is 75° F, and the highest temperature at Hengtsun in the summer reaches 90° F. Winters are usually dry, but sometimes there are destructive gales. Annual precipitation ranges from 60 to 80 inches, of which 90 per cent falls in summer.

East Coast Region

This region, comprised of the Taitung Range and the adjoining trench, has an annual rainfall of 60 to 80 inches, two-thirds of which falls in summer. Temperature of the coldest month, January, averages 60°F.

Central Mountain Region

The central mountain ranges are included in this region. The high altitude, 3,000 feet above sea level, and exposure to prevailing

132 winds bring an annual precipitation of more than 120 inches. Frosts are frequent and the higher mountains are snow-covered during the winter.

Penghu Region

This region comprises the Pescadores Islands, and is subject to strong wind almost all year round. The average velocity of 15 miles per hour is recorded, but during December the velocity is as much as 20 miles per hour. The precipitation amounts to about 40 inches a year.

VII. POLITICAL DIVISIONS

631 On August 16, 1950, the administrative areas of Formosa were rearranged into five municipalities, 16 hsien, and Yangminshan Administration. The five municipalities are: Taipei, Tainan, Keelung, Kaohsiung, and Taichung. The sixteen hsien are: Taipei, Taoyuan, Miaoli, Changhua, Yunlin, Tainan, Pingtung, Hualien, Yilan, Hsinchu, Taichung, Nantou, Chiayi, Kaohsiung, Taitung, and Penghu (Pescadores).

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VIII. IMPORTANT CITIES[3]

Keelung

439 Keelung City, the port for Taipei and northern Formosa, handles nearly one-half of Formosa's imports and a little more than one-fourth of all exports. Apart from factories which manufacture commercial fertilizers, wheat flour, and bicycles, it has ship-building facilities, a railway terminus, and warehouses. It also is a base for deep-sea and coastal fishing. The registered population in June 1953 was 170,000.[4]

Taipei

438 633 Taipei, located on the northern bank of Tan-shui River, is the largest city on the island, with an estimated population of over 700,000 in early 1956. It is the capital of

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3. Information on the important cities is taken from A.F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, pp. 73-109.

4. The registered civilian population, apparently not including military personnel and foreigners.

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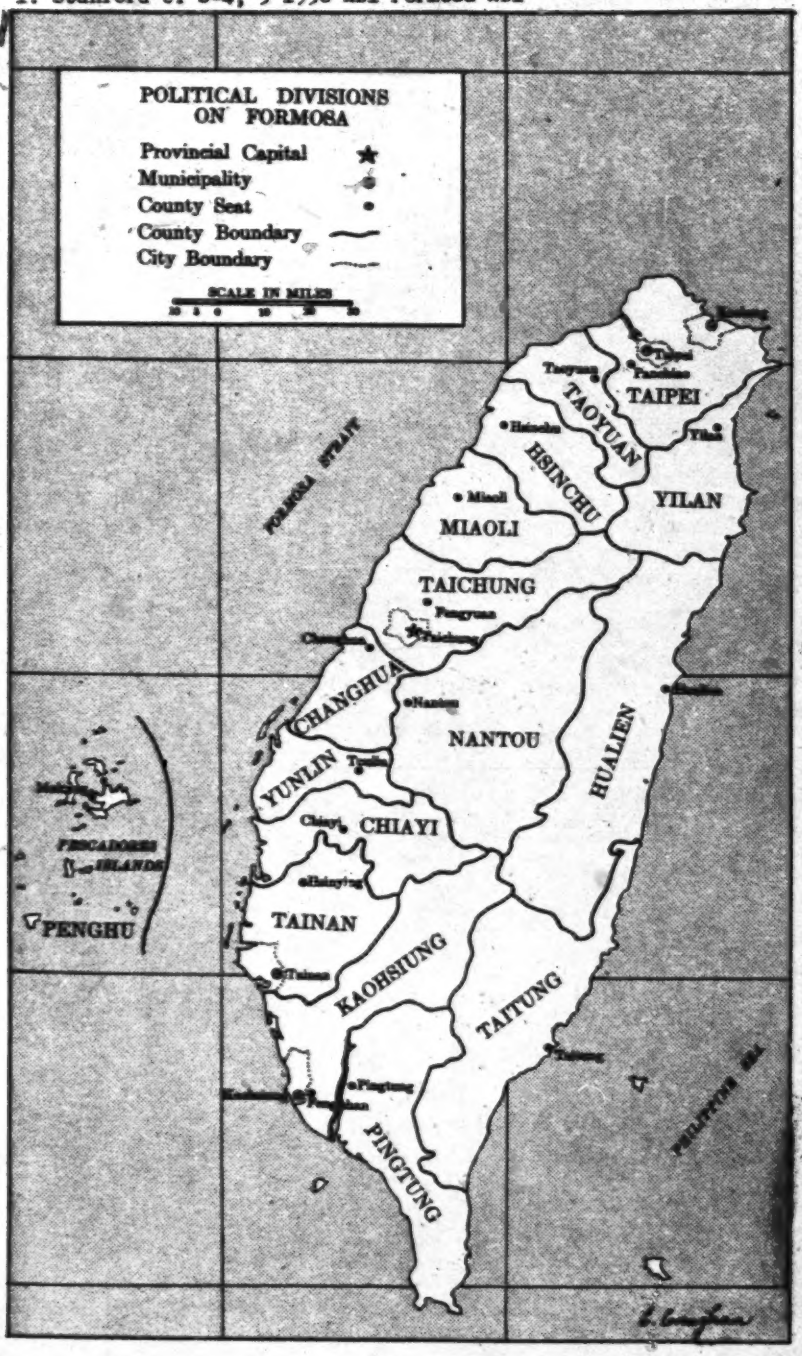

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633 Nationalist China's Central Government as well as of the Taiwan Provincial Government.[5]
438 It is the most important center for commerce and the heart of air, railway, and highway transportation. Institutions of higher learning are concentrated here. The scenic spots, Grass Mountain (Tsaoshan) and Peitou Hot Springs, are nearby, to the north of Taipei.

Taichung

438 The fourth largest city, relatively new and growing, Taichung is located in the middle of Taichung Plain and is one of the island's agricultural centers. It has a population of 222,000.

Tainan

Located near the China Sea and twenty-nine miles north of Kaohsiung, is Tainan, ancient capital of Formosa. It is an agricultural center for sugar-cane, rice, and peanuts and is important in fish culture. The population is about 250,000. Forts Provintia and Zelandia, constructed by the Dutch, and the temples of Confucius and Koxinga (famous general of the Ming Dynasty, 1368-1644) attract tourists.

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5. According to Ya-chou T'ung-hsin [Asia Foundation Bulletin], August 17, 1955, the seat of the Provincial Government will be moved to Taichung on October 1, 1955. For construction and other reasons this has not been realized as of March 1956.

Kaohsiung

604 712 Kaohsiung is the second largest city and is known for its harbor and large-scale industries. It has a population of 300,000. [439] Because of its warm and rather dry climate, this port handles a major portion of the island's sugar, salt, and cement exports. The naval base of Tsoying is located in the city and the military fort, Fengshan, another important military base, is about six miles north of the city limits.

Makung

712 633 Makung, located in the west of the main island of the Pescadores, is an important naval base and the seat of the Penghu hsien government. The fact that this port lies in the Formosa Strait and between the China Mainland and Taiwan gives it strategic importance.

Annex "A," Subparagraph 1a,
Sociological Background

GENERAL CHARACTER OF SOCIETY

1. Three Types of Social Integration.

182 Among Formosans, as among other peoples, there are three developmental ideal types of social integration correspondings to three developmental ideal types of society:

a) Integration by blood relationship -- tribal society
b) Integration by locality -- folk society
c) Integration by social function, or social need within an area -- national society

182 602 Blood relationship is the most direct and immediate principle of social integration. It is natural that primitive societies in their transition from band to horde to tribal society, are integrated on this principle. The aboriginal society in Formosa belongs to this type. We of course refer to integration by blood relationship and tribal society as an ideal type. Even in primitive societies there are relationships by locality and relationships by function, but blood is the main principle of social integration.

182 When a society increases in numbers and its scope is extended, various kinds of work

182 and functions are differentiated. Then the society becomes too complicated to be integrated by blood relationship. Integration by locality has to take its place. Though the dominant place is taken by locality, however, blood relationship still remains a very important principle of social cohesion. The principal of social integration of the Chinese in Formosa up to the early years of Japanese rule belonged to this type.

As a society continues to develop, some part of it will be urbanized, and handicrafts and commerce will develop. In an urban community, some members begin to make their living by means other than agriculture. Handicrafts and commerce, and later on various kinds of services, become the main concern of its members. People are integrated by their trades into guilds, and guilds are again integrated into some higher unit. This is the new principle of social integration, integration by social function or social need in its various aspects. At the same time handicrafts and commerce promote the exchange of goods, and the self-sufficient, closed village economy gradually evolves into a circulatory money economy. Eventually a national economy may develop. On the political level, a national economy requires standardization and unification, and half-independent localities within an area are generally integrated into an organic whole which becomes an administrative division of a modern state. A modern state with a national economy is a national society or civil society. In it, although social cohesion by blood relationship and locality are still important, social function or social need becomes the dominant principle of integration.

182 As long as the urban community still comprises only a small part of society, there will be no remarkable change. But when the scope of the urban community is extended and industry, commerce, and the field of services develop and become more important than agriculture, then the way of life changes greatly, agrarian society is transformed into industrial society, rural society is transformed into urban society. In Formosa the modern political-economic system was enforced by a colonial ruler, and industrialization and urbanization were begun only after the Japanese occupation.

2. Blood Relationship and Locality as Principles of Social Cohesion.

103 618 Among the place names in Formosa there are not a few called after the surname of a clan. Examples are, Tan-tso (Ch'en-tsu), which means the hamlet of the clan of the Ch'ens, or Lim-tso-liao (Lin-tsu-liao), which means the cottages of the clan of the Lins. Though hitherto not adequately noticed, this is an indication of the existence of the so-called clan-village, and it is a significant stage in social development.

103 Again, as in other countries, there are places named after the original native town of the residents. In one case the local name of a mainland town or city was adopted in Formosa, such as Chaochow (Ch'ao-chou) in southern Taiwan. In other cases, a prefix or suffix was attached to the

103 name of the town of origin. For example, Hsin-pai-kung means new Pai-kung. This case is parallel to that of the Scotch highlanders of Inverness who named their village New Inverness when they emigrated to Georgia. Tongan-ts'o is an example of a place name (Tung-an) with a suffix, which means the hamlet of the people of Tongan, a district on the Mainland. This is also an indication of the character of early settlements of the Chinese in Taiwan. When people moved to a new place, they naturally settled near their kinsmen. If kinsmen were too few, they settled with people from their town. In other words, blood relationship and locality are the principles of social cohesion at a certain stage of social development.

3. Towns of Origin of the Taiwanese.

162 While most Chinese in Formosa came from south China, there is a marked difference in the localities of their towns of origin. According to a survey made by the Japanese colonial government in 1926, of 3,752,000 Formosa Chinese, 83 per cent came from the province of Fukien, 16 per cent came from the province of Kwangtung, and the remaining one per cent were from other provinces. The Fukienese who comprised 83 per cent of the total may be further broken up as follows: 45 per cent from the prefecture of Chuanchow (Ch'üan-chou), 35 per cent from the prefecture of Changchow (Chang-chou), and three per cent from other prefectures. People from Chuanchow (45 per cent), people from Changchow (35 per cent), and Cantonese (the so-called Hakka) (16 per cent) are the three main groups.

162 Emigrants from Chuanchow came earliest, occupied the best places of the western plain, and engaged in commerce, trade and agriculture. The Hakkas came last. When they came, the most fertile soil of the plain was already claimed, so they had to settle in hilly places or mountain foothills. They mostly engaged in agriculture. People from Changchow came between these two in point of time, and also settled between the two in actual geographic regions. They engaged in commerce and agriculture. Hakka and Fukienese have different dialects; and even among the Fukienese, those from the prefecture of Chuanchow and those from the prefecture of Changchow speak with a different accent. The three groups have different patron gods, different associations, and have fought against each other in sanguinary wars. In daily contact, the same native town means higher affinity, higher consciousness of kind. Marriage takes place more frequently among people from the same original native town.

4. The Clan Village.

167 The Chinese seldom leave their ancestral shrines and graves behind them when they go abroad. Pressed by hard living conditions, one male member of the family may leave home for overseas, but the whole family seldom moves to a new place. Many came to Formosa only for a longer or shorter time, and having accumulated sufficient money, went back to their ancestral towns. Even if they settled permanently in the new land, they still kept an intimate contact with their kinsfolk in the old home town. This relationship was broken by the

167 Japanese colonial government, which wanted the Taiwanese to sever their ties with their fatherland.

167 618 The early Chinese settlers came mostly to Formosa with their kinsfolk or town's people. On arriving on the island, the family group settled in a new place, and frequently used its clan name (surname) as the name of the village. This is the clan village. At first the clan village may have had only kinsfolk with the same surname as its members. Later on families related by marriage might join the village. As the people with the same surname consider themselves as belonging to the same clan, and intermarriage within the clan was barred by custom, all in-laws necessarily had a different surname. In-laws were the first heterogeneous element in the homogeneous clan village, but their number was very small. More in-laws might come to live, craftsmen or itinerant merchants might come and stay for a longer or shorter time. As time passed, the proportion of heterogeneous elements increased, but the original clan was still dominant in numbers, and constituted the so-called influential surname of the village. For instance, there was a Lim-tso-liao (means the hamlet of the Lins) near Peikang, Tainan. A survey done in 1930 showed that there were 327 households, consisting of 18 different surnames. Of these households 76.6 per cent were the kinsfolk of the influential clan of the Lins, and the other 17 surnames made up only 23.4 per cent of the total households.[1]

1. Yoshio Tomita, "A Study on the Settlement in Taiwan," Symposium of the Culture of Taiwan, Vol. I, 1943, Taipei, p. 179.

167 Professor Y. Tomita found that even though
618 there were many villages which did not have the clan name as their place name, nevertheless each still retained one influential clan.[2] It is evident that settlement with kinsfolk was fairly common in early times.

5. Villages Formed by the People of the Same Native Town.

167 A survey made by the Japanese administration in 1926 revealed that a great number of villages in Formosa were formed by Chinese immigrants from the same native town on the Mainland. This type of settlement was more general than the clan village.

Both the clan village and the village consisting of the people of the same native town were highly homogeneous. As time passed, heterogeneous elements gradually increased. If the village was located in some place convenient for commerce and transportation, the heterogeneous elements rapidly grew. In the meantime, in response to the current social situation, the village community became the basic unit of social life, whether it derived from a clan village or from a village consisting of the people of the same native town.

6. The Function of the Village.

621 In pre-modern China, governmental administrative activity practically ended at the prefecture level. Most local affairs were left to the local community in the village and town, except

2. Ibid., pp. 176-188. Tomita's study was based on census report of 1930.

621 for tax collection, conscription and cases of capital crime which were handled directly by the prefectural government. In this respect the situation in Formosa under the Manchu regime was the same as that on the Mainland. Within the village, the elder was elected, and approved by the local government. He had some assistants under him. Public affairs and minor crimes were decided and disposed of by the village elders. At times the new settlers drew up rules for the administration of local affairs, and affairs for common interest were discussed and decided upon by the council of householders.

648 Manchu control of Formosa was always
631 tenuous. Uprisings were frequent, and after the first quarter of the 18th century internecine wars
669 occurred incessantly. As the government was not strong enough to keep peace and order, self-defense was left to kinship groups or groups of the people of the same native town. In this situation the influential kinship group was very significant. If it was strong, not only could it defend its kinsmen better, but it could even suppress other groups and enjoy various privileges. A strong clan insured survival and prosperity, and this was the reason why an abundance of male descendants became the ideal of life among the Formosan Chinese. This
[161] may account for the enormous rate of natural growth of Formosa's population which is still going on unabated. On the other hand, for defense against raids of aborigines and pirates, even the influential clan had to get the co-operation of other people. This led to territorial consolidation within the village.

631 As uprisings and clan wars became more
669 frequent and widespread, often nearby villages united to make a league of defense. When one village was raided, a drum or gong would be beaten and the allied neighboring villagers would come to the rescue. To affirm their consolidation, common temples were constructed and common patron gods were worshipped. In rotation each allied village celebrated the yearly festival in honor of the patron god. In each case the allied villagers participated in the festival and feast. The blood tie was represented by the village ancestral temple, the territorial tie was represented by the local patronal god. Usually the worship of local patron gods was more frequent and enthusiastic. Sociologically speaking, it is safe to say that, in spite of the often emphasized Chinese ancestral worship and family spirit, the principle of locality took precedence over the principle of blood relationship during the Manchu period. As far as the mass of Formosan Chinese is concerned, this is true. However, in the case of a smaller number of the upper ruling class, the blood tie was still the dominant principle.

7. Breakdown of Folk Society.

612 Consciousness of the blood tie and locality
178 bond was very strong among the Formosans in former times. When two persons found they had
631 the same surname, they would consider each other as brothers or cousins. When a person introduced himself, he usually added his native

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province. Associations of kinsfolk and associations of the persons of the same native town were organized in cities, and they performed a significant function as agencies for mutual protection and mutual aid. On the China Mainland, at least until recently, and among the overseas Chinese, these associations are still fairly active. So it was in Formosa up until the early years of the Japanese rule. Nowadays, many young Formosans do not even know exactly which prefecture is their native place on the Mainland. They pay little attention to ancestral shrines, and the remaining associations of kinsfolk or associations of the persons of the same native province no longer perform their former political and social functions. No doubt a radical change has taken place in the attitude of the people.

Since the Japanese administration proved able to keep peace and order with its vigorous police control, kin-groups and local associations for self-protection and mutual aid lost their significance. Gradually people became less eager to support these associations, and to the young generation, raised in peace and order, these associations became a thing of the past. With the administrative, industrial and economic improvement, self-sustaining and half-independent villages were integrated into an organic administrative system. Thus the folk society was broken down, and the people adapted themselves to modern political-economic system.

631 The colonial system was abolished after Formosa was restored to China in 1945. The Three Principles of the People advocated by Dr. Sun Yat-sen were adopted as the basis of politics and administration. It has been pointed out that under the Japanese rule certain advantages of modern technology were introduced "without... counterparts in social organization."[3] It is undeniable that organizational lag is a problem. Now, under the encouragement of the government, various organizations and associations are being promoted. Local self-government in particular is being strengthened. No doubt the development of education and the change from a colonial and dependent economy to an autonomous economy are incentives to stimulate active group co-operation. Social changes are inevitable, but time is too short to gauge how much and how fast the new developments will affect the general character of the Formosan society.

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3. G. W. Barclay, Colonial Development and Population in Taiwan, Princeton University Press, 1954, p. 255.

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PART II

HISTORICAL SETTING

I. EARLY RELATIONS WITH MAINLAND CHINA

175 Because they possess no written language, the aboriginal people of Formosa cannot account for their own emergence on the island. Although the island of Formosa must have been known to the Chinese from time immemorial (its mountains are discernible on a clear day and its coast lies less than a day's sail from the Mainland), ancient Chinese chronicles contain few references to the island. Obscurity is heightened by the confusion of Formosa with the Ryu-kyu islands in ancient times. Most historians date the known history of Formosa from 605 when the Chinese Emperor Sui Yang Ti dispatched the first official mission to assert his authority over the island.[1] The direction taken by the voyagers and their description of the life of early inhabitants leave no doubt that Formosa was the island on which the imperial

1. Lien Heng, T'aiwan t'ung-shih [General History of Taiwan], Shanghai Commercial Press, 2nd ed., 1936, Vol. I, p. 2.

175 emissaries landed. Since then Formosa has been the destination of a number of similar expeditions, but none appear to have succeeded in subduing the hostile natives. During the reign of Kublai Khan (1263-1294), the first civil administration under a local official, given the rank of Hsü-chien-ssu [Inspector], was established in the neighboring Pescadores.[2] Despite the fact that Formosa and the Ryu-Kyu islands were discovered to be separate and distinct, the name Ryu-Kyu or Liu-ch'iu was still used for Formosa.[3]

During the Ming Dynasty (1368-1644), Formosa emerged as a retreat for Japanese and Chinese outlaws and malcontents. The Chinese rovers settled in the southwest region around the present city of Tainan; their Japanese counterparts made Keelung their headquarters. With superior armanent these men of the high seas had no difficulty in ousting the aborigines from the coastal areas. Combining piracy with legitimate trade, they grew in strength and

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2. Ibid., p. 6.

3. T'ai-wan Sheng T'ung-chih-kao [Gazeteer of Taiwan Province], Taiwan Sheng wen-hsien wei-yüan-hui [Historical Research Commission of Taiwan Province], Taipei, 1950-52, Premier Series, Book II, p. 8.

175 wealth. They became so formidable that the Ming emperor tried to pacify them by offering them government commissions. One such chief who diverted his activities to government service was Cheng Chih-lung, the father of Cheng Ch'eng-kung (Koxinga), whose regime as ruler of Formosa lasted from 1662 to 1683.

II. UNDER THE DUTCH, 1623-1661

The Portuguese were the pioneers among Europeans exploring Far Eastern waters. Their permanent settlement was established at Macao in 1557. While trading along the coast of China and with Japan, they often sighted the island of Formosa, and despite the fact that they bestowed upon it the western name it bears, they never attempted to establish a settlement there.[4] Toward the end of the sixteenth century, the Dutch began to dispute the monopoly of commerce held by the Portuguese. However, repeated Dutch expeditions failed to dislodge the Portuguese in Macao. Encountering a typhoon during one of those unsuccessful missions, the Dutch fleet ran for shelter to the Pescadores. Thus acquainted with the islands, they later seized them and used them as a base from which

4. James W. Davidson, Formosa, Past and Present, London and New York, Macmillan & Co., 1903, p. 10.

175 to raid the China coast and disrupt commerce between China, Japan, and the Philippines. The interference with regular trade had become so serious by 1624 that the Chinese were compelled to offer a treaty which gave to the Dutch certain commercial privileges with China if they would agree to leave the Pescadores and occupy a trading post on Formosa.[5]

In Formosa, the Dutch acquired a strategic location, from which Spanish commerce between Manila and China and Portuguese commerce between Macao and Japan could be made so precarious by constant attacks that much of it would be thrown into the hands of the Dutch, and thus Dutch trade with China and Japan could continue without interruption.[6] For defense, two forts were constructed, one called Fort Zelandia, at the entrance of Anping harbor, and another further inland, called Fort Provintia.[7]

Fearing the loss of the Chinese market and sensing the potential threat to the Philippines, the Spaniards seized the port of

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5. T'ai-wan Sheng Cheng-fu Hsin-Wen Ch'u [Information Bureau, Taipei Provincial Government of Taiwan], T'ai-wan Hsin-chih [A New Account of Taiwan], Taipei, 1903, p. 3.

6. James W. Davidson, op. cit., p. 13.

7. Fort Zelandia was located within the present confines of Anping, and Fort Provintia in present Tainan.

175 Keelung in northern Formosa in 1626 and later extended their domain to Tamsui. Tamsui, the port nearest the China Mainland, was already inhabited by a large number of Chinese merchants. The Dutch had no wish to tolerate the presence of a rival, but they were involved with England in a bitter struggle. For fifteen years they made no serious attempt to rid themselves of the Spanish.[8] In 1639, part of the Spanish garrison was transferred from northern Formosa to the Philippines to fight rebellious tribesmen in Jolo and Mindanao, and the fort at Tamsui was demolished.[9] Seizing this opportunity, the Dutch captured Northern Formosa after a brief seige in June 1653.

With the entire island under their control, Dutch trade flourished. Although enormous profits were derived from commerce, the Council of the Dutch East Indies Company also tried to extract as much wealth as possible from the island. The Chinese inhabitants, who numbered more than 50,000, were required to pay a head tax which yielded 200,000 guilders annually.[10] Heavy duties were levied on rice

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8. Jose M. Alvarez, Formosa, Geografica E Historicamente Considerada, Barcelona, 1930, Vol. II, p. 80.

9. Ibid., p. 81.

10. Frederick Coyett; Verwaerloosde Formosa, Amsterdam, 1675, p. 15.

175 and sugar, the two staple products of the island. There was also a hunting tax, and a number of other taxes; "even the unfortunate fishermen... [were] obliged to give to the government a portion of their catch."[11] Resentment among the Chinese was high. In 1656 there was a revolt led by Kuo Huai, also known as Fayet, but he was defeated in fourteen days and over 4,000 Chinese were slaughtered.[12] After this incident the Dutch redoubled their oppression. On the least pretext Chinese settlers were thrown into prison and cruelly tortured. This mistreatment led the Chinese to look to their countrymen on the Mainland for deliverance.

As previously mentioned, Cheng Chih-lung, one of the former leaders of the Chinese settlement in Formosa, had entered the service of the Ming emperor. In 1644, Peking was captured by the Manchus, who established the Ch'ing dynasty (1644-1912). Loyal supporters of the Ming Dynasty (1368-1644) attempted to oppose the Manchu invasion in South China, and Cheng was given the command of all loyalist forces. Cheng Chih-lung, having received a lucrative offer from the Manchus, surrendered to the invaders in 1646. He was succeeded by

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11. J. W. Davidson, op. cit., p. 24.
12. Lien Heng, op. cit., vol. i, p. 13.

175 his son, Cheng Ch'eng-kung, whom the Dutch named Koxinga,[13] one of the most extraordinary characters ever to appear in China.[14] The young Cheng was born of a Japanese mother and was educated at the Academy of Learning at Nanking. When his father was taken to Peking by the Ch'ing forces, he dramatically discarded his scholastic robe in the Temple of Confucius and vowed to continue armed opposition. Establishing his headquarters at Amoy and Quemoy, he gathered around him many able Ming supporters. He waged vigorous campaigns against the coastal provinces, retook a number of cities in Fukien, Chekiang, and Kwangtung provinces, and later advanced on Nanking. Although he suffered heavy losses before the wall of the old capital, his military powers were feared by the Manchus.

Unable to subdue Cheng Ch'eng-kung by military means, the Manchus resorted to the

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13. When presented to the court at the age of twenty-two, he so impressed the Emperor that he was given the imperial family name, a signal honor. Ever since, the young Cheng has been hailed as Kuo-hsing-yeh or Lord of the Imperial Surname, from which the Dutch derived the name Koxinga and the Spanish Cotsen.

14. Davidson, op. cit., p. 31.

175 "scorched earth" policy. By an imperial mandate, all the people from Kwangtung to Shantung who lived within ten or fifteen miles of the sea were ordered to demolish their homes and to move inland. Along the coast forts were erected every three miles, and each was garrisoned by one hundred men. No unauthorized person was allowed to pass into the restricted zone, so that Cheng's supplies would be completely cut off.[15] Deprived of provisions, Cheng Ch'eng-kung was compelled to look to other quarters for maintenance. The fertile island of Formosa, which his father once controlled, came to the attention of Cheng Ch'eng-kung. Preparations were made to establish a foothold across the strait.

The concentration of military power in Amoy aroused the apprehension of the Dutch authorities on Formosa. In 1660 the Dutch governor, Frederick Coyett, appealed to the Dutch East Indies Company at Batavia for help. Twelve ships were dispatched to Formosa, but the commander, Admiral Jan Van der Laan, had no respect for the military power of the Chinese. Leaving four of his ships in Formosa, he returned with the remainder of his fleet to Batavia and accused Governor Coyett of

15. Lien Heng, op. cit., p. 23.

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175 cowardice.[16] On April 24, 1661, twenty days after the departure of the Dutch fleet, Cheng Ch'eng-kung appeared in the Pescadores with 25,000 of his best troops and entered Anping harbor five days later.[17] All communications between the forts of Zelandia and Provintia were immediately intercepted. After some ineffectual resistance, Fort Provintia and the deputy-governor who commanded it surrendered on May 4, 1661, and Fort Zelandia on February 1, 1662.

III. CHENG CH'ENG-KUNG'S KINGDOM 1662-1683

Leaving his son Cheng Ching in control of Amoy and vicinity, Cheng Ch'eng-kung to whom the last Ming emperor had given the title of the Prince of Yen Ping, moved his court to Formosa. The village of Sakkam where Fort Provintia was located was renamed Sheng-tien-fu[18] and made the capital of the island. Chinese laws, customs, and forms of government were introduced.[19] The pledge to regain the lost territory of the old dynasty was renewed, and faithful Ming adherents were placed in charge of the administrative departments.

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16. Davidson, op. cit., p. 35.

17. T'ai-wan Sheng T'ung-chih-kao, op. cit., Vol. IX, 1, pp. 174-204.

18. Present-day Tainan.

19. All traces of the Dutch occupation have been obliterated. The Dutch had taught the

[see following page]

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175 To acquaint himself with the conditions of his new domain, Cheng Ch'eng-kung conducted an inspection tour of northern Formosa. Having early suffered privation of food, Cheng devoted his first attention to the development of agriculture. Plots of land were allotted to his soldiers and liberal treatment was accorded to migrants from the Mainland, who were given land to cultivate exempt from taxation for three years. In return, they were obliged to undergo military training and would be expected to join the army should the necessity arise.[20] New schools, new roads, and markets were built, and prosperous settlements sprang up along the coast.

Encouraged by his triumph in Formosa, Cheng Ch'eng-kung aspired to add the Philippines to his kingdom. He asked an Italian missionary, Vittorio Riccio, to take a letter to Manila, demanding submission. When the ultimatum was delivered, the Spaniards

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19. [continued] natives to write their own language in Roman characters. Some land contracts written in Romanized native languages, which are on exhibit in the Taipei public museum, form the only Dutch relics. No Dutch words exist in the savage dialects. J. W. Davidson, op. cit., p. 48.

20. Lien Heng, op. cit. Vol. 1, p. 22.

175 massacred very nearly all of the Chinese in the Philippines.[21] Only a handful escaped in small boats. Cheng Ch'eng-kung was infuriated by their reports and immediately launched preparations for an expedition of vengeance. Another landmark in history might have been created[22] had not death abruptly put an end to his ambition.

Cheng Ch'eng-kung, who died at the age of thirty-nine, was a strict disciplinarian. For some misconduct he is said to have ordered the execution of his own son, whose life was saved only by his father's sudden death.[23] Cheng Ching, the son, strengthened defenses of the island, established an effective administration, revived friendly relations with foreign powers, and attempted to invade the Mainland. At last, after a number of battles in the three coastal provinces of Fukien,

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21. "No less than 24,000 Chinese were killed in cold blood." Japan in the Beginning of the 20th Century, the Japanese government, Tokyo, 1904, p. 779.

22. The Spanish forces in Manila were not superior in strength to those the Dutch had possessed in Formosa, and it is not unlikely that Koxinga would have had like success, had he landed his party in the Philippines. Davidson, op. cit., p. 52.

23. Ibid.

175 Chekiang, and Kwangtung, the Manchus, aided by the Dutch fleet, succeeded in ousting Cheng Ching from Amoy in 1680. He died in Formosa in 1681. Taking advantage of a family quarrel over the succession, the Manchus captured the Pescadores in July 1683. Cheng Ching's son surrendered in September.

IV. AN INTEGRAL PART OF THE CHINESE EMPIRE 1683-1895

In 1683, when the whole island came under Manchu rule, it was made part of Fukien Province. The capital was renamed Taiwanfu, and the island, Taiwan.[24] For administrative purposes the island was divided into three hsien (districts), namely, Taiwan, Fengshan and Chulo, each under a civil magistrate. The magistrates were under the authority of the prefect of Taiwanfu, who in turn was subordinate to the Taotai, or Imperial Commissioner, at Amoy and the Governor of Fukien Province. A garrison of 8,000 men, later increased to 14,000, was stationed in Formosa and the Pescadores. In view of the independent character of the populace and the stubborn opposition offered to the Manchu regime, the

24. Under the Dutch, the name of Taiwan applied to the region surrounding the bay. The island was always referred to by most Dutch writers as Formosa.

175 Ch'ing emperors refrained from introducing drastic government measures toward the reorganization or the development of the island. Nevertheless, there were a number of rebellions during the two hundred and twelve years of Manchu rule. Some had the objective of the restoration of the Ming Dynasty and others were uprisings against misrule and excessive taxation.

V. POPULAR REBELLIONS

The most notable insurrections against the authorities occurred in 1722 and 1787. The leader of one such insurrection was Chu I-kuei, who was of humble origin and made his living by raising ducks. Claiming to be a descendant of the dethroned Ming dynasty and rallying around him a number of Ming loyalists, he rose in 1722 against the Manchu magistrate at Fengshan who had executed two hundred persons for violating the new law instituted to preserve the camphor trees. The revolt soon spread to other parts of the island. In three months the rebels captured both Taiwanfu and Chulo. The government officers fled to Amoy. When Chu I-kuei was crowned Chung-hsing Wang, or Restoration King, the Manchu court was thoroughly alarmed. A large detachment,

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175 dispatched from Amoy and Namoy to Formosa to quench the rebellion, took two years to restore complete order.[25]

Another important disturbance was the insurrection engineered by a secret society called T'ien-ti Hui, established to overthrow the Manchu rule in China. It is said that it was originally organized by Cheng Ch'eng-kung himself.[26] Lin Shuang-wen was the head of T'ien-ti Hui in northern Formosa and Chuang Ta-t'ien was in charge of the same organization in the southern part of the island.

In 1786, the magistrate at Changhua, alarmed at the growing influence of the society, arrested a few of its members and put them to death. Protesting against their prosecution, Lin Shuang-wen raised the standard of rebellion and killed the local governor. In due course, Chulo and Hsiuchu were captured by the rebels. Members of the society in southern Formosa, led by Chuang Ta-t'ien, drove out the government forces from Fengshan. With the exception of Taiwanfu, the whole island fell under the control of the rebels. Four thousand

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25. T'ai-wan Sheng T'ung-chi Kao, op. cit., p. 80.

26. Hsiao I-shan, "Tien-ti Hui Kao" [Study of Tienti Hui] in T'ai-wan Wen-hua Lun-chi [Collection of essays on the Culture of Formosa], Taipei, 1954, pp. 215-24.

175 troops from Kwangtung, three thousand from Chekiang, and one thousand Manchu regulars were rushed to relieve the seige on Taiwanfu, but were unable to stop the rebellion. The number of rebels gradually swelled to over one hundred thousand.[27] Emperor Ch'ien Lung (1736-1796), realizing the seriousness of the situation, called for reinforcements from the provinces of Szechwan, Hunan, Kwangtung, and Kweichow and placed these troops under the command of his ablest Manchu general, Fu-k'ang-an. After nine months of battling, the rebels were driven from the settled districts and the leaders were captured and put to death.[28]

Besides the numerous political uprisings, there were also feuds between emigrants from Fukien, the Haklos, and those from Kwangtung, the Hakkas. Among the settlers from Fukien Province there were rivalries between those who came from Ch'üanchou and those who came from Chang-chou districts. As the Chinese colonists spread toward the interior of the island, they also came into conflict with the aborigines, with attendant murders and reprisals. In this connection, mention should

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27. T'ai-wan Sheng T'ung-chi Kao, op. cit., p. 81.

28. In memory of the victory of the Imperial forces, the city Chulo was renamed Chia-i, meaning "commendable loyalty."

175 be made of th saintly figure of Wu Feng. A native of Chiayi, Wu Feng was a learned and respected man and was versed in the aboriginal languages. He went to live with the tribesmen as official interpreter and tried to persuade them to discard the barbarous practice of headhunting. Failing in his efforts and animated by a spirit of sacrifice, We Feng, at the age of 71, voluntarily made himself a victim. The aborigines were deeply distrubed when they discovered that they had killed their beloved friend, and they henceforth gave up headhunting. In commemoration of his martyrdom, which occurred on August 10, 1769, Wu Feng was deified as the god of Mount Ali. Temples were erected to perpetuate his memory, and he is revered and honored by the people on Formosa today.

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B. CONTACT WITH THE OUTSIDE WORLD

177 In spite of governmental misrule and frequent disturbance, the natural wealth of Formosa attracted a steady migration from the Mainland. As a result of the energetic efforts of the hard-working new settlers, agriculture, commerce, and industry made remarkable developments on the island. About the middle of the eighteenth century, according to one authority, "nearly two millions of Chinese in Formosa engaged in the cultivation of sugar and rice, and about four hundred vessels were plying continually between the island and the Mainland Chinese coast.... A great part of the sugar consumed in the northern provinces of China was produced in the island, and the rice upon which millions of people in Fokien (Fukien) at that time depended almost entirely for their support, was derived from the same source."[29] Camphor was also a principal article of export and was declared a government

29. Davidson, op. cit., p. 66.

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1777 monopoly in 1720. The commercial potentialities began to attract the attention of Western nations searching for new fields of commercial expansion and colonial achievement.

Among the foreigners who came to Formosa during the eighteenth century was an Hungarian adventurer, Count Maurice de Benyowsky.[30] Having escaped from a prison camp in eastern Siberia, the count and his followers landed on the eastern shore of Formosa in August 1771. Hoping to found a colony for some European power willing to extend him support at favorable terms, he killed a thousand or more aborigines who opposed his exploration. He was met inland by a party of natives headed by a Spaniard, Don Hiernimo, a fugitive from Manila. Don Hiernimo introduced the count to a native chief, Huapo, with whom he formed an alliance to defeat an enemy tribe. For his assistance, Huapo presented Benyowsky with many precious gifts. The count embarked for Europe, taking a native along to serve as his guide for his return trip. But

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30. As described in Maurice de Benyowsky, Memoirs and Travels in Siberia, Kamtschotka, Japan, the Liukiu Islands and Formosa, 2 vols., London, 1790. Since no other record of his visit exists, there is no way to verify the accuracy of his statements.

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177 his scheme to found a colony on Formosa was of no great interest to European statesmen, who were not convinced the island was worth exploitation.

During the Opium War of 1840-42, the British on successive occasions bombarded Keelung and Taichung. Two British ships, Nerbudda and Ann, were wrecked on the coast, and the crews (261 men in all) were decapitated by the Chinese.[31] At the conclusion of another war with the British and French in 1860, four seaports of Formosa -- Tamsui, Keelung, Tainan, and Kaohsiung -- were open for trade. This began an era of commercial rivalry among the foreign powers. Camphor, sugar, rice, and gold were the principal exports. Surveys for the exploration of coal fields in northern Formosa were undertaken, and tea plantations were introduced from An-chi in Fukien. In 1868-70, the annual export of camphor amounted to 14,240 piculs (1,875,000 lbs.), and in 1870 sugar export was 74,000,000 lbs., increasing to 141,500,000 lbs.[32] in 1880.

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31. Yen Hsing Taiwan Chien Sheng Ch'ien-hou chih Kuo chi Kuan-hsi [Formosa's International Relations preceding and Following the Elevation to Provincial Status]. T'ai-wan Wen-hua Lun-chi [Collection of essays on the Culture of Formosa], Taipei, p. 171.

32. Davidson, op. cit., pp. 405, 445-46.

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1777 The increase of foreign shipping also led to more frequent shipwrecks in the treacherous waters of the Formosa Strait. When a wreck occurred near the coast inhabited by the aborigines, the castaways often were captured and traded as slaves. Among the ill-fated vessels, several were American. The local Chinese authorities were unable to devise effective measures to prevent the maltreatment of the shipwrecked people. In March 1867 an American ship, the Rover, sank in a severe gale near the southeatern shore of Formosa. The captain, his wife, and the crew landed in a territory occupied by the Koalut tribe and were brutally murdered. The American government sent two ships, the Hartford and the Wyoming, and the combined crews landed and advanced inland. But the intense heat, the hostile jungle, and the fierce attacks of the natives soon forced them to withdraw. Seeing the futility of obtaining redress by military means, the American Consul at Amoy, General C. W. Le Gendre, ventured into the savage territory and conducted negotiations with the tribesmen. He succeeded in concluding a treaty of peace, according to which the headhunters promised from that time on to give shelter and assistance

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177 to castaways found on their shores.[33]

C. JAPANESE EXPEDITION OF 1874

The Japanese conducted a similar expedition in 1874, but with other motives. In 1871, fifty-four members of the crew of a Ryukyu fishing vessel had been murdered by the Botan tribe in southern Formosa. The Chinese government in Peking disclaimed any responsibility, saying that the tribesmen were not under their jurisdiction. The Japanese, who had declared a protectorate over the Kyu-kyus in 1872, saw this as opportunity to further their aggressive designs. Count Okuma Shigenobu of the Imperial Council carefully prepared a scheme for the eventual seizure of Formosa. In January 1874, a special Formosan department was installed in the Tokyo government with Okuma as the head.

Lieutenant General Saigo Yorimichi was appointed commander-in-chief of the military expedition. Advance agents, disguised as merchants, surveyed the entire island and collected military intelligence. A large contingent of Japanese troops landed in

33. Le Gendre, Report on Amoy and the Island of Formosa, Washington, 1891, and "First Visit to the Interior of Formosa," U.S. Diplomatic Correspondence for 1868.

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177 Liangk'ou (Liang-kiau) Bay on May 9, 1874, crushing the Botan tribesmen at Shih-men (the Stone Gate). The savages resisted fiercely, but they could not withstand the heavy artillery fire of the Japanese. The losses on both sides were heavy. During the campaign many Japanese soldiers also perished from disease. Unwilling to risk further penetration into the mountain fastness, the Japanese proceeded with their plan for a permanent encampment in Southern Formosa. The anxiety of the Chinese was aroused. Two Chinese warships arrived in June, and 25,000 troops under the command of the governor of Fukien were used to reinforce the garrison at Taiwanfu. Rumors spread of imminent war between China and Japan. Foreign powers were prepared to intervene. Count Okuma was sent by the Japanese emperor to negotiate a settlement with the Chinese government, and he demanded an indemnity of three million taels (approximately two million gold dollars) to cover the expenses of the expedition. Agreement between the two governments was finally reached on October 31 and the amount of the indemnity was fixed at 500,000 taels.[34]

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34. Yen Hsing, op. cit., p. 177.

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D. THE FRENCH BLOCKADE OF 1884

177 The Japanese campaign awakened Chinese authorities to the urgent need for a thorough reorganization of Formosa's administration. It was decided that the island should be elevated to provincial status, new fortifications constructed along the coast and linked by telegraph lines and highways, and modern machinery utilized in coal fields and sulphur pits. Sulphur was declared a government monopoly in 1877.

Before the new measures could be introduced, Formosa was involved in another international incident. War broke out over Annan (Indo-China) between China and France. At the end of the war, under the pretense of occupying Formosa as material security for the payment of indemnity, the French attempted to seize the island. After heavy bombardments, 3,000 French marines landed at Keelung. The Chinese fortified themselves behind earthworks on hills surrounding the port. Unable to make any appreciable advance toward Taipei, the Frencl were driven back to their boats. A blackade of the island, unusual since war had not been declared, was subsequently instituted by the French and continued through the winter. In June 1885, a treaty was signed and the French agreed to lift the blockade and withdraw from Keelung.

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IX. PROGRESSIVE POLICY UNDER LIU MING-CH'UAN

175 The success of the Chinese defense in warding off the French attack[35] owed much to the leadership of the new governor, Liu Ming-ch'uan. Liu, a good soldier and an able administrator, had been transferred from Fukien Province, arriving at his new post only a few days before the commencement of hostilities. In 1885 Formosa was formally made an independent province and divided into four fu (prefectures), and eleven hsien (districts). The prefectures were: Taiwan, Taipei, Tainan, and Taitung; the districts were: Changhua, Taiwan (Taichung), Miaoli, Yunlin, Tamsui, Yilan, Hsinchu, Anping, Chiayi, Fengshan, and Hengchun.

Taichung was chosen as the future capital of the province and named Taiwanfu, while the former Taiwanfu, capital of the island since the Dutch period, was renamed Tainanfu.

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35. "The campaign was unique in that the foreign forces were not always the victors, and that France, one of the greatest military powers in the world, was forced to admit that the actual results of the campaign frequently failed to correspond with the carefully laid plans, that the anticipated victories, in at least two instances, were victories of China -- and that altogether, from a military standpoint, the war was a failure." Davidson, op. cit., p. 220.

45;Stanford U, S-4, 5 1956 AD1 Formosa
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176 Pending the construction of the new capital city, Taipei was made the temporary capital, and so it has remained to the present day.

Governor Liu applied himself to the strengthening of the island defense and the improvement of communications. Keelung was developed into a modern harbor. A railway linking Keelung with Taipei, later extended to Hsinchu, was constructed. Telegraph lines joined Taipei with Tainan and Kaohsiung, uniting the north and south. Cables were laid between Anping and the Pescadores and between Tamsui and Foochow, joining Formosa to the world's telegraphic system. Work on several highways was begun, and streets were paved inside the city wall of Taipei. To introduce jinrickshas, the government ran them at its own expense for some time and then turned them over to the coolies.[36] The government also introduced modern street lighting.

Reconstruction work imposed a heavy financial burden on the newly instituted province. Export duty on sugar, in addition to that on tea and camphor, was levied. New tax on riceland was collected. Camphor was again declared

36. Davidson, op. cit., p. 280.

176 a government monopoly in 1886. Opposition both from the people and foreign traders became very marked. In June 1891, Liu Ming-ch'uan retired. His successor, trying by extensive economy to win popularity among the islanders, made no effort to carry out Liu's progressive program. Camphor monopoly was again abolished and coal mines which had been operated by the government were closed.

War broke out between China and Japan over Korea in July 1894. China was defeated, and forced to accept the Treaty of Shimonoseki in April 1895. The treaty provided for the cession to Japan of Formosa and the Pescadores, and was bitterly resented by local Chinese. A deputation of prominent residents was sent to Peking, presenting protests to the Emperor. When their protests proved of no avail, the Formosans declared the island an independent Republic. A local army of 50,000 men was raised to resist Japanese occupation. Dispatches were sent to foreign powers for recognition and support.[37] Because no outside aid was forthcoming, the new republic offered little resistance when the Japanese landed at San-tiao-chiao in May 1895 and advanced from Keelung to Taipei. T'ang Chin-sung, the president of the

37. Ibid.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Formosan republic, escaped to the Mainland. General Liu Yung-fu took up his work in southern Formosa and continued the organized opposition for another five months.

V. HALF CENTURY OF JAPANESE OCCUPATION (1896-1945)

Although the Japanese conquest of the island was completed early in 1896, underground movements to resist subjection to Japanese rule remained strong among the populace. Armed uprisings were frequent. "As fast as one band was broken up, new bands arose in other places, and both soldiers and police were wearied out without having apparently accomplished anything. The fact that occasionally peaceable inhabitants were mistaken for brigands and treated accordingly by punitive expeditions, finally led some of these people to turn brigands. Thus the end seemed as far off as ever."[38] During the first twenty years of Japanese occupation, 1895-1915, there were at least fourteen important revolts, all ruthlessly suppressed. As a result of indiscriminate slaughter following each rebellion, it has been

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38. Yosaburo Takekoshi, Japanese Rule in Formosa, trans. by George Braithwaite, London, Longmans & Co., 1907, p. 4.

175 estimated that 650,000 Formosan Chinese lost their lives in the half century of Japanese rule.[39]

No less ruthless was the Japanese persecution of the aborigines. Since 1910 the Japanese have launched many campaigns to quash revolts and to drive away tribesmen from regions which the Japanese timber companies desired to exploit. However, despite their ruthless tactics,[40] the Japanese were unable to achieve their objective with complete success. As observed by a foreign missionary, "These courageous and liberty-loving people were the only group in the island who were not conquered by the Japanese arms."[41]

In addition to the revolutionary movement, since 1918 there has been agitation, mainly among students, for representative government and for the modification of harsh laws. Petitions for political reforms were presented to the Japanese Diet, but the liberal movement was soon suppressed by the Japanese police. Leaders were thrown into prison, and new restrictive measures were proclaimed.

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39. Li Chi-fei, Taiwan, Shanghai Commercial Press, 4th printing, 1947, pp. 110-11.

40. J. W. Ballatine, Formosa, A Problem for United States Foreign Policy, Washington, D.C. The Brookings Institution 1952, footnote, p. 32.

41. James Dickson, missionary in Formosa, in his pamphlet, Stranger than Fiction, quoted by Han Lih-wu, Taiwan Today, Taipei, Hwa Kuo Publishing Co., 1952, rev. ed., p. 41.

175 Although Japan did succeed in establishing order, the people had never been allowed any political freedom. In 1941, the Institute of Pacific Relations made a study of how the Chinese population lived under forty-five years of Japanese rule. The investigator, Mr. Andrew J. Grajdanzev, reported in 1942 in his book, Formosa Today:

> "In the Western world British policy in India evoked much criticism. Yet conditions in British India cannot even be compared with those in Formosa. The Indian people can organize; they use their own languages in middle schools and even in the universities; they publish their own newspapers and books in their own languages; they have their own political groups and parties, their voice and their criticisms are heard in the political assemblies; certain important industries of India are now in the hands of Indians. However limited all these rights and opportunities to use them may be in India, they are infinitely greater than those of the people of Formosa."[42]

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42. Andrew J. Grajdanzev, Formosa Today, New York, Institute of Pacific Relations, 1942, vi.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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A. ECONOMIC DEVELOPMENT UNDER THE JAPANESE

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Japan's exploitation of Formosa falls into two periods: (1) from 1895 to 1936; (2) from 1936 to 1945. During the first period, Formosa's economy was geared to the demands of the Japanese homeland. The island was developed to export sugar, rice, salt, and other primary products in exchange for Japanese manufactured goods and fertilizers. Japan took between 90-95 per cent of the exports and supplied 85-90 per cent of the island's imports.[43] To facilitate transportation, a network of excellent railroads and highways was constructed, and the harbors, especially those at Keelung and Kaohsiung, were modernized. Industries were owned and operated either by the government or by large Japanese corporations, with very little participation by the local people. Chinese workers were paid wages 50 per cent lower than those paid Japanese workers on a similar job.[44]

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43. Taiwan, A geographical Appreciation, compiled by the Dept. of Mining and Technical Survey, the Canadian Government, Ottawa, 1952, p. 15.

44. Grajdanzev, op. cit., p. 116.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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During the second period Formosa became the base for Japan's southward expansion. In 1936, Admiral Kobahashi was made the seventeenth Governor-General of Formosa. His appointment marked the return of military government.[45] In his first public speech, the Governor-General laid down a new two-point program for Formosa: cultural assimilation and industrial development.[46] An intensive campaign was launched to assimilate Formosan Chinese, who were encouraged to discard their own customs, religion, and language. The Japanese language was used in the schools. Chinese language newspapers were prohibited, and even banking had to be conducted in Japanese. Simultaneously the industrialization of the island was accelerated; mining and industrial enterprises were encouraged, and commercial crops such as cotton and ramie were raised. Machinery and raw materials were imported from Japan and other parts of the Japanese Empire in order to make the island self-sufficient industrially and to meet the demands of Japanese military efforts.

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45. The first seven governors-general in the period 1895-1919 were either admirals or generals. From 1919 to 1936 the governors-general were chosen from civilian officials. From 1936 on they were admirals.

46. Hideo Naitor, Taiwan- A Unique Colonial Record, 1937-38 Ed., Tokyo, Kokusai Nippon Kyokai, 1938, Ch. VI, pp. 53-54.

45;Stanford U, S-4, 5 1956 AD1 Formosa
AD1

B. FORMOSA'S ROLE IN THE SECOND WORLD WAR

175 With a view to the maximum utilization of the manpower in Formosa, the Japanese administration took a census of Formosa's population every five years, beginning in 1920. [162] The population totalled 5,872,084 in 1950; the number of males between the ages of 19 and 40 was estimated to be over 928,000.[47] The invasion of China by Japan was resumed in 1937, and war in the Pacific broke out in 1941. Despite their efforts at assimilation, the Japanese in Formosa exercised great caution in mobilizing the vast reservoir of manpower available in Formosa. Until 1942, no Formosan was allowed to own or harbor firearms of any kind. In June 1942, the Japanese imperial government called for voluntary military service. Japanese sources[48] claimed that hundreds of thousands of Formosan Chinese had registered, but because the Japanese would not trust the latter with arms, only a few hundred were accepted for training. It was not until February 1944 that the Japanese granted the first army commission to a Formosan Chinese, who was a sub-lieutenant in the Army medical service.

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47. Chen Cheng-hsiang, "Taiwan Chih Jen-kou" ["The Population of Taiwan"], Taiwan Yin-hang Chi Kan [Bank of Taiwan Quarterly], Vol. 4, No. 1, March 1951, p. 47-49.

48. Tokyo, Domei English broadcast, Jan. 11, 1943.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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175 Except for a small contingent of aborigines who took part in jungle warfare in Southeast Asia, the Formosans were used principally in non-combat service. They worked with the labor corps, carrying supplies and serving the army as auxiliaries. On the Chinese Mainland, the Japanese did employ Formosan Chinese extensively in espionage work. Many of the latter took advantage of this opportunity to work as double-agents to extort money and to engage in other unscrupulous activities. "This led to bad blood between the islanders and the rigorousness with which the islanders were treated after the Chinese reoccupied the island in 1945."[49]

Formosa was of value to Japan in World War II because of its strategic position. It formed the training ground for the army and a base for trans-shipment to the war theaters in South China and Southeast Asia. Many new airfields were constructed from which surprise attacks on Manila and Hong Kong were launched. The naval base at Makung in the Pescadores was transferred to Kaohsiung, where the harbor had undergone extensive development. In 1943, when the war was growing in intensity, there was a plan to incorporate the Formosan

49. Ballantine, op. cit., pp. 45-46.

175 Chinese and the tribesmen into a volunteer army. In 1944 the island of Formosa became the target of American planes. Although it was bypassed by American land forces, the damage inflicted by aerial bombings was so extensive that only 20 per cent of Formosa's industrial plants are said to have been in operation[50] when the Chinese assumed control after Japan's surrender in September 1945.

VI. CHINESE REOCCUPATION, 1945

On December 1, 1943, after the Cairo Conference, Roosevelt, Churchill, and President Chiang issued a declaration, subsequently accepted by Stalin, that "all the territory of Japan stolen from the Chinese, such as Manchuria,

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50. Of 42 sugar refineries, "only eight narrowly escaped from bombings by American Air Forces." "At the time of Japanese surrender in August 1945, generating capacity of the western power system was reduced to 32,000 kw out of total installed capacity of 308,000 kw as a result of allied air bombing." Industrial Enterprises of National Resources Commission in Taiwan, Nat'l Resources Comm., Taipei, 1951, Part I, chap. 6, p. 1 and cahp. 7, p. 2.

175 Formosa, and the Pescadores, shall be returned to the Republic of China." Accordingly, after the surrender of the Japanese in 1945, Formosa and the Pescadores were restored to China.

The first postwar Chinese governor of Formosa was General Chen Yi. The Nationalist Government was at that time engaged in a life-and-death struggle with the Communists. The resources of Formosa were diverted to carry on the warfare on the Mainland. As a result, little was done to encourage the rehabilitation work so badly needed in Formosa. The Formosan Chinese, who had rejoiced at reunion with their mother country, were disappointed because they had been denied the opportunity to participate in the control of confiscated Japanese enterprises. Friction arose between the Mainlanders and the islanders, culminating in a riot on February 28, 1947, in which many Mainlanders and native Formosans were killed.[51] Chen Yi was replaced by Dr. Wei Tao-ming, former Chinese Ambassador to the United States. When the Chinese Mainland war overrun by the Communists in 1949, the central government of the Republic of China moved to Formosa. General Chen Cheng,

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51. George Kerr, "Formosa's Return to China," Far Eastern Survey, Oct. 15, 1947, pp. 205-08; "Formosa: the March Massacre," Far Eastern Survey, Nov. 5, pp. 224-26.

175 Chiang Kai-shek's chief lieutenant, was appointed governor. The influx of a flood of refugees and retreating troops created many difficulties. Chen's most notable achievement during his brief tenure of office was the introduction of agrarian reforms, which limited the rental on farm land to 37 1/2 per cent, as an initial step toward the implementation of the "land-to-the-tiller" policy. Chen Cheng was elevated to the presidency of the Executive Yuan (prime minister) in December 1949. He was succeeded as governor by Dr. K. C. Wu, former mayor of Shanghai.

Under the Japanese, Formosa was divided into five provinces (Japanese, Chu) which were subdivided into fifty-one counties (Japanese, Gun) and five incorporated cities (Japanese, Shi) and three districts (Japanese, Cho). The districts administered undeveloped regions. Administrative power was invested in an autocratic governor-general directly appointed by the emperor of Japan. There was an advisory council of forty members appointed by the governor-general, who was its chairman. All high officials, civil or military, were Japanese and were appointed and dismissed at the recommendation of the governor-general. The people of Taiwan had no representative organization and no voice in the legislation or administration of the island.

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Following the revolt of February 28, 1947, the new Chinese provincial administration accepted seven Formosan Chinese as commissioners in a total of fifteen. When K. C. Wu became governor, another effort was made to broaden the participation of local Chinese in government. The provincial commission was enlarged to include seventeen Formosans in a total of twenty-three. Greater number of local people were employed in the civil service. By June 1950, of the total of 81,006 persons employed by the provincial government, Formosans accounted for 53,024.[52] On August 16, 1950 the administrative areas were revised from eight hsien and nine municipalities directly under the province to sixteen hsien and five municipalities. Steps were immediately taken to promote self government in the province. The popular election of the magistrates of the sixteen hsien, the mayors of the five municipalities, the members of the hsien and municipal councils, and the members of the Provincial council was held for the first time in July 1950 and completed in March 1951. A new election took place in 1953-54. Since that time the election law has been modified so that future elections will take place on the same day in all sections of Formosa.

52. Fred W. Riggs, Formosa under Chinese Nationalist Rule, New York, The Macmillan Company, 1952, p. 49.

same day in all sections of Formosa.

K. C. Wu resigned as governor in 1953 and was replaced by O. K. Yui. The term of Generalissimo Chiang as first president of the Republic of China under China's new constitution expired in May 1954. A second session of the First National Assembly was convened in Taipei in February 1954. Chiang was re-elected and Premier Chen Cheng was elected vice-president. Governor O. K. Yui succeeded Chen as president of the Executive Yuan. Yen Chia-kan was appointed governor and he is still in office today. Yen has served for many years on the Council for United States Aid (CUSA) of the Executive Yuan. It is expected that there will be closer Sino-American co-operation during his administration.

Annex "A," Subparagraph 1c,
Sociological Background

POPULATION OF FORMOSA

I. INTRODUCTION

161 The population of Formosa [Taiwan] in 1955 is estimated[1] at about 10,400,000, including about 7,500,000 Formosa-born Chinese (hereafter Formosan Chinese, as distinguished from Mainland Chinese), about 2,000,000 Chinese civilians from the Mainland, 700,000 military personnel and troops, and about 200,000 non-Chinese tribes of aborigines. The latter are composed of seven linguistically distinct tribes believed to have come originally from Malaya, the Philippines, New Guinea, and Kwangtung Province. The Formosan Chinese are descendants of Mainland Chinese who migrated from Fukien and Kwangtung provinces chiefly during the eighteenth and nineteenth centuries.

II. ETHNIC GROUPS

162 563 The population of Formosa may be divided into two distinct ethnic groups: the aborigines and the Chinese.

A. Aborigines

Prior to 1600, Formosa was sparsely populated by so-called aborigines, referred to by the Japanese as "savages" and by the Chinese government as "mountain tribes" or "brethren of the mountains," whose habitations ranged

[Footnote 1 next page.]

45:Stanford U. S-4, 5 AD 1 Formosa
~~AD 1~~ AD1

162 563 over most of the island. However, an increasing number of Chinese immigrants, with their superior civilization, pushed these natives into mountainous areas and thereafter occupied the fertile lowlands of the island.

563 105 According to language, custom, and physical characteristics, the aborigines are commonly divided into seven tribes: Taiyal, Saiset, Bunun, Ami, Paiwan, Tsou, and Yami. Although physical characteristics may vary, they are generally brave warriors and can run long distance or climb steep mountains and cross swift streams with skill and speed. Their short stature, light-brown skin, and straight black hair, as well as their language and customs, suggest a close resemblance to the Malays of the South Seas. They are independent in nature, passionate in temperament, and show respect for the aged and love for the young. They live in villages and build huts made of wood and stones. Some 70,000 aborigines are called Pepohuan, meaning assimilated savages. Their customs and activities are similar to those of the Formosan Chinese who had assimilated them in the lowlands. Tribesmen who were not able to bear the economic and cultural pressures exerted upon them fled to the mountainous interior.

1. This estimate is the result of reconciling various estimates offered by writers on Formosa's population. The analyses in this chapter, however, will be based on the total registered population because the household registry system provides the only statistics available on the population. The total registered population in 1953 was 8,438,016.

000 upon them fled to the mountainous interior.

B. Formosan Chinese

161 The Formosan Chinese are often called "Taiwanese," a term which refers to those who were born in Formosa prior to 1945. When the surviving general of the Ming Dynasty, Cheng Ch'eng-kung, who is known to the Western world as Koxinga, took refuge in Formosa in 1662, the Chinese population was estimated at 100,000. During the eighteenth and nineteenth centuries, immigrants from Fukien and Kwangtung provinces increased the population to more than 2,600,000 by 1898, according to figures published at that time by the Japanese government on the island. In 1953, the population was estimated at about 7,500,000. There are about five Fukienese descendants to every one of Cantonese descent. The Fukienese are thought to be clever and gentle and the Cantonese are thought to be aggressive and industrious.

C. Mainland Chinese

The influx of Mainlanders to the island following the evacuation of the Central Government to Taipei in 1949 brought the Mainland Chinese population on Formosa to about 2,000,000[2]

2. Mutual Security Agency Mission to China, Economic Development on Formosa, 1951-52, Taipei, 1953, p. 9.

161 They have come from various provinces on the Mainland and are composed of government employees, professionals, and technical personnel.

III. PATTERN OF SETTLEMENT AND DENSITY

311 In the early days of settlement, Chinese immigrants first cultivated the fertile land and plains of the coastal areas from which the aborigines had been driven. The inhospitable and inaccessible nature of the mountains protected the aborigines from continued exploitation but also served to contain them.

About ninety per cent of the total population now occupies the coastal lowlands; the remainder, among them the aborigines, is scattered over the central mountain area which comprises two-thirds of the island's total area. The people from Kwangtung, arriving later than the people from Fukien, settled in the foothills and cultivated rice terraces. The Fukienese inhabit most of the lowland and urban areas.

161 The average density of the population is 610 persons per square mile.[3] However, 2,500 persons must share the amount of food produced on one square mile of cultivated land (nutrition density).

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3. Statistical Abstract of the Republic of China, Executive Yuan, Directorate-General of Budgets, Accounts and Statistics, Taipei, 1955, p. 28.

45:Stanford U. S-4, 5 1956 AD I Formosa
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Table 1. Population Density and Nutrition Density of Selected Countries
(per square mile)

Country	Year	Population Density	Nutrition Density
Formosa	1953*	610	2,500
Japan	1950	586	3,534
Belgium	1948	727	2,200
United States	1949	51	188

* Calculated from Statistical Abstract of the Republic of China, 1955, p. 28; Natural Resources Section, General Headquarters, Supreme Commander for Allied Powers, as quoted in Norman Wycoff, "An Outline of Demographic Conditions and Prospects on Taiwan," Chinese-American Economic Cooperation, Vol. I, No. 5, May 1952, p. 44.

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[Facing p. 71]

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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161 The accompanying figure shows that the most heavily populated areas lie in the Taipei Basin and in the plains of Taichung and Tainan. In 1953, Taipei City had a density of 3,600 persons per square mile; the density for Kao-hsiung was 1,100. The least-populated hsien of Taitung has only 12 persons per square mile.[4]

IV. COMPOSITION OF THE POPULATION

A. Age Composition

162 Formosa's average population is young. As of 1953, population under the age of fifteen comprised 42.2 per cent of the total and those under forty years of age comprised 82 per cent of the total.[5] Old people have never made up a large share of the population. Improved medical facilities in the past decades have reduced infant mortality and helped to maintain the youthfulness of the population. The birth rate has been constantly high. The changes in age composition for the last twenty years are shown in Table 2. An age structure of this sort is costly to society; there are few to support many -- as was the case in 1953, when each group of one hundred persons between the ages of fifteen and sixty-four, the most productive working years, had to support eighty others, although not necessarily all of the hundred were employed.[6]

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4. Ibid.

5. United Nations, Statistical Office, Demographic Yearbook, 1954, New York, 1954, p. 127.

6. Ibid.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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162 In contrast, the corresponding ratio[7] for Japan in 1950 was 68, for the United States 55, and for Sweden 36. Attempts to reduce this burden of dependency include encouraging the youngsters to work as soon as they are physically able and requiring them to forgo the training that would make their efforts more productive. Society must shoulder responsibility for the education and care of the younger population.

[See following page for Table 2.]

7. George Barclay, A Report on Taiwan's Population to JCRR, Princeton University Press, 1954, p. 50.

45:Stanford U, S-4, 5 1956 AD 1 Formosa
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Table 2. Population By Age and Percentage in Each Age Group. *

Age	1930	1940	1950	1953
		A. Population (in thousands)		
0-14 years	1,767	2,432	3,129	3,524
15-39 "	1,684	2,057	3,075	3,274
40-64 "	756	870	1,161	1,279
65 and over	107	151	189	206
Total	4,314	5,510	7,554	8,284
		B. Percentage by Age Group		
0--14 years	41.0	44.2	41.3	42.2
15-39 "	39.0	37.3	40.8	39.8
40-64 "	17.5	15.8	15.4	15.5
65 and over	2.5	2.7	2.5	2.5
Total	100.0	100.0	100.0	100.0

[Footnotes next page.]

162 The age-sex pyramid of Formosa's population reveals that fertility is extremely high today and mortality was high in the past. A comparison of the 1953 and 1954 pyramid shows that fertility has increased in recent years. This should not be interpreted as a post-war phenomenon, but should be attributed to the gradual improvement of health conditions and medical facilities. The crude rate of birth has remained over 40 per thousand for most of the last fifty years. There has been a drastic reduction in infant[8] mortality in recent years -- 135.5 in 1940 and 35.3 in 1952. These facts will probably keep the population "young" for a long time to come.

B. Sex Composition

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*/ For 1930 and 1940, data are for Taiwanese; for 1950, figures represent the total registered population as taken from George Barclay, A Report on Taiwan's Population, Taipei, JCRR, 1954, p. 48, in which figures for 1930 and 1940 are taken from respective census reports and figures for 1950 are from Taiwan Province, Statistical Abstract, Twelfth Period, Taipei, 1951; 1953, from United Nation, Statistical Office, Demographic Yearbook, 1954, New York, 1954, p. 127.

+/ This figure derived from another source does not correspond with the figures for total registered population given earlier. The discrepancy may be due to the exclusion of foreigners and other groups.

8. United Nations, Statistical Office, Demographic Yearbook, 1953, New York, 1953, pp. 220-21.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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162 In Formosa, there are 105 males to every 100 females.[9] In 1940 when the population was more permanently settled, the ratio[10] was 102 to 100 females. The many male immigrants who came in after the war probably account for the present sex ratio.

C. Urban and Rural Population

369 167 Urbanization has increased rapidly in the past few decades. In 1920, four per cent of the population lived in cities of more than 100,000 inhabitants; in 1952, the number in such cities had increased to 21 per cent. Economic development in the last years of Japanese control and in the current postwar years, and the influx of Mainland people in the late 1940's and early 1950's, have contributed to growth in urban population. The preponderance of agricultural population has become less pronoupced, and the high degree of ethnic and cultural homogeneity has been diminishing.

The majority of young people come to the cities with the hope of finding jobs; immigrants from the Mainland are mostly non-farmers and therefore flock to the cities; and most wives follow their husbands to the cities.

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9. China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], Vol. III, Taipei, 1954, p. 78.

10. Provincial Government of Taiwan, Results of the Seventh Population Census of Taiwan, 1940, Taipei, 1953, p. 40.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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Table 3. Percentage Distribution of the Total Population in Communities by Size 1920-1952 */

Year	Under 20,000	20,000 30,000	30,000 40,000	40,000 100,000	100,000 or more	Others +
1920	75	11	5	3	4	1
1930	59	22	2	8	5	3
1940	36	34	7	8	12	2
1952	23	25	17	12	21	2

*/ Arranged from governmental reports of each census, as quoted in Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 255.

+/ Aborigines and boat dwellers.

1: Stanford U. 5-4.5 1956 ADJ Formosa ADJ

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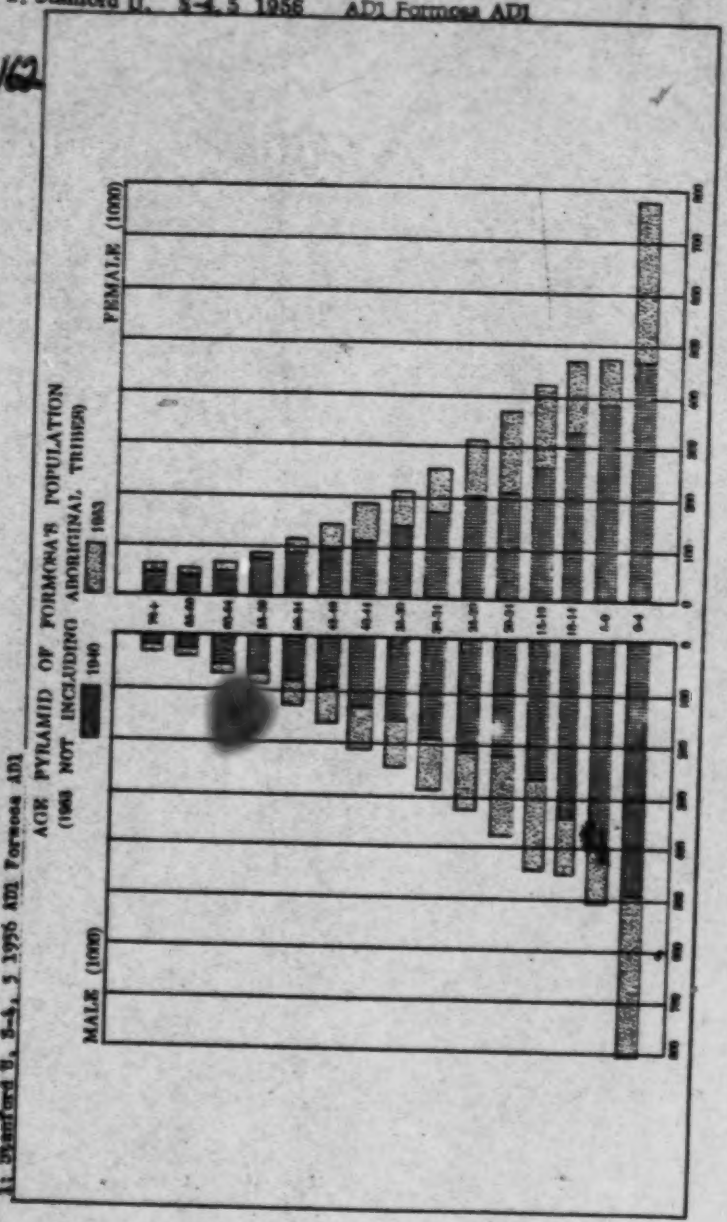

A C B

Reduce AB to CD

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45:Stanford U. S-4, 5 1956 AD 1 Formosa
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D. Occupational Composition

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In 1953, of 5,400,000 people more than twelve years of age, 1,800,000 were engaged in agriculture, 23,000 were in industry, and 460,000 were students. There were 2,000,000 people without formal occupation, but most of them (1,700,000) were housewives. Agriculture is the most predominant occupation although the proportion of agricultural workers to the total working population has declined gradually during the last forty years. From 1915 to 1940, the proportion of farmers in relation to the total working population decreased from 70.1 per cent to 62.4 per cent;[11] the percentage for 1953 was 53. For detailed breakdown, see Table 4.

11. T'ai-wan-sheng Wu-shih-i-nien-lai T'ung-chi T'i-yao [Statistical Summary of Taiwan for the Past Fifty-one Years], Taipei, Provincial Government of Taiwan, 1946, pp. 130-38; See also Results of the Seventh Population Census of Taiwan, 1940, Taipei, 1953, pp. 68-69.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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Table 4. Population by Occupation *

	Population	Male	Female
Over 12 yrs. of age	5,422,044	2,777,938	2,644,106
Agriculture	1,811,767	1,277,139	534,628
Mining	36,659	32,786	3,873
Industry	232,873	207,752	26,121
Commerce	251,230	231,866	19,364
Transportation	68,196	65,480	2,716
Public Service	119,728	109,489	10,239
Professionals	74,644	57,925	16,729
Service Industry	225,969	168,181	57,788
No Occupation **	2,005,777	219,851	1,785,886
Student	462,469	291,971	170,498
Military Service **	58,967	57,563	1,404
Others	72,805	57,935	14,870
Under 12 yrs. of age	3,015,972	1,548,700	1,467,202
Current total **	8,438,016	4,326,708	4,111,308

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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E. Marital Status

162 A great proportion of the people 15 years old or more are married. The rate of divorce in Formosa is low, about 0.45 per 1,000 population as compared with 2.48 for the United States.[12]

Table 5. Marital Status of Population 15 Years Old and Over - 1953 */

	Number	Percentage
Single	1,447,803	30
Married	2,966,356	62
Widowed	388,191	8
Divorced	30,508	-
Total	4,832,858	100

*/ China News Press, Chung-hua Nien-pao 1954 [China Annual, 1954], p. 77.

F. Educational Status

212 87 Forty-five per cent of the total population know how to read and write. If children under six years are excluded, the percentage of literacy rises to 59 per cent. Over 90 per cent of the children from six to twelve years of age now attend primary schools; primary education is compulsory. Because many illiterate people are over school age, a literacy movement as well as other types of adult education are being promoted. A detailed breakdown of the educational status of the population is shown in Table 6.

12. United Nations, Demographic Yearbook, 1953, pp. 276-77.

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Table 6. Educational Status of the Population*
(December 1953)

	Male	Female	Total
Over 6 years of age	3,368,349	3,168,769	6,567,118
College education:			
Graduates	62,090	10,964	73,054
Students	13,972	2,868	16,840
High school education:			
Senior high graduates	117,846	45,846	163,692
Senior high students	42,359	13,679	56,056
Junior high graduates	142,626	73,325	215,961
Junior high students	109,852	44,288	154,140
Primary school education:			
Graduates	993,071	565,583	1,558,654
Students	766,410	571,184	1,337,594
Private school education	174,109	91,093	265,202
Illiterate	946,014	1,779,921	2,725,935
Under 6 years of age	958,359	912,539	1,870,899

*China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], p. 78.

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V. MIGRATORY MOVEMENTS

167 From the beginning of the seventeenth century to the end of the nineteenth century immigrants from the Chinese coast increased the population in Formosa. However, due to prohibitive measurs against immigration taken by the Japanese, the major increase after 1895 was caused by excess of births over deaths. In the post-war years, particularly when the Nationalist Government abandoned the China Mainland, a vast number of civilians and troops came to Formosa, swelling the population by about 20 per cent. It was estimated that in 1952 there were about 9,700,000 people on the island; of this number one-fifth were Mainlanders.[13]

166 Internal migration is largely limited to rural people moving to urban areas. Because of familial and local ties farmers rarely move unless they plan to change their occupation. Moreover, because of the lack of frontier lands, farmers do not gain by moving to other areas unless they change their livelihood. To the farmers, migration means departure from rural life and activities. As a result, most people tend to stay in or near the locality in which they were born. About 60 per cent of the 857 heads of households surveyed by the Joint Commission on Rural Reconstruction were born in the village in which they now live, 17 per cent were born in other villages in the same township (chen), and 10 per cent were born in other townships in the same

13. Arthur F. Raper, Rural Taiwan--Problem and Promise, Taipei, JCRR, 1953, p.290, Appendix B contributed by Profs. Ruey Yih-fu and Chen Shao-hsin of National Taiwan University.

166 hsien.[14] The few rural dwellers who moved from the townships surveyed went to the larger cities or to the east coast. Two townships on the east coast showed a relatively large immigration[15] during the period 1937-52; most of the newcomers were from the western and southern parts of the island. If employment opportunities in the urban areas are improved, it is believed that there will be a great migration from every township.[16]

In recent years, industrialization has been another factor which influenced a number of people to move from rural areas to urban and industrial areas. Cities having more than 100,000 inhabitants in 1920 accounted for 4 per cent of the total population; while in 1952, large cities accounted for 21 per cent. If we consider that the increase in total population during 1920-52 was 120 per cent -- 3,800,000 to 8,200,000 -- the increase in urban population which amounts to more than 420 per cent is of extreme importance and indicates how rapidly urbanization is taking place in Formosa.

VI. VITAL STATISTICS

163 A. Births

The birth date of Formosa has been constant and high. During the period 1920-53, the number

14. Ibid., p. 205; the remaining 13 per cent are probably from other hsien and provinces.
15. Raper, loc. cit.
16. Ibid.

Table 7. Births According to Age of Mother, 1950-52 */
(per 1,000)

Year	All Ages	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +
1950	143.2	0.1	60.9	245.0	295.3	266.9	191.5	110.9	29.4
1951	168.0	0.1	67.7	287.1	349.5	310.9	225.9	131.8	34.6
1952	158.5	0.1	53.1	271.8	341.7	293.8	219.9	113.4	29.3

*/ United Nations, Statistical Office, Demographic Yearbook, 1953, New York, 1953, pp. 144-45.

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of births per 1,000 population has remained over 40, except in the year 1948 when the rate was 39.7.

163 In the prewar years, the birth dates were found to be lower in the northern and central parts of the island; higher rates prevailed in the southern and eastern districts.[17] Exactly the same tendency exists today, according to a study of sixteen townships made by the Joint Commission on Rural Reconstruction.[18]

General fertility ratios for the Taiwanese in 1930, 1935, and 1940 were estimated at 204, 215, and 206 (births per 1,000 women 15 to 49 years of age).[19] In the twelve months ending in September 1952, the sixteen townships studied by the Joint Commission[20] had a fertility ratio of 290 for every 1,000 women between the ages of 15 and 45. Mothers 25 to 29 years old are the most prolific. But, as a whole, Taiwanese women do not avoid the risks relative to frequent pregnancy and childbirth.

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17. George Barclay, Colonial Development and Population in Taiwan, Princeton University Press, 1954, p. 249.
18. Raper, op. cit., p. 196.
19. Barclay, op. cit., p. 243.
20. Raper, loc. cit.

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B. Deaths

165 While the birth rates for the last few decades remained scarcely changed, the death rates were reduced to less than half during the same period (see Table 8). The present death rate of 9.5 compares favorably with the rates of the United States (9.6) and Canada (9.0) for 1950.[21] However, it is possible that the registration system may have presented a lower death rate in Formosa because some deaths went unrecorded as a result of administrative laxity, or because relatives of the deceased hoped to continue to receive the additional rice ration.

In cities where adequate medical facilities are available, the death rates are definitely lower.[22] A great number of infants die, but children who attain the age of 10-14 may be expected to live to be adults. After the age of fifty, the number of deaths increases rapidly.

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21. United Nations, op. cit., p. 168-69.

22. Norman Wycoff, "An Outline of Demographic Conditions and Prospects on Taiwan," Chinese-American Economic Cooperation, Vol. I, No. 5, May 1952, p. 54.

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(faces p. 86.)

Table 9. Death Rates by Age and Sex *

	1960	1961	1962
165 Under 1			
Male	39.9	42.7	37.7
Female	36.5	38.0	36.6
1-4			
Male	22.0	23.4	16.8
Female	25.0	26.5	19.7
5-9			
Male	3.3	3.4	3.1
Female	3.6	3.3	3.4
10-14			
Male	2.3	2.2	1.8
Female	3.0	1.8	1.6
15-19			
Male	2.2	2.2	1.8
Female	2.2	2.0	1.8
20-24			
Male	3.4	3.5	3.0
Female	3.5	3.3	2.8
25-29			
Male	4.2	4.7	3.9
Female	4.2	4.1	3.2
30-34			
Male	5.4	5.4	4.8
Female	5.1	5.3	4.3
35-39			
Male	6.2	6.8	5.7
Female	6.3	6.2	5.3
40-44			
Male	10.3	9.6	8.0
Female	8.8	8.7	6.8
45-49			
Male	13.9	13.5	10.9
Female	10.6	10.2	8.3
50-54			
Male	20.3	18.7	15.6
Female	16.7	13.0	10.5
55-59			
Male	30.5	26.5	23.6
Female	21.1	18.2	14.7
60-64			
Male	41.1	41.4	35.7
Female	30.5	28.0	25.2
65-69			
Male	58.2	57.8	52.5
Female	41.4	38.4	34.1
70 and over			
Male	126.4	121.5	117.9
Female	93.9	[illegible]	90.5
Average, All Ages			
Male	11.5	11.7	9.9
Female	11.2	11.4	9.8

* United Nations Statistical Office, Demographic Yearbook, 1963, New York, pp. 184-186.

[Facing p. 86]

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Table 8. Taiwan Birth Rates and Death Rates */
(per 1,000) +/

Year	Birth Rates	Death Rates	Rate of Natural Increase
1920-24 aver.	41.8	25.8	16.0
1930-34 aver.	45.5	20.6	24.9
1935-39 aver.	44.7	20.2	24.5
1948	39.7	14.3	25.4
1949	42.4	13.1	29.3
1950	42.5	11.3	31.2
1951	49.9	11.6	38.3
1952	46.6	9.9	36.7
1953	45.3	9.5	35.8

*/ United Nationa, Statistical Office, Statistical Yearbook 1954, New York, 1954, pp. 36, 41.

+/ Excluding tribal aborigines in all cases and foreign nationals after 1949.

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VII. POPULATION GROWTH AND GOVERNMENT POLICY

168 The outstanding feature of population growth in Formosa is the constant high birth rate as against the rapidly declining death rate. The natural rate of increase in population has been estimated at 25 or more per thousand.[23] However, in view of the statistics presented by the Department of Civil Affairs[24] and the United Nationas Statistical Office, the rate of natural increase for Formosa may be given as 30 or more. This rate of growth will probably continue as the result of medical improvements, interest in public health shown by the Joint Commission of Rural Reconstruction, the government's indifference to birth control, and the reluctance and financial inability of the people to restrict the number of their family. At this rate, the population will have doubled in less than a quarter of a century.

The results of the population upsurge are obvious. More educational and social institutions will be necessary, or their operations must be expanded, to take care of the increased population. There will be more people to farm the land. The number of jobs in cities and industrial areas probably will not increase as rapidly as the number of your people who seek work each year.

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23. This estimate is based on the vital statistics of the pre-war years as well as on statistics obtained from the household registry. Registration may lack accuracy because of a tendency to over-record the number of births and under-record the number of deaths.

24. China News Press, op. cit., p. 77.

168 Because agricultural frontiers are becoming scarce, a tremendous acceleration in industrialization and expansion of non-agricultural employment will be essential to the welfare of the people.

Although the problems of growth have been discussed by many people, the government has not taken any steps to regulate the increase in population. In fact, officials avoid discussion of birth control and attempts at public discussion of the subject are not encouraged.[25] Some war-minded leaders believe that high birth rates should be maintained so that there will be many young people available for conscription. The government does not prohibit the use of contraceptive devices, but many people do not have the opportunity to buy or the money to pay for these devices, which must be imported at the expense of the country's dollar reserve.[26] In the meantime, there is no prospect that the government will take strong countermeasures against the increase in population. Nor is there any urgent feeling on the part of the populace that this growth in population somehow must be halted.

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25. Geroge Barclay, A Report on Taiwan's Population to the Joint Commission on Rural Reconstruction, Princeton University Press, 1954, pp. 100-101.

26. Ibid.

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Annex "A," Subparagraph le,
Sociological Background

LANGUAGE IN FORMOSA

Major Languages and Dialects

19 In Formosa there are several language groups, each with its own language or dialect. Most important of the languages and dialects are: the Min-nan dialect (or Amoy dialect), the Kuo-yü (commonly referred to as Mandarin), Japanese, the Hakka dialect, and the languages of the aborigines. To a minor extent, the dialects of Shanghai and Canton are used.

Considering the educational and historical background of the population, a very rough approximation of the number of speakers of each language and dialect may be ventured:

Language or Dialect	Approximate Number of Speakers
Min-nan dialect	7,000,000
Mandarin	4,000,000
Japanese	4,000,000
Hakka dialect	1,500,000
Aboriginal languages	200,000

Language varies, first, according to ethnic groups, and second, according to the length of time the ethnic groups have been on the island. The population of Formosa can be divided into two distinct ethnic groups, namely the Chinese

19 and the aborigines. The latter's language consists of seven different dialects which belong to the Malay-Polynesian family.[1] They are the dialects of Taiyal, Saiset, Bunun, Tsou, Paiwan, Ami, and Yami. These dialects have no written script.

The Chinese fall into three language groups: Mainland Chinese, Formosan Chinese of Fukien descent, and those of Kwangtung ancestry -- Hakkas. The Chinese who come from Mainland China speak Mandarin[2] as a rule, although a variety of dialects representing Shanghai, Canton, Foochow, etc., are spoken by a good number of them. While not proportionate in degree, it may not be an exaggeration to say that all dialects of northern, central, and coastal China are represented in Formosa.

The Formosan Chinese, except some of Kwangtung descent, speak Min-nan (閩南) as typified by Amoy (厦門) and Swatow (汕頭) dialects. Most of the Hakkas -- a minority mainly of Kwangtung descent -- can understand and speak the Min-nan dialect, although they have an entirely different Hakka dialect of their own.

Japanese is spoken by those who inhabited the island prior to the end of World War II. Most of the adult Formosan Chinese and adult

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1. Cf. Tung-ho Tung, Languages of China, Taipei, 1953, China Culture Foundation, p. 14: "Malay-Polynesian Family consists of languages spoken in the Malay Peninsula, in some parts of Indo-China, and in the Pacific Islands."

2. It covers southern and northern Mandarin as spoken in central and northern China.

19 aborigines, as a result of fifty years of Japanese rule, are at least able to understand Japanese. Japanese was taught in schools as the official language, and a knowledge of the Japanese language continues to be general all over the island.

Geographical Distribution

Among the Formosan Chinese and the aborigines, distribution of languages is determined by geographical location of ethnic groups. The accompanying figure shows that the Min-nan dialect is widely spread over the southern plains and northern section of the island while the Hakka dialect is dominant in the eastern trench and hsien [counties] of Taoyuan, Hsinchu, and Miaoli. The lines of geographical demarcation should not be construed to imply that over these lines one dialect is not understood by those who speak the other. The actual situation, with few exceptions, is quite the contrary. Many of the Hakkas, because of occupational similarities, migration, and communication with the Fukinese, speak the Min-nan dialect with native fluency. However, in some remote Hakka villages in the eastern trench, a traveler not equipped with a knowledge of the Hakka dialect may find it necessary to communicate in sign language.

The aboriginal dialects are distributed in the central and eastern mountains. Their dialects are numerous and complex, as is exemplified by the fact that when members of the same tribe are separated geographically several sub-dialects will be spoken. Mountain tribesmen often find themselve

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19 total strangers as far as a common speech is concerned.[3] The Taiyal and Paiwan tribes, which cover large areas, are good examples of this phenomenon.

Since the Chinese Mainlanders are dwelling chiefly in urban areas, the distribution of Mandarin follows closely the boundaries of their settlement. However, it must be noted that Formosan Chinese who speak Mandarin are increasing gradually over the entire island.

The Written Languages and Their Problems

212 Mandarin is the official language on the island and is used in administration, jurisdiction, education, and, to a large extent, in commerce. Its written form and that of the Min-nan and Hakka dialects are practically the same because all three belong to the Chinese Language Family. Their characteristic features as well as their problems are similar to those on the China Mainland.

Romanized Min-nan dialect has been used by some missionaries and some Formosan-Chinese Christians. For instance, a Bible has been written in Roman alphabet with diacritical marks indicating the tonal features of the Min-nan dialect. During the Japanese rule an attempt was made by some Formosan intellectuals to popularize the romanization of the dialect. They claimed it would help abolish illiteracy, because those who could not read anything written in Chinese could read its equivalent in Min-nan dialect if they would master the alphabet together with the tonal

3. Sainosuke, Fujisaki, Taiwan no banzoku [Savage Tribes of Taiwan], Tokyo, 1936, Kokushi kankokai, pp. 627.

212 marks. The Japanese did not encourage the movement, for they were attempting to assimilate the Formosans. The present status of the romanized Min-nan dialect has not changed, probably because it is looked upon as an obstacle to the spreading of Mandarin.

Knowledge of Foreign Languages

19 The Japanese language is not considered a foreign language here, for it has been adopted by nearly half of the population.

The number of people who can speak English is limited to those who have studied or lived in English-speaking countries, to local students who have limited ability to speak or to understand, and to those who come in contact most often with foreigners on the island. About one per cent of the population has ability to communicate in the English language while another four per cent has knowledge of elementary English.

No classic in the Russian language are given in the National Taiwan University -- the highest institution of learning in Formosa. Thus, it may be said that a knowledge of the Russian language is negligible.

Role of the National Language and Future Trend

The fact that Mandarin has been designated as the national language should not obscure the prevalence of the Min-nan dialect, which has

19 served for centuries as the social language of Formosa. Nearly all of the Formosan Chinese consider this dialect as their mother-tongue and speak it in their daily life. Among the people not previously educated in Japanese or Mandarin, the Min-nan dialect is the only means of oral communication. Most adults who received a Japanese education find Japanese more convenient in writing and in conversation. Likewise, the Formosan Chinese youth now attending schools find Mandarin most convenient for reading and writing. It is this last point that suggests the future significance of Mandarin.

The government is making an all-out effort to infuse non-Mandarin-speaking people on the island with knowledge of the national language. Social education, the establishment of supplementary classes throughout the primary school systems, and lessons by radio are some of the means employed. School children are quickly adopting the new language, and it is believed that in the future Mandarin will become the most important language in Formosa.

In the years to come, as the present generation grows older, Mandarin will gradually replace the local dialects as well as Japanese. It seems possible to say that in fifty years, assuming continuation of the present conditions, the native dialects and Japanese will have no linguistic importance in Formosa.

Annex "A," Subparagraph 1f,
Sociological Background

SOCIAL STRUCTURE

I. SOCIAL STRATIFICATION

1. General Characteristics

565 Originally Formosa was a frontier for adventurers. In the new land people were less constrained by their cultural heritage and more independent. In the documents of the Manchu era it is stated that the Formosan people refused to degrade themselves by servitude, and that male and female servants were imported from the mainland.[1] The two centuries of Manchu rule were interspersed with a sequence of uprisings, some large, some small. The situation did not favor any stereotyped form of social stratification. There were some embryonic elements of a feudal system, but they were wiped out by the Japanese colonial administration. Rich and poor, landlords and tenants, both extremes existed, but under the colonial scheme the rich were not allowed to engage in modern industrial enterprise. The property of the rich was equally divided by their sons at the

1. Yoshihusa Kinebuchi: History of Social Work in Taiwan, 1940, Taipei, pp. 622-623.

565 time of inheritance, so the contrast between the rich and the poor was not striking. In effect, except for the political and ethnic class lines between the ruling Japanese and the ruled Formosans, social stratification was not clearly marked during the Japanese rule.

After the restoration of Formosa to China in 1945, political and ethnic class lines disappeared with the abolition of the colonial system. With the implementation of the Land-to-the-Tiller policy, inequality in land proprietorship was greatly reduced. When the China Mainland was lost to the Communists in 1949, tycoons transferred their capital to other parts of the world, so that there are no extremely wealthy people in Formosa. New industrial development after the restoration may cause economic differentiation in the future, but for the time being, social stratification is not a serious problem in Formosa. This is the general outline. Some specific topics will be considered on the following section.

2. Primary and Secondary Ownership of Land

471 425 Until the early years of the Manchu rule the land in the southern part of the island was agriculturally exploited under the protection of the government. When people began to farm the northern and middle part of the island,

471 they had to rely on themselves. Usually rich
425 and influential people received land grants from the government. Then they hired farmers, supplied them with capital, and organized self-protection forces against bandit and aborigine raids. In return, the owner received rent from the cultivators. Legally he was the proprietor and landlord. When a cultivator was assigned a large patch of land, he could rent some parts of it out to other cultivators, and thus in a sense he also became a landlord. In this case there were two proprietors for the same patch of land. This is the origin of primary and secondary ownership of land in Formosa. The original proprietor held the first title, the second proprietor held the second title to the land. The cultivator paid rent to the second proprietor, and the second proprietor paid rent to the first proprietor. The first proprietor, as the nominal owner of the land, paid the land tax to the government. Sometimes with the connivance of officials, an influential man could get the first title to certain land without any investment and collect the rent.

423 This complicated system of land ownership resembled somewhat the Oberhoheit and Unterhoheit of medieval Germany, and the landlords' control of the self-protection forces tended toward a kind of feudal system. Moreover, this system made the transfer of

423 ownership and the collection of taxes difficult. For this reason in the later years of the Manchu rule, Liu Ming-Ch'uan, an able and far-sighted governor, tried to abolish it. Meeting with stiff opposition from the landlords, his plan was doomed to failure. Liu's project however, was finally carried out by the Japanese government. Between 1898 and 1905 a land survey was completed. In 1903 the existing first titles were confirmed, and further establishment of them was prohibited. In the following year the system of double titles was abolished, and the holders of first titles were compensated by a total sum of 3.78 million yen in bonds. After this all the holders of secondary land titles were recognized as the sole owners and thus the embryonic feudal system was abolished.

3. Relation between Landlord and Tenant

427 The relation between landlord and tenant was generally analogous to that between father and son, and the son was expected to obey the father. Besides paying high rent for the land, tenants presented their landlords with chickens and the like at festival seasons, and were expected to work for the landlord when he requested their help. Though tenants were not serfs, their status was obviously much lower than that of the landlord. This situation continued to the 1920s. The social movement of the Taiwan Cultural Association awakened

427 the social consciousness of the farmer, and Farmers' Association encouraged the farmers to oppose their landlords. Hitherto tenancy had been based mainly on oral contract, and, even where there were written contracts, the terms of tenancy were ambituous. To mitigate the situation, the Japanese administration sponsored Landlord-Tenant Associations, and proposed various measures for improvement in the land tenancy system. The Landlord-Tenant Associations recommended written contracts and the extension of the terms of tenancy. But unwilling to give up their privileges the landlords resisted these recommendations. However, the tenant farmers were aroused by the agitations of the reform movement; many of them abandoned the custom of bringing their seasonal presents to the landlord.

423 Shortly after the restoration of Formosa
to China, a rigorous land reform program
427 was begun. Under this program, all farm leases are required to be in writing according to a form promulgated by the Taiwan Provincial Government. The obligations and responsibilities of both the landowner and the tenants are definitely specified. As a result, the tenants may deal with landlords on equal terms, and democratic relationships are established.
466 Simultaneously, the relations between the employer and the employee in industrial establishments underwent similar changes.

466 Formerly the employee was an apprentice with a status of a house servant, but now the relationship is regulated by written contracts.

4. Male and Female Servants

566 Up to the early years of Japanese rule a type of true servitude existed in Formosa. These servants were not slaves, but were bought and sold for money, and were very low in social status. Male servants disappeared earlier in time, but female servants remained until a much later date. It is interesting to note that, the civil status of female servants in Formosa was somewhat different from their status on the mainland. On the mainland their servitude was life-long, but in Taiwan they were bought by contract, and emancipated when the servant or her family could provide money to buy her back. In the case of marriage, her intended husband had to pay money to buy her freedom. Her status somewhat resembled the indentured servant of colonial North America. The frontier spirit, the newness of social institutions, and the scarcity of women seem to be the cause of this contrast between the mainland and Taiwan.

In 1917, the higher court of justices in Taipei invalidated the purchase system of female servants as detrimental to public welfare and morals. The following year the commissioner of police, fortified by this

566 decision, instructed the census department of the local police to confirm all existing female servants but to refuse any new registrations. Another blow was given to the system of female servants by the higher court of justice in 1935. According to this decision, a female servant could emancipate herself whenever she desired, and the householder could not object. Thus, at least nominally and legally, the institution of female servants was abolished. However, it has continued in fact under the new name of "adopted daughters". In 1935, at a conference of social workers, the system of female servants was assailed, and a program for improvement was recommended. At present, one seldom hears about female servants, but in fact some are still kept under the name of adopted daughters. Their status is, however, much improved in comparison with former times. The name "adopted daughters" includes female servants, girls for prostitution, and true adopted daughters. After the restoration of the island to China, the system of "adopted daughters" was frowned upon. Article 296 of the Chinese Criminal Code provides that selling a person into servititude or restraining the liberty of a person is a criminal offense punishable with imprisonment of one to seven years. The custom is abating and may totally disappear in the course of time.

5. Upper Nine Ranks and Lower Nine Ranks

65 During the Manchu era there were three classes in Formosa, namely, (1) officials and gentry, (2) common people, and (3) the "base" class. Although the officials and gentry exercised great influence over the common people, there was no rigid demarcation between the two. When a commoner passed the imperial examinations, he could be appointed an official. The situation of the base class was somewhat different. There was a demarcation between them and other two classes, but eh demarcation was not as rigid as in a caste system.

Each class was divided into several ranks. Among the common people there were the so-called upper nine ranks, including (1) secretaries of officials, (2) physicians, (3) painters, (4) masters of geomancy, (5) fortune tellers, (6) physiognomists, (7) Buddhist monks, (8) Taoist monks, (9) teachers of the lute. The lower nine ranks of the "base" class were: (1) prostitutes, (2) actors, (3) witches, (4) musicians (trumpeters), (5) hog drivers, (6) barbers, (7) male and female servants, (8) masseurs, and (9) grave diggers. Sedan chair carriers were low in the scale of occupations. Obviously the ranking was based on occupation. In pre-modern society it was very common for certain jobs to be looked on as mean, and

565 people engaged in them had a low social status. Conspicuous examples can be found in Japan, Korea, and India. In medieval German cities operators of bath houses, barbers, flute players, drummers, night-watchmen, scavengers, executioners, etc. were treated as "unehrliche leute", and their sons were not allowed to participate in any guild. In Formosa, common people did not marry with the people of the lower nine ranks, and they even hesitated to take a meal with them. The lowest classes were not entitled to take the imperial examinations. When a person passed an imperial examination, he had to prove that, among the three generations of his immediate ancestors no one had engaged in these mean occupations. Otherwise, the title granted by the examination would be canceled. But the disability was confined to the last three generations. In this respect it was different from the rigid slave system or caste system, in which the status was permanently inherited.

This system persisted until the first quarter of the present century. The development of industry and education, and the enlightenment movement after the 1920's have contributed to its elimination. At present, musicians, actors, waiters, barbers, etc. are looked on much the same as those engaged in other occupations, and young people do not even know what the upper and the lower nine ranks are.

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II. SOCIAL ORGANIZATION

A. Traditional Organizations

596 The village community is the basic unit of folk society. Formosa's original village communities contained the family, the kinship group, and other folk associations.

1. Family and Kinship Group

The family in early Formosa was the so-called extended family or the composite family. It was a cluster of nuclear families living in a large rambling structure or compound consisting of many rooms surrounding courtyards. The head of the family lived in the central section. Each of his sons on marriage was assigned to a separate room according to seniority, designated as "the first chamber," "the second chamber," and so on. Usually each chamber was the center of a nuclear family consisting of husband, wife, and unmarried children. Not infrequently, married sons and daughters-in-law and even grandchildren were included. Generally such a family had common meals and common property, but there were variations. On the breakup of a large family the sons formed independent families, in turn assigning their sons separate chambers. Although divided among themselves, the brothers, their sons and grandsons constituted a kinship group. Thus, the extended family

596 under the family-head and the kinship group under the elder of the clan constituted small integrated kingdoms.

The functioning of the patriarchal and extended family is far from simple. The inheritance of property, troubles between sons or daughters-in-law, the relation between daughter-in-law and mother-in-law or daughter and her brother's wife, all these are very complicated and easily lead to discord and antagonism. However, inspite of this, the members do unite and co-operate in defending their life and common property. Strong authority is bestowed on the house-father to control the family, and patience is taken as the cardinal virtue of the members of the extended family.

After peace and order were established by the Japanese colonial government, consolidation of kinsmen for self-protection lost its raison d'etre. As the system of administration became more complete, the necessity for mutual-aid among kinsfolk gradually diminished. While the older generation valued highly the prosperous family and kinship group, the young people saw no reason why they should sacrifice their individuality and freedom for their ancestors and the extended family. Young people went to big towns and cities as factory workers, clerks, merchants, teachers or professional men,

596 usually bringing their wives and children with them. The proportion of nuclear families has increased with urbanization and industrialization in the past twenty years.

2. Folk Associations

Various Folk Associations: In the
575 pre-modern village community co-operation for mutual aid in making a living was essential, and there were many kinds of associations in response to various social needs. Hitherto specialists on Formosa have focused their attention mainly upon village and family. In fact, folk society attained a fairly high degree of development, and it was much too complex to be managed by blood and locality groups alone. Institutions of social cohesion based on social function or social need was in evidence, and these we will designate as folk associations.

625 There were various associations for the protection of agricultural work. When crops and vegetables were still young or almost ripe, they had to be protected from damage by cattle, hogs or chickens. Usually an association was organized to take care of this. Special persons were appointed to watch over the fields. Every household was notified not to let its animals out, and if any one violated the regulation, he was punished by the association There were associations for the regulation of

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625 cutting lumber in the woods owned in common by the village and associations for the protection of fruits, bamboo sprouts, etc. from theft. These were the so-called agricultural protective associations. In the season between the two harvests, at the end of the year or before the next crop was ripe, there were petty grain thefts. For the prevention of these, an assocaition of night watchmen was organized. A person from each household was requisitioned and the group was divided into several small bands which stood watch by turns. To prevent attack by aborigines or bandits, a self-protecting association was organized. All adult males in the village, except the old people, participated in it, and in the time free from work, they trained themselves with various weapons. The need for the regulation of such local group activity was essential and constant. As a result, this kind of association was deeply rooted among the village people in Formosa. Many public works, such as repairing roads, bridges, drainage or irrigation canals, etc. were often managed by these associations and sometimes they constituted an embryonic village government.

575 There were other kinds of associations. A buffalo-keeping association collectively watched the buffalos of each household. It was a kind of co-operative. There were associations for mutual aid for burial in case

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576 of the death of parents. This was a kind of mutual insurance. The association for mutual financial aid, called "hui," was a kind of temporary credit union.

438 361 Set-up of Towns and Cities: Although the life of farmers was highly self-sufficient, they had to exchange some of their products for agricultural implements and other daily necessities. In response to this necessity towns sprang up in the midst of this agrarian society. As will be seen from a map, Formosa has a fairly even distribution of towns along the western plain. The longest distance between two towns or villages in the plains area is under 10 miles; a distance of 6 miles is most common. This means that each individual lives with 5 miles or less of some town or village, and in one day or less can walk to the village center and back home. In other words, even though he walks, every farmer can sell his products and buy his daily necessities at some town or village between sunrise and sunset. Among the small towns and villages there are larger towns, and among larger towns there is an occasional city as a local center. On the whole, there is a systematic distribution of cities, towns, and villages. Obviously this was the result of natural growth in an agrarian society. After the Japanese occupation there were newly developed mining towns, fishing ports, sugar plantation towns, railway and

361 communication centers, recreational towns
438 or satellite towns close to the large urban areas. Even so, the traditional agrarian town-city set-up is still much in evidence.

3. Associations in the City: Cities in
441 Formosa were mostly developed as the trading centers of agrarian society. Those cities with ports and trade with the mainland had attained a fair size. In 1897, two years after the Japanese occupation, the population of the biggest city in Formosa, Tainan, was 45,330. Its commerce and handicraft were differentiated, and largely organized into merchant guilds. During the Manchu rule there were in Formosa rice guilds, cloth guilds, sugar guilds, silk guilds, string guilds, paper guilds, drug guilds, timber guilds, hemp guilds, oil, needle and iron guilds, porcelain guilds, and tea guilds.[2] Usually the stores of each trade were concentrated in one street, and not infrequently the street was named from the trade. In Tainan there was a Rice Street, Oil-dealer Street, Bean-dealer Street, Fish-monger Street, Cloth Street, Silver-smith Street,

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2. Yoshio Higashi: Economic History of Taiwan, 1944, Taipei, p. 304.

441 Timber-dealer Street, Bamboo Street, Bamboo-splintsmaker Street, Stone-cutter Street, Coir palm treating Street, etc. These are much the same as the Bread Street, Milk Street, Fish Street, Honey Lane, etc. of medieval London or the Schustergasse, Gerbergasse, Webergasse, etc. in the medieval German city. The same condition can be found in other old Formosan cities, such as Lukang and Changhua.

442 Besides these merchant-guilds there were guilds of wholesale merchants who traded with the mainland or other ports of the island. Tainan had three such guilds: (1) the North Guild, which traded with North China, and had more than 20 member stores; (2) the South Guild, which traded with South China and had more than 30 member stores; (3) the Port Guild, which traded with other ports of Formosa, and had more than 50 member stores. They all had a shrine as the center of their activities. They participated in public affairs of the city and carried on social welfare activities. In time of disturbance, they contributed money to the government, and volunteered in defense work. An area of Taipei city, Tataoting, was originally constructed by an influencial guild.

575 There were still other kinds of associations in the cities. Among the upper classes, there were associations for the

576 promotion of education, for moral culture, for music, drama, and literary activities. Various kinds of secret societies and fraternities also existed.

4. The number and types of Associations: As folk associations are essential for the life of the people in folk society, we can expect that there were numerous such associations in agrarian Formosa. Some data exist which wil enable us to make an estimate. The Japanese colonial government made a survey of religion from 1915 to 1918, and the result was published in 1919, as "The Report of the Survey of Religion in Taiwan", Vol. 1. According to this report there was 6,159 associations with 291,161 members.[3] Since informal associations are hard to identify and may not have been recorded, the actual number is likely to be larger than the reported figure.

454 The above figure did not include the associations for mutual financial aid (the hui). According to a survey by the Japanese in 1922, there were 2,055 hui with 24,428 members in Taipei prefecture, 145 hui with 1,720 members in Taichung prefecture. They estimated the number in other prefectures of the island to be 2,200 hui with 26,138 members.

3. Table 27.

454 Thus there was a total of 4,400 hui with 52,286 members in Formosa.[4] If we add these figures to the above, there were 10,569 associations with 343,447 members around 1922. The Formosan population in 1922 (excluding Japanese) was about 3.7 millions, so more than 9 per cent participated in some association. Since this 9 per cent represents adult members of each household, it is evident that a substantiat proportion of households in Formosa participated in associations.

575 All folk associations retained some religious character, so the Japanese treated them all as religious associations. In fact they were organized for a great variety of purposes. In "The Report of the Survey of Religion in Taiwan," eight kinds of associations are enumerated:[5]

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4. Chen Yunghu: "The business of Ho-huei in Taiwan." The Quarterly of the Bank of Taiwan, Vol. V. No. 4, 1953, p. 123.
5. Table 23, p. 129.

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Kind of Associations	No. of Associations
1. Associations to help the education of kinsmen	160
2. Associations for public construction and relief	6
3. Associations organized by the people of the same trade	1,685
4. Associations organized by the people of the same town of origin	890
5. Associations organized by the people living in the same village or town	1,851
6. Associations organized by the people of the same surname (that is associations of kinsmen)	1,077
7. Associations organized by the people of the same hobby	30
8. Other associations	460
Total	6,159

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575 The number of members of each association ranged from a few persons to more than one thousand. Out of 6,159 associations 4,859 (that is 78.7%) numbered between 6 and 50 persons. Almost half of the total number of associations had between 11 and 30 members. A membership between 11 and 20 seems most common; there were 1,865 (that is, nearly 30% of the total) associations of this kind.

More than three quarters of the associations were founded between 1760-1895. This was due to rapid population growth in those years. Some of the associations owned property. Farms owned by them exceeded 7 thousand chia (16,800 acres), and cash owned by them amounted to 217,601 yen. The associations which had financial means were generally more influential.

5. Gradual decline of Folk Associations: Folk associations were organized in response to the needs of an agrarian society. Up until the early years of Japanese rule, folk associations were very important. The new rulers realized this fact, and so far as these associatiions did not militate against or disturb the Japanese rule, they were allowed to continue. As peace and order were maintained and conditions of sanitation, agriculture and education were improved, the need for folk associations gradually diminished. Their

575 number began to decline. Some associations disappeared, some remained in name only. Some associations with properties were troubled by disputes among their members.

B. Under the Japanese Rule

656 Strength arises from unification. The
575 new rulers of Formosa in general looked with disfavor on associations of the Formosan people, with the exception of those which facilitated their administration.

From the political point of view there were two categories of associations: those promoted or approved by the Japanese government, and those voluntarily organized by the Formosans and not welcomed by the government. Among the former were: (1) industrial and occupational associations; (2) associations for educational and social development; and (3) social clubs, philanthropic and religious associations.

Many associations were sponsored and controlled by the government, often with government officials as their directors, and had their offices in government buildings. In fact there were auxiliary agencies for administration, and were not voluntary associations of the people. Most associations for the promotion of production belonged to this type. For example, associations of farmers

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were called "Agricultural Associations". It was not an association of farmers for co-operation and improvement of agriculture. Participation was compulsory, membership fees were collected along with taxes, and farmers received only instruction and supervision. Associations for animal husbandry, for fishing, for forestry and irrigation were similar in nature. Co-operatives for fruit growers (banana, citrus fruits, etc.), associations of various trades, chambers of commerce were more autonomous, but government control and supervision were always in evidence. There were various kinds of occupational and professional associations for physicians, lawyers, teachers, etc., and though the Formosan people were allowed to join them as members, they were all controlled by the Japanese.

Associations for educational and social development were also numerous. There were parent-teacher associations called "father and elder brothers" association to help school education. There were householders' associations and housewives' associations to promote adult education. In addition there were youth associations, girls' associations and boy scouts for young people. Community Development Association, Landlord-Tenants Associations, Sanitary Associations, Athletic Associations, the Red Cross, Patriotic Women's Associations, Association for the Improvement of Living, Associations for the

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656 Reformation of Bad Habits and Customs
575 (such as prostitutes and drinking), etc. are further examples of this type. Many of these associations were organized under government encouragement in response to the new situation after the 1920's in order to distract the awakening Formosans who were grumbling against colonialism.

Social clubs for hobbies, recreational, literary artistic and cultural activities were organized freely by the Japanese. A selected number of Formosans were permitted to join these clubs. Philanthropic agencies had existed since the Manchu era. Some of them were reorganized and new agencies were added during the Japanese era. Religious groups with the exception of Christian minors, were less active.

Voluntary Associations of the Formosans

668 As folk associations waned with the change of social life after World War I, the Formosan people began to form their own voluntary associations of a modern type.

1. Political Associations

After World War I the spirit of democracy permeated the whole world. In Japan serious problems appeared and democratic and socialistic movements became widespread.

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668 In China, social movements of the modern type among students and young people gained momentum at about the same time. Under the influences of both China and Japan, Formosa was involved in this modern current. In 1919 an association was organized by Formosan students in Tokyo, and started the work of enlightenment and criticism of colonialism in Formosa. Two years later, in 1921, the Taiwan Cultural Association was organized in Taipei by young people and students both in Japan and Formosa. In the name of cultural enlightenment, they organized public speaking teams, gave lectures, and held meetings in various places in the island. Their new knowledge and criticism of colonialism stirred up the racial consciousness of the Formosan people, and everywhere they were met with overwhelming enthusiasm. Their activity reached a peak in 1925-26, and between 1923 and 1926 many similar associations in other parts of the island. The social consciousness kindled by this movement proved very important for the subsequent social development on Formosa.

When the movement reached its peak, the association split up, as the ideological incompatability of liberalism, socialism, and communism became clear. The right wing dropped out of the association, and organized the Taiwan People's Party in 1927. In 1929

668 the remaining left wing of the association split again into the communistic and the social-democratic groups, and the latter was expelled from the association. The moderate Taiwan People's Party again split into the conservative rich landlord group and the more radical middle class group. The former group organized the Taiwan League for Local Self-Government in 1929, and in the meeting of the party in 1930, was expelled by the more radical group. But at the same time, the party was disbanded by the colonial government. Thus, by 1930, among the Formosans, there were (1) a communistic group, (2) a social-democratic group, (3) a more radical middle-class group, and (4) a conservative landlord group.

474 2. Farmer's Associations: The influence of
427 this movement could not fail to reach the farmers. In 1924 a dispute arose between
668 sugar cane farmers and a sugar corporation.
671 Under the leadership of a local doctor, the dispute was settled in favor of the farmers. This encouraged the farmers, and in next year the Association of Sugar Cane Farmers was organized. Some farmers had reclaimed government-owned land without permission. This was denounced as illegal, and in 1926 nearly four thousand hectares of this kind of land were distributed to 370 Japanese retired officials. This provided impetus for farmers

474 to unite and fight. Moreover, farmers were
427 under the heavy yoke of the landlord, and
668 most of landlords were local people. On
671 Formosa, 53 per cent of the farm land was tenant land, and tenants had to pay about half of their harvest to the landlord as rent. Moreover, the tenant farmer has various other obligations toward the landlord. This situation was unbearable even to the most subservient tenants, and they often submitted complaints against landlords to legal arbitration. Under the threefold pressure of the sugar corporation, retired Japanese officials and landlords, the farmers were always ready to rebel at the slightest provocation. The sparks kindled in 1924 spread and many farmers's association were organized. It is interesting to note that the name of the association thus organized was not the "association for agriculture," but the "farmer's association." In 1926 these local associations were united into the Taiwan Farmers' Association. Campaigns against the landlord under the direction of the association rapidly increased. There were 5 such cases of disputes in 1924, 4 cases in 1925, 15 cases in 1926, in 1927 the number jumped to 431 cases (2,127 persons involved) and in 1928 dropped back to 134 cases (3, 149 persons involved) in 1928. The magnitude of the dissatisfaction stimulated the Japanese to action and suppression was begun in 1929. With the Japanese invasion of Manchuria in 1931

474 ruthless means of suppression were adopted
in the name of internal consolidation. The
427 cases of farmers opposing landlords dropped
668 sharply to 23 cases in 1929, 28 cases in
1930, and 16 cases in 1931. However, the
671 influence of the movement on Formosan
society, especially on social relations between
landlords and tenants was undeniable. The
government sponsored landlord-tenants
associations after 1924 were a means to
mitigate the tense situation of the time.

467 3. Labor Unions: The new social currents
also reached factory workers. Labor unions for
various trades were organized, and in 1927,
29 local unions were federated into the
Taiwan Federation of Workers Unions. At
the end of the year participating units
increased to 65, and the number of members
amounted to 7,861. In 1928 the League of
Taiwan Mechanical Workers was organized
under separate leadership. Several strikes
were directed by the leagues. Both the
farmers associations and the worker's unions
received co-operation from associations and
unions in Japan. Generally speaking, because
of the backwardness of Formosan industry
at that time, the activity of labor unions was
not as conspicuous as that of the farmers.
The activity of the union also faded out under
the pressure of government suppression in
1929 and 1931. In 1932 almost all labor
leaders were arrested, and in 1937, the year

467 Japan started its invasion into North China, even the conservative and harmless Taiwan League for Local Self-Government was ordered disbanded by the government.

III. SOCIAL ORGANIZATION AFTER THE RESTORATION

575 Since the restoration of Formosa to China in 1945, the people have been free to form associations of various kinds, provided these associations do no conflict with the anti-Communist policy of the government. Many new organizations have come into being. In the village, the traditional folk associations for religion and for mutual financial aid still exist. Most of the associations established during the Japanese period have been reorganized, with Chinese members replacing the Japanese and the Chinese government assuming control formerly in the hands of the Japanese colonial government. All associations are registered with the Provincial Department of Social Affairs, which supervises their activities. An association may be dissolved or may be compelled to re-elect its officers if found guilty of violating national laws or ordinances.[6]

For administrative purposes, associations

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6. In 1953, 247 organizations were ordered to re-elect their officers, 9 to be reorganized, 8 to suspend their activities, and 1 to be dispersed. Chung-hua Min-kuo Nien-chien

(continued next page)

575 on Formosa are divided into (1) farmers' associations, (2) labor unions, (3) fishermen's associations, (4) trade associations, (5) professional groups, (6) social groups, and (7) co-operatives. Most of the associations are organized on a local basis and are generally patterned after the governmental administration, that is, directives and rulings are made at a single headquarter and disseminated to lower groups. A provincial organization establishes its branches in hsien and municipalities; the latter in turn organize sub-branches in towns and villages. Some associations have a national organization, which expects to extend its activities when the Mainland is regained.

474 The Farmers' Association was first organized thirty years ago for the express purpose of protecting the rights of the farmers. Very often it came into conflict with the Japanese administration, which finally ordered its dissolution and replaced it with the Agricultural Association, a quasi-government agency. The activities of the Agricultural Association were confined to the promotion of agricultural production. In 1949, the

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6. (continued) [Yearbook of the Republic of China], 1954, Taipei, p. 730.

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474 Farmers' Association was reincorporated under the Chinese law. It is at present a private organization governed by a representative body, managed by a general manager assited by a board of 9 to 15 directors and supervised by a board of 3 to 7 supervisors.[7] In the rural areas, the Farmers' Association distributes fertilizers, extends credit, collects government taxes and repayment of land purchase loans in rice or in kind, and directs educational programs. In towns, the Farmers' Association offers facilities for wholesale purchasing, co-operative marketing, and warehousing. In the cities and larger towns, the Farmers' Association extends short-term loans to small merchants. The Farmers' Association is the only modern organization actively supported by the farmers, who form 52 per cent of the total population in Formosa. There are 4,121 sub-units of the Farmers' Association in rural areas with a total membership of 395,208. These sub-units combine to form 340 units at the town, hsien, municipal, and provincial levels.[8]

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7. Arthur F. Raper: Rural Taiwan -Problem and Promise, pub. by JCRR, Taipei, 1953, p. 183.

8. Chung-hua Nien-pao [China Annual], 1954, Vol. III, p. 83.

467 Labor Unions were considered revolutionary and banned under the Japanese administration. Upon the restoration of the island to China, labor unions on the Mainland helped the local workers to form unions. Labor unions are of three kinds, occupational, industrial and special. Workers in each trade organize the local units. The locals in a hsien or a municipality unite to form a local labor union. In large-scale industries, which are mostly operated by the government, the staff members and the workers organize a union in each industry. The occupational labor unions and the industrial labor unions unite at the provincial level to form the provincial general labor union. A few occupational unions such as the postal union and the railroad workers unions maintain their own local and provincial organizations. They are the special labor unions. The number of labor unions and their membership at the end of 1954 were as follows:*

	Number of Units	Total Membership
Occupational labor unions	401	111,657
Industrial labor unions	219	231,431
Postal Union	14	2,542

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Railroad workers union	13	22,265
Highway workers union	13	5,121

* The China Annual 1954, Vol. 3, Feb. 1955, p. 89.

Labor unions in Formosa are generally directed by members of the Kuomintang and are subsidized in part by the government. Their main functions are to seek improvements in wages and working hours, to look after the welfare of the workers, and to participate in patriotic activities. The most noteworthy service offered are social security measures which include accident insurance, maternity and life insurance, pensions at retirement, and low-cost housing for workers. Some unions also operate clinics, day nurseries, and co-operative groceries for the benefit of their members.

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Formosa has a long seacoast and over seventy islets. Over 232,000 people are engaged in fishing. The fishermen's associations were formerly controlled by fishing-boat owners and owners of the fish ponds, and funds used in welfare work were derived from a surcharge of the price of fish.

474 In 1954 the fishermen's associations were
226 reorganized by the provincial government to give the workers a greater share of control.[9] There are at present seven local units and one provincial fishermen's association, with a total membership of 80,123. They construct and repair fishing boats, operate facilities for cold-storage, and offer emergency aid to the fishermen and their families.

474 Trade associations are formed by people belonging to the same trade. They combine to form either a chamber of commerce or an association of industries. The professional associations are organized by lawyers, accountants, journalists, and physicians. There are eleven such associations, some having a local organization in each hsien and municipalities, others with only a provincial organization. Social organizations, devoted to social welfare and relief work, are sponsored by the government, by religious groups, and by civic clubs. Their activities include the collection and distribution of comforts for the armed forces, aid to women in distress (unwed mothers, mistreated wives

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9. "Under the new set-up, two-thirds of the directors, officers, and inspectors of the association will be workers." Arthur F. Raper and others, Urban and Industrial Taiwan-Crowded and Resourceful, Taipei, Sept. 1954, p. 292.

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474 and foster daughters), sewing for charitable purposes, and the operation of day nurseries, orphanages, and homes for the dumb and the blind. Wives of government personnel often take an active part in social organizations.

In order of size, the farmers' associations, the labor unions, and the co-operatives are the largest social organizations. There are at least 421 local co-operative units with a total membership of approximately 375,000 households, or roughly one-fifth of the island's population.[10] The most important of the co-operatives is the consumer co-operative which has over two hundred units in the larger cities of the province, and distributes the ration of daily supplies to the families of government employees, school teachers, and military personnel. There are at least 71 branches of the credit co-operatives. They accept deposits and extend loans to such small businesses as handicraft and family industries. At the end of 1953, deposits amounted to NT$176,092,000 and loans amounted to NT$119,316,000.

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10. Raper, ibid., p. 292. The Yearbook of the Republic of China of 1954 reports that there were 481 units and 398,681 members at the end of 1953.

474 Agricultural co-operatives help the farmers to transport and market special farm products such as fruits, tea, citronella oil, and straw hats and mattings. At present there are 81 agricultural co-operatives. Co-operative farms are organized with the help of the government. The co-operative farms are either operated on a community basis (their products distributed among the members according to individual contributions) or operated individually with co-operative purchasing of fertilizers and seeds and co-operative processing and marketing of products. There are 133 such co-operative farms in Formosa with a total membership of 18,000, but most of them do not have the equipment necessary for efficient operation.

008 Formosa has a vast network of social organizations, but most of these have had a short history; they were either founded or reorganized within the past five years. They are still in an experimental stage and not yet deeply rooted in the lives of the people. The Formosan people were given little opportunity to exercise initiative under Japanese rule, and in consequence they lack both the experience and the training to run efficient organizations. Moreover, most organizations rely on the government for financial support, which in turn gives the government undue control over their activities

and the selection of their officers. With time and as the local people gain in experience and ability, the value of such organizations may increase. A tradition of group activity will probably develop, and the people may evince greater interest in managing the various social organizations which help to foster a democratic society.

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Annex "A," Subparagraph 1g,
Sociological Background

FAMILY

5A6 Definition of Terms. Family is defined as "a group of people living together as a unit who are related to one another by blood, marriage, or adoption." In the main, it refers to an economic "family," i.e., in addition to the above characteristics, it has both common property and common budget.[1] The terms chia or chia-t'ing, meaning "family" in Mandarin, and ke or ta'u, meaning "family" in Min-nan dialect, seem to afford no distinction between the nuclear family (parents and unmarried children), the stem family (parents and married son), the joint family (parents and married sons), and the extended family (more than two generations, married and kinsmen). An extended family may include several family units of nuclear and stem type and it may also include more than two generations. Similarly, a joint family may include some kinsmen. These terms, to some extent, often correspond with the term "household" (hu in Mandarin and ho in Min-nan dialect) which may include servants, boarders, etc. Thus, the terms are not clearly differentiated. Therefore, whenever possible, families will be referred to as nuclear, stem, joint, or extended, depending upon the criteria given above.

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1. Olga Lang, Chinese Family and Society, New Haven, Yale University Press, 1946, p. 13.

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I. INTRODUCTION

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Familial relationships and sentiments form the most important basis of social fabric and human behavior in Formosa. Precepts as well as structure of the family and kinship groups, with which the society has lived for centuries, exist side by side with ideas and influences of Western institutions. The extended family, which was predominant in the past, is now gradually on the wane as the result of changes brought about by industrialization and the introduction of new social institutions.

With the exception of tribal aborigines, Formosa's society in pre-Japanese times was a transplantation of those which existed in Fukien and northern Kwangtung provinces. With the coming of the Japanese, economic, educational, religious, and political ties that had held together members within villages, clans, and extended families began to crumble. In other words, most of the familial functions were gradually taken over by the state -- the Government-General of Formosa -- and, indirectly, Japan. Since the beginning of the twentieth century, the Formosan Chinese have been exposed to conflicting cultures and have been forced to reconcile the old and new.

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178 Today, the typical family grouping in the rural areas is that of the extended family; in urban areas, the typical grouping is that of the nuclear or joint family.

II. THE TRADITIONAL FAMILY

596 Ever since the seventeenth century, kinship groups in Formosa have been changing from clans to extended families, and from extended families to joint and nuclear families. Cohesion and functional ties within a clan are no longer strong, and today only the large and extended family remains an arbiter of social behavior.

The traditional family was extended and patriarchal. The ideal was to have a large family, with many generations living under the same roof. A large family was a strength in itself in a society which depended on farming for its livelihood. A popular Formosan saying, "If there are three sons to a man, there will be one thousand in the family within six generations," well expresses the ideal of a large family.[2] The extended family was a

2. Taiwan Government-General, Taiwan rigen shuran [Collection of Taiwan's Maxims and Proverbs], Taihoku, Taihoku kappansha, 1914, p. 138.

596 cluster of nuclear families living in a large rambling structure or compound, with many rooms surrounding a courtyard. The head of the family lived in the central section. Each of his sons upon marriage was assigned to a separate room according to seniority, the eldest son and his wife given "the first chamber," the second son given "the second chamber," and so on. Usually each chamber was the center of a nuclear family consisting of husband, wife, and unmarried children. Often married sons and daughters-in-law and even grandchildren were included. Generally such an extended family shared common meals and common property, but there were some variations. When the patriarch of a large family died, his sons formed independent families, in turn assigning their sons separate chambers.

The most important concern of family life was to preserve the continuity of the family. Its pattern was patrilineal; a family line might be perpetuated only through the male heirs.

The head of the family was usually an elder male. The authority of the father was considered supreme within the household, and his position was assumed by the oldest son when the father died. If the son were too young, an uncle became head, and if there were

596 no uncle, the mother, although this happened rarely, assumed authority. Household management, as well as external business affairs, was the responsibility of the male head.

596 562 The position of women was subservient; women had few property rights, and they themselves were the property of men. Confucian principles taught that woman's world was in the home, that a virtuous woman would obey her father before marriage, her husband after marriage, and her son after the death of her husband. Daughters at home were temporary members of the family who would someday marry and join their husbands' households. When a family estate was divided, all property was distributed among the males. Wives and daughters were their husbands' and fathers' heirs only in those cases where there were no males to inherit. Instances of women dominating men were not unheard of, but always at the sacrifice of the man's self-respect and as a subject of ridicule. As a daughter-in-law, a girl had to please her husband's parents, her husband being subordinate to his father in the family. A husband, out of filial piety, had to side with his mother if she happened to be harsh in her treatment of his wife.

584 596 Marriages were arranged by the parents. Happiness of the couple was not a consideration,

584 for the perpetuation of the family was the prime
596 motive for matrimony. Very often people married without knowing each other previously. Since to marry was to bring forth a new generation, concubinage for the purpose of procreation was not frowned upon. Where there were no sons in the family, adoption of the children of close relatives or friends was encouraged. As Mencius taught: There are three things which are unfilial, and to have no heirs is the greatest of them.

Although the extended family was pre-
596 dominant in pre-Japanese Formosan society, no
593 familial relationship was closer than that found among the members of a nuclear family. In an extended family, a father might have a tight control over his married sons, but he would grow old and his sons' attentions and affections would revolve around their wives and their children.

Within a nuclear family the father-son relationship was said to be the closest.[3] A son

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3. Shoji Yamanaka, "Rigen ni arawareta Taiwan oyobi Shina no kazoku seikatsu," ["Family Life in Taiwan and China as Expressed in Sayings and Proverbs"], Taiwan bunka ronso, Vol. II, [Symposium of the Culture of Taiwan], Taihoku, Shimizu shoten, 1943, pp. 1-107.

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never exposed his father's mistakes or misdemeanors. A close bilateral dependence between father and son among the poor families and unilateral dependence of son upon father in rich families were the rule generally. The father was expected to exercise disciplinary power over his sons, and the mother was to care for and love them. Often a boy relied on his father's reputation to establish himself in a new situation. When a parent died, the son was charged with responsibility for the funeral rites, the selection of a grave site, the maintenance of the grave, and periodic sacrifices at the ancestral shrine. Ritual obligations functioned not only as a medium for the continuation of the reciprocal parent-child relationship, but also as a means of validating one's position in the community.[4] The father-daughter relationship was formal and temporary. Poor people preferred not to have girl babies because female children would be dependent upon the parents for sustenance during their early years and upon maturity would marry and join other families. However, the daughter's children always attracted the grand-parents' love and attention.

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4. Morton H. Friend, Fabric of Chinese Society, New York, Praeger, 1953, p. 53.

596 593 Brothers were not bound to each other with the same strength each felt for the father. The degree of cohesion was determined by their social and economic circumstances. When it was necessary to protect the family from an enemy without, brothers were considered as close as one's limbs.[5] If there were differences in occupations and economic interests, a division of the family after the death of the father was inevitable. Then each son formed a nuclear or joint family for himself, and brothers became mere neighbors. But such instances were rare. Many factors bound together the nuclear units, making the typical family grouping extended and inclusive.

596 411 The social function of the extended family was as a unit for self-protection against possible attack by aborigines, bandits, enemy clans, and criminals. For defense against so many enemies, village and clan members united, but the extended family was the basic defense unit. In well-to-do families there were stores of rifles, spears, and other weapons. Even today, gun loopholes can be found in the outer walls of some old houses.[6]

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5. Yamanaka, loc, cit.
6. Ibid.

596 The extended family was in itself a
771 religious group. Worship of common ancestors, observation of their birthdays, and participation in annual festivals were ceremonies observed by all members of the family. Religious practices served to impress family members with a feeling of kinship and common heritage.

596 The education of children became the
871 function of an extended family when there were no public schools. Tutors were invited to join the family and all the children studied at common expense, regardless of their parents' status within the family. All the children had an equal opportunity to learn.

596 The family was also an economic unit. Male adults participated in the family business and the entire family shared a common budget. In rural families, rice paddies were hulled and cloth was woven by women in the home. Chickens ducks, vegetables, and preserves were produced in the household, thus making it unnecessary to buy more than a few necessities at the market. In this manner, the family functioned as a unit of production and consumption. Another feature pertaining to the extended family was the system of community property. Family property belonged to the entire family, and at the dispersion of the family it was divided among the sons, with a relatively larger share going to the eldest son, who assumed responsibility for maintenance of the family shrine.

596 There was strength in remaining a large family. Farming needed the co-operation of all adult members. A family engaged in commerce often feared the loss of prestige and economic strength if the family were divided.

Thus, the family played a decidedly important role in the whole web of human contacts.

596 Group living necessitated a pattern of obligations, sentiments, and expectations.
181 The custom of passing on a business from father to son, the reluctance of rural people to leave their ancestral land for the cities, and the mutual profit shared by family members -- young or old -- who worked together to earn the family's livelihood all reflect the influence of family relationships upon individual lives. Many cultural characteristics of the Formosans -- their great dignity and politeness, their unwillingness to express disagreement, their tendency to keep their own counsel, and the way in which they maintain an attitude of non-interference toward the lives and the problems of others -- had their origin in the close-knit family groups and the conditions in which of necessity they lived. Considerate behavior and the ability to compromise have been necessary to maintain friendly relationships within the family.

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577 Filial piety and other traditional values stem from the concept of the family. It is a mark of shame to be called unfilial, and children do not neglect their parents or elderly relatives. A successful kinsman is obligated to assit his kinsmen financially or politically even if such an act should be against the interests of the state.

III. RECENT CHANGES

596 178 The advent of the Japanese was followed by successive changes in the social and political institutions of the Formosan Chinese. The government took over many of the responsibilities of the clan and the extended family in matters which pertained to the maintenance of public order, the establishment of public schools, and other public institutions. Industrialization, the introduction of corporate enterprise, and urbanization in general, together with the newly-assumed duties of the government were responsible for the loosening of familial ties and the emancipation of women within the family as well as within society.

More people now live in urban areas and farmers have ceased to lead nearly self-sufficient lives; they look to the farmers' organizations for agricultural information and other forms of mutual assistance. Opportunities for jobs in banks, factories, railroads, and

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shipping have resulted in further division of extended families and at the same time have given women more opportunity for employment outside the household. There is a great deal of evidence that extended families are separating to form smaller and less-inclusive units. In 1812, the average household consisted of 8.3 persons;[7] in 1953, the average household had 5.5 persons.[8] In a survey conducted by the Foreign Operations Administration's Mutual Security Mission to China, the composition of urban households was characterized by a relatively large proportion of legal households consisting of a single person, and such households accounted for more than 9 per cent of the total.[9]

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7. Yoshinori Ino, Taiwan bunkashi, Vol. II [The Records of the Culture of Taiwan], Tokyo Toko shoyin, 1928, p. 238.

8. Statistical Abstract of the Republic of China, 1955, Taipei, Directorate-General of Budgets, Accounts, and Statistics, Executive Yuan, 1955, p. 27.

9. A. F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 261.

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Rural households retain many of the features of the traditional family. They are often made up of three or four generations with a goodly sprinkling of kinsmen, adopted children, and others. However, among the one hundred households which were the subjects of a survey conducted by the Joint Commission on Rural Reconstruction, 58 were termed nuclear families and included 48 per cent of the total population surveyed. The other 42 households were three- and four-generation households, and included the remaining 52 per cent.[10]

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The influence of the West has greatly improved the position of women in Formosan society. Women today have equal elective franchise and the right of inheritance. They have not only become clerks and manual workers but also have entered the professions and have taken a role in politics. The Chinese Constitution stipulates that the number of women delegates to the National Assembly, as well as the number of women members of the Legislative and Control Yuan, shall be determined by law. The Electoral Law fixes the percentage at ten, and at present there are 60 women of a total

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10. A. F. Raper, Rural Taiwan - Problem and Promise, Taipei, Joint Commission on Rural Reconstruction, 1953, p. 208.

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537 members in the Lesiglative Yuan.[11] The percentage of women delegates is also applied to the provincial and local councils. In Taipei alone, there are about one hundred full-fledged women doctors and a great number of qualified mid-wives, five chartered women accountants, thirteen women judges, and six women prosecutors.[12]

IV. FAMILY ORGANIZATION AND DISORGANIZATION

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Monogamous marriage is the rule in Formosa, although concubines and mistresses have not been eliminated. People of the same surname do not intermarry. Marriage remains a family affair as well as an affair of the parties concerned. When a son reaches adulthood it is a traditional obligation of the parents to see that he is married. Parents in most cases choose spouses for their children. But today the majority of men and women at least have some knowledge of their future spouses before marriage. It is stipulated by law that an

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11. Chung-pei Hsu, The Position of Women in Free China, Taipei, China Culture Publishing Foundation, 1953, p. 2.
12. Ibid.

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engagement must be contracted by the parties concerned, and if their consent has not been obtained, the engagement is not binding.[13] Contrary to this legal provision, only about 10 per cent of the marriages in the rural and urban households surveyed were contracted by the parties themselves, and the remainder were arranged by parents, relatives, friends, or go-betweens.[14] In some instances people may seek marriage through advertisements placed in newspapers. Feasts attend the wedding, elaborate or simple, according to the family's socio-economic status. Marriages between sons and adopted daughters, or, to a lesser extent, between daughters and adopted sons, are usually performed within the family circle. The patrilocal nature of matrimony requires, in most instances, that the groom's father provides living quarters for the bride. When possible, the bride's family provides a dowry consisting of clothes, furniture, jewelry, and so forth. Some girls consider a dowry so important that they work before marriage in order to save money so that they may bring to their husbands' families such things as furniture and beautiful clothes. For reasons of economy, collective marriages are performed in city halls from time to time.

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13. Ching-hsiung Wu (ed.), Chung-hua Min-kuo Liu-fa Hui-pien [Compendium of the Six Codes of the Republic of China], Volume II, Civil Code, 1947, Shanghai, pp. 505-11.

14. Raper and others, op. cit., p. 268, and Raper, op. cit., p. 209.

587 Second marriages are usually looked down
586 upon, but in order to perpetuate the family line a childless widow may marry again. Divorce, although the rate has been increasing in recent years because of financial difficulties and the growing independence of women, is not as serious a problem in Formosa as it is in the United States. Formosa's divorce rate in 1953 was as low as 0.45 per 1,000 population, as compared with a rate of 2.48 per 1,000 population in 1951 in the United States.[15] For good or ill, a popular adage that a virtuous woman does not marry twice is often repeated, and a divorcee rarely finds opportunity for a second marriage.

582 The average age at which men and women marry is reported to be rising. Among young men of urban areas, marriage is often delayed because of financial difficulties. The adoption of daughters often poses a social problem.
597 The old notion that a daughter may be bought
548 or sold like a commodity remains among some uneducated people. Although the purpose of such adoptions may be that of securing a young companion or maintaining the family lines,

15. United Nations, Demographic Yearbook, 1953, New York, 1953, pp. 276-77.

597 many people adopt girls to be employed as
548 servants and, in a few extreme cases, adopt several girls in order to derive profit from their prostitution. A recent household registration indicates that there are about 135,000 adoped daughters on the island, of which abdut 100,000 are said to have been adopted for the purposes mentioned above. They are less
597 daughters than bonded servants, and may be sold or traded frequently and forced to serve in cafes or to engage in prostitution.[16] Many cases of incest and abduction and suicide pacts involve young women who have been "adopted" in this manner and innocently cause the disintegration of a household. Recommendations, however, are being made for correction of this abuse.[17]

V. FAMILIAL SETTING OF THE ABORIGINES[18]

596 Family cohesion within aboriginal families is probably as strong as that in Formosan families.

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16. Hsin-she-hui Yüen-k'an [New Society Monthly], VII, 7, Taipei, July 1955, pp. 1-28.
17. Ibid.
18. Sainosuke Fujiksaki, Taiwan no banzoku [Savage Tribes of Taiwan], Tokyo, Kokushi kankokai, 1936, Part II, Chapter 4; Part IV, Chapter 4; Part V, Chapter 2; and Part IV, Chapter 3.

596 Marital customs among the tribesmen seem to indicate that their groupings include both nuclear and extended families. Bunun, Paiwan, and Yami tribes have nuclear families, and each son after marriage establishes his own household.

Aboriginal families are patriarchal, with the exception of those of the Paiwan and Ami tribes. The latter families are perpetuated through the female line; a man marries into the bride's family in both tribes and the newlyweds establish separate households after marriage.

562 428 The position of women in Ami and Paiwan tribes is superior to that of the men. Men have no rights of inheritance and have no say in the management of property in these tribes, although they represent their families at public meetings and in other social contacts. Women are sole heads of the family in matters which concern the family and its relatives. In other tribes, an inheritance is equally divided among the sons or goes to the eldest son who is the heir. When there are no sons in the family in the Bunun tribe, the family line is terminated, and the family property is given to the closest male relative. An interesting aspect of inheritance in the Ami tribe is that the youngest daughter remains at home to inherit the family property as well as to perpetuate the family line.

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Annex "A," Subparagraph 1h,
Sociological Background

SOCIAL VALUES, PATTERNS OF LIVING, AND FOLK BELIEFS

162 Nearly 98 per cent of the population on Formosa today are Chinese. Of this number, approximately one-fifth have come to Formosa from the Mainland since 1945. Of the remaining four-fifths, the majority are descendants of early settlers who migrated to the island from Fukien and Kwangtung provinces between 1600 and 1895. Non-Chinese aborigines make up about 2 per cent of the present population. Social values and the major patterns of living on Formosa are derived from the Chinese, in spite of the efforts of the Japanese to sever the ties between the Mainland and Formosa during a half-century of rule. Even the official promotion of Shintoism did not destroy the customs and traditions of either the aborigines or the Chinese on Formosa. The restoration of Formosa to China in 1945, followed by the influx of some two million Chinese from the Mainland, has further strengthened ties with the mother country.

A. The Rural Family

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The patriarchal, extended family common to the Mainland is the pattern of the family for the majority of people on Formosa. In rural communities, the father and sons work in the fields, the mother and the wives of married sons look after the hogs, fowl, and cattle and do the work of the household. Daughters care for the younger children, help in the preparation of meals, and wash the clothes. Boys and girls attend school until twelve years' of age; schooling continues after that age only if the child is talented and the family is able to afford tuition and the loss of the child's labor at home. Generally speaking, women of Fukienese descent are not given as many laborious duties as the Hakka women, who raise hogs, cattle, and fowl, and tend vegetable plots even in non-farming communities. Fukien children are more apt to prepare for city jobs than to continue work on the farms.

Since World War II, farm rents have been reduced and farmers are encouraged to farm more intensively in order to secure larger yields. As a result, women now do more farm-work than before. It is reported that women in Chihu are responsible for at least

369 40 per cent of the district's agricultural
596 production; in 1937, they accounted for only
563 17 per cent of the total yield.[1]

The aborigines in the mountainous regions of Formosa make a living from slash-and-burn agriculture and hunting. Some of the aboriginal tribes (the Bunun, the Tsou, the Paiwan, and the Yami) follow the patriarchal, extended family pattern. Others (the Atayal and Saisett) have a nuclear family organization -- each member of the family fulfills a definite role fixed by tribal custom. Aborigine women ordinarily do more farm work than Chinese women. Until recently few children from native tribes attended school, and until recently few aborigines ventured outside their tribal regions.

B. The Urban Family

369 The population of Formosa has been
161 increasing rapidly. The rate of increase is greatest in the urban areas. Each of Formosa's four largest cities -- Taipei, Kaoshiung,

1. Arthur F. Raper, Rural Taiwan - Problem and Promise, Taipei, 1953, p. 120.

369 Tainan, and Tiachung -- has more than
161 doubled in size since 1937.[2] The cities of Keelung, Hsinchu, and Hualien have grown almost as rapidly. The rapid increase in urban population is traceable, in part, to the number of young Formosans who have deserted the rural areas for further education and more profitable economic opportunities.

369 The patterns of living of the urban population differ in many ways from those of the rural population. The size of the average household is smaller. The houses themselves are small, overcrowded, and usually contain no more than two generations, parents and children. Crime in urban areas has increased substantially.[3] On the other hand, educational facilities in the cities have improved. The people of Formosa are becoming more aware of the importance of education. Urban families send their children to vocational schools or high schools whenever it is financially possible. During the past fifteen years, the rate of industrial expansion has been rapid, although not rapid enough to provide
000 work for the fast-growing population. The

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2. Arthur F. Raper, et. al., Urban and Industrial Taiwan - Crowded and Resourceful, Taipei, 1954, p. 2.

3. The number of urban crimes reported
(continued next page)

369 The
463 scarcity of employment has resulted in the increase in the number of "self-made" jobs, such as the keeping of small, temporary streetside shops and stands, peddling, "household industries" of various kinds, cart-pulling, and pedicab-operating. Marginal self-employment is the chief source of income for approximately one-fifth of the males 15-50 years of age in the seventeen areas surveyed in 1954 by the China Mission of the American Mutual Security Agency and a group from National Taiwan University. A large proportion of those marginally self-employed would shift to regular industrial jobs if such jobs became available.[4]

369 Because of under-employment and the
464 prevailing low wage-scale, women and children often take up various kinds of work in order to supplement family incomes. Many urban households augment their income by raising hogs or fowl. Overcrowding in urban areas, the increase in the number of peddlers, streetside stands, and the feeding of hogs and fowl in crowded districts create a very serious health and sanitation problem.

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3. (continued) today far exceeds the number reported under Japanese rule. See the section on Criminal Codes and Procedures in the chapter on Law and Order.

4. Raper, op. cit., p. 5.

C. General Characteristics

181 Formosans are considered to be industrious and resourceful. Perseverance, tenacity, and endurance are characteristics of the majority. The rural people show a strong feeling of solidarity and affection to members of their community and have a strong attachment to the soil as representative of their homeland and their way of life. Family loyalty and filial love are considered the greatest of virtues. Deep love for the family circle is further accentuated by the frontier environment of Formosa. In the cities, people tend to become more independent and self-reliant. Because it is not the custom to pool resources for joint enterprises outside the immediate family, only small businesses can be established. If the head of a small urban household suffers a long illness or extended unemployment, the family falls into dire need. Most families so afflicted must return to rural areas and live with kinsmen until they have acquired enough capital to go back to the city and try again.

D. Recreations and Sports

241 461 Formosa's subtropical climate makes farming possible in all seasons; most farmers

241 on the island work every day of the year. The
461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

177 A majority of city dwellers have running water and electric lights. Most families in the cities own sewing machines and bicycles. As the islanders acquire Western conveniences and possessions, their patterns of living take on the configurations common to the occidental world.

526 Sports -- soccer, basketball, and baseball -- are popular among the younger generation. A Formosan basketball team toured the United States and countries in Southeast Asia in 1955. A soccer team from Formosa is to participate in the Olympics in Australia.

524 Mah-jongg and chess, traditional games
517 of the leisured class, have retained their popularity among the older generation. The young favor motion pictures and dancing.
517 Government officials and wealthy persons of
529 other classes take their families to one of the numerous scenic resorts or hot springs in

517 northern Formosa for a country weekend.
529 Only the poor have little time, money, or leisure for these pastimes. But the workers
517 in the cities amuse themselves by playing upon the hu-ch'in, a two-stringed fiddle, or singing folksongs, as well as granting themselves a short holiday at the time of local festivals. For rural workers, a shopping trip to a nearby city affords the greatest pleasure and provides them with subjects for idle talk when they have opportunity to visit with neighbors.

E. Annual Festivals

527 The primary recreational outlet for the people of Formosa is active participation in public festivals. The majority of Chinese festival days are observed on the island, particularly in the rural districts. The New Year is a time of family reunion as well as a time to propitiate the gods and do reverence to the dead.[5] The festival lasts for fifteen days, and daily offerings are made to the household gods and to the family's ancestors.

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5. The festivals are celebrated according to the lunar calendar, which lags about one month behind the Gregorian calendar.

527 Members of the family who live at a distance revisit the home. Poorer families, who seldom eat meat during the year, have feasts during the New Year's festival, even if it means slaughtering the family pig or a number of hens.[6] Formosans also celebrate the Dragon-boat Festival on May 5 and the Moon Festival on August 15. The birth of Confucius, the birthday of Dr. Sun Yat-sen, and the anniversary of the founding of the Chinese Republic are national holidays. Government offices and schools are closed and there are memorial ceremonies.

574 The family itself celebrates marriages and births with elaborate feasts for relatives and friends. Funerals are also a time for large gatherings; a feast is usually provided for those who walk with the procession and attend the rites of burial.

796 Many religious ceremonies provide additional opportunities for celebrations. A day devoted to Matsu, goddess of travel, is remembered. Her traditional importance to the Formosans may be attributable to the protection she offered those who made the

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6. Low-income groups eat little meat except at festival times. Raper, op.cit., p. 274.

796 perilous voyage from the Mainland across the stormy waters of the Formosan strait. Kuan-yin, the goddess of mercy, offered protection to those building settlements in a primitive and often hostile land. The Land God is also remembered, since Formosa is primarly a land of farms. These ceremonies include street processions, music, dancing, religious dramas, and feasts.

F. Folk Beliefs

771 In an agrarian society, folk beliefs are always naive and superstitious. When ways of life change, folk beliefs undergo transformation, for folk beliefs are but reflections of reality. In the present century, when science and technology had begun to modify the conditions of life of the Formosan people, folk beliefs altered. Infant mortality was once a serious concern on the island, and the gods who protected children were propitiated. The dragon who regulated the amount of rainfall received offereings from people in rural districts. After irrigation canals were constructed it was no longer necessary for farmers to seek the favor of a

771 rain-making god.[7] In 1903, Formosa had 3,662 temples consecrated to the dragon god; only one remains today.

In 1715, grasshoppers destroyed crops in the district of Fenshan. Soon after, a temple was erected to appease and honor the god of the grasshopper. For over two hundred years, farmers went to the temple before each harvest to make offerings and invoke the mercy of the god. Only now that the use of insecticides has become widespread has the temple been torn down. Similarly, vaccination has dethroned the god of smallpox. The same fate befalls the gods who look after mothers and children as modern medicine minimizes the dangers of childbirth and lowers the rate of infant mortality.

Folk beliefs in Formosa were fostered in rural areas; with increasing industrialization and urbanization, folk beliefs lose their

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7. In 1902, only 23 per cent of the cultivated land on Formosa was irrigated by a system of canals. In 1942, approximately 64 per cent of the farmland was under irrigation.

771 power to determine the customs of the people.

G. Superstitions ~~and Taboo~~

784 In spite of the enormous strides made by education in the past three decades, many superstitions and prejudices persist among the Formosan people. They often take the form of taboo or premonitions.

Some uneducated Formosans believe that if a person stumbles on the threshhold of his home just before commencing a journey, danger awaits him en route. To choke while eating presages bad luck. An itching ear is a sign that others are talking about us. The crowing of a rooster at night is a bad omen. Illness and misfortune are punishments sent by angry gods who demand propitiation. An earthquake is caused by the restlessness of a sleeping bull. The dead, especially those who have drowned, are objects of fear. People who waste rice may be struck by lightning.

The aborigines have their own super-
[826] stitions and taboos. Twins and crippled babies are misfortunes to a family and are allowed to die at birth. Intermarriage among members of the same clan is forbidden. Only members of the immediate family may touch

784 the dead. No person may eat the food raised by a clan to which he does not belong.

These are taboo, superstitions, and prejudice, and yet all have a symbolic reference to reality; some tend to protect the group against the wilfulness of the individual; others can be explained in psychosomatic terms; still others are poetic interpretations of natural phenomena.

828 Belief in the value of the interpretation of dreams is another aspect of the folk-culture of the Formosan people. Those who dream of wearing a yellow robe or of sighting fish swimming in a well may expect to receive money.[8] Those who dream of drinking on a high terrace may expect to be offered a position in government. To dream of murder or suicide is interpreted as a good omen. To dream of ants in bed or of a clouded mirror are evil omens. All of these have their Western equivalents, the patently absurd in dream books, the poetically accurate in the literature of psychoanalysis.

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8. This superstition led many families to attempt to breed fish in the family well.

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000 Since the restoration of the island to China, the people of Formosa are able to enjoy a larger measure of freedom and self-direction. Industrialization has been greatly accelerated. International trade, once confined to Japan and handled exclusively by the Japanese, now brings Formosa into contact with every corner of the globe. Science and technology have broadened the Formosan way of life. Provincialism and prejudice, largely responsible for the internecine struggles which hindered the development of Formosa in centuries past, are giving way to cosmopolitanism and tolerance. A new pattern of living is taking shape.

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Annex "A," Subparagraph 1i,
Sociological Background

ARTISTIC AND INTELLECTUAL EXPRESSION

53 In its course of change, Formosa has evolved from a primitive folk society to a comparatively modern society, and in the process, its artistic and intellectual expression, derived from traditional Chinese culture, has been strongly influenced by Western civilization. The most noticeable transformation occurred during the 1920's, following hard upon marked changes in Formosan economy and ways of life.

I. TRADITIONAL EXPRESSION

Before 1920, literary and philosophic thought, calligraphy, painting, music, and drama followed traditional patterns of artistic and intellectual expression brought to Formosa from the China Mainland. There are few examples of artistic or intellectual expression distinctive to Formosa.

Literary and Philosophy Thought. In Formosa as in China proper, literature and philosophy were the provinces of the scholar-official (mandarin) and scholar-gentry classes, who had sufficient education and the leisure to seek opportunities for the expression of ideal forms of culture

53 and good taste. Theirs remained private arts, practiced for pleasure, and had little to do with the common people, who may have respected these activities but did not understand their value.

Some scholar-officials of the Ming Dynasty (A.D. 1368-1644) came to Formosa during the rule of Koxinga (see chapter on Historical Setting). To provide diversion in this outpost of civilization, they formed literary groups and poetry associations. Some of their works have been preserved. During the Manchu Dynasty (A.D. 1644-1912), the mandarins continued to devote their leisure time to literary activities, and Formosans aspiring to the class of scholar-officials began to participate in the various intellectual movements. Of the chronicles that remain, a series of studies of the various prefectures, documents comparable to our present-day regional surveys, are of particular interest. Poetry associations continued to flourish until the later years of the Japanese rule in Formosa, when the scholar-official class began to lose its place in the modern community.

Fine Arts. The scholar-officials and scholar-gentry also made painting and calligraphy their provinces. There were no professional artists as we know them. Painters, sculptors, and architects skilled in building temples and mansions were looked down upon as artisans, gifted members of the lower classes.

Music. The gentry cultivated certain skills in music, composing and playing traditional instruments for private enjoyment or as a mark of accomplishment. Among the lower classes, the

53 the usual folk music, unwritten and passed from generation to generation, was extremely popular. Professional musicians formed a part of the Formosan society and were called upon to perform at funerals or entertained the guests following the marriage rites. They had a low social status. Sacred music as well as dances of a religious nature were performed at annual festivals and consecrated to the memory of Confucius.

Drama. Traditional Chinese drama, which flourished on Formosa, is akin to the Western opera. Songs and speeches were performed in mandarin Chinese, and although most native Formosans did not understand mandarin, they patronized the opera. More popular than opera was a kind of folk show, using local dialects and stemming from religious ceremonies in much the way Western drama developed from religious processions and the re-enactment of religious themes. Puppet shows, similar to those seen today in Java, also played a part in the island's entertainment. Actors and players were considered mountebanks, amusing and irresponsible members of the community.

Folklore. Myths, legends, folktales, folksongs, proverbs, and riddles popular on Formosa resemble those common in South China, which in turn have their equivalents in every culture. Local names and local heroes are substituted.

II. CONTEMPORARY EXPRESSION

53 Modern artistic and intellectual expression are carried on by professionals and semi-professionals who enjoy popular respect if successful. However, even as recently as the 1920's the young who wished to make a career of poetry, painting or music were dissuaded by their families or faced disapproval and strong opposition. It remained a distinction for the family if a young man chose to become a teacher.

Primary and secondary schools on Formosa have fostered an interest in the arts. Missionaries from the Western countries have sometimes encouraged artistic activities, and performers and exhibits from Japan and the Western countries sometimes came to Formosa. Advanced study in any of the arts usually required trips to Japan and China. Later, some centers of artistic and intellectual activity were formed on Formosa, and often they became an integral part of political and social movements. Politically speaking, the development of native centers was a protest against Formosa's status as a colony; socially, it was a criticism of traditional culture, and was stubbornly resisted by conservative elements. The young were attracted to the new culture which looked to the West for inspiration and guidance.

Literature. The magazine Taiwan Youth (later changed to Taiwan) was first published in July 1920 as an organ for literary and cultural

53 expression. Printed in Tokyo, it was subject to strict censorship. It continued monthly publication until May 1924. In 1923, a fortnightly journal, Taiwan People's Journal, began publication in Tokyo. Later, it became a weekly magazine, and in August 1927 the colonial government permitted the offices of the journal to move to Formosa. In 1932 it became a daily newspaper. These magazines were chiefly concerned with articles on current political, economic, and social problems, although space was allotted to literature and the arts.

A controversy over language and style was in progress during 1922-24. The magazine Taiwan included articles in Chinese and Japanese, but rising national sentiment urged the exclusive use of Chinese so that an increasing number of Formosans interested in the new cultural movement might benefit. However, because traditional Chinese style was antiquated and not suitable for the exact expression of the new culture, a popular style, which made no distinction between the spoken and the written word, came into vogue. "Popular Chinese" was already in use on the Mainland, and in 1923 the Taiwan People's Journal was published only in Chinese.

The "new style" demanded a change in concepts and values, and conservative intellectuals were not in favor of so radical a departure from established mores. Disputes continued through the 1920's, although by 1925 modern translations of Western and Japanese literary works had begun

53 to appear, and by 1927 many Chinese works in the new vernacular were read in Formosa.

Hitherto the Taiwan People's Journal and the magazine Taiwan had been the only outlets for literary works; after 1930, various literary groups were formed and a number of literary journals were published. In 1935, these groups were united under the leadership of the Taiwan Literary Federation.

When the Japanese invasion of North China began in June 1937, publishers in Formosa were forbidden to use the Chinese language. Censorship of all literary activities was strictly enforced. Expressions of national sentiment were forbidden, and artists were forced to confine themselves to minor themes involving local manners and customs.

Fine Arts. Japanese teachers in secondary schools encouraged an interest and talent for water colors and oil painting. In the 1920's, talented Formosans went to Japan to continue their training, and many associations of artists were formed. In 1927, the Taiwan Educational Association sponsored a semi-official art exhibition. In 1938, the government undertook sponsorship of the exhibition and continued it until 1943. Both Japanese and Formosans participated in these exhibitions under government sponsorship. A federation of artists was established in 1934 and continued the promotion of native arts until 1944.

Ideological content is less evident in the fine arts and in music than it is in works of literature, and for this reason censorship of paintings

53 was not strictly enforced. During the period of Japanese rule, and especially during the years of the Japanese invasion of Mainland China, when artists in other fields were silent, music, sculptur and painting flourished on the island.

Music. Talented young Formosans received their musical training in Japan during the 1920's. In 1934, a group of musicians banded together to give concerts. In 1936, for the relief of earthquake victims, a fund-raising concert team was organized to tour the island.

Drama. Stimulated by the activities of the Japanese on Formosa and by students who had observed the rise of new dramatic forms on the China Mainland, native troupes organized a drama movement in 1923. Members of the Taiwan Cultural Association gave equal emphasis to the artistic value and the enlightenment value of drama. The leader of the new dramatic movement, Wei-hsien Chang, went to Japan in 1928 for further theatrical training. Upon his return, he organized a dramatic school. In 1934, a drama festival open to both Japanese and Formosans marked the peak of dramatic activity on the island. Since that time, dramatic art has languished.

Dance. The performances of visiting Japanese and Western dancers in Formosa acted as a stimulus to the Formosans. Japanese teachers conducted classes in ballet, and many Formosans went to Japan for extensive training.

814 Intellectual Activity. The Japanese colonial government encouraged training in medicine, agriculture, and management in order to increase the number of technical personnel for local industry. Training in the humanities and the social sciences was not encouraged, since these endeavors might tend to awaken national consciousness. But many Formosans persisted, migrated to Japan and China for additional training, and returned to publish in various academic journals. Few positions were open to graduates in the humanities and the social sciences, and there is little evidence of collective activity in these fields, although some intellectuals formed small groups.

III. POSTWAR EXPRESSION

53 After Formosa was restored to China in 1945, artistic and intellectual activities received a new impetus from the abandonment of cultural restrictions imposed by the Japanese. They have continued to increase as the result of the great number of artists and intellectuals from the Mainland who have taken refuge in Formosa. Participation in various groups has grown steadily. This is particularly true in the fields of literature.

The revival of traditional drama, opera, and native music is underway, and all forms of artistic expression are studied. Motion pictures, particularly those imported from the United States, are popular. A provincial orchestra has been forme and often broadcasts. An annual art exhibition has been established by the provincial government.

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53 The China Literature-Arts Prize Committee awards cash prizes to writers and composers who show evidence of talent; prizes are apt to go to those who use anti-Communist themes or offer works encouraging the awakening of national consciousness. Prizes are awarded to poets, novelists, dramatists, and composers. One of the more important organizations for the promotion of literary and artistic activities is in the China Literature and Arts Association.

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Annex "A," Subparagraph 1j,
Sociological Background

EDUCATION IN FORMOSA

I. LITERACY

212 The literacy of its people is a prerequisite for a country's scientific and technical advancement and for the improvement of public health. It has been reported that about sixty per cent of the population in Formosa over six years of age are able to read and write.[1] Literacy here probably includes literacy in the Japanese language for many of these people completed their education before the end of World War II, at a time when Formosa was governed by the Japanese. Some of these people may not be able to read Chinese. This complicating factor has resulted in the printing of articles and pamphlets in both Chinese and Japanese; Harvest, a partly bilingual farmers' magazine, is an example.

Literacy in Formosa is high as compared with the rates of some other Asiatic countries, although definitions of "literacy" may vary. Forty per cent of Thailand's population are literate, the literacy of Burma stands at 36 per cent, that of Indochina (Laos, Cambodia, Vietnam) is 15 per cent, and that of Indonesia 7 per cent.[2]

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1. China News Press, China Annual, 1954, Taipei, 1954, p. 78.

2. Economic Co-operation Administration, Far East Data Book, Washington, D. C., Nov. 1951.

212 But Formosa's position appears less favorable when compared with that of industrially advanced countries such as the United States, which has a literacy rate of about 95 per cent.

The potential literacy of Formosa's population holds promise. More than 90 per cent of the children of school age are now attending primary schools, and it is expected that within fifty years the percentage of literacy will have increased to that current in the United States. Meanwhile, adult education in Mandarin Chinese is being vigorously promoted. During the school year of 1954, approximately 610,000 people attended 5,670 classes (mainly for the teaching of Mandarin) given by hsien governments and municipalities.

II. EDUCATIONAL SYSTEM

87 The educational system in Formosa follows closely that of the United States, though use of terms may differ somewhat. In the main, six years of primary and six years of secondary education constitute the basis for advancing to the collegiate level, which generally runs for four years. Post-graduate work leading to a Master's degree requires two years of study. Vocational education begins at junior middle-school level, at senior middle-school level, or at college level. Normal-school education (teacher-training) begins at senior middle-school level, where primary-school teachers are trained. Because educational facilities are limited, competitive entrance

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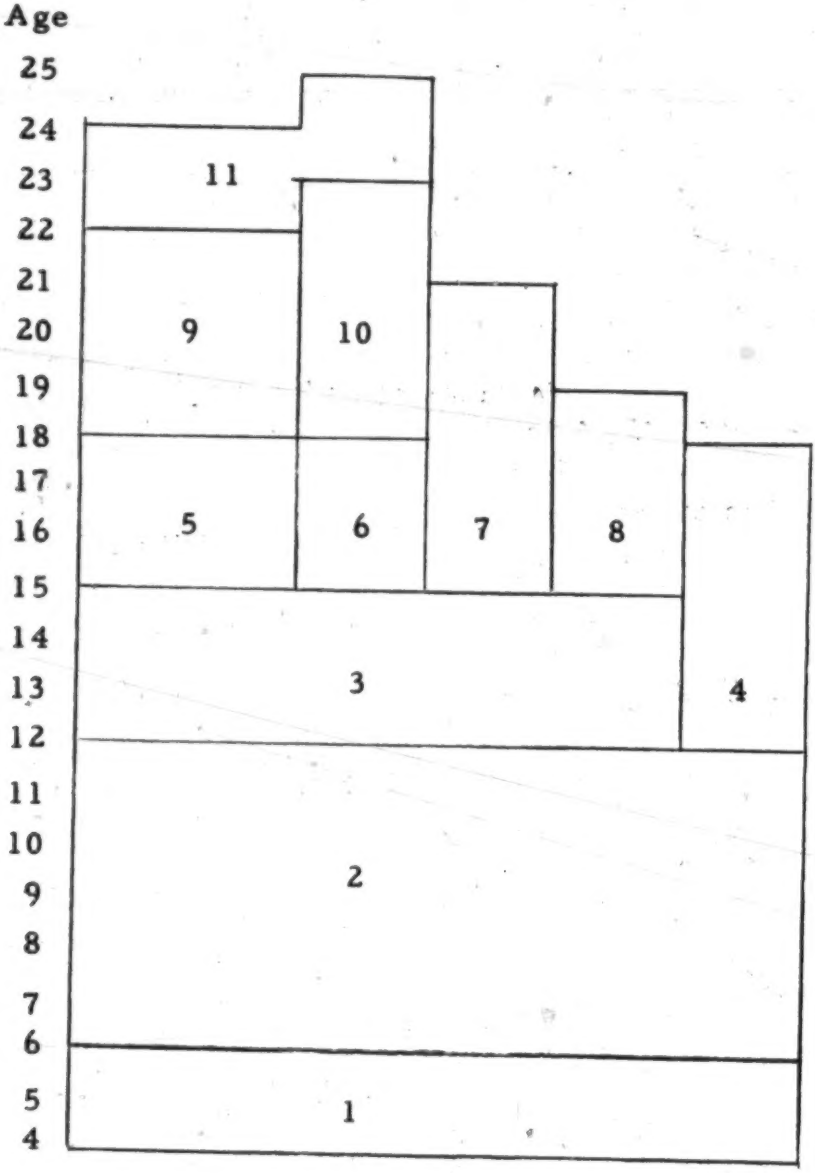
SIMPLIFIED EDUCATIONAL SYSTEM
School Year 1954-55



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KEY

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1. Kindergarten -- one to two years
2. Primary School -- six years
3. Junior Middle School -- three years
4. Vocational School -- one to six years
5. Senior Middle School -- three years
6. Normal School -- three years
7. Junior College -- two to six years
8. Senior Vocational School -- four years
9. College -- four years
10. Normal College -- five years
11. Graduate School -- two years

87 examinations are required at each educational level above junior middle schools.

A. Primary Education

872 Primary education begins when a child reaches the age of six and lasts for six years. Primary education is compulsory and free to all school-age children, "school age" being defined as from 6 to 12 years. Salaries of the teaching staff are paid by local governments. Textbooks and tuition are free, but children must buy their own notebooks and pencils.

The objectives of primary education are good citizenship, proper habits, and the basic knowledge and skill necessary for earning a living. As to language, emphasis is placed on the teaching of Mandarin Chinese as evidenced by the fact that all children entering school must be taught the Mandarin phonetic symbols during the first twelve weeks of school. All texts are in the Chinese language, the compilation of which emphasizes commentary on Dr. Sun Yat-sen's "Three People's Principles,"[3] exposure of the barbarism of the Communists, explanation of the nature of Soviet imperialism, stories illustrative of a patriotic spirit, material relating to Formosa past and present, and other items conducive to the building of morale and to the strengthening of determination to fight against Communist and Soviet imperialism.[4]

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3. Nationalism, Democracy and Livelihood. For details, see the chapter on Structure of Government.

4. China Handbook 1954-55, Taipei China Publishing Company, 1954, p. 313.

872 In the academic year of 1954-55, there were 1,350 primary schools in Formosa, with 22,025 classes and an enrollment of 1,113,438 students. The teaching staff numbered 27,944. Percentage of attendance averaged 90.83 with 95.95 the average for boys and 85.32 for girls.[5] From this percentage, it may be inferred that compulsory education is not necessarily enforced. It is possible that some families are too poor to send children to school, and the children are needed at home to supplement the family income. Since most of the schools do not have bus transportation for children, those who live too far away to walk to school may be unable to attend.

B. Secondary Education

873 Three types of secondary schools may be noted, namely, academic middle schools (called middle schools throughout this study), vocational schools, and normal schools (for teacher-training).

1. Middle schools Academic middle schools are divided into those that have both junior and senior divisions and those that have only the junior division. Generally, each division requires three years of study in which Chinese, English, mathematics, physics, chemistry, biology, physiology, hygiene, geography, history, civics, and manual work are taught. Military training is required of senior middle school boys (girls take nursing instead),

5. Provincial Dept. of Education, T'ai-wan-sheng Chiao-yu T'ung-chi 1954-55 School Year [Statistics of Education in Taiwan Province], [cont.]

873 and scout training is given to all junior middle-school students. (This subject is further discussed in the section on "The Role of Government" below.) Stress is placed upon the study of the Chinese and English languages; in fact, these two courses take up one-third of the weekly teaching hours. Mathematics, natural sciences, and military training or scout training each takes one-tenth of the total week-hours. Since 1950, some schools have adopted, on an experimental basis, the so-called 4-2 system--four years in the junior division and 2 years in the senior division. It was recommended that the traditional 3-3 system be adjusted to a 4-2 system so that those pupils who could not afford to go through the whole period of six years might stop at the end of the fourth year. Repetition of junior-division courses in the senior division is avoided. The system has the advantage of giving general courses in the first four years, while in the last two years students are grouped into arts and science majors for concentrated study.

In the academic year 1954-55, there were 137 middle schools in operation, 82 of which had both senior and junior divisions. Enrollment reached 125,203, with 24,198 in senior divisions and 101,005 in junior divisions. Less than one-third of the primary-school graduates entered junior middle schools; 42,053 students enter junior middle schools in the autumn of 1954; although there were 141,384 graduates from primary schools in the summer of [6]

[5. continued] Taipei, 1955, Tables 1-4, p. 69.

6. Statistics in this paragraph are from Provincial Department of Education, op. cit., Tables 32, 44, and 76.

873 the same year. Traditionally, the highest graduates from primary schools enter public academic middle schools; the less able graduates enter vocational schools. With a few exceptions, a nominal tuition fee is paid in secondary schools. Tuition at private universities is expensive by Formosan standards.

874 2. Vocational Education Vocational schools give youth the necessary training in production techniques and practical knowledge to earn a living, with emphasis on the "patriotic nature of all endeavor." There were, in the 1954-55 school year, 91 vocational schools, which included 41 agricultural schools, 18 engineering, 18 commercial schools, 3 maritime schools, 8 schools of home economics, and 3 nursing schools. All have junior and senior divisions with the exception of nursing schools, which have only a senior division. Students enrolled in the same period numbered 52,830, of which 17,823 were in the senior division and 35,007 in the junior division.

To emphasize the practical aspects of vocational education, the Ministry Education in October 1954 called a conference of educators with leaders in agriculture, industry, commerce, and medicine to discuss problems and techniques of developing teamwork between schools and employers. Although no concrete program was adopted, individual schools are making efforts to increase field practice to give their students practical experience. However, it is reported that many factories and enterprises are reluctant to make their facilities available to students.[7]

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7. Provincial Dept. of Education, Vocational-Industrial Education in Taiwan, Taipei, 1953, p. 6.

874 Vocational schools lack competent teachers because the salaries offered are low compared with those offered for work in factories and business enterprises. Equipment and size of workshops in the schools are reported to be inadequate to provide full opportunities for all students. Consequently, undue emphasis is put on the theoretical aspects of the subjects studied and lack of practical experience makes comprehension difficult.[8] Efforts are being made to find solutions to these problems.

3. Teacher-training Schools There are 9 teacher-training schools, with 6,539 students, of whom 3,750 are boys.[9] The importance of teacher-training is appreciated because it is recognized that the quality of teachers determines the quality of the generation to come. The traditional feeling toward vocational schools, as has been mentioned, and the generally low salaries of teachers, make the profession of teaching less attractive. To encourage people to become teachers, the training schools offer free tuition, room and board, and uniforms. Those who complete their training agree to serve as teacher for at least three years after their graduation.

In teacher-training, cultivation of a national consciousness and patriotic sentiment, a strong background in Mandarin Chinese, and an understanding of the value of labor are given closest attention. For these purposes, teaching of materials from the

8. Ibid.

9. Provincial Dept. of Education, Statistics of Education in Taiwan Province, 1954-55, Table 45.

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(Table faces p. 181.)

Institutions of Higher Education

Autumn-1956*

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Name of Institution	Location	Enrollment	Number of Faculty
National Taiwan University	Taipei	4,797	1,583
Graduate School, National Political University	Near Taipei	86	30
Provincial Normal University	Taipei	1,426	320
Provincial College of Agriculture	Taichung	961	206
Provincial College of Technology	Tainan	1,264	292
Christian Tunghai University	Near Taichung	200	—
Provincial College of Law and Commerce	Taipei	1,523	136
Law School of Soochow University	Taipei	400	42
Tamkang English College	Tamshui	821	86
Tahsu Medical College	Kaohsiung	61	14
Provincial Maritime Junior College	Keelung	335	75
Provincial Junior College of Agriculture	Pingtung	150	41
Provincial Junior College of Technology	Taipei	1,553	253
Provincial Junior College of Nursing	Taipei	83	23

*Enrollment and size of faculty are for academic year 1954-55; statistics, with the exception of Christian Tunghai University, are from the Provincial Department of Education, T'ai-wan-sheng Chiao-yü T'ung-chi /Statistics of Education in Taiwan Province, 1954-55, Taipei, 1955, Tables 6 and 8. The figure for Christian Tunghai University is from The Asian Student, November 8, 1956. Number of faculty not available.

[facing p. 181]

874 Four Books[10] and training of students in farming as well as in handicrafts are emphasized, so that they will in turn be able to instruct children in such matters.

C. Higher Education

873 After 12 years of primary and secondary education, students may take a competitive examination for entrance to institutions of higher learning. In the autumn of 1955, approxi mately 2,300 freshmen entered colleges and universities although some 12,000 students sat for the examination. There are 14 institutions of higher learning, with an enrollment of about 14,000. Location, enrollment, and size of faculty for these instutions are given in the following table.

10. The Great Learning, The Doctrine of the Mean, Confucian Analects, and the Works of Mencius, all pertaining to Confucian philosophy and moral principles.

873 More than half of these institutions are located in or near Taipei. Indeed, Taipei is the most important educational center of the island.

In addition to concentration in specialized fields, all students are required to take four courses in common before graduation, namely, courses in modern Chinese history, the Three Peoples' Principles, the history of Soviet encroachment upon China, and world organization and current conditions. Since October 1954, military training in the school as well as upon graduation is required of all male college students (girls are required to take courses in nursing). Conferring of a degree is conditional upon completion of the training.

Educational facilities and opportunities are being continually expanded and improved, but they are still far short of the demand for higher education. Through co-operation of some American universities and the sponsorship of the American Mutual Security Mission to China, educational systems and teaching methods are being revised and educational facilities are being improved.

874 D. Graduate Education and Research Facilities

The National Taiwan Universirty, the National Political University, and the Provincial Normal University have graduate divisions where students complete a two-year course. Upon successful passing of an examination and the completion of a thesis, the Master's degree is conferred upon the graduate.

In National Taiwan University there are 13 graduate divisions, one in the College of Law, another in the College of Arts, and the remainder

874 in the departments of natural and applied science. In the academic year 1954-55, there were 149 graduates at the university. A graduate division of the College of Sciences publishes periodic reports on the results of its research. With the assistance of American agencies, the university is improving and expanding its facilities to be comparable to those in the United States. The government has recently established an Atomic Energy Committee and five atomic-resarch centers. Two of the centers are located in the university. Research is concerned with the peaceful use of atomic energy.

The Graduate School of the National Political University has four institutes, known as the Institute of Civic Education, the Public Administration Institute, the Institute of Journalism, and the Institute of International Relations. They lack satisfactory library facilities of their own and must borrow books from the National Central Library or from the Library of the Ministry of Education. Efforts are being made to buy more books at home and abroad. In early 1955, the total enrollment was 56.

In view of the increasing number of students, library collections in general at these institutions are not adequate and space is limited. Most of their collections are old, and books in the Japanese language constitute a major part of the collections.

The Academia Sinica, established as the highest institution for scientific research in China,

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874 carries on a program of scientific research, which includes its direction, co-ordination, and promotion. Thirteen institutes, composed mostly of academicians (Yüan-shih or research scholars), were established before the government's removal to Formosa, but only one institute, the Institute of History and Philology, was moved from Nanking to Formosa with its collections intact. Its research work has continued. Some academicians of such institutes as those of astronomy, geography, botany, and medicine also are continuing their research work with the existing facilities on the island. In 1955, a new Institute of Modern Hstiroy was established under the direction of the distinguished scholar Kuo T'ing-i. The announced purpose of the institute is to collect and organize source materials and to support critical research on "Chinese history since the beginning of the 19th century, inclusive of changes in diplomatic relationships, military and political conditions, social and economic institutions, letters and arts, and systems of thought; successes and failures of the modernization movement; and the development and growth of Chinese Communism." [11]

E. Social Education

The core of social education in Formosa centers around the obliteration of illiteracy and

11. "General Scope of the Research Program for the Institute of Modern History, Academia Sinica." Typescript, distributed by the Institute in August 1955.

The promotion of a national consciousness, the improvement of public sanitation, and the furtherance of co-operation between the armed forces and the people. The main objective of such a program is the training of those people who have missed opportunities to attend schools. They are trained in one or several of the following fields:

1. Languages -- overwhelmingly Mandarin, with English to a considerable extent.
2. Citizenship -- cultivation of national spirit and promotion of traditional moral principles.
3. Vocation -- accounting, typewriting, drawing, auto mechanics, radio and telecommunication, handicraft, etc.
4. Arts -- drama, music, writing, etc.
5. Sciences -- physics, chemistry, and biology.
6. Health -- physical education and sanitation.

Local schools and private educational organizations participate in the educational program. All the primary schools on the island have "mass continuation classes" where Mandarin and citizenship are taught. In some instances, attendance by the underprivileged is made compulsory.[12]

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12. Chung-kuo Chiao-yü Hsüeh-shu Yü Wen-hua 1954 [Education, Learning, and Culture in China], Taipei, Education and Culture, Inc., 1955, p. 47.

873 In 1954, there were 23 provincial and private vocational schools which provided teaching staffs and facilities for some 10,000 people, mostly factory workers and farmers, and gave classes in vocational education for periods ranging from 2 to 12 months. In the same year, there were also 418 vocational classes, most of private organization, of which 213 taught the fundamentals of tailoring, 39 taught English, 30 taught typewriting, and 30 accounting.

Active promotion of social education by the government is worthy of mention. The provincial Department of Education has built four social education halls in Hsinchu, Changhua, Tainan, and Taitung, which are used for counseling and teaching in all fields of social education. These education halls are often used for concerts, movies, and social meetings of various kinds. Audio-visual aids are now widely used in teaching, and local governments are ordered to set aside a certain portion of their budgets for this purpose. A radio network for educational purposes, reaching the entire island, is now in operation. (See chapter on Propaganda and Public Information.)

217 With the exception of those located in various schools, the following are the most important libraries and museums on the island: The National Central Library with 120,000 volumes, located at the Botanic Garden, Taipei; two provincial libraries, at Taipei and Taichung, and 15 hsien and municipal libraries at Taipei, Tainan, Kaohsiung, Keelung, Hsinchu, Yilan, Taoyuan, Taichung, Changhua, Chiayi, Pingtung, Hualien, Penghu, Miaoli, and Nantou. These seventeen

217 libraries have a total of 46,187 books in European languages, 241, 574 in Chinese, and 240,603 in Japanese.

874 The provincial Department of Education also maintains two trade schools for the deaf, dumb, and blind at Taipei and Tainan. These schools provide free education in trades such as woodworking, barbering, shoemaking, massaging, etc., and can accommodate 436 students, principally children.

658 Special attention has been given to fine arts education in order to encourage the aesthetic aspirations of the people. The Ministry of Education recently established for this task the Committee for Fine Arts Education and the Committee for Research and Improvement of Chinese Opera. New plays are being written and concerts, art exhibitions, and other cultural events are provided under the committees' promotion.

III. ROLE OF THE GOVERNMENT

A. Content and Character of the Role

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In Formosa, the government has general control over the supervision, educational policies, and organization of schools at all levels.

The Executive Yuan, in its proposal of an administrative program to the Legislative Yuan in March 1952, set its educational objectives as follows:"that in order to meet the needs of time...

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the education program should develop the moral character of the citizens...should denounce the false doctrine of class struggle so as to eradicate the contamination of Communism and Soviet imperialism...and should guide and assist youth who cannot afford to attend school and encourage them to participate in the gigantic work of national salvation..." Within these broad principles, the Ministry of Education, a part of the Executive Yuan, exercises supervisory power over the education of the entire country and controls the compilation of textbooks. Financing, maintenance, and administration, however, are left to the provincial and local governments. In the academic year 1954-55, the budget of the Ministry of Education, including a supplementary budget, amounted to NT$ 73,580,000 (US$4,7560,000, at NT$15.65 to US$1 as of June 1954) which constituted 2 per cent of the national budget. However, educational expenditures are borne largely by the provincial government, which allocated 25 per cent of its NT$1,200,000,000 expenditures for educational purposes in the 1954 fiscal year. The educational appropriations of 16 hsien and 5 municipalities and the Yangmingshan board of administration averages 35 per cent of their total budgets.[13] All the primary schools on the island are publicly owned. Only 29 of the total of 237 secondary schools (including 21 middle schools and 8 vocational schools) are privately owned. Of 14 institutions of higher learning, 3 are owned and administered by private interests. The organization or dissolution of any school, moreover,

13. Chang Chi-yun, Education in Free China, Taipei, China Culture Publishing Foundation, 1954, pp. 2-3.

87 is subject to the permission of the educational authorities of the government.

New requirements in the courses offered in all levels of schools -- non-academic labor and military training -- are recent implementations of the educational program. All primary and secondary schools are required to provide vegetable gardens, workshops, implements, tools, machines, etc., in order that students may learn the habit of manual work and productive efforts. Efforts are being made to achieve closer coordination between the school and the community and between vocational schools and factories or farms.

87 Needs of the time, especially in Formosa, clearly indicate the necessity for military pre-
701 paredness. The Ministry of Education is of the opinion that educated people should be prepared to serve on the home front if they are not to serve in the front line. Students of all schools above junior middle-school level are required to take military training at school and upon graduation Girls are required to take nursing instead of
87 military training. As of 1954, more than 90 per cent of the schools at junior middle-school level were giving scout training, and there were approximately 8,876 Boy Scouts and 3,084 Girl Scouts[14] in Formosa.

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14. Chung-hsin Ch'en "T'ai-wan-sheng T'ung-tzu-chun Chiao-yu Kai-k'uang, " ["Boy Scout Education in Taiwan"] Chiao-yü Yü Wen-hua [Education and Culture Weekly], Vol.6, No.10, pp.9-11.

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87 In addition to training, Boy Scouts in Formosa render social service by contributing radios and books to the armed forces and by such services as maintaining order in public meetings.[15]

B. Education of Overseas Chinese

87 648 Education of overseas Chinese is under the charge of the Ministry of Education. It is undertaken on the premise that overseas Chinese support the government of their motherland and wish to preserve their traditional culture. Chinese Communists are now making a tremendous effort to indoctrinate overseas Chinese and to attract them to study on the Mainland.

There are about 2,338 primary and secondary schools[16] of overseas Chinese over the world, more than 90 per cent of which are in Southeast Asia. The ministry supplies textbooks to 1,817 of these schools and also distributes periodicals and books intended to familiarize the Chinese with Chinese culture and institutions. The ministry plans to establish a university in Formosa for overseas Chinese; in the meantime, the National Middle School for Overseas Chinese, with an enrollment of 200 students from Vietnam, Korea, and other countries began instruction on October 21, 1955.

The ministry has continually helped the overseas students by assigning them to various

15. Ibid.
16. Asia Foundation Bulletin, Aug. 5, 1955.

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schools on the island, assisting them in finding part-time employment, and offering them counseling while at school. It is reported that, during 1951-54, there were 2,350 overseas Chinese attending colleges and universities in Formosa through the encouragement of the ministry.[17] About one-fourth attended National Taiwan University.

An Overseas-Chinese Teachers' Department is being established at the Provincial Normal University, where 50 teachers, to be selected from middle schools of overseas Chinese, are to complete a two-year training program.

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17. Ibid., May 31, 1955.

Annex "A," Subparagraph 1k,
Sociological Background

RELIGION

I. GENERAL BACKGROUND

771 The dominant, yet nameless, religion which exists in Formosa today is a system of worship, derived from such diverse sources as Taoism, Buddhism, and Confucianism, each of which has contributed some of its teachings and practices to the system, intermixed with folk beliefs. The religion is polytheistic and has its roots in the worship of Nature and one's ancestors. Most of the people on the island do not belong to a single religion but worship the gods of the three religions. Their religion, thus, is inclusive and tolerant. In almost every Formosan Chinese household an altar may be found in the central hall. On the altar, beside the tablets of ancestors, the images or symbols of several gods are displayed. Among them are usually Kuan-yin [Goddess of Mercy], a Buddhist goddess; Sheng-mu or Matsu [the Holy Mother of Heaven], Tsao-chün [the God of the Hearth], Fu-te-cheng-shen [the God of Wealth and Virtue] -- these three being derived from the Confucian system; and T'ien-kung [the Jade Emperor or Supreme God of Heaven], a Taoist god. In addition, each house has a Men-shen

771 [Diety of the Door].[1] There is also among the Formosan Chinese another common object of worship, Ch'eng-huang-yeh [the Judicial God], who is believed to have judicial and policing powers over the living and the dead. In essence, these folk-beliefs constitute the religion of the island; it is estimated that about 7,000,000 people (about 70 per cent of the population) subscribe to them in one way or another. Wide latitude seems to exist between strict surface adherence and true belief among the younger generation. Young people and urban intellectuals are less enthusiastic about the religion and follow it only as a matter of family observance. But it is still very influential among women, older men, and the less-educated. More than 3,000 temples of various gods existed throughout the

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1. Fukutaro Masuda, Taiwan hontojin no shukyo [Religion of Taiwan Islanders], Tokyo, 1935, p. 47. Classification of these gods into certain philosophical schools such as Confucianism and Taoism may appear arbitrary. But it is done so in this source probably because the gods of the folk religion tend to be ascribed to one school or another, by the general public.

period of Japanese rule.[2] The number of temples has not decreased; since the Restoration in 1945, many temples have been repaired and new ones have been built.

On Formosa the faithful of other religions are numerically unimportant. There were only 41,000 "true" Buddhists among the Formosan Chinese[3] in 1942. In 1954, there were about 34,000 Catholics with 126 churches, and 80,000 Protestants (about 4,600 of them Presbyterians) with about 600 churches.[4] There were about 900 Taoists[5] on Formosa in 1955. These various religious groups constitute less than 2 per cent of the total

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2. Taiwan Provincial Government, Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Table 507.

3. Ibid., Table 510. This seems to be the latest figure available on the number of Buddhists on the island.

4. China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], Vol. II, Taipei, 1955, pp. 103-106.

5. There were about 900 Taoist believers on the island in 1955. Chung-yang Jih-pao [Central Daily News], Taipei, Oct. 7, 1955.

797 population.[6] Mohammedanism was introduced
779 after the Restoration; the number of believers are very few. The majority of the recent converts to Christianity are high school and college students.[7] These students are believed to have become Christians largely because of their wish to follow Western practices.

797 Many Protestant and Catholic missionaries have continued and expanded their vigorous activities since the end of the war. Many who were forced to leave the China Mainland are now continuing their work on Formosa. Besides the preaching of the Gospels, they have intensified their educational and social services. For instance, there were some 270 priests and 160 sisters of the Catholic Church on Formosa in 1955. Twelve priests and four nuns were teaching at Taiwan National University.[8]

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6. The number of Buddhists in 1942 was added to that of Christians in 1954. The result may not be presenting a true picture of the numbers of these faithful, but only a rough approximation.

7. China News Press, op. cit., p. 104.

8. China Handbook 1954-55, Taipei, China Publishing Company, 1954, pp. 62-63.

797 There is a Catholic hospital in Kaohsiung and another in Lotung. Many of the missions give time to Bible classes, English classes, and kindergartens. The increase in the number of Catholic converts has been most remarkable. There were fewer than 10,000 Catholics in 1941, and the number had increased[9] to more than 34,000 in 1954. While many Protestant denominations have been established in the last ten years, the number of their adherents has increased relatively little -- about 70,000 in 1942, to slightly over 80,000 in 1954.

There seems to be no open conflict between the tolerant native religion and Christianity, nor any objection to the introduction and expansion of Christianity. It has been noted that some non-Christian families celebrate Christmas and many Christian families continue to celebrate traditional Chinese festivals.[10]

II. THE CHARACTER OF FOLK BELIEF

771 The Chinese have "concerned themselves less with the hereafter than with the proper

9. China News Press, op. cit., p. 103.
10. A.F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 334.

conduct of affairs and attainment of happiness in the here and now."[11] Unlike the Hindus, the "Chinese are not a passionately religious people preoccupied with a spiritual quest." However, the daily life of the Formosan Chinese is tremendously influenced by religion, although they worship in order to resolve the problems of the here and now. Everything that is useful for living, no matter whether it is native or foreign, rational or naive, is generously absorbed and preserved. Naturally their system of religion has no rigid principles, they adhere to no single discipline of teaching and practice, and their idea of the godhead is not clearly defined.

The Formosan Chinese religion has been resolved, in the main, from the material needs of life. When the Chinese came to Formosa, they carried with them the image of Matsu, the patron goddess of navigation, and the images of other local gods as patrons and protectors. Sometimes they carried consecrated incense as a symbol of the gods. Before steam navigation, it was dangerous to cross the Formosa Strait.

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11. "Religion in the Land of Confucius," Life, Vol. 38, No. 14, April 4, 1955, pp. 44-84.

771 After the Chinese arrived in Formosa, they were subject to epidemics, bandits, and raiding parties of aborigines. The patron gods were their only refuge.

Religion in those early days of settlement also had a social function. Immediately after a settlement was made, a temple was built. Intimate co-operation was absolutely necessacy in the new settlement, and shared beliefs gave a basis for mutual endeavor. The temple was their community center for discussions and decisions on public affairs. Once an argument had been settled in the presence of their gods, the agreement was binding and adherence was assured.

For the Formosan Chinese, everything that man cannot control is attributed to the work of supernatural force. This force governs every aspect of human life. All natural phenomena are deified, and ancestors, sages, virtuous women, and historical personalities are often given the status of gods. In heaven, there is the supreme god, the Jade Emperor. Under him, in successive ranks are the gods of heaven, of earth, and of water; the gods of the seasons, the god of the five elements (water, wood, earth, gold, and fire); the god of the thunder, of the lightning, of the wind, of the clouds, and of the rain; the gods of the mountains and the rivers -- and so on. Each branch of trade

771 has its god; there are patron gods for pharmacists, rice traders, carpenters, tailors, musicians, etc. There are household deities for the door, the well, and the hearth. For child-bearing and child-upbrining there are specific gods. There are gods of longevity and happiness. In short, there is a god to correspond to each and every human need. It is inevitable that beliefs as general as these result in superstitious practices.

775 The conception of a realm of the dead (Yin-chien) as contrasted with the world of the living (Yang-chien) includes a hell after death, judgment, reward, or punishment, and transmigration into another living form as punishment or entry into paradise as reward. It is generally believed that a person after his death will go to the realm of the dead where Ch'eng-huang-yeh [the Judicial God] will send him to Yen-lo-wang [the King of Hell]. The King will try each case with impartial care, sending those who have done good deeds to the Paradise of the West (the Buddhist Paradise) and give adequate punishment to those who have done evil. The seriousness of the offense determines whether the person is to be re-born as a new person or as a lower creature, say, a water buffalo or an insect. The punishments imposed are cruel, and those who have sinned may be boiled in oil, cut in half, or have their tongues

775 removed.[12]

After death, the souls of one's ancestors are believed to live in Yin-chien, where there prevails the same set of moral and economic values that govern the living. The descendants
769 are considered unfilial if they fail to worship their ancestors or do not consecrate periodic sacrifices to make the dead happy in Yin-chien.[13] The dead are considered a part of the family, determining the fortunes and misfortunes of their descendants in strict accordance with the amount of filial piety shown them. Some families build temples for the worship of their ancestors. Of the dead who have no offspring to worship them, most become lost souls wandering the universe as malevolent spirits and have such a strong influence on the living as to be assumed the cause of their misfortunes.

III. RELIGIOUS PRACTICES

793 Awe of the universe intermixed with Taoist sorcery results in one thousand and one strange practices among the less-educated people. Religious practitioners, mostly of the Taoist order, serve in the invocation of gods and spirits, communication with spirits,

12. Masuda, op. cit., pp. 54-60.
13. Ibid., p. 63.

793 and the exorcism of malevolent spirits. At the time of births, deaths, sickness, the building of new houses, and other important family occasions, priests are invited to offer prayers and sacrifices and extended services appropriate for each case.

A. Prayers and Sacrifices

782 Gods and ancestors on the family altar are worshiped generally on the first and the fifteenth days of each month (lunar calendar). Usually candles are lit, incense consecrated, and symbolic "paper currency" is burned for use in the other world. In the minds of the faithful, each god has a personality. Earthly problems and difficulties are brought before gods for assistance, and conditional promises are given that certain sacrifices and donations will be offered if and when the prayers are answered. Sacrifices differ according to the hierarchal positions of the gods in the pantheon. A whole pig is sacrificed, among other food, to the Jade Emperor, to the God of Earth, of Heaven, and of Water, and to the Judicial God in celebration of their name days, on which gay, joyful, and carnival-like festivals are held. To the gods just described and the less important deities may be offered "three sacrifices," generally pork, fish, and chicken; to ancestors, cooked rice and other dishes.

782 Sacrifices and food offered once to a god may be again offered to gods of lower rank. All the sacrifices are eventually consumed by those who offer them because gods are thought to require only the essence of each sacrifice.[14]

Prayers may be offered by a priest (usually a Taoist), who is paid to ask the gods for the patient's quick recovery, a safe birth, the removal of distress supposedly caused by evil spirits, etc. Prayers commonly heard in temples are not offered in order to seek strength to live a holy life but to ask for practical and immediate benefits.

B. Communication with Spirits

787 Since souls are popularly believed to live in Yin-chien, communication is possible through the media of Taoist practitioners. When someone wishes to communicate with those who are dead, he may ask a medium, usually a devout woman of the faith, to go to a Taoist priest practicing spiritualism. Before the presence of a god, the priest places the medium in a trance. In the trance the medium meets the dead soul through the guidance of the god and is able to answer questions which

14. Masuda, op. cit., pp. 86-88.

787 the seeker wishes to ask. The questions may pertain to the circumstances in which the soul has left the Yang-chien, the conditions of life in Yin-chien, the causes of misfortune which now exist in the family, etc.[15]

Hung-i [a sorceress] also renders services as a medium to the spiritual world. She may ask the gods in heaven or spirits wandering in the universe to descend and dwell in her so that the inquirer may directly converse with the gods or spirits involved in a particular problem. One may ask the hung-i such questions as: "Where may medicine for the sick be obtained?" "Will the expected birth be easy or difficult?" "Where can lost treasure be found?" "Are the dead happy and how do they live in Yin-chien?" An interesting saying, "Your mouth is exactly like that of a hung-i." (meaning that you are as great a liar as a hung-i), is used in irony and suggests the combination of belief and distrust with which

15. Seiichiro Suzuki, Taiwan kyukan - kankon sosai to nenchu gyoji [Traditional Customs of Taiwan - Coming-of-age, Marriage, Funeral, Ancestor Worship and Annual Events], Taihoku, Taiwan nichinichi shimposha, 1934, pp. 52-54.

787 the people of Formosa regard the practice of sorcery.[16]

C. Taboo

787 The belief that the world is full of
791 spirits which control all aspects of life and every part of the universe has led to a system of taboo. A doubtful science called feng-shui (literally meaning "wind and water") is concerned with a study of the spirits dwelling in earth and mountains. The breaking of earth for the purpose of erecting a house, opening a mine, or digging a grave site at a certain time and on a certain date can begin only after a geomancer has assured the questioner that the spirits concerned will not be disturbed. For more or less the same reason, the date of a marriage or the time a funeral procession should begin is determined by a fortuneteller.

787 It should be made clear that these beliefs and practices are observed by a limited number of people among those who

16. Keirai So, Taiwan shukyo to meishin roshu [Religion and Superstitious Practices in Taiwan], Taihoku, Taiwan shukyo kenkyukai, 1938, pp. 34-44.

787 adhere to the folk-religion. With the advance of science and Western education, the belief in communication with the spirits of the dead and the various forms of taboo will lose much of their force. However, their influence on the religious life of the people in Formosa still seems to remain far stronger than that of Christianity.

IV. GOVERNMENT POLICY TOWARD RELIGION

771 Since the establishment of the Republic of China, the government has assumed an attitude of "non-interference" toward religious practices. Confucianism, which is a system of ethnical principles rather than a religion, receives official support and encouragement in matters of education and propaganda. On the birth day of Confucius, heads of central and local governments become chief priests in worshiping and commemorating the great sage.

Of the greater number of government officials who have begun to observe Christian services, some may have done so, in part, because the wish for co-operation with the West, particularly with the United States, is growing. Church attendance, however, is by no means widespread.

771 The wartime austerity campaign launched by the government has, to a certain extent, imposed measures against waste and extravagance during local festivals and other annual religious rites. However, these restrictions have had little effect on traditional religious practices, to which the people stubbornly cling for solace.

Annex "A," Subparagraph 11,
Sociological Background

PUBLIC INFORMATION

GOVERNMENT INFORMATION OFFICES

208 There are four principal government information offices on Formosa. The Government Information Bureau, under the Executive Yuan, releases official statements and expresses the views of the government on the topics of the day, for the director of the bureau is the official spokesman of the government. The Fourth Section of the Kuomintang holds regular press conferences and issues statements for the party. The information office of the Ministry of National Defense issues a daily bulletin on military development. The information department of the Taiwan Provincial Government reports on the progress of the work of the various departments of the provincial government.

NEWSPAPERS

204 There are twenty-seven registered newspapers on Formosa and one in the Pescadores. For reasons of economy, the number of newspapers as well as the number of pages of each newspaper are restricted by law. Although any existing newspaper may change its

204 ownership or alter its name, no new daily newspaper may be published. In the years when the Taiwan Pulp and Paper Corporation was run by the government, the paper used by the newspapers was apportioned by the government according to the circulation of each newspaper at a fixed price. When circulation grew, more paper was provided by the government, which paid the difference between the current price of paper over and above the fixed price. The Taiwan Pulp and Paper Corporation has now been transferred to private ownership. It announced its intention to discontinue the practice of supplying paper to the newspapers at the special price on March 1, 1956. In protest, the newspapers proposed to publish a daily consolidated issue on imported newsprint.

Of the 28 newspapers (editions of the same paper printed in or for different cities being counted as separate units), Taipei alone has 15; Keelung, 2; Taichung, 3; Chiayi, 2; Tainan, 1; Kaohsiung, 1, Taitung, 1; Hualin, 2 and the Pescadores, 1. Twenty-five are morning editions and three are evening editions. All of the evening newspapers are published in Taipei.

204 The total circulation[1] of Formosan newspapers, as reported by the Provincial Committee on Paper Rationing, averaged 336,706 copies per day in the year 1954. It is estimated that, in addition to the newspapers listed above, newspapers published elsewhere, mostly in Hong Kong, sell about 40,000 copies on the island. In view of the high literacy among the people, this rate of circulation (under 5 per cent of the total population) appears to be surprisingly low. The explanation may be found in the fact that a large number of the Formosan Chinese are unable to read Chinese. In an effort to suppress Chinese culture during Japanese occupation, only the Japanese language was taught in the Formosan schools and all of the newspapers were printed in the Japanese language. From March 1, 1937, even the practice of carrying a single column in Chinese was abandoned.[2] When the Chinese authorities returned, they were equally anxious

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1. Ch'eng She-wo, "Pao Yeh" ["The Newspaper Business"], Chung-hua Nien-pao [China Annuals], Taipei, China News Press, 1954, Vol. II, p. 50.

2. Andrew J. Grajdanzev, Formosa Today, New York, Institute of Pacific Relations, 1942, p. 170.

204 to eradicate the influence of Japan. On October 25, 1946, the Taiwan Provincial Government restricted the newspapers and magazines to the use of the Chinese language.[3] Because the majority of adults are unable to read the Chinese language, the circulation of newspapers and magazines is necessarily limited. It may be pointed out in this connection that for the benefit of those who cannot afford to buy a newspaper (newstand price, 70 NT cents, equivalent to US 4 cents, a copy), newspapers are posted in public places so that crowds may gather to read them.

The most important newspapers in Formosa are five in Chinese - the Central Daily News, New Life Daily, United Daily News, Chung-hua Daily News, Public Opinion, and one in English, the China Post.

1. Chung-yang Jih-pao [The Central Daily News] (daily circulation 67,170 in 1954, is the official organ of the Kuomintang. It expresses the view of the government and the

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3. Chu Hsü-pai, "Tai-wan Hsin-wen Shih-yeh" ["Newspapers in Taiwan"], Hsin-sheng Ti T'ai-wan [Taiwan under a New Life], Taipei, Hsin-sheng pao, 1950, p. 81.

204 party. Originally established in Nanking in 1919, it was moved to Formosa in 1949.

2. Hsin-sheng Pao [New Life Daily] publishes two editions, one in Taipei, circulation 41,153; and another in Kaohsiung, circulation 21,095. It was the only newspaper called Taiwan Shimpo [Taiwan Daily] on Formosa during the last years of the Japanese rule and was handed over to the provincial government after Japan's surrender. It also operates a large printing press.

3. Lien-ho pao [United Daily News] also publishes two editions. The Taipei edition has a circulation of 33,463 and the Chiayi edition has a circulation of 11,930. It is the combined issue of three newspapers, the People's Daily News, the Min-tsu Pao [National Daily], and the Economic Times.

4. Chung-hua Jih-pao [Chung-hua Daily News] is another Kuomintang newspaper, established when Formosa was restored to China. Its southern edition, printed in Tainan, has a wider circulation, 23,836, than its northern edition-Taipei, 9,558.

5. Kung-lun Pao [Public Opinion] is published by the Young China Party and has a circulation of 4,550.

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204 6. The China Post, an English-language daily, is independent and privately owned. Its daily circulation was 3,343 in 1954.

PERIODICIALS

There is no restriction on the publication of new periodicals. With a concentration of talented writers from the Mainland, the number of registered periodicals has grown[4] from 60 in August 1950 to 266 in June 1954. These periodicals cover a wide range of subjects, including anthropology, world affairs, meteorology, agriculture, religion, and even comics for children. Many are of value in the study of Formosa's economy and culture.

PRESS LAW AND CENSORSHIP

Article XI of the Constitution of the Republic of China, promulgated on January 1, 1947, guarantees freedom of the press. The

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4. Taiwan Sheng Cheng-fu Hsin-wen Ch'u [The Information Bureau of Taiwan Provincial Government], T'ai-wan Hsin-chih [A New Account of Taiwan], Taipei, 1950, p. 37.

204 Press Law, enacted by the Legislative Yuan in 1954, stipulates that a publisher is liable to punishment should his paper be found to incite treason, disturb the public order, or "commit acts of moral turpitude." There is no censorship of any kind before a newspaper or a magazine is printed, but all printed matter is checked by security officers after publication.[5]

In 1954, on the ground that the provisions of the Press Law had been contravened, the publication of five magazines was suspended for ten months, two other magazines were suspended for six months, and three were suspended for three months. In November 1954, the Chinese Government formulated a set of regulations with a view to tightening the control over the press, but they were hastily withdrawn because of the strong opposition manifested by the press association and the legislature.

NEWS AGENCIES

204 207 1. There are twenty-seven news agencies on Formosa. By far the largest and the oldest is the Central News Agency. It was

5. The China Handbook 1954-55, Taipei China Publishing Co., 1954, p. 188.

204 established by the Kuomintang in 1924 and
207 maintained a nationwide radio network before the Mainland was overrun by the Communists. In 1948 the Central News Agency was transferred to the control of the government and its head office was moved to Formosa in 1949. Now it has ten overseas offices, and it broadcasts news both in Chinese and in English several times a day.

204 2. The China Union Press, another government news agency, is engaged in the collection of news from the Mainland.

3. The China News and Publication Service is a privately owned news agency which supplies to local newspapers the dispatches of foreign news agencies translated into the local vernaculars. It also publishes a daily paper in the English language, the China News.

4. The Pan-Asia Newspaper Alliance is an international news agency, serving newspapers in twelve Asian countries.

5. The Cheng Hsin News Agency [Industrial News Agency] specializes in financial and commercial news.

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PUBLISHING FIRMS

214 A large number of Chinese scholars took refuge in Formosa after the loss of the Mainland, and as a result an abundance of literary and scientific works has made its appearance in the past five years. However, because of the limited number of readers, the new publications generally are not remunerative. They are shunned by commercial publishers, such as the Commercial Press, the Chuang Hua Book Company, and the World Book Company, which restrict their business on Formosa to the publication of textbooks for schools.

The publishing of new books usually is undertaken by publishing houses supported either by the government or by the Kuomintang. The China Cultural Service since its inception in October 1950 has published an average of one new book a day, the bulk of which is anti-Communist literature. On the other hand, the China Culture Publishing Foundation, established in April 1952, is devoted to the publication of scholarly works. Both organizations included among their new publications in 1953 and 1954 a number of informative pamphlets in the English language. The Cheng Chung Book Company is another publisher financed by the Kuomintang. It has compiled the first series of one hundred volumes

214 on the fundamentals of modern sciences and is preparing to publish a second series. The China News and Publication Service is a privately owned concern. Among its notable publications are the Chung-hua Nien-pao [The China Annuals], the China News, an English daily, and the Ch'ing-pao Yüeh-k'an [Intelligence Monthly].

According to the statistics of the Provincial Government, there are 239 printing concerns in the Printers' Union on Formosa. The largest are the Hsing-t'ai Printing Company and the China Engraving and Printing Works, both located in Taipei.

BROADCASTING

207 There are twenty-nine broadcasting stations on Formosa. Eleven are located in Taipei, three each in Taichung and Kaohsiung, two in Chiayi, and the rest scattered in other cities of the island.

The most powerful broadcasting stations are the China Broadcasting Corporation, the Taiwan Broadcasting Station, the Army Broadcasting Station, the Air Force Broadcasting Station, and the Cheng-i Broadcasting Station. Each of these makes daily broadcasts to the Mainland. "The Voice of Free China" broadcasts in eleven languages ten and a half hours a day, to the countries of Southeast

207 Asia and to the United States, and is directed primarily toward the overseas Chinese and the Chinese newspapers.

In 1954, according to a survey conducted by The China News Press,[6] 37 per cent of the radio programs were educational and 50.7 per cent were classified as entertainment.

Among the five new radio stations established in 1954 one is planned for the Formosan farmer, and another presents special programs for the entertainment of the American forces stationed in Formosa.

There is no television on Formosa. All radio receivers, as a war measure, must be registered with the local telegraph office and owners are required to pay a license fee of NT$10 (US 70 cents) every three months.[7] But it is unlikely that the law is strictly enforced. The actual number of radio receivers in use is not known.

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6. Chung-hua "Broadcasting" in Chung-hua Nien-pao [China Annuals], Taipei, China News Press, Vol. II, February 1955, p. 91.

7. Regulations governing the Registration of Radio Receivers, promulgated by the Ministry of Communications, No. 8593, April 5, 1948; and Regulations Pertaining to License of Radio Receivers, promulgated by the Executive Yuan, No. 3282, June 22, 1951.

207 The China Broadcasting Company, which manufactures inexpensive radio receivers from parts imported from Japan, estimates that the number of radios in Formosa is under 300,000. The reason for the small number of radios is twofold: the poverty of the people and the uneven distribution of electric power in rural areas. In a survey made in 1952 by the Joint Commission on Rural Reconstruction, it was found that the farmers could not afford to purchase radios costing over NT$150 (US$10), while only 25 per cent of the 800,000 farm families have electricity in their homes.[8] However, the value of radio as an educational medium is fully recognized. There have been various proposals to encourage the farm families and the people of moderate means to own radios. In 1954, the Joint Commission on Rural Reconstruction distributed 5,000 receiving sets to farmers.

MOTION PICTURES

546 Motion pictures constitute the greatest diversion for the populace on Formosa. On

8. Chinese-American Economic Co-operation, Taipei, U. S. Mutual Security Agency Mission to China, Vol. 1, No. 7, July 1952, pp. 46-51.

546 a day selected at random, fifty theaters were advertised in the Taipei Central Daily News.[9] There were twelve theaters in Taipei alone, of which one was showing a Chinese motion picture produced in Hong Kong, two were showing Japanese pictures, and the rest were showing American films. Among the educated class, American pictures are popular, but with the masses, as a result of the language difficulty, Japanese pictures are preferred. In 1954 motion pictures accounted for a remittance total from abroad amounting to $1,500,000 in American currency.[10]

There are three local motion picture studios. The China Motion Picture Company produces pictures for the armed forces, and the Taiwan Motion Picture Company is operated by the Information Department of the Provincial Government. Both of these studios are devoted to the making of newsreels and documentary films. The third company, The Central Motion Picture Company, produces a few features for local consumption as well as for showing in places where there is a

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9. The Central Daily News, Taipei, August 27, 1955.

10. China Annual , 1954, p. 93.

546 large Chinese colony. The information office of the Mutual Security Mission to China surveyed in 1952 the number of movie projectors in rural areas.[11] It was found that 212 primary schools, 23 middle (or secondary) schools, and 64 Farmers' Associations owned movie projectors. Most of these are designed to project 16 mm. silent films. It should be noted that, of those reported, 121 projectors are but rarely or never used.

208 A majority of the people on Formosa live
546 in rural areas where transportation facilities are poor and accessibility to public information is difficult. In view of the limited circulation of the newspapers and the small number of radio receivers owned by the villagers, greater use could be made of lantern slides and short films as media of public information. The Joint Commission on Rural Reconstruction made a few documentary and educational films in 1953 and 1954. It reports: "These films, which are shown free to the farmers throughout the island, constitute one of the most effective means of rural publicity and one of the most popular information services of the JCRR."[12]

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11. Chinese American Economic Co-operation, Vol. I, No. 7, Taipei, July 1952, pp. 51-52.

12. JCRR General Report IV, Taipei, 1954, p. 196.

208 Another useful medium of publicity is the
546 pictorial poster, which may be distributed by mail or by carriers. It is found that the rural people welcome these posters and use them to decorate the interior of their homes. Hence the posters possess more permanent propaganda value than either the newspapers or radio broadcasts.

Annex "A," Subparagraph lm,
Sociological Background

LABOR

I. MAIN CHARACTERISTICS OF LABOR

162 Composition of the Working Population. Owing to efforts to accelerate industrial development during the latter years of Japanese occupation, the proportion of agricultural workers to the total working population in Formosa gradually declined. From 1915 to 1940, the proportion of farmers in relations to the total working force decreased from 70.1 per cent to 62.4 per cent.[1] Since the restoration of the island to China, special emphasis has been placed on intensive industrialization by the government with the co-operation of the American Mutual Security Mission to China. This development has inevitably led to increasing activities in manufacturing, construction, etc., resulting in a gradual decrease in the agricultural population.

1. Provincial Government of Taiwan, Statistical Summary of Taiwan Province for the Past Fifty-one Years, Taipei, 1946, pp. 139-38; and Results of the Seventh Population Census of Taiwan, Taipei, 1953, pp. 68-69.

464 Employment Situation. The population density of Formosa is the second highest in the world. In 1951 there were 667 persons to one square mile of land.[2] Because of limited economic resources and overpopulation, partial and under-employment are more prevalent than complete unemployment. Manpower appears to be rather poorly distributed, with the result that the rate of under-employment in some cases is unusually high. This is particularly true among civil service personnel and employees of various government-owned enterprises. Industrialization, though at a rapid pace, has not given rise to technological unemployment. Under the inflationary conditions generated in the economy, the number of workers has increased. As reported in the Yearbook of Labor Statistics 1953, the employment index in manufacturing rose from 100 in 1948 to 178.8 in 1952.[3]

465 Working Hours and Wages. The law provides that the regular work week consists of an eight-hour day, six days a week.

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2. Mutual Security Agency Mission to China, Chinese-American Economic Cooperation, Taipei, Vol. 1, No. 5, May 1952, p. 44. The population was estimated at 9.2 million.

3. International Labor Office.

465 Overtime is paid at time and a half. National holidays are observed.[4] Actual practice, however, diverges from the above provisions in some cases. National holidays are only generally observed. In government agencies and enterprises, banks, schools, and other public institutions the eight-hour-day principle stands. However, in most mines and factories 10 hours or more a day and 6.5 to 7 days a week are usually the rule.[5] Low wages force employees to work long hours.

Wage payments include money wages, payment in kind, and in most cases free housing. However, the level of wages is low, and workers' receipts are generally inadequate to meet their necessary expenditures. A survey made by the FOA Mutual Security Mission revealed recently that nearly half of the workers in a coal mine were in debt, and 48 per cent of the money borrowed was spent on food.[6]

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527 4. National holidays include: January 1, Founding of the Republic of China; March 29, Martyr's Day and Youth Day; August 27, Birth Day of Confucius; October 10, "Double Tenth"--National Day; and November 12, Dr. Sun Yat-sen's Birthday.

000 5. China News Press, Chung-hua Nien-pao, 1953 [China Annual, 1953], Taipei, 1954, Vol. II, p. 115.

6. FOA Mutual Security Mission to China, Project Evaluation Office, unpublished pamphlets based on 1954 survey.

467 Labor Organizations. Labor organizations include trade unions, farmers' associations, and fishermen's associations. Trade unions are weak and cannot be called unions in the real sense of the term, because the law does not provide for effective collective bargaining and also prohibits strikes, shut-downs, and walkouts of any kind during the present emergency period. The trade unions are organized under government supervision and tend to be used for carrying out government policies with respect to the workers. However, the educational and welfare activities performed by the unions should not be overlooked.

461 The Outlook of the Workers. Most of the farmers, as a result of the recent land reform, have become owner-cultivators and are looking forward to owning their own houses, sending their children to school, and enjoying better living conditions. On the other hand, because of limited employment opportunities and low wage levels, the non-agricultural laborers do not appear to face a very promising future.

464 The Future Labor Force. In 1950, the entire male labor force was estimated at 2.1 million. George Barclay states that the male labor force 25 years from now (1980) could amount to about 4 million, assuming that the

464 natural rate of increase and emigration remain the same.[7] Since agricultural employment, which was about 1.2 million in 1950, is assumed to remain constant because of limited arable land, the number of jobs for male non-agricultural workers will have to be tripled by 1980, just to provide enough employment, to say nothing of an improved standard of living.[8]

II. FARM LABOR

241 Size of Farm Households and Labor Force. In 1952, the total rural population of Formosa amounted to 4.3 million, or about 680,000 farm households. The average size of a farm household at that time was 6.3 persons.[9] An accurage estimate of the size of farm labor is extremely difficult because women as well as children also take part in farming. Women also work in the field and dry harvested rice. Children may deliver food to the field where adult family members work. Farming in Formosa is a household responsibility, and a clear-cut

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7. A Report on Taiwan's Population, Princeton, Princeton University Press, 1954, pp. 53-55.

8. The constant number of farmers at 1.2 million for the period 1950-80 is only an assumption. In 1954, the total number of farmers was reported to be 1.8 million.

9. Taiwan Provincial Government, Taiwan Agricultural Yearbook, 1953, Taipei, 1953, pp. 36-37.

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241 demarcation of duties or types of work is rather difficult. According to a survey made by the Joint Commission on Rural Reconstruction (JCRR), on the basis of 4,000 sample families, in 1952 there were 8.14 persons to each farm household, and the actual working force of each household was 3.21 man-equivalents.[10] If this relation was applied to the whole farm population pro rata,[11] the actual working force on

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10. Y.C. Tsui and S. C. Hsieh, Economic Digest Series No. 4: Farm Income of Taiwan in 1952, Taipei, JCRR, 1954, pp. 12-13. One man-equivalent equals a full-time farm laborer between the ages of 16 and 60.

11. Rigid application of this ratio to the total farm population may be open to criticism in regard to the age composition of all farmers and their families and their sex distribution. M reover, the survey represents only one year (1952) and certainly cannot be interpreted as representing the general trends. However, in the absence of a complete survey or more satisfactory sampling, the rough approximation obtained by the following means would work for our purpose here:

Average man-equivalent per family (3.21): Average persons per family (8.14) = X (Total man-equivalent): Average number of persons per family for the whole island, and X multiplied by total number of all farm families.

241 Formosan farms in 1952 would reach 1.7 million man-equivalents.[12]

241 464 Size and Mobility of Surplus Farm Labor. In Formosa there are two, three, and, in some cases, as many as four harvests per year. Therefore the frequency of planting and harvesting is high. The supply of family labor is usually constant. It is true that where there are extra young workers in the family, they often are attracted to the cities in quest of employment or to road construction, water conservation work, etc.; however, strong family ties usually cause them to return if city employment fails to materialize or when temporary construction jobs terminate. The high frequency of planting and harvesting accounts for the absence of prolonged periods of seasonal slack in farm work in spite of the constant supply of family labor.

Formosan farm labor in general is not mobile. Under the current laws regulating the lease of farms, the tenants, by virtue of their contracts with the land owners, have

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12. This figure comes close to the total agricultural workers of 1.8 million in September 1954 as reported in Taiwan: Land of Opportunity, Economic Stabilization Board, Republic of China. However, the latter estimate did not disclose how the figure was reached.

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the right to cultivate the land for six years.[13] This arrangement gives the farmers a feeling of security and tends naturally to tie them down to the land. As a result of the land reform, 76 per cent of the farmers are now owner-cultivators,[14] whose land ownership results in low mobility. However, it should be noted that all surplus farm labor can be made available for other employment, permanent or temporary.

As seen in the following table, the per chia farm population increased from 3.0 persons in 1929, to 4.3 persons in 1949, and 4.7 persons in 1952.[15] As of 1952, the size of surplus labor on the farms may be estimated at 68,000 man-equivalents.[16] This labor force is a surplus in the sense that the available manpower exceeds the actual need.

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13. Article V, Regulations Governing the 37.5 per cent Land Rental, promulgated on June 7, 1951.

14. United Nations, Department of Economic and Social Affairs, Economic Survey of Asia and the Far East 1954, Bangkok, 1955, p. 88.

15. The increase is principally through natural increase of the farm population.

16. The estimate is based on the JCRR survey Farm Income of Taiwan in 1952. The provincial average of 270 days requiring 3.21 man-equivalents applies to the production of all crops. Supposing that each farmer can work (continued next page)

45:Stanford U. S-4, 5 1956 AD1 Formosa
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16. (continued) 310 days per year (less Sundays and holidays), each 3.21 man-equivalents will have done 40 days of work in addition to the 270 days required for farming. When this extra working manpower is multiplied by the existing farm labor force -- 1.7 million -- it will result in a farm surplus labor force of 68,000 man-equivalents. This is a conservative estimate because some farm families put in more than 400 working days a year in several regions and because farmers seldom take holidays other than national ones.

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AREA OF CULTIVATED LAND AND FARM POPULATION*

Year	Farm Population (Thousands)	Cultivated Area (chia)	Population (per chia)
1929	2,489	830,010	3.0
1939	2,925	[illegible]225	3.3
1949	3,880	891,675	4.3
1950	3,998	897,522	4.3
1951	4,161	900,961	4.6
1952	4,257	903,369	4.7

* Figures for 1929 and 1939 from Taiwan keizai nenpo 1941 [Taiwan Economic Annual], Kokusai nippon kyokai [International Association of Japan], The rest from Taiwan Agricultural Yearbook, 1953. Persons per chia calculated.

241 The Farmers' Outlook. Since the Restoration, the land reform program has been carried out and farmers are enjoying a greater sense of freedom and individual initiative. However, the farmers are inclined to compare the current situation with conditions under the Japanese with regard to farm receipts, living conditions, political freedom, etc. In the eyes of the farmers, the Nationalist Government's success in its administration of Formosa has depended upon and will continue to depend upon how favorably its accomplishments will compare with those of the Japanese.

241 435 It is reported that a large disparity exists between the prices received for farm products and the prices paid for supplies used on the farm. To illustrate this point, the per chia farm receipts from all sources amounted to NT $9,700 in 1952,[17] while the per chia expenditures (for production purposes) were NT $5,400. Thus, the net earnings amount to NT $4,300 per chia, which constituted the support of 4.7 persons, the latter being the average farm population per cultivated chia.

241 208 When asked in a JCRR survey in 1952

17. New Taiwan Dollars. The prevailing rate of exchange during the year was NT $15.65 to US $1.

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whether current conditions were better than those in 1937, 35 per cent of the 1,176 farmers answered in the affirmative, while 43 per cent answered in the negative, with 16 per cent indicating that conditions were about the same.[18] Among the main reasons given for the affirmative answers were land reform, more political freedom, and larger supply of household goods. Negative answers were attributed to an increase in farm population and high prices in general in comparison with the prices of farm products. However, the general outlook was hopeful among the farmers surveyed. Many of them expected to own their houses and land. Nearly 50 per cent of the heads of households stated that conditions would probably be better during the next ten years. This optimistic conviction was apparently based on the assumption that the land reform program would be carried out as planned, that peace would prevail, that prices would become lower, that more factories would be established, and that the surplus population could go back to the Mainland after the latter's liberation from communism

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18. A. F. Raper, Rural Taiwan -- Problems and Promise, Taipei, JCRR, 1953, p. 282. The remaining 6 per cent made no answer.

III. INDUSTRIAL LABOR

464 The Labor Force. The Economic Stabilization Board estimates that the current industrial labor force engaged in all types of manufacturing and mining is in the neighborhood of 0.3 millions.[19] It is reported that nearly 20 per cent of the workers are women; one per cent, child workers.[20] The same report states that in 1951 the average age of male workers in public enterprises was 31 and that of female workers 24. If all the government enterprises were considered, 25 per cent were within the age bracket of 21 to 25 years.[21]

463 Composition of the Labor Force. Industrial workers are heavily concentrated in the Taipei, Tainan, and Kaohsiung areas on account of the existence of coal mines and textile factories in the north and of chemical and machinery manufacturing factories in the south. The distribution of workers according to the county (hsien) follows:

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19. Ibid., p. 33.
20. Free China Labor League, T'ai-wan Lao-kung Yün-tung Kai-k'uang [General Condition of the Labor Movement in Taiwan], Taipei, 1952, pp. 7-8.
21. Ibid.

45:Stanford U. S-4, 5 1956 ADI Formosa
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NUMBER OF PERSONS ENGAGED IN MANUFACTURING AND MINING AS OF DECEMBER 1951 IN FORMOSA*

Hsien	Manufacturing	Mining
Taipei (incl. Yangmingshan Adm)	67,963	40,686
Yi-lan	5,449	-
Tao-yuan	5,800	941
Hsin-chu	8,382	2,363
Miao-li	8,797	4,465
Tai-chung	17,880	66
Nan-tou	3,148	-
Chang-hua	8,909	-
Yun-lin	6,568	-
Chia-yi	11,743	-
Tai-nan	24,027	256
Kaohsiung	28,109	-
Tai-tung	2,615	-
Hua-lien	1,117	39
Peng-hu (Pescadores)	1,343	-
Total	206,740	49,756

45:Stanford U. S-4, 5 1956 AD1 Formosa
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* Taiwan Provincial Government, The Structure of the Taiwan Economy, Taipei, 1953.

463 In terms of industrial divisions, workers in the food-processing industry constituted in 1951 about 30 per cent of the total number of workers. The following table shows the distribution of workers by industries and by sex:

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NUMBER OF EMPLOYEES (BY INDUSTRY AND SEX) IN GOVERNMENT ENTERPRISES*

Industry	(March 1, 1952) Total	Male	Female	(December 31, 1951) Total	Male	Female
Textile	7,816	2,399	5,417	28,873	8,409	20,464
Metal	3,259	3,050	209	3,626	3,257	351
Machine & Tools	7,440	7,095	345	7,121	6,753	368
Kiln	4,843	3,930	913	10,390	7,482	2,908
Chemical	17,881	14,465	3,416	9,440	6,558	2,882
Wooden#	6,596	6,158	438	4,377	3,934	443
Printing	2,014	1,472	542	1,889	1,625	264
Food Processing	29,519	25,741	3,838	20,067	15,493	4,574
Gas & Electricity	5,019	4,810	209	-	-	-
Others	252	157	95	3,393	1,484	1,909
Total	84,699	69,277	15,422	89,176	55,013	34,158

45:Stanford U. S-4, 5 1956 AD1 Formosa
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* Taiwan Provincial Government, Department of Reconstruction as quoted by L. R. Smith and W. R. Etter, Labor in Taiwan, Taipei, MSA/MC, 1953.

This term is used in the original source and presumably includes logging and lumber workers.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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463 According to a 1952 survey of 17 urban areas, industrial and government employees and mining workers accounted for 45 per cent of all gainfully employed workers over 12 years of age. However, for the province as a whole the ratio was only 18 per cent. The breakdown of occupation distribution is shown below:

PERCENTAGE OCCUPATIONAL DISTRIBUTION OF WORKERS*

Occupation	Whole Province	Seventeen Cities and Towns
Total	100	100
Industry	8	21
Commerce	9	21
Government employees	4	12
Transportation and Communications	2	7
Professionals	2	5
Mining	1	3
Agriculture	62	20
Domestic service	8	8
Others	3	3

* A. F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954.

45:Stanford U, S-4, 5 1956 AD1 Formosa
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463 Marginal Self-employment: Due to the over-supply of labor in urban areas, many people have created employment for themselves by engaging in the so-called "marginal self-employment." It is "marginal" in the sense that the manpower is utilized less than its full and productive use. In the capital city of Taipei, 34,500 heads of households, supporting over one-fifth of the city's population, were engaged in the following types of employment in 1953:

NUMBER OF SELF-EMPLOYED PERSONS IN TAIPEI, 1953*

Occupations	Number
Small shopkeepers and peddlers	20,000
Pedicab operators	9,000
Freight-cart pullers	2,500
Household Industries	2,000
Ox-cart drivers	350
Truck-hoppers	250
Others	250
Total	34,350

* A. F. Raper and others, op. cit.

Small retailers and peddlers have increased in recent years. The majority of small retailers

463 sell towels, shirts, soap, food, etc., at roadside stands. Household industries such as cake baking, handicrafts, etc., are also very common. Truck-hopping is an entirely new occupation in Formosa. The truck-hoppers are young and husky persons who hop on the moving trucks and start bargaining for unloading jobs as soon as the trucks reach their places of unloading.

IV. WAGE LEVELS AND WORKING CONDITIONS

465 434 The Wage Level. Government statistics shows improvement of the wage level in recent years. During the years 1949-52, the index of wages and salaries rose faster than the retail price index:

45:Stanford U. S-4, 5 1956 ADI Formosa

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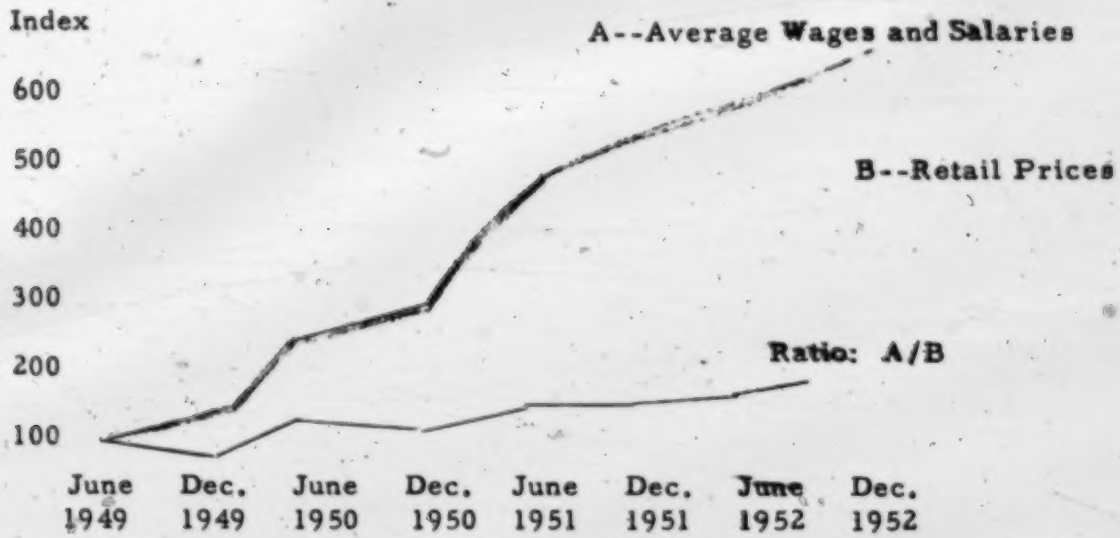
Trend of Wages and Retail Prices --1949-52
Indexes (June 1949 = 100)



Source: Plotted from Appendix II, The Structure of the Taiwan Economy by Taiwan Provincial Government

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434 The average income of 1,383 sample households in the month of June 1953 in urban areas was estimated at NT $585,[22] while that of the average laborer's household was estimated at NT $400. The estimated average gross income in 1952 and 1953 for the households surveyed may be seen in the following table:

YEARLY GROSS INCOME OF 1,383 HOUSEHOLDS (in NT $)

	1952	1953
Total Average	5,684	7,722
Employers	27,252	27,271
Self-employed	6,482	9,206
Laborers	3,826	5,148
Professionals	6,974	11,208
Civil Servants	4,203	9,174
All Others	5,481	7,128

* A. F. Raper and others, op. cit.

22. A. F. Raper and others, op. cit.; this amount is a little less than US $40 at the foreign exchange rate of NT $15.65 to US $1.

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465 Roughly 85 per cent of the gross receipts of
434 the laborers and self-employed are in cash, and 15 per cent in other allowances and payment in kind. For the civil servants, only about one-half is in cash. Payment in kind consists of rice, edible oil, salt, and charcoal. For instance, there is a monthly allowance of 66 pounds of rice to each laborer and each adult family member living with him, as well as one-half of that amount to each child under 10 years of age. The total rice allowance for each labor household, however, is restricted to 224 pounds per month.

511 The relatively low standard of living of the laborers is reflected by the pattern of household expenditures, of which food expenditure comprises the major portion. A breakdown of expenditures in 1952 for the 1,383 households surveyed is shown in the table below:

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46 HOURS OF WORK PER DAY IN 45 FACTORIES AND MINES, JUNE 1951*

Daily Working hours	8	9	10	12
Percentage of factories and mines	13	4	16	12
Percentage of factories and mines	29	8.8	35.6	26.6

* Free China Labor League, op. cit., p. 10.

The league also reported that the average number of working days per month for all industries in Formosa was 28.3 for male laborers and 25.8 for female laborers. For male workers, those in the ceramic industry worked the longest hours, 29.6 days a month, while those in the food industry worked only 20.5 days.

46 Wage Scale. Aside from miners, textile workers in Formosa are apparently the highest paid of all the factory workers, followed by workers in the printing and machinery industries. The monthly income of workers in selected industries is shown below:

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MONTHLY INCOME OF WORKERS IN SELECTED INDUSTRIES IN 1952*

Industry	Number of working days	Average daily wages (NT $)	Average monthly income (NT $)
Metal	24.9	11.96	298
Machinery	28.5	13.90	396
Chemical	28.0	10.33	289
Ceramics	29.6	12.23	361
Textile	28.7	14.74	422
Food	20.5	14.45	296
Printing	25.1	15.90	400

* Working days of laborers from Free China Labor League, op. cit., and average daily wages from Yearbook of Labor Statistics 1953 by International Labor Office; average of January-October 1952 only.

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The Industrial Workers' Outlook. The outlook of industrial workers is determined by the low wages, high prices, and pressure of population on the employment situation. From surveys made by the FOA among coal miners (120 households) at Hsu-ti, dock workers (450 households) in Keelung, salt workers at Putai (132 households), and fishermen (105 households) at Kaohsiung, Suao, and Tainan during 1954, it was learned that a high percentage of workers felt that current conditions were worse than in 1937. The following tabular presentation of the survey results may be examined:

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CONSENSUS OF OPINION ON CONDITIONS IN 1954 COMPARED TO CONDITIONS IN 1937*
(in per cent)

	Better	Worse	About the same	No Answer	
Coal Miners (120 households)	12	29	32	27	100
Dock workers (450 householders)	8	32	30	30	100
Salt workers (132 households)	11	52	28	5	100
Fishermen (105 households)	34	34	29	3	100

* Compiled from Foreign Operations Administration, Mutual Security Mission to China, unpublished pamphlets.

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Reasons such as higher price levels, low real wages, and unemployment were given by those who thought that the situation had deteriorated. For the "better" answers, more freedom and more United States aid were mentioned as reasons.[25]

When asked whether in their opinion conditions in the next ten years were like to be better or worse, more than three-fourths of the coal miners thought the situation would be about the same, while 14 per cent indicated that it would be worse. To the same question, 26 per cent of the dock workers answered "better" and two per cent, "worse," while 67 per cent gave no answer. Twenty-one per cent of the Putai salt workers said "worse," and 16 per cent "better"; and 62 per cent gave no answer.

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25. It may be noted that the workers interviewed may have said "better" with the expectation of receiving increased United States aid. Likewise, they may have said "worse" with the hope that current conditions may be improved. These answers are by no means conclusive. Many of the workers of 1954 were probably very young in 1937, and it is difficult to say whether they would recollect correctly after a lapse of seventeen years, a long war, and the change of government.

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208 The reason for the "worse" answers were found to be overpopulation, more competition, more unemployment, and low income. More United States aid, possible reconquest of the Mainland, and more employment were given as reasons why conditions might improve.

V. LABOR ORGANIZATIONS

467 The Limited Role of Trade Unions. Although Article 5 of the Labor Union Law (revised) of January 7, 1949, states: "The functions of a labor union are as follows: (A) to conclude, revise, or abolish any agreement or contract on behalf of the members...," the trade unions in Formosa function principally as a medium of political education and undertake limited welfare activities on behalf of their members.

During the Japanese occupation unionization was banned by the Government-General. At that time most of the workers were not sufficiently educated or aggressive enough to form unions. Despite the National Government's attempts to encourage unionization, in view of the existing emergency conditions, trade unions are not permitted to exercise their bargaining power. The government has undertaken to train union officials. At the same time, government promotional and

467 supervisory personnel and labor-relations specialists are sent to the unions. Consequently, trade unions tend to be used for carrying out government policies among the workers.

The Organizational System. The administrative hierarchy of trade unions in Formosa consists of the Chinese Federation of Labor at the national level, the Taiwan Federation of Labor at the provincial level, and hsien federations and city general labor unions. As basic level units, there are the city and hsien locals, which make up the city general labor unions and hsien federations respectively. The locals are classified into industrial unions, occupational unions, and special unions. At the beginning of 1943, there were 288 occupational locals and 57 industrial locals in the whole province.[26] As of 1953, occupational unions included 58 trades, such as printing, trucking, painting, baking, pedicab operators, mechanics, dockworkers, canning, electricity, barbers, tea-processing, etc. The membership of industrial unions primarily comprises workers,

26. China News Press, T'ai-wan Ching-chi Nien-pao, 1953 [Annual of Taiwan's Economy, 1953], Taipei, 1953, p. 174.

467 from large factories and mines. Special unions include railroad workers, postal workers, and salt miners; each of these has a federation at the provincial level in addition to the locals.

The Fishermen's Association and Farmers' Association are independent of the federation systems. The former has been instrumental in co-operating with the provincial government and United States aid agencies in making low-interest loans to fishermen and loans of fishing boats, rationing of cloth and rice, establishing medical stations, improving fish markets, etc.

VI. LABOR RELATIONS

466 Paternalism: Paternalism, in the Oriental sense of the word, concedes full authority to the head of the family and exacts complete loyalty and obedience from family members. In Formosa, the owner or manager of a plant is referred to as "Lao Pan" -- meaning, the owner. Lao Pan is also the term used for "master" or "ship's master," and it carries the connotation of complete domination not only over the use of fixed property but also over the person or persons employed on the premises. The lives and working conditions of the workers are largely, if not completely, dependent upon the whims of the master.

466 Some employers have strongly opposed unionization because in their opinion their own beneficence outweighs any advantages that may be offered by union membership. Any grievances which the workers may have must be handled with extreme care and diplomacy on the part of the workers, or else be interpreted by the employer as a display of disrespect or disloyalty.

467 Labor Welfare Measures. Each of the city general labor unions and hsien federations has a "Labor Welfare Committee" with the function of improving living conditions and mitigating the hardship imposed by the low wages. For instance, there is a "Labor Clinic" in the Keelung City General Labor Union and the Hsien Federations of Labor of Taichung, Hsinchu, Yilan, Chiayi, and Taoyuan.[27] Also, union stores which sell daily necessities to the members at a lower price are very popular. Various enterprises and employers also undertake to provide recreation and medical facilities, daily necessities at a lower price, mutual aid funds, etc. As an example, a government-owned cigarette manufacturing factory has a clinic of its own, and provides welfare facilities such as a day nursery, a laundry shop, cold drink stands, a barber shop, public baths, etc.

The income of the trade unions, derived mainly from membership fees, has been limited

27 Ibid.

467 because of the low income of the workers. For this reason welfare work carried out by the unions has not been able to meet the workers' needs. Although some government-owned enterprises provide satisfactory welfare facilities, generally speaking, most employers lack the financial means to make satisfactory provisions.

Annex "A," Subparagraph 1p,
Sociological Background

HEALTH AND SANITATION IN FORMOSA

I. FOOD AND HOUSING

A. Diet and Food Supplies

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The main diet of the Formosan people consists of rice and vegetables. A moderately active male adult generally consumes one catty (600 grams of 1.321 lbs.) of rice a day, the amount comprising over 75 per cent of his daily requirements of 24,000 to 28,000 calories.[1] A survey conducted by the National Defense Medical College showed that rice supplied 82 per cent and vegetables 7.5 per cent of a soldier's daily caloric requirement, and rice alone provided 64.5 per cent of his protein need.[2] The proportionate nutrient value of food consumed by civilians is probably quite similar. Some poor families, unable to afford rice, rely wholly or in part on sweet potatoes as their staple food. To a considerable extent, rice is supplemented with flour by a part of the immigrant population from the Mainland. Rice, sweet potatoes, tea, sugar, fruit,

1. The caloric content of rice is calculated on the basis of 350 calories per 100 grams of rice.

2. S.C. Hsu, "Nutritional Study of Processed Soybeans," Chinese American Economic Cooperation, Taipei, June 1952, pp. 56-59.

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146 and vegetables are produced in plentiful supply on Formosa. The diet of the people generally is
262 considered adequate in proteins, minerals, and vitamins, except B2, but the protein is poor in quality, only about 10 per cent of it being derived from animal sources. Fish furnishes about 50 per cent of all animal protein consumed on the island;[3] other principal sources are pork and poultry. Dairy products have a low place in the dietary habits of the people, except for infants whose mothers cannot provide breast-feeding.

B. Housing Conditions and Problems

362 Of the problems of food, clothing, and shelter, the latter still poses a serious problem, but the food and clothing problems have been fairly well met. The housing situation remains critical despite the assistance of the government and U. S. agencies in instituting various housing programs and improving housing conditions during the last few years. Much progress has been made in this area, and the day when every citizen occupies adequate housing may not be too far off.

Formosan dwellings may be divided into three main types. A typical good urban dwelling is built of reinforced concrete with kiln brick walls, new tile roof, and cement floors and is equipped with electric lights and running water. A typical good rural house has mudbrick walls, thatch roof, and dirt or cement floor, the water supply comes

3. Economic Co-operation Administration, Economic Development on Formosa 1951-52, Taipei, 1953, pp. 39-40.

45:Stanford U. S-4, 5 1956 ADl Formosa ADl

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from a well or river, and the light from electricity or kerosene lamps. The third group of dwellings includes all kinds of improvised shacks and huts in urban areas and farm houses built of such cheap and inferior materials as wooden boards or bamboo for walls and corrugated iron or split bamboo for roofing. Houses in the first group may be new or old. Some of them, especially old ones, are built of mudbrick wall and brick or dirt floor. Their sources of water supply range from a municipal water system to a well, ditch, or stream. Electricity is used for lighting by nearly nine tenths of the urban households, and by a little more than one third of the rural homes. Construction of new power lines in rural areas is expected to increase the use of electric lighting in the future.[4] Of more immediate importance to home comfort is weather-tight roofing; some 60 per cent of Formosan houses are reported to have leaking roofs.[5]

Housing conditions during the Japanese occupation were adequate, but general sanitary conditions were not always satisfactory. The destruction of buildings and water supply systems during the war coupled with the recent increase of population, especially in urban areas, have created the post-war housing shortage. Rural people in search of employment and an increasing number of evacuees from the Mainland swarmed to the cities, where reconstruction of houses was slow and land values high. Some of the new arrivals usurped public thoroughfares or the shells of damaged

4. Arthur F. Raper and others, Urban and Industrial Taiwan--Crowded and Resourceful, Taipei, FOA and Nat'l Taiwan Univ., 1954, p.348.

5. Ibid., p. 346.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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362 buildings as sites for temporary huts and shacks. Lack of building material, adequate lighting and toilet facilities, and proper water supply created many crowded and unsanitary slum areas in large cities. This situation has been steadily meliorated in the last five years as Formosa's economic rehabilitation progressed and personal income rose. However, some shacks and huts, somewhat refurbished and assuming an air of permanence, are still found in the cities. Typical of them are the shelters on Chungua Road alongside the railroad in Taipei. They are built of old bricks, thin boards, corrugated iron, and bamboo. In some extreme cases, one room no bigger than 9 by 15 feet serves the living needs of as many as twenty people -- from cooking and dining to sleeping in shelves along the walls.[6] The congestion, poor lighting, inadequate ventilation, dampness, and smoke create the worst imaginable sanitary conditions.

362 648 To relieve the crowding and improve living conditions, several housing programs have been launched through the cooperation of the government, U. S. Aid agencies, and the dwellers concerned. In Keelung, where hundreds of dockworkers' families had lived in sheds and empty crates, 102 new houses were built in 1954 under the Keelung Harbor Docks' Self-Help Housing Program. The program was implemented technically and financially by the Mutual Security

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6. Mutual Security Mission to China, Foreign Operations Administration, Housing, (unpublished pamphlet), Taipei, 1954, p. 1.

45:St anford U. S-4, 5 1956 AD 1 Formosa
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Mission to China (MSMC) in cooperation with the Dockworkers' Union and the Keelung Harbor Bureau. The occupants of the new housing contributed 60 days of unskilled labor for its construction, and are now making amortization payments of 15 per cent of their monthly family incomes, so that in less than ten years they will own the houses they now occupy. The houses are built of cinder-blocks and reinforced concrete, and each provides 288 square feet of living space partitioned into two bedrooms, a living room, kitchen, and toilet. The building cost of a house, including the installation of electricity and running water, is about US$400.[7] The Keelung idea has been extended to Kaohsiung Harbor dockers in the South, and to salt-field and mine workers. More than 295 houses were being built in late 1954 for those three groups of workers.

In the meantime, the MSMC is giving technical assistance and providing a long term loan at low interest to implement the work of the National Housing Program Working Group, currently the National Housing Committee (NHC) of the Chinese Government. The Committee administers the national housing program and undertakes such responsibilities as arranging long-term, low-interest loans for housing investment, promoting self-help building for which the government supplies equipment and technical information, and encouraging cooperative housing programs, etc. Under the auspices of the committee, a National Housing Exhibition featuring 52 selected, low-cost housing

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7. Ibid., p. 4.

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648 362 designs -- actually built -- was opened in October 1955 in Taipei.[8] The model houses are built of reinforced concrete, kiln brick wall, cement or brick floor, new style tile roof, and are equipped with electricity and running water. The houses range from four-to seven-room units. The best and most expensive type of design provides for a living room, three bedrooms, a kitchen, a dining room, and a bathroom equipped with flush-toilet -- rarely found in Formosan homes. It is believed that the self-help, low-cost housing program as well as the efforts of NHC will go a long way toward improving housing conditions in Formosa.

II. ENVIRONMENTAL SANITATION

A. General Sanitary Conditions

744 Climate and economic conditions are the main determinants of the living environment of the Formosan people. Although sanitation is being constantly improved, it is still far from adequate and, with the housing situation, presents a most serious problem in the field of public health. The long summers, relatively warm weather throughout the year, and usually abundant rainfall, provide conditions favorable to the spread of communicable diseases. The rapid increase of population, especially in urban areas, unmatched by proportionate expansion of housing, public sanitation, and fresh water supply facilities has created such new problems as congestion in living quarters, lack of sufficient water, and shortage of public toilets. These conditions aggravate the previously existing situation of poor housing, drainage systems, and waste-disposal facilities.

8. Chung-yang Jih-pao [Central Daily News], Oct. 17, 1950.

B. Specific Conditions and Problems

744 Few homes in Formosa are equipped with modern facilities. Brick stoves burning charcoal are the most common medium for cooking and heating; oil and kerosene lamps provide most of the lighting. Smoke from both these sources is a polluting agent within and outside the home, particularly in the rural areas. According to a recent study, 15 per cent of urban homes and 40 per cent of rural homes are not equipped with electric lighting, to say nothing of other electrical facilities.[9] Drinking water is piped into only about 30 per cent of urban houses and less than 15 per cent of rural dwellings; about one-third of urban households and two-thirds of rural homes obtain water for drinking and cooking from wells; and the rest of the households get their water from irrigation ditches, streams, and springs.[10] Towns under 20,000 population generally do not have a system for piping water into homes.[11] Some wells have pumps, but most are open to pollution by dirt, insects, and the runoff of surface water. Flush-type toilets are rare, only about 1 per cent of urban dwellings have such a facility; the majority of households use inside or outside privies, periodically emptied of night-soil for disposal as fertilizer.

744 362 Sewer systems in towns and cities are networks of open drains designed to carry storm runoff and waste water from domestic and industrial sources. The brick or cement gutters, from one to four feet deep, are generally located between the street and the sidewalk. Occasional cross drains lead into

9. A.F.Raper and others, op.cit., p. 348.
10. Ibid., p. 349.
11. [next page]

744 trunk lines, which empty into open canals. Most
362 urban centers have a system of high-level canals bringing in fresh water, and another network of low-level canals carrying away waste water. However, it is a common sight to see children swimming and women washing clothes or vegetables in low-level canals. Often garbage, night-soil, and other refuse are dumped into the fresh-water canals. Some municipal authorities are now considering elimination of open sewage systems with all their disadvantages, but the enormity of the job and financial difficulties preclude any immediate fulfillment of such plans. For instance, the municipality of Taipei is contemplating the construction of an underground drainage system costing hundreds of millions of Formosan dollars and requiring more than ten years to complete.[12]

744 The scarcity of chemical fertilizers and the
514 average farmer's lack of financial resources necessitates the use of all organic refuse materials from human and animal sources to enrich the soil. The consumption of raw vegetables fertilized by unprocessed night soil is a primary cause of the spread of intestinal diseases. In addition the use of night soil presents problems of collection and disposal. In cities, human excrement from one or more households is often stored in water-tight vaults. The contents are periodically emptied by

11. E. A. Turner, "Environmental Sanitary Conditions in Taiwan," Chinese American Economic Cooperation, Volume II, No. 2, Feb. 1953, pp. 51-65.

12. Central Daily News, Jan. 11, 1955.

744 364 long-handled dippers into wooden buckets and carried to collectors' carts for transportation to reservoirs outside the city. There the night soil is sterilized before being distributed to rural areas. In the countryside, human excrement is usually taken directly from the privies and applied to the soil without processing.

744 364 Refuse of all kinds is extensively utilized. Private or municipal collectors of refuse carefully sort waste material to salvage and resell as much of it as possible. Organic waste is used for composting fertilizer; paper, rags, glass, and metals are sold for scrap. While waiting for disposal, the compost piles and junk heaps provide breeding places for disease, rats, and insects. Other breeding places for diseases and their carriers are provided by waste accumulation in the streets and back yards of cities; the number of workers engaged in the collection and disposal of night soil and refuse is insufficient for prompt waste disposal. In Taipei, for instance, while the population was doubling in the 1950-54 period, the number of night-soil collectors [13] increased only from 410 to 428. However, under the cooperative efforts of the American MSMC, the JCRR, and government agencies, more efficient and sanitary methods for the collection and disposal of waste materials are being adopted.

744 The problem of sanitation is complicated by public ignorance concerning it. Although the people

13. The Central Daily News, Jan. 21, 1955.

744 are being made increasingly conscious of the need for sanitation, such unsanitary habits are still common as spitting in public places, discarding waste onto streets, dumping refuse in open sewers, and permitting chickens to wander freely through homes. Garbage cans are scarce, and the too-few public toilets are often not kept clean. In an attempt to improve the situation, the provincial government has organized the Committee for Supervision and Guidance of Environmental Sanitation. The committee is divided into small groups which tour the island to inspect sanitation facilities and to direct the improvement of them in all government agencies, schools, public meeting places, public markets, and slaughter houses.[14] Each local government also has a similar committee to formulate sanitation policies. However, government assistance in improving public sanitation is limited by lack of sufficient finances. In the municipality of Taipei, only 8.37 per cent of the 1954 budget was allocated for all public health needs, of which environmental sanitation was only a part.[15] Government efforts are supplemented by the work of various social organizations, such as the Women's Association, in improving public sanitation.

As will be discussed in the following section, considerable advances have been made in the improvement of health and medical facilities and in the prevention and control of disease, leaving environmental sanitation as the major challenge in the field of public health.

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14. T'ai-wan Sheng-cheng-fu Kung-pao [The Official Gazette of the Taiwan Provincial Government], Feb. 21, 1955.

15. The Central Daily News, Jan. 30, 1955.

III. PUBLIC HEALTH PROBLEMS

A. General Background

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Many of the communicable diseases usually associated with a tropical and sub-tropical climate were common to Formosa until the end of the nineteenth century. At that time, Formosa was still commonly called the island of epidemics. Plague, cholera, and smallpox caused the most serious epidemics; malaria, dysentery, typhus, and pneumonia were widespread but less prevalent. The control and prevention of these diseases became a major task of the Japanese administration which took over control of the island in 1895. The activities of the health bureau were closely coordinated with the exercise of the police power. Such measures as enforced vaccination, isolation of patients, destruction of contaminated houses, elimination of rats, and strict quarantine at seaports brought quick results. Since 1920, no major epidemics have occurred on Formosa.[16] Preventive activities against venereal diseases, parasitic diseases, trachoma, tuberculosis, and leprosy were begun by the Japanese in the late 1920's. By 1942, deaths from contagious and other diseases among Chinese inhabitants of Formosa had been reduced to the following yearly rate:[17] tuberculosis, 4,834; malaria, 5,792, parasitic diseases, 5,775; tracheitis, 4,661; pneumonia, 18,922; diarrhea and intestinal inflammation, 14,789; and kidney disease, 5,993. The least results were achieved in controlling tuberculosis, malaria,

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16. Shao-hsing Chen, "Population Growth and Social Change in Taiwan," Bulletin of the Department of Archeology and Anthropology, Nat'l. Taiwan Univ., Taipei, May 1955, pp. 76-103.

17. [next page]

764 parasitic diseases, pneumonia, diarrhea, and
164 intestinal inflammation, but the remarkable success in general of the health measures undertaken by the Japanese is evident in the decreased death rate during the course of the Japanese occupation.

DECLINE OF DEATH RATES DURING 1906-1942

Year	Total Population	Number of Deaths	Crude Death Rate per 1,000 pop.
1906	3,156.7	104.7	33.2
1925	4,147.5	98.0	23.6
1942	6,249.5	112.0	18.0

Source: Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Tables 50 and 87. Crude death rates are calculated by the author.

Since the end of World War II, the most prevalent and menacing diseases have been tuberculosis, pneumonia, malaria, trachoma, leprosy, parasitic diseases, and diarrhea. Of lesser incidence are diphtheria, typhoid, smallpox, typhus, plague, cholera, and venereal diseases. Significant progress has been made since the war in controlling a number of these diseases,[17] particularly malaria, tuberculosis, the venereal diseases, leprosy, and trachoma. Progress in this area and in the building of hospitals, expansion of

17. [from previous page] The Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Table 91.

764 medical facilities, training of personnel and
164 distribution of medical supplies have been effected through the joint undertakings of Chinese Government, United States, and international agencies, namely, the American MSMC, American Board for Medical Aid to China, Sino-American JCRR, World Health Organization (WHO), and United Nations International Children's Emergency Fund (UNICEF). The decline in the death rate during the 1948-53 period from 14.3 to 9.5 per 1,000 population[18] is clear evidence of the advances made by these joint efforts.

B. Specific Measures

744 Malaria. The Japanese in the last years of their malaria-control program maintained 375 malaria stations throughout the island for the administration of suppressive drugs. During the war the efforts were discontinued and an epidemic broke out in the post-war years. The Malaria Eradication Program begun in 1952 under the joint sponsorship of the Provincial Government, WHO, MSMC, and JCRR, arrives at complete elimination of the disease from the island by the end of 1956. By early 1956, the program had provided direct protection against malaria to more than 5,500,000 residents of formerly malarial areas.[19] The control program is carried out through (1) continuous checking and study of malaria parasites and treatment of malaria patients in the rehabilitated 144 malaria control stations throughout the island, and (2) the planned residual spraying with DDT of all dwellings in

18. See Table 8 in chapter on Population.

19. Mutual Security Mission to China, International Cooperation Adm., The Public Health Program on Taiwan (unpublished pamphlet), Taipei, 1955, p. 6.

744 malaria-affected areas to break the cycle of infection.

Tuberculosis. This is one of the most serious and crippling diseases in Formosa; one out of every ten deaths on the island is attributed to tuberculosis.[20] The control program has mainly employed a preventive technique, giving tuberculin tests, mass chest surveys, and BCG vaccination shots (believed to increase the resistance of infants and children against tuberculosis). The JCRR assisted the government in constructing and equipping a laboratory for productio of BCG vaccine, and the Taipei Tuberculosis Center, a unit of the Provincial Health Administration (PHA), has been acting as a sponsoring agency for extensive vaccination. Hospitals, rural health centers and stations and mobile units co-operate in carrying out this program. As of 1955, all school children had received tuberculin tests, and youngsters showing negative reactions were given BCG vaccinations. Testing and vaccination have now been extended to pre-school children.

Serum and vaccine production. The Taiwan Serum and Vaccine Laboratory, organized with JCRR assistance after World War II, has since received help from JCRR, WHO, UNICEF, and MSMC. Through co-operation with the National Taiwan University School of Medicine, the laboratory is now able to produce most of the serum and vaccine needed for the population. In 1952, the

20. A. F. Raper, Rural Taiwan -- Problem and Promise, Taipei, Joint Commission on Rural Reconstruction, 1953, p. 230.

744 laboratory manufactured smallpox vaccine for 8,800,000 persons and distributed it free to 350 health stations. In the same year, mixed vaccine against cholera and typhoid was produced for 2,355,000 persons and issued to the health stations for free inoculations.[21]

Other programs. Campaigns against trachoma through examination and treatment of school children; the control of venereal diseases through education, periodic examinations, and treatment; and the establishment of a blood bank to meet emergency needs; all are being carried out through the co-operation of various governmental, United States, and international agencies. In addition, the provincial government operates a leprosy colony for the custodial care of some 700 patients.

C. Medical Education

874 There are currently three medical schools and two college-level nursing schools in Formosa -- the National Taiwan University School of Medicine, the National Defense Medical College, and the non-Government Takau Medical College, the National Army Defense Nursing Schools and the Provincial Technical School of Nursing.

The National Taiwan University (NTU) School of Medicine is the island's highest medical institution. It trains dentists and pharmacists as well as physicians and surgeons. The doctoral

21. China Handbook 1953-54, Taipei China Publishing Company, 1953, p. 140.

874 degree requires seven years of work -- three in pre-medical courses at the College of Sciences and four in specialized studies at the school. In the 1954-55 school year, the school had 175 pre-med students and 361 medical students, 66 of them studying pharmacy. The National Defense Medical College trains doctors and medical technicians for the armed forces. The private Takau Medical College, recently established, has an enrollment of 61 students. It admits graduates of senior middle schools for six years of professional education in general medicine, dentistry, and pharmacy. The National Army Defense Nursing Schools offers nursing diplomas and bachelor degrees in nursing. For the degree, graduation from a senior middle school is required for admission to a four-year course. The Provincial Technical School of Nursing, established in 1953, gives training in nursing education. It admits about forty students yearly.[22] In addition, there are four provincial nursing schools which offer courses in nursing only; two of the schools are at Taipei, one at Tainan, and the other at Taichung. The Provincial Taipei School of Nursing is the only institution on the island that maintains four-year diploma programs in nursing and midwifery.

874 648 In addition to recently expanding its medical facilities, the NTU School of Medicine has made progress in medical education through a United States two-way technical assistance group. Under

22. The statistics in this paragraph are from the Department of Education, Taiwan Provincial Government, T'ai-wan-sheng Chiao-yü T'ung-chi, [Statistics of Education in Taiwan Province, School Year 1954], Taipei, 1955, Tables 10, 18, and 21.

874 the program, key local faculty members are sent
648 to the United States for training, and United States medical consultants are sent to the N U School of Medicine for short periods to teach and to assist in the revision of curriculum and teaching methods. In co-operation with Duke University 32 man-months of United States consultant work at the school was scheduled for the fiscal year 1955 and 36 man-months for fiscal 1956. With the help of these and other U.S. technical assistance consultants, much of the school's curriculum has already been completely revised along modern lines. It is expected that the personnel of the school now receiving training in the United States will eventually take over the work of incorporating new medical knowledge and teaching methods into the curriculum. Recent improvement of school facilities includes the renovation of all key buildings and the establishment of a clinical pathology laboratory and a completely equipped therapeutic and diagnostic X-ray building at the NTU Hospital.[23]

874 A nursing program has been developed to provide more nurses by establishing new schools and to improve the existing training of personnel by short training courses as well as education abroad. A new program at NTU to provide college-level

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23. Mutual Security Mission to China, International Co-operation Administration, op. cit., pp. 3-4.

874 training for nurses will begin in 1956 with the expectation of graduating forty nurses with B.S. degrees yearly after 1960. In addition, nine nurses have received training in the United States under the technical assistance program; three are scheduled to enter the program in 1956 and seven in 1957. In Formosa, the Provincial Health Administration is also conducting seminars for hospital administrators, chief nurses, and head nurses.

D. Outlook

744 Today, the major challenge in the field of public health lies in environmental sanitation. The problem entails, in particular, the improvement of waste collection and disposal, of food sanitation in private homes, food stands, and restaurants, and of insect and rodent control. Concentration of attention in these areas is vital to maintain the present general level of the population's health as well as to reinforce the curative and preventive accomplishments already made in the treatment of specific diseases.

Since the improvement of environmental sanitation is closely related to a higher standard of living, the attainment of completely satisfactory conditions will be a long and hard pull. Under the co-operative efforts of the government, the United States, and international agencies, Formosa has made great advances in health work and looks forward to achieving a clean and healthy community free from major diseases in the not too distant

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744 future. Before attaining this goal, however, health education will have to be ex[illegible]ded to all classes of the people, and the economy made stable and prosperous.

IV. MEDICAL FA[illegible] AND PERSONNEL

759 Formosa is better provided with professional medical personnel and better equipped with medical and health facilities than the average Asian nation. The latest reports on medical personnel and facilities on the island show the following situation:

LICENSED MEDICAL PERSONNEL -- FORMOSA 1953 *

Physicians	5,4[illegible]
Herbalists	1,[illegible]
Dentists	[illegible]1
Pharmacists	90[illegible]
Nurses	[illegible]
Midwives	2,310
Dental technicians	234
Druggists	327
Total	12,633

*/ [illegible] 1953-54, Tai[illegible]

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MEDICAL FACILITIES -- FORMOSA 1952*

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Health centers	22
Health stations	343
Provincial Hospitals	13
Provincial Sanitoria	3
Hsien maternity and child health centers	1
Hsien and municipal hospitals	9
Hsien and municipal isolation hospitals	6
Municipal sanitoria	3
Private hospitals	121
Private clinics	3,895
Total	4,416

*/ China Handbook 1952-53, Taipei, 1952, p. 114.

159 The number of licensed physicians alone in 1953 was sufficient to provide one doctor for about every 1900 people.[24] This compares with a ratio of one doctor to every 70,000 people in Indonesia, one to 13,300 in Burma, one to 4,000 in the Philippines, and one to 739 in the United States.[25] Many of the doctors in Formosa have

24. Based on latest population estimate of 10,400,000.

25. Economic Co-operation Administration, Far East Data Book, Nov. 1951, Washington, D.C. These are 1950 figures.

159 been trained in Western countries, the doctors who have not are capable of providing treatment equivalent to that of their Western counterparts except for the administering of the newest medicines. Many of the midwives are well trained and capable of efficient practice in their specialty.

744 Health centers at 22 cities under hsien and provincial administration and health stations at more than 350 townships and villages throughout the island provide a network of medical facilities for the administration of preventive and curative measures on a mass basis.[26] A health center is usually staffed with from 20 to 25 persons, including four or five physicians, three to six nurses, two or three midwives, and one or two laboratory technicians. The health stations are branches of the health centers; a typical health station has a physician, a nurse, a midwife, a sanitarian, and a technician. Since 1954 the provincial government has established 120 sub-stations in aboriginal villages to extend its health services; a sub-station is permanently staffed with an attendant nurse and a midwife. In addition to out-patient clinical care, the health centers and stations provide obstetrical services, home and school visits by nurses, preventive inoculations, health education, laboratory services, and mobile clinical treatment in neighboring villages. The centers and stations also gather and compile vital statistics. The stations are now an integral part of rural communities and are financially self-supporting.

26. Mutual Security Mission to China, International Co-operation Administration, op. cit., p. 5. The number of health stations is constantly increasing.

757 Traditional Chinese medical services were provided on Formosa by 1,755 herbalists in 1954. A recent survey of 1,383 urban households showed that 75 per cent of them sought medical care from modern physicians, 50 per cent from herbalists, and 15 per cent from temple healers.[27] Obviously, many households relied on two or more types of medical practitioners. This practice probably has close affinity to the widespread custom of simultaneous belief in two or more religions, with emphasis placed on one or the other at various milestones or crises in individual or family life. Some Chinese shop for medical cure as they do for religious help. There are numerous reports of illnesses cured by herbalists after long and fruitless treatment by Western-style doctors. Age and education also affect attitudes toward the various kinds of medical services. It is not uncommon for the older members of a household to depend on temple healers and herbalists at the same time that younger members of the family are relying on Western-trained doctors.

758 The supply of medicines and drugs on Formosa is adequate by modern standards, and a wide range of new medicines are now considered necessities rather than luxuries. The central government maintains a medical supply bureau which manufactures thirty kinds of standard

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27. A. F. Raper and others, op. cit., p. 316.

758 pharmaceutical preparations for the market, and imports other medical supplies for distribution at cost to schools, nurseries, and other public agencies.

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Annex "A." Subparagraph 1q
Sociological Background

PUBLIC WELFARE

176 Industrialization and other economic developments have been the main cause of rapid urbanization in Formosa in the last few decades. During this time much social dislocation has occurred and many new social problems have arisen. Within the traditional family system there was practically no need for social insurance. The clan provided for its aged, unfortunate, infirm, and destitute members as did the extended families to members who needed assistance (see chapter on the Family). In the agricultural society, life was serene and subject to few changes. With the advent of industrialization and the introduction of new techniques, the pattern of life was partially, if not wholly, geared to a social system characteristic of Western industrial society. Even surpassing the rapid rate of increase in the total population, the number of urban population (those living in communities with over 40,000 population) has increased more than 5 times[1] since 1930.

1. These data are derived from A. F. Raper and others, Urban and Industrial Taiwan, Taipei Foreign Operations Administration and National Taiwan University, 1954, p. 255.

746 In recent years, the number of households on relief and the number of urban persons who must earn their livelihood by "marginal self-employment" have increased. However, the need for unemployment insurance may not be as urgent as it is in countries that are dependent upon industry for the major part of their national income, although some such scheme is perhaps becoming more necessary. Changes in the family system and the concept of the family, the trend of population growth, education, and technology, are all likely to create social problems of far-reaching effect. The unfortunate aspects of such changes must eventually be made a national concern, and a comprehensive social-security program must be created.

A. Social Insurance

In Formosa, as well as in some other societies, a strong sense of family obligation acts as a kind of social insurance. Parents support their children, children support their parents, husbands assist their wives' relatives, and relatives provide each other with such help as they can render in time of trouble. This sense of obligation arising from kinship is still very strong in rural areas, but it is less common in industrial areas.

746 Efforts toward the establishment of such a system of social insurance as is known in industrialized countries have been increasing in the last few years, although Formosa is still far from the attainment of a comprehensive system. A collective labor insurance policy was put into effect on June 1, 1950 for all the workers in public and private factories, mines, salt fields, communications, and public utilities. Insurance coverage includes injury, disability, maternity, death, and old age. However, there is no sickness insurance, although it is in demand among the workers.

An injured worker, while unable to work, receives free medical attention and also daily maintenance assistance amounting to one-half to two-thirds of his earnings. Maternity insurance gives pregnant workers two months with full pay and some maternity benefits. It also allows maternity benefits to the wife of the insured worker, but the benefit is paid for a period of ten days only.

Insurance against death is provided for the worker or for any member of his family, and the beneficiary receives a payment amounting to 10 to 24 times the worker's monthly earnings, as well as an additional amount to cover some of the funeral expenses, depending upon the length of the period during which the insured has held the policy and paid

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premiums. For instance, if a worker has held his policy for four years or more, his beneficiary is entitled to 20 times the amount of monthly earning at the time of death. Death of any member of the family of the insured brings benefits equivalent to one month's wages.

Old-age insurance has some restrictive and impractical provisions regarding the payment of benefits. An insured worker must carry the insurance for at least fifteen years and must reach 60 years of age before he can be considered for retirement with a lump sum benefit equal to 15 months of his earnings.

The insurance premiums are paid to the Labor Insurance Agency (a branch of the government-operated Taiwan Life Insurance Company) at the rate of 3 per cent of an insured worker's monthly earnings. Of this 3 per cent, 20 per cent is paid by the insured, 20 per cent by the provincial government, and 60 per cent by the employer. A similar insurance plan for fishermen has been in operation since 1953; there is a slight variation in the payment of premiums. By the end of 1954, insurance had been acquired by 255,000 workers and 73,900 fishermen, and over NT $50,000,000 [US $2,657,000] in benefits had been paid to

746 142 488 cases.[2]

Another and similar type of insurance, designed for all levels of government employees is now in the process of being instituted. An interesting feature of this plan is that it allows insurance against sickness, a provision which is lacking now in both labor and fishermen's insurance. All employees under this plan regardless of their official rank will pay a flat rate, and the government will assist in the payment of premiums -- paying a greater share of the premium for those of lower rank.[3]

As industrialization and urbanization continue there will rise a need for other types of social insurance, such as unemployment insurance and old-age pensions.

B. Social Welfare

746 747 Welfare activities in Formosa are promoted and fostered by the government through legislation and supervision, with a view to the improvement of the living conditions and the mental well-being of the people.

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2. Hsin she-hui [New Society Monthly], Vol. 8, No. 3, pp. 3-5.

3. Chung-yang Jih-pao [Central Daily News], Aug. 11, 1955.

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In recent years, activity in labor welfare has been most conspicuous. The law provides that all enterprises set aside a certain portion of their capital stock and income for the establishment of "welfare units" such as cafeterias, low-cost housing, clinics, night classes, public baths, barber shops, nurseries, placement offices, laundries, and libraries. As an example, a government-owned cigarette-manufacturing factory at Sung-shan (near Taipei) furnishes its workers with free transportation, has a clinic of its own, and provides such benefits as a day nursery, laundry facilities, cold-drink stands, a barber shop, and public baths. Labor unions also participate in establishing welfare units. Each of the general labor unions and hsien federations has a "Labor Welfare Committee" with the function of improving living conditions and mitigating the hardships imposed by the low wage scale. For instance, there is a "labor clinic" in the Keelung City General Labor Union and in the Hsien Federation of Labor at Taichung, Hsinchu, Yilan, Chiayi, and Taoyuan.[4] There is also a "home of labor," forming a center of welfare activities, in the Hsien Federation of Labor at

4. China News Service, T'ai-wan Ching-chi Nien-pao 1953 [Annual of Taiwan's Economy 1953], Taipei, 1953, p. 174.

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746 Yilan, Hualien, Taichung, Chiayi, and
747 Kaohsiung.[5] Most of the welfare units have stores which sell daily necessities to union members and workers at lower prices than those prevailing in the markets. As of 1954, there were 354 such welfare units on Formosa, with 2,120 sub-units such as clinics and cafeterias.[6]

Similar welfare benefits exist for fishermen, farmers, and salt workers. For instance, the Tainan Salt Field Welfare Service provides for its workers, emergency loans, medical service, a milk supply and motion pictures.

To alleviate housing problems, a low-cost housing program was completed in 1954 for Keelung dockworkers. Housing programs in large cities are also being carried out under the auspices of the government, United States agencies, and related organizations.

The Committee for Directing Women's Movements has a welfare division where a

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5. Chung-hua Nien pao 1953 [China Annual 1953], Taipei, 1953, Vol. I, pp. 99-100.
6. China Annual, 1954, Vol. III, p. 90.

tailoring class is held and legal and marital counseling and employment assistance are given. Many women's associations at provincial and hsien levels have vocational training classes for women in an effort to increase their earning capacity. The Taipei Municipal Government has recently launched a rehabilitation program for 200 prostitutes, and gives them training in nursing, sewing, embroidery, typing, etc.[7] To assist children's health growth and to lighten the responsibility of working mothers, many nurseries have been established on Formosa. In Taipei alone there are 16 nurseries, not including those established by various private enterprises, equipped to care for over 2,000 children.[8]

C. Social Relief

Regular relief is given to the aged, the destitute, and the dependent. The relief organizations emphasize self help rather than direct relief. There are 5 provincial and 11 private relief homes on the island, accommodating over 3,200 persons. Their activities are generally confined to medical attention, classes in trades and techniques, and education

7. The Asia Foundation Bulletin, May 23, 1955.

8. Hsin-she-hui [New Society Monthly], Vol. 6, No. 4, pp. 29-32.

for citizenship. The four provincial relief homes at Tâipei, Pingtung, Hualien, and Makung house the old, educate and train the disabled, the poor, and dependent children, and give medical care wherever necessary. The Provincial Women's Home in Tainan accomodates aged women and aids destitute women. Some of the private relief organizations have a long history of relief activities extending back to the time of the Ch'ing Dynasty (1644-1912). For instance, the Private Taipei An An Relief Home and the Taipei Jen-chi Relief Home have long engaged in caring for the aged, the giving of medical care, rehabilitation of the disabled, and guarding and caring for the mentally ill. Four orphanages, two in Taipei and the others in Taichung and Tainan, receive orphans of 2 to 12 years of age. The Taipei Provincial Orphanage, located at Peitou, has full-time custody of 300 orphans and dependent children. The children are well-fed by Formosan standards, each receives 500 grams of rice and NT $1.50 equivalent of meat and vegetables per day. In addition the orphanage provides both kindergarten and elementary education. Some 50 other children of the poor in the area attend the orphanage's primary school, and 162 attend its kindergarten.

Emergency relief entails disaster relief, winter relief, and refugee relief. The law

731 provides that the local authorities of disaster-
746 stricken areas (most disasters being the result of typhoons, earthquakes, and floods) report to the provincial authority, so that afflicted people may be given shelter, food, and medical attention. The government, in addition to the supervision of relief work, contributes about one-third of the financial expenses, and private organizations of all kinds and public-minded individuals contribute to make up the rest. When the southern part of the island was stricken by a destructive typhoon in 1952, the whole island joined in a "Relieve the South" campaign in which schools, business enterprises and organizations, public agencies and private individuals were urged to contribute cash or "in kind" to a relief fund which was administered by the government.

746 Every year from December to March hsien and municipal governments take the lead in providing winter relief to the poor. Contributions from schools, from various organizations, including churches, and from individuals are pooled under the administration of the local authority and money, food and clothing are given to the needy.

Relief of refugees from the China Mainland, and recently from the Tachen Islands, is being carried out chiefly by the government

746 and the China Mainland Refugee Relief Association, and to some extent by other organizations. The association extends its activities to Hong Kong and other areas of the world; it receives contributions and donations at home and from abroad. In the fall of 1955, about 1,000 fishermen who fled to Hong Kong from the Mainland were each given HK $20 by the relief association.

For refugees in Formosa, direct relief, low-rate loans, relocation on farms, and employment assistance are administered by the relief association. Some 5,000 families evacuated from the Tachen Islands are now being integrated into the economy of Formosa. Villages and farms have been constructed for them, and many have entered the fishing, farming, small business, and handicraft industries. A total of 514 disabled persons among the refugees from the Tachen Islands were given medical treatment and shelter by the provincial government.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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Annex "A," Subparagraph 1r,
Sociological Background

ATTITUDES AND REACTIONS

I. COMPOSITION OF POPULATION

563 Ninety-eight per cent of the population of Formosa are of Chinese origin. Two per cent of the population are aborigines whose origin, although generally conceded to be Malayan, remains a subject for academic dispute. Among the Chinese, approximately eighty per cent are the descendants of early Chinese settlers, whom we call Formosan Chinese, or often simply Formosans. The early settlers came to the island from the southern part of Fukien Province and the eastern Part of Kwangtung Province between 1600 and 1895. In 1895 the island was ceded to Japan and immigration from the Mainland was restricted.

During the half century of Japanese occupation, Chinese tradition and culture were preserved by the Formosan people, the family remained the center of most social and economic activities, and Formosan Chinese, anxious to maintain a sense of solidarity, kept in touch with their relatives on the Mainland.

563 In 1937, the Japanese launched a campaign to destroy the spritual affiliation of the Formosan Chinese with their ancestral land. The Japanese language was used in the classrooms, and Shintoism was introduced to replace the traditional polytheistic religion of the Formosans. But before these efforts could take effect, World War II ended and Japan was forced to relinquish its rule in Formosa.

Approximately twenty per cent of the curre Chinese population on the island immigrated to Formosa after 1945. The greatest number arrived in 1949-50 when the Communists seized control of the Mainland. Most of the recent immigrants, former government employees and commercial workers, have settled in the larger cities. Racially and culturally they resemble the Formosan Chinese, although many speak a different dialect. They regard their residence in Formosa as tempo rary, since most of them were forced to leave family and property on the Mainland.

The aborigines, who constitute two per cent of the population, lead a primitive life in the mountainous regions of the island. Those tribesmen who lived on the plains, have been assimilated by the Chinese and have accepted Chinese customs and preoccupations.

II. ATTITUDES OF THE FORMOSAN CHINESE

A. Toward the Communists:

668 A small number of Formosans had attended the Communist training school (the Institute of the Toilers of the Far East) at Moscow. In 1928 they held a conference with Chinese and Japanese Communists in Shanghai. Shortly thereafter they formed the Taiwan branch of the Japanese Communist Party. Their mission was to "lead" the Farmers" Association, the Workers' Union, the Cultural League, the Anti-Imperialist League, and the Friends of the Masses Society on the island and to incite strikes and riots.[1] One Communist leader, Yang Chun-sung, was assigned to work among Formosan residents in Japan.[2] In 1931 the Japanese administration suppressed the movement in Formosa, disbanding all organizations connected with it. The leaders were either imprisoned or put to death. One of the leaders, Hsieh Hsueh-hung, was sentenced to thirteen years of imprisonment.[3] Following the restoration of Formosa to China, the Communists were active again. They organized the People's League, revived the Farmers' Association, and published a newspaper called Jen-min Kung-pao [People's Bulletin]. Ts'ai Ch'ien, a Formosan Chinese[4] and veteran Communist who had accompanied Mao Tse-tung on his Long March to Yenan, was designated chairman of Taiwan's Communist organization.

[Footnotes 1 - 4 on following page.]

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Gradually a growing number of Formosans were won over by Communist Party tactics. The Communists played an important role in the inciden of February 28, 1947 and lost many members durin the subsequent massacre by governor Ch'en I (Chen Yi). The small group led by Hsieh Hsüeh-hung escaped to Hong Kong and organized the Democratic Self-government League. Hsieh is now a member of the East China Administrative Committee and a member of the People's Political Consultative Council in Peking. The other Communist leader, Ts'ai-Ch'ien, was arrested by the Chinese Nationalist Government in Formosa in 1951 and his presen fate is unknown.[5]

The Communist Party in Formosa was outlawed in 1947 and the island's security control was further tightened when Formosa became the seat of the central government of the Republic of China in 1949. Communism is no longer a serious problem on Formosa. There were only two cases of

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1. Wang Chu-lou, "Tai-wan Jen-min Ko-ming Nien-pao" ["A chronicle of People's Revolution in Formosa], Kuang-ming Jih-pao [Enlightenment Daily], Peiping, February 28, 1952, p. 3.

2. F. W. Riggs, Formosa under Chinese Nationalist Rule, New York: Macmillan & Co., 1952 p. 54.

3. She was released in 1940 on account of ill health. Kuang-ming Jih-pao, p. 3.

4. He joined the Communist Party in 1925 while studying in a college in Shanghai.

5. Gendai Chugoku Chosen Jinmeikan [Who' Who in Present Day China and Korea] compiled by [cont'd]

668 Communist espionage throughout 1955.[6] Educational institutions which have usually been hotbeds of Communist agitation are found to be relatively free of Communist influences. According to President Ch'ien Ssu-liang of Taiwan National University, there is no known Communist among either the professors or students, and that all suspected Communists have been either persuaded to change their convictions or eliminated. The presidents of two teachers' colleges know of no Communist activities in their schools.[7] The fact that Communist infiltration into Formosa has been held in check should not be construed as solely the result of the stern preventive measures taken by the government.[8] After all, Communism has never

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Japan's Gaimo-sho Asia-Kyoku (Asia Bureau of the Japanese Ministry of Foreign Affairs), Tokyo, 1953, pp. 77-83.

6. Even in those cases, according to Nationalist reports, most Communist agents on the island are mainlanders rather than the Formosans, and they concentrate their efforts on propaganda work among fellow exiles rather than among the local population. F. W. Roggs, op. cit., p. 55.

7. Walter Crosby Eels, Communist in Education in Asia, Africa, and the Far Pacific, Washington, D.C., American Council on Education, 1954 p. 45.

8. Communist is a capital crime in Korea.

668 been really strong on the island. It has never been given a chance to take root among Formosans. Communism was repeatedly persecuted by Japan with vigor when the island was under Japanese rule. After the restoration, a great many Communists perished in the February-March 1947 incident. Another important reason why the Formosans have never cherished any hope of being "liberated" by the Communists is that the islanders are convinced that they are faring better than the Chinese on the Mainland. Refugees fled from the Mainland have many stories to tell of the terror and sufferings they have experienced, and such accounts simply render Communist propaganda ineffective. The fact that 14,209 Chinese prisoners of war in Korea refused repatriation after hostilities ceased and that the inhabitants of Yikiangshan (I-chiang-shan) and nearby islands chose to evacuate to Formosa provide additional evidence of the ineffectualness of Communist propaganda. It is quite certain that the people in Formosa are firmly opposed to Communist and that they will wholeheartedly defend the island against Communist aggression.

B. Toward Independence:

186 668 Some Formosans favor complete independence for the island from Nationalist rule. They advocate the sitting up of a United Nations trusteeship as a means of enabling the island to attain autonomy. It is said that the Japanese are secretly encouraging the movement in the hope that an independent Formosa might provide a better chance for Japan's imperialist expansion in the future. The separation

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movement attracted some following soon after the return of the island to Chinese rule, when the Formosans found themselves worse off than they were under the Japanese. They were denied at that time the opportunity of participating in the management of Japanese enterprises taken over by the Chinese Government. Although the new Chinese Constitution was in force on the Mainland in 1947, local self-government for Formosa was not carried out until 1949. Even then all positions of authority, in both government and business, were occupied by Mainland Chinese. As to the local people, if they had any standing during the Japanese regime, all were treated as Japanese collaborationists. Formosan Chinese who were enthusiastic about the restoration of the island to Chinese rule, expected equality from the Nationalist administration. When they were treated as second class citizens, they were naturally disappointed. Their resentment led to the growth of the independence or separation movement.

The leaders of the independence movement are the two Liao brothers, Joshua and Thomas. Their father was a tax collector at Lotung. Both brothers were educated at Columbia University, and taught in high schools after their return to Formosa. They formed a Freedom Party in 1945 and associated with the Communists in the uprising occurring February 28, 1947. Following this incident, they fled to Hong Kong, organized the Formosan League for Reemancipation, and issued a manifesto, "Formosa Speaks," demanding independence and a plebescite.

186 The manifesto was circulated among the representatives to the United Nations. In May 1950 a Formosan Democratic Independence Party was organized in Tokyo; its leaders included Wilfred Wong, James H. Chen, Gordon Tan, Y. T. Tsong and Frank Lim.[9] Joshua Liao was elected Chairman of the new party. It was reported by a Hong Kong newspaper[10] that in view of their past association with the Communists, the Liao brothers were confined in Sugamo prison, Tokyo, for seven to eight months after their arrival in Japan, and were bailed out by an American by the name of John Kellen. In the latter part of 1955, apparently in connivance with Japanese authorities, they were active again. In September they organized an association of Taiwan residents in Japan and a "Taiwan Provisional Congress."[11] On November 21, 1955, it was announced that Joshua Liao assumed the post of the "President of the Taiwan Provisional Government" and the chairman of the Provisional Congress, while Wu Chen-nan was named "Vice-President."[12] According to Japan's Immigration Bureau, there were in 1955 about 25,000 Formosans living in Japan. How many of the Formosan residents supported Liao was not disclosed.

186 In Formosa the independence movement is regarded just as traitorous as Communism. Since

9. F. W. Riggs, op. cit., p. 56.

10. Weekly Supplement of Hsing-tao Jih-pao (Hsing-tao Daily), No. 201, Sept. 15, 1955, p. 12.

11. United Press, Tokyo dispatch, Sept. 28, 1955.

12. Pan-Asia News Alliance, dispatch of November 21, 1955.

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public expression of popular sentiment is not encouraged, it is difficult to tell how many Formosan Chinese would prefer complete independence or United Nations trusteeship for Formosa to Nationalist government. Moreover, conditions have been changing rapidly in the island. The opinions of foreign observers who visited Formosa during the early years of Nationalist rule are no longer sustained by recent visits. The truth of the matter is that the tide has turned since 1949. An almost uninterrupted series of reforms, economic, political and military, has taken place recently. Land reform has done away with the inquitous system of exorbitant rental. Tenants who constituted two-thirds of the island's population and who in 1950 still suffered from undernourishment, disease and poverty,[13] now own their own land, are well-fed, and possess their own homes. The damaged industries have been rehabilitated and many new ones have been established. Industrial production has exceeded the peak level under the Japanese. Local elections were held in 1950 and 1953. Among the officials in the Provincial, prefectural and municipal governments 67 per cent are Formosans,[14] and their participation is still increasing. Although we should not take it for granted that, on account of the absence of expressed sentiment, the Formosans are no longer in favor of the autonomy movement, it is fairly safe to assume that in view of the improved conditions as well as the imminent Communist menace, the Formosan people as a whole are not

13. W.I. Ladejinsky, "Land Reform in Formosa," Foreign Agriculture, Vol.14, No.6, June 1950, pp. 130-135.

14. A. F. Raper, etc., Urban and Industrial Taiwan--Crowded and Resourceful, Taipei, '54 p.283

186 too anxious for complete independence; at any
178 rate, not before they can successfully defend the island against aggression.

C. Toward the Government:

186 Except an insignificant number of aborigines
642 the Formosans are Chinese or of Chinese descent. Even under Japanese rule, they never forgot their own national origin. Poetry and songs composed during that period were replete with reminiscences of their mother country. That is why in 1945, the Formosan Chinese were overwhelmed with joy at the prospect of the island's being returned to Chinese rule after half a century of Japanese colonial dominance. But their enthusiasm was dampened by the abuses of Chen Yi's administration. The Nationalist government after 1949 made a determined effort to win back popular support. Economic reconstruction has been vigorously pushed forward to enable the island to achieve self-sufficienty and stability. Large government corporations have been converted to private firms and turned over to the local people. The political basis of the provincial government has been altered to permit increasing participation by Formosans.

In spite of the special concessions granted by the Nationalist Government in the past five years some Formosans, according to the sentiment expressed in the Provincial Assembly, complain that they have not been making as much headway politically as they would like. Others are not happy because the popularly elected mayors and magistrates do not have full authority in the settlement

186 of local affairs, since governments on the local
642 level as provided by the Chinese Constitution exercise only those powers delegated to them by the central government. There is also the complaint, though not necessarily substantiated by fact, that the "elected Formosans often held office in name only and that Kuomintang men appointed under them held the real power."[15] To remedy such complaints and to make the Formosans more enthusiastic about self-government, two measures may be desirable; (a) extension of the powers of the Provincial Assembly, and (b) selection of personnel for top provincial posts, including that of the governor, by popular suffrage.

642 To gain more support from Formosans,
433 the Nationalist government must also seek to improve further their economic well-being. Although the general industrial level has risen forty per cent above the Japanese peak year of 1941, neither in agriculture nor in industry have the gains kept pace with the increasing population. The per capita production is still below that of the Japanese period. Moreover, the rising cost of living has made the economic life of the island unstable. With American aid, the Nationalist Government has been trying to step up the industrial production of the island, but the prospect of arresting inflation is not very bright.

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15. Preston Schoyer, "Present Conditions on the Island," The Reporter, Vol. 12, March 10, 1955, p. 18.

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433 For the main cause of inflation is the huge deficit in the national budget, which is strainted by nearly one million men in the armed forces.

701 The upkeep of such a huge military force accounts for the most crucial question raised by political observers: are the Formosan people willingly supporting the military program of the government? Contrary to speculation, the answer is affirmative. Foreign visitors are practically unanimous in stating the lack of interest among the Formosans in the liberation of the Mainland. This is true although such sentiment has not been openly expressed as the result of the rigid government control of all media of public expression. Nevertheless, another facet of the question, the need of a strong military force to defend the island, has never been debated. The farmer in Formosa now owns the land he cultivates, however small the acreage, and enjoys the fruits of his own labor. He certainly does not cherish the propsect of being chained to a collective farm, and laboring under the whip of political cadres. The industrial developments of recent years have provided opportunities for an increasing number of people and given rise to a new business and industrial class. The Formosans are both resourceful and industrious. They will be loath to see their prosperous land overrun by Communism, suffer deprivations similar to those found on the Mainland. It is quite certain that Formosans will resist Communist aggression, and that they will defend the offshore islands too. The best evidence of the unequivocal support of the Formosans to the government is the response of young Formosans

701 to military call. Up to now, 90,000 Formosans have been drafted into the army to replace aging Nationalist veterans.[16]

648 642 It seems clear that the Formosans do not have much sympathy for the Communists, although they realize that there is little prospect of their island becoming really independent. They also realize that, as more and more of them are being absorbed into the government and as the Mainlanders are aging, it is only a matter of time before they will win full control of the island.[17] They may differ with the Government in regard to its policy of liberating the Mainland, but they take comfort in President Chiang's assurance that it would not take place yet for some years. As more and more Formosans are inducted into the armed forces, more changes will take place in the Nationalist overall policy for the island. The principal aspirations of the Formosans at this moment are: more self-government, greater freedom of expression, and greater economic security. Their immediate apprehension is a runaway inflation. They are fearful that the Nationalist Government might plunge the island into bankruptcy, as it did on the Mainland in the years following the war, paving the way for Communist conquest.

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16. Time, op. cit., p. 34. 72,000 young Formosans were drafted from February to July 1955.

17. Manchester Guardian, Vol. 78, No. 13, Sept. 29, 1955, p. 14.

III. ATTITUDE OF THE MAINLANDERS

648 The Mainlanders are different from the native Formosans in that most of them own property and many of them have a part of their immediate family on the Mainland. They regard their stay in Formosa as temporary. They came to the island with the same implicit faith in the future as that which induced them to evacuate the coastal provinces during the Japanese invasion. They believe that western democracy and Communist cannot coexist for long. Sooner or later showndown fights will occur. They know full well that the Nationalist forces are not strong enough for a full-scale assault on the continent, but they do not despair. It was their strong determination that tided them over the darkest days of war against Japan before Pearl Harbor. The Communist regime will crumble as a result of its own weaknesses, or the Western democracies will be compelled to take drastic action against it. Somehow their dream of returning to the Mainland will come true. It goes without saying that they are one hundred per cent behind the Nationalist government. Unlike the native Formosans, they are prepared to sacrifice their personal freedom for the time being if by doing so their hope of returning to the Mainland will be realized.

When the Mainlanders migrated to Formosa, they had just gone through a long war with Japan. They were bitter toward anyone who had collaborated with the Japanese. They did not realize that

648 the Formosans, unlike the willing collaborators on the Mainland, were in a different position. The Formosan Chinese were forced by circumstance to accept Japanese education and to carry out Japanese orders. At any rate, the unwarranted prejudice of the Mainlanders for the Formosans created a rift between them, and it was the cause of the February 28, 1947 incident. But time has healed such a breach. Meanwhile the Chinese language has replaced Japanese as a medium of education and communication. Some Mainlanders have learned the local dialects, while many Formosans have quickly taken up Kuo-yü, the Chinese national spoken language. Practically every trace of Japanese influence has been eradicated. The lines of distinction between the Mainlanders and Formosans gradually fades away, and, in the course of time, it will disappear totally, especially since so many inter-marriages have taken place. According to the statistics of the Provincial Department of Civil Affairs, [18] the sex ratio of Mainlanders in Formosa in 1952 was 146 males to every 100 females, and the predominance of the former was even greater between the ages of 25 to 55. This figure has not taken into account of 750,000 men in the armed forces. Consequently more and more Mainlander bachelors have been married to Formosan girls. In the survey of 6,609 marriages during the early months of 1953 made in five localities, [19] 15 per

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18. Arthur F. Raper, etc., op. cit., pp. 239 and 242.

19. Conducted by F.O.A. Mutual Security Mission to China. Ibid., p. 244.

648 cent of them involved Mainland men and Formosan women, and 0.3 per cent involved Formosan men and Mainland women. Among the 1790 court marriages in Taipei in 1955, 1074 brides were Formosans and 714 were Mainlanders, while 1709 bridegrooms were mainlanders and only 81 were Formosans.[20] However, the majority of the civilian Mainlander population belong to the higher age group.[21] Most of them are married, but their families were broken up at the time of their exodus to Formosa. The strong attachment of the Chinese individuals to their families and their ancestral homes makes it impossible for them to forget the liberation of the Mainland, however remote such an eventuality may appear. "It was quite obvious to all but the blind and the bigoted that the Nationalists want nothing more than to be back in China and to leave Formosa as a loyal and prosperous province with a liberal degree of local autonomy."[22]

IV. ATTITUDE OF THE ABORIGINES

563 The aborigines were the victims of ruthless persecution under Japanese rule. The whole aboriginal population was placed under rigid police control. A 316-mile picket line with electrified wire fences and guard houses girdled the districts where the "savages" dwelt. Yet the Japanese failed to subjugate them. As late as 1930, 190

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20. Pan-Asia News Alliance, Taipei, dispatch of Jan. 10, 1956.

21. More than three times as many males as females in the 40-49 group.

22. H. Maclear Bates, Report from Formosa, London, Eyre & Spottiswoode, 1952, p. 120.

563 Japanese lost their lives in the attempt to subdue a revolt staged by the aborigines. After 1936 the Japanese colonial government tried to assimilate the aborigines: (a) by removing them from their remote mountain homes to small plots of land on the plains where they could be more easily watched and where they might settle down as farmers; (b) by establishing schools within the aborigines' territory. A four-year primary school and some vocational courses were set up for them by the Japanese. This accounts for the fact that a small percentage[23] of the aborigines can speak the Japanese language.

563 667 After the restoration of the island to China, the aborigines are no longer called "savages" They are referred to as "mountain tribesmen" and addressed as "mountain brethren." The administration of the mountain areas has been transferred from the Police Department to the Civil Affairs Department of the Provincial Government. The areas are divided into 30 hsiang (groups of villages) and 192 ts'un (villages).[24] The chiefs

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23. About 30 per cent. "In the east coast town like Hualien, the bus conductresses make their announcements in Japanese, so that even the aborigines will know where to get down." Manchester Guardian, op. cit., p. 12.

24. T'ai-wan Ti Shan-ti Hsing-cheng [Administration of Mountain Areas], published by the Information Department of Taiwan Provincial Government, Taipei, 1952, p. 15.

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of the rural districts are all elected by the aborigines themselves. They are represented in the Provincial Assembly by three members, two elected by the tribesmen living in mountain areas and one by those living on the plains. One tribesman, Hua Ch'ing-chi, serves as a Commissioner in the Provincial Council. In the 144 elementary schools provided for the aborigines, 17,734 children and 6,032 adults were enrolled in the second semester of 1951.[25] It is said that 71.56 per cent of school age children are receiving education.[26] With the assistance of the Sino-American Joint Commission on Rural Reconstruction, the Nationalist Government is also improving the livelihood and economy of the tribesmen. The number of health stations has been increased. A total of 30 health stations and 120 substations have been set up since November 1949. Efforts have been made to improve the quality of the cattle and to increase the number of hogs in the aboriginal areas. A selected number of aboriginal girls are to be trained in sewing and sericulture.[27] The guarding of the mountain areas has been relaxed. In fact,

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25. Ibid., p. 22.

26. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China], 1954, p.818.

27. General Report of J.C.R.R., Vol. IV, 1954, p. 186.

563 many tribesmen are found patrolling the streets
657 in Taipei as members of the local police force. No noticeable friction has ever been reported between the aborigines and other groups. For this the Nationalist government should be given credit. The aborigines are at long last recognized as a part of the community, and some headway has been made to bring about their economic betterment. It is quite natural that they are satisfied with Nationalist rule.

45:Stanford U. S-4, 5 1956 ADI Formosa
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Annex "A," Subparagraph 2a',
Political Background

HISTORICAL DEVELOPMENT OF THE GOVERNMENT

175 Formosa has been the habitat of primitive people and lawless Chinese and Japanese since the dawn of its recorded history. In the early part of the seventeenth century, the Dutch and the Spaniards founded trading posts in Formosa and establishing the first organized community on the island. After a rule of 38 years, the Dutch were forced from Formosa by a group of Chinese who were loyal to the fallen Ming Dynasty (1368-1644). Chinese governmental institutions modelled after those prevailing during the Ming period superseded the Dutch, until the Ming adherents were themselves ousted by the Manchu conquerors.

175 631 For two centuries, beginning in 1683, the island of Formosa was a fu or prefecture of the Chinese province of Fukien. In 1887, by imperial decree, it was made a separate province. The island was ceded to Japan in 1895 following the Sino-Japanese War. During the first twenty-five years of Japanese occupation the island was under military rule: the government was preoccupied with the quelling of revolts, and the governors-general were all military men. From 1919 to 1936 civilian officials were chosen as governors-general.

175 After 1936, in line with Japan's southward
631 expansion policy, the appointees were all admirals. The administrative system had undergone several revisions, the last revision occurring in November 1943.

631 Under the Japanese, Formosa was divided into five provinces (Japanese shu) and three districts (Japanese cho). The five provinces were located in the western part of the island, each placed under the supervision of a provincial governor. The eastern part of the island, which is mountainous and sparsely populated, formed two districts and the Penghu Islands (Pescadores) the third. The five provinces were subdivided into nine cities (Janapese shi) and forty-five counties (Japanese gun). The counties were further divided into towns (Japanese gai) and villages (Japanese sho). The administrative area of towns often embraced a considerable rural area. All areas not within a city or a town fell within the political boundary of a village. The two districts of eastern Formosa were subdivided into ten counties, and the counties into towns and villages.[1]

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1. Hideo Naito, Taiwan, a Unique Colonial Record, 1937-38 edition, Tokyo, Kokusai Nippon Kyokai, 1938, pp. 64-74.

631 The governor-general was the head of
643 the government-general of Formosa. Appointed directly by the Japanese emperor, he wielded extensive and autocratic powers. He supervised the work of all administrative machinery, nominated all officials under him, and, with the exception of a few of the highest rank such as the governor of the provinces and districts, he could promote or dismiss the officials under him. He appointed half of the membership of the provincial assemblies. He had the right to suspend or cancel orders of the provincial governors, veto measures of the provincial assemblies, and dissolve the assemblies. He could impose on any person on the island, without recourse to the courts, imprisonment up to one year or a fine up to ¥ 200. He was assisted by a director-general of civil administration who supervised the secretariat, the various administrative bureaus, and the Central Research Institute, and an Office of Imperial Affairs which co-ordinated military and civil affairs.[2] When the governor-general was a military man, he was also the commander-in-chief of the armed forces on Formosa. If he was a civilian, he might request the local commander to make use of the military or

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2. Joseph W. Ballantine, Formosa, a Problem for United States Policy, Washington, D.C., The Brookings Institution, 1952, p. 27.

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643 naval forces for the maintenance of order.

647 Under the governor-general, were a secretariat, several administrative departments, which included home affairs, education, finance, police, communication, agriculture, and industry, and monopoly bureaus and research institutes. There was also an
645 advisory council with forty councilors, all appointed by the governor-general, who was its chairman. The term of office for the councilors was two years. "In case of necessity, however, the governor-general of Taiwan is authorized to relieve any councilor of his post before the expiration of his office term."[3] The prerogatives of the council were "to announce its opinions in reply to questions submitted thereto by the governor-general regarding important matters of administration."[4] The councilors were appointed from among high-ranking government officials and resident citizens "rich in scholarship and experience." "Clearly, this is a purely bureaucratic
646 institution. The people of Taiwan have no representatives in the Japanese Imperial Diet; they have no representative body which takes

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3. The Organization of the Council, Imperial Ordinance No. 248, June 1, as revised on June 28, 1930 by Imperial Ordinance No. 128, Article IV.

4. Ibid., Article I.

646 part in the legislation or administration of the island."[5]

635 On the local level, the provincial governors were appointed by the Japanese emperor upon the nomination of the governor-general.[1] They supervised all the administrative bodies in their respective provinces. They could impose upon any person, without recourse to the courts, a prison term of two months and/or a fine of ¥ 70. There was a provincial assembly in each of the five provinces. The provincial assembly had forty members, one-half of whom were appointed by the governor-general and one-half of whom were elected by the city, town, and village assemblies. The assembly exercised limited powers over the provincial budget, matters of tax collection, and of general finance. The provincial assembly also elected six members, who together with the provincial governor and vice-governor formed the provincial council. In the districts the assemblies consisted of twenty members. The district assemblies had no budgetary power; their functions were purely advisory.

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5. Andrew J. Grajdanzev, Formosa Today, New York, Institute of Pacific Relations, 1942, p. 161.

1 [During Japanese Control 1895-1945--Analyst]

634 Each county (called gun in the five provinces and shicho in the three districts) was administered by an official whose duty was to police the county. The chief of a county supervised the town and village governments under him.

632 City governments were responsible
633 directly to the provincial government in which they were situated, while towns and villages were responsible to the provincial government through the county administration. Mayors of cities, as well as chiefs of town and heads of villages, were all appointed by the governor-general. There was an assembly in each city, town, and village. The city assembly had a membership ranging from twenty to forty and the town and village assemblies had eight to twenty members. One-half of the members of the local assemblies were appointed by the governor of the province and one-half were elected by the qualified electorate. The city assemblies functioned in the same manner as the provincial assemblies. They could act on the city budget and tax matters. They also elected six members to the city council which took the place of the assembly when the latter was not in session. The governor of a province or the mayor of a city held the veto power over the acts of the assemblies. The town and village assemblies were consultative agencies, authorized only "to announce their opinions to

632 answer to questions submitted to them by
633 the local government authorities." The heads of towns and villages had no obligation to seek or to follow the advice of local assemblies. The governor-general could dissolve the assemblies at any level at will.

631 The exceedingly limited extent of "self-
666 government,[1]" which the Japanese had much
641 publicized, was further minimized by the franchise. Suffrage was granted to all self-supporting male Japanese subjects 25 years of age or older, resident in the relevant districts for more than six months, who have been paying for six months or longer a minimum local tax of ¥ 5.00 a year.[6] Formosan Chinese were counted as Japanese subjects, but because the majority of them paid a city, town, or village tax under ¥ 5.00 a year,[7] the number

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6. Naito, op. cit., p. 73.

7. "The small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko (chio = 2.39 acres). But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote." Grajdanzev, op. cit., p. 163.

1 [During Japanese occupation from 1895 to 1945 -- Analyst]

631 [illegible] voters among the Formosan Chinese
666 was [illegible]. In 1935, the year in
644 which the so-called local self-government was introduced, there were 40,297 qualified voters among 270,174 Japanese residents, but only 187,155 qualified voters among 4,674,300 Formosan Chinese. The total membership, including government appointees of provincial, district and city assemblies as instituted in 1935, was 252 Japanese and 169 Formosan Chinese. Thus, not only were all administrative offices almost exclusively staffed by Japanese, but even in provincial and municipal representative bodies the Japanese members also far outnumbered the Formosan members.

625 For administrative control of the populace, the Japanese relied upon an elaborate police system. This system[8] comprised a civilian police force, numbering over 12,000 in 1940, supplemented by a special police force of over 5,000, functioning in the areas occupied by the aborigines and by a military police force numbering some 6,000. To facilitate the task of the police force, the old Chinese pao-chia system of collective responsibility was revived and strengthened. Approximately ten households formed a chia and ten chia a pao.

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8. Ballantine, op. cit., p. 28.

625 The Chia-chang [head of a chia] and pao-cheng [head of a pao] were chosen from among the elders of the households concerned; but they were subject to the approval of the provincial and county officials and the police.[9] The term of office was two years. They did not draw any pay and the expenses were levied on the members. The duties of the chia-chang and the pao cheng were many and varied; the principal ones were the maintenance of peace and order and the taking of a local census. They had to report new arrivals and departures, disseminate public information, collect taxes, and report law-breakers. If a crime was committed, these heads were first held responsible, but the whole group shared that responsibility along with the heads. Membership in the mutual responsibility organization was obligatory for all Formosan Chinese and failure to co operate with the group became a matter for the police. Japanese residents were not required to become members. The police on Formosa were dreaded by the inhabitants for their ruthless brutality. An interesting analogy can be drawn between the pao-chia in Formosa under the Japanese rule and the inhabitants'

9. Since 1936 a knowledge of the Japanese language had been made a requisite for these positions.

634 committee and inhabitants' teams that exist under the Communist regime in Mainland China today. With the efficient espionage built on the pao-chia system, the Japanese were able to control every household in Formosa just as the Communists are using the inhabitants' organizations to maintain an effective check on every household in Communist-dominated China.

635 After World War II, the Chinese govern-
63/ment took over the administration of Formosa and made the island one of the thirty-five provinces of China. However, the head of the provincial government was named administrator-general, and he was also commander-in-chief of the garrisons. The administrator-general exercised considerably wider power than a provincial governor; he supervised both the work of provincial machinery and the administrative functions assumed by the central government in the province. This arrangement was intended to be a temporary one during the period of the transfer of

62/ authority.[10] The administrator-general was
62/ assisted by a secretary-general. There were nine departments in the provincial government which included the secretariat, civil affairs, education, finance, agriculture and forestry, industry and mining, communications, police, and accounts. In addition, there were the food bureau, the bureau of monopolies, and the trade bureau.

63/ The five provinces of Taipei, Hsinchu, Taichung, Tainan, and Kaoksiung and the three districts of Taitung, Hualien, and Penghu were converted into eight hsien [counties], each under a hsien-chang [magistrate], and the nine cities -- Keelung, Changhua, Tainan, Chiayi, Kaohsiung, and Pingtung -- in the five provinces were brought under the direct control of the provincial government at Taipei. Two new cities, Yilan and Hua-lien, were established and were placed under the

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10. T'ai-wan Min-cheng Ti-i-chi [First Collective Report on the Civil Affairs of Taiwan], published by the T'ai-wan Sheng Hsing-cheng Chang-kuan Kung-shu Ming-cheng ch'u [The Department of Civil Affairs of the Office of Administrator-General], Taipei, May 1946, p. 104.

63/ jurisdiction of the hsien government in which they were located. The hsien were subdivided into chen [town] and hsiang [rural districts]. Towns and rural districts were further subdivided into ts'un [villages]. The cities were divided into ch'ü [districts, or sections] and ch'ü into li [wards]. A ts'un is composed of one hundred to two hundred households, and a li from one hundred fifty to three hundred households. Under the ts'un and the li is the smallest community organization, the lin [neighborhoods], consisting of six to fifteen households. Ts'un and li correspond to the former pao, and lin to the former chia, the designations having been altered to obliterate the unhappy associations the former names held for the people who were forced to live under the old system of pao-chia with its unrestrained police powers.

646 63/ Elections of local representative bodies took place in 1946. Franchise was extended to all citizens of both sexes over twenty years of age. Approximately 91.80 per cent of the eligible voters registered for voting.[11] The

11. Total number of registered voters was 2,409,560, First Collective Report on the Civil Affairs of Taiwan, p. 139.

~~666~~ election of hsien and city assemblies was
631 completed before April 7 and the provincial assembly (called the Provincial Political Council) was formally inaugurated on May 1. Although the functions of the local assemblies were principally consultative, they represented a great improvement over the Japanese system in two ways: first, the base for suffrage had been extended to include a greater number of voters, and, secondly, all the members of the assembly were elected. The election of district heads, magistrates, and mayors was deferred, because the authorities asserted the people at that time lacked administrative experience to undertake the work.[12]

635 After the local insurrection of February
~~633~~ 27, 1947, the provincial administration was brought into conformity with that of other provinces of China. The post of administrator-general was abolished. A provincial council of fourteen members or commissioners, with the governor as chairman, was established. Half of the provincial commissioners were chosen from local residents, the Formosan Chinese. The monopoly bureau, whose restrictive activities were immediately responsible for the outbreak of riots, was

12. Ibid., p. 103.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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abolished. A new tobacco and wine bureau was created and placed under the finance department. A camphor company was formed under the department of reconstruction (industry and commerce), and a bureau of supply replaced the trading bureau. In 1950 the number of provincial commissioners was further increased to 23, of whom seventeen were Formosan Chinese. Local elections were held in 1950 and 1953-54. Members of assemblies of rural districts, towns, cities, and hsien and heads of villages, rural districts, and towns, such as mayors and magistrates, were all elected by direct vote. Members of the Provisional Provincial Assembly[13] were elected indirectly by the various hsien and municipal assemblies in 1950. In the second election of 1953-54, they were directly elected by the people. (Details of the organizations of the provincial and local government as well as the popular elections, will be considered in another chapter.)

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13. "Local self-government in Taiwan is, for the time being, confined to the hsien and municipal level. Since the provincial government is still under the direct control of the Central Government, the principal council is known as the Provisional Provincial Assembly; China Handbook, 1954-55, Taipei, China Publishing Co., 1954, p. 469.

631 Toward the latter part of 1949 the Mainland of China was lost to the Communists. The Central Government of the Republic of China moved to Formosa. Formosa became both the seat of the national government and the provincial government. Thus, two levels of governmental mechanism exist side by side. In order to study the functions of the different branches of the government and the division of power between them, it will be necessary to examine the constitutional provisions and the structural organization of the central, provincial, and local governments.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 2a,
Political Background

CONSTITUTIONAL SYSTEM

642 The Republic of China, which overthrew the Manchu Dynasty, was founded on January 1, 1912, after a successful revolution led by Dr. Sun Yat-sen. Due to the lack of a democratic tradition among the people, no constitutional government followed. The country was torn asunder by ambitous warlords, who waged incessant wars among themselves. National unity was not restored until 1928 when a new government, under Chiang Kai-shek, successor to Sun Yat-sen as leader of the Kuomintang, was established in Nanking and supported by the country as a whole. Dr. Sun Yat-sen laid down a program of political reconstruction for the guidance of his followers,[1] advocating that, following the unification of the country by military success, there should be an interim period of political tutelage in preparation for constitutional democracy.

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1. Sun Yat-sen, Fundamentals of National Reconstruction (English translation), Taipei, China Cultural Service, reprint, 1952, p. 20.

642During the interim period, the Kuomintang should assume the role of a tutor, directing the national policy and training the people in democratic ways.[2] Accordingly, the Nationalist Government was organized by the representatives of the Kuominantg. But, since it followed closely the pattern conceived by Dr. Sun with regard to the division of powers, the structure of the government did not differ materially from the present government under the new constitution. In 1932 the Central Executive Committee of the Kuomintang passed a resolution, prescribing twenty-five principles, on the basis of which the Legislative Yuan was to draw up a draft constitution. A preliminary draft was completed on March 1, 1934, and the final draft, the "May 5th Draft Constitution," was promulgated by the National Government in 1936. Another plenary

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2. During the period of political tutelage, the National Congress of the Kuomintang took the place of the People's Congress in formulating government policies. When the National Congress of the Kuomintang was not in session, the political powers were exercised by the Central Executive Committee of the Kuomintang. A Provisional Constitution of the Political Tutelage Period was promulgated on June 1, 1931.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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642 session of the Kuomintang called for the convocation of the National Assembly on December 12, 1936. Because of unsettled political conditions, the election of delegates could not be completed in time, and the convocation of the National Assembly was postponed until October 15, 1937.

The Japanese invasion assumed nationwide proportions in July 1937, when several coastal provinces were occupied by the invaders. The national capital was evacuated from Nanking to Chungking. The convocation of the National Assembly becoming impossible, the introduction of a permanent constitution was postponed until the Japanese were defeated.

After the war, a constitutional convention met at Nanking on November 15, 1946. The Constitution of the Republic of China was adopted on December 25, 1946, promulgated by the National Government on January 1, 1947, and scheduled to be enforced on December 25 of the same year. On March 29, 1948, the First National Assembly, composed of 3,048 delegates[3] elected by popular vote in accordance

3. The first general election in Chinese history was held on November 21, 1947.

642 with the provisions of the new constitution, was convened in Nanking. Chiang Kai-shek was elected president and Li Tsung-jen vice-president. It also approved temporary provisions in the Constitution granting emergency powers to the president during the anti-Communist campaign.

CONSTITUTIONAL RIGHTS OF THE PEOPLE

In the Chinese Constitution, the freedoms, rights, and duties of the people are enumerated in Articles 7 through 21. They follow more or less the British or American Bill of Rights. But martial law, put into effect since May 19, 1948, has restricted to a considerable extent these freedoms.[4] We shall presently examine the rights of the people as guaranteed by the Constitution and indicate whenever they are affected by the provisions of martial law.

Article 8 of the Constitution protects the freedom of the person. It provides that no person, except in cases of flagrante delicto as provided by law, be arrested or detained except through a judicial or a police agency in compliance with legal procedure. No persons

4. Article 8 of the martial law was revised in 1949 by a presidential order.

may be tried or punished except by a law court in accordance with legal procedure. When a person is arrested or detained on suspicion of having committed a crime, the agency executing the arrest and detention shall inform the said person and his relatives or friends of the cause of his arrest or detention and turn him over to a competent court for trial within twenty-four hours. The person under arrest, or any other individual, may also petition a competent court for a writ of habeas corpus, to be issued within twenty-four hours, demanding the surrender of the person under arrest. However, the Chinese Constitution and laws have not expressly provided whether the right of the writ of habeas corpus should be suspended in case of rebellion or invasion, as public safety may require, as provided in the Constitution of the United States.[5]

Article 9 of the Chinese Constitution provides that except for those in active military service, no person may be subject to trial by a military court. Under martial law, a civilian will be subject to military trial if he is under suspicion of having committed a crime against

5. Constitution of the United States of America, Art. I, Sec. 9, Par. 2.

642 the Act of Communist Espionage or the Act of Rebellion.[6]

The inviolability of the domicile and the freedom to change one's domicile are guaranteed by Article 10 of the Constitution, except when a person is domiciled in a military area or in area under compulsory evacuation, as provided by the Air Defense Law.[7]

The Constitution guarantees that the people shall have freedom of speech, freedom of academic instruction, and freedom of publication. A new Press Law was enacted by the Legislative Yuan in April 1952. It provides a system of registration for all publications, including newspapers, magazines, and other printed matter.[8] It stipulates certain cases in which a publisher shall be punished or his publication shall be suspended, such as to attempt to commit or to incite others to commit, crimes of treason, insurrection,

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6. Regulations Governing the Separation of Jurisdiction between Judicial and Military Courts, 1954, Article 2.
7. Air Defense Law, 1948, Article 6.
8. Press Law 1952, Article 9.

642or espionage; to interfere with the lawful exercise of public functions or voting; to disturb, or to incite others to disturb, public order; and to commit, or to cause others to commit, acts of moral turpitude.[9] The new Press Law also provides that in time of war or emergency, when the government, as authorized by the Constitution, takes measures to deal with any unforeseen crisis, it may ban or limit the publication of certain items which tend to endanger public security, such as military, political, or diplomatic secrets.[10]

The Chinese Martial Law, in force since May 1948, authorizes the military authorities to restrict freedom of speech, academic lectures, newspapers, magazines, pictorial posters, slogans, and other writings and publications deemed harmful to the military cause.[11]

Article 12 of the Chinese Constitution guarantees the people the freedom of private correspondence. But under martial law,

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9. Ibid., Articles 33, 34.
10. Ibid., Article 35.
11. Martial Law, 1948, Article 11.

642 mails and telegrams in time of war may be censored or confiscated by military authorities. The correspondence of a prisoner may be censored or barred by the officer in charge of the prison, at his discretion.[12]

Freedom of religious belief is guaranteed by Article 13 of the Constitution. In schools, no course on religion may be required which might be considered as infringing upon freedom of religious belief. Under martial law, any religious activities that may disturb the public order may be banned by the military authorities.[13]

Article 14 of the Chinese Constitution guarantees freedom of assembly and the formation of associations. However, any assemblage may be dispersed or limited by the military in war time.[14] As to the forming of associations, the Chinese government has encouraged the people to exercise this freedom in professional and trade spheres.[15] Trade and labor unions have been established under the patronage of the government. Labor

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12. Prison Administration Law of 1947, Article 67, 68

13. Martial Law, 1948, Article 11.

14. Ibid.

15. Wen-jen Tsao, The Constitutional Structure of Modern China, Melbourne University Press, 1948, p. 65.

642 organizations and professional associations are represented both in the National Assembly and the Legislative Yuan.[16] Political parties, if lawfully organized, are given equal status and are allowed equal opportunity to participate in elections. All organizations must be registered with the proper authorities by their sponsors. Whoever joins an association formed with the object of committing or inciting rebellion is subject to imprisonment.[17]

641 It is definitely stipulated in the Chinese
~~583~~ Constitution that all citizens of the Republic of China, irrespective of sex, religion, race, class, or party affiliation, shall be equal before the law. A minimum quota of seats are reserved for women delegates in all representative bodies.[18] And to insure the election of women candidates, votes cast for them are computed separately. There is no religious or racial discrimination in China. A quota of seats in the National Assembly and the Legislature is expressly reserved for "people living in the interior areas," i.e., the minority races.[19]

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16. Law of Election and Recall of National Assembly Delegates, 1947, Article 4; and Law of Election and Recall of Legislators, 1947, Article 4.

17. Criminal Code, 1935, Article 154, and Rebellion Act, 1950, Article 5.

18. Constitution, Article 134.

19. Constitution, Article 135.

642 The Chinese Constitution provides that the people be given the right to existence, the right to work, and the right to own property.[20] The right of existence implies that the people shall be guaranteed a minimum standard of living. As to the right of work, the state shall provide opportunity of employment to the people who are capable of work, commensurate with their capacity and ability, so that they may render their services to the community and support themselves.[21] The state shall accord special protection to working women and children who work (Article 153) and shall give assistance and relief to the aged, the infirm, the disabled, and the victims of natural calamities. To promote social welfare, the state shall put into operation a Social Insurance System (Article 155).

651 No one shall be arbitrarily deprived of
403 his property. However, privately owned land
642 and other property are liable to taxation. If any land has an increase in value, through neither the exertion of labor nor the employment of capital, the state shall levy thereon an increment tax, the proceeds of which shall be used for public welfare.[22] The government

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20. Ibid., Article 15.
21. Ibid., Article 152.
22. Ibid., Article 143.

642 may regulate the distribution of land in the
651 interests of the tiller-owner and tenant-
423 cultivators and may limit the amount of land ownership.[23]

642 Under the Chinese Constitution, any
694 citizen has the right to present petitions to file complaints, or to institute legal proceedings. The Law of Petition was promulgated on December 18, 1954. It provides that a person has the right to voice his opinion concerning the policy of the government on matters of public interest to the representative agency or a competent authority, but the petition must be in written form and must not interfere with the exercise of judicial functions.[24] Any citizen may file a complaint against a wrongful decision on the part of a government body. The prescribed procedure is for the injured party to bring his complaint to a higher government body such as the provincial government, if the case is caused by an administrative act on the part of a hsien or a municipal government.

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23. Ibid., These provisions are inserted in accordance with the equalization of land ownership, one of the basic policies of Dr. Sun Yat-sen.

24. Law of Petition, 1954, Articles 2-6.

642 If he is not satisfied with the decision of the
694 provincial government, he may file a further complaint with the proper department of the Central Government. If the charge is agains a wrongful decision, the decision on the secc complaint by a superior government body will be final. But if the complaint is against an unlawful decision or an illegal execution, the dispute may be referred to the administr court for final judgment.[25]

642 The Chinese Constitution provides that
871 the people shall have the right to receive as well as the obligation to accept public educat The state has the responsibility of providing the necessary educational institutions so tha all the people may have a chance to receive elementary education; and the state may compel children of school age to attend scho Articles 159 and 160 of the Constitution specify that all citizens shall have an equal opportunity to receive education and that primary education shall be free of charge. Children from poor families shall be supplie with textbooks at the expense of the governm

25. Law of Administrative Procedure, 19 Article 1.

26. Constitution, Article 21.

27. Constitution, Article 160.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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642 According to Article 23 of the Constitution,

[illegible] to prevent an imminent crisis, to maintain social order, or to promote general welfare. One condition under which civil liberties may be restricted is during the time of declaration of martial law by the president; another is the exercise of the emergency power granted the president in the temporary provisions adopted by the first session of the National Assembly.

SUFFRAGE AND THE RIGHT TO HOLD OFFICE

644 Any citizen of the Republic of China over 642 twenty-years of age has the right to vote. All elections stipulated in the Constitution, except as otherwise provided, shall be universal and by secret ballot.[28]

Any citizen over the age of twenty-three years has the right to be elected to office, except as otherwise provided by law. All candidates in the election prescribed by the Constitution shall openly campaign for election. Intimidation and material inducement

28. Ibid., Article 129.

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are strictly forbidden, and disputes concerning

[illegible]

[illegible] the people [illegible] the president and vice president are elected by the National Assembly, and the members of the Control Yuan are elected by the provincial and municipal assemblies. In local elections of 1950 and 1953-54 on Formosa, the magistrates, mayors, and members of the provincial hsien and municipal assemblies were directly elected by the people in secret ballot. The Constitution also provides that a person after being elected may be recalled by the constituency (Article 133). Beside the rights of suffrage and recall, the people also possess the rights of initiative and referendum. However, although the Constitution states that the exercise of the rights of initiative and referendum shall be prescribed by law (Article 136), no law in this regard has been promulgated.

In a [illegible] public [illegible], the Constitution specifies that a system of competitive examinations shall be enforced, quotas of candidates shall be prescribed severally according to provinces and areas, and examinations shall be held by regions. No person may be appointed to a public office unless he has been qualified through

examinations.[29] Ever since A. D. 132

[illegible] provision simply continues ancient Chinese practice. In 1953, several civil service examinations were held. In the examination for civil service employees and for professional practitioners and technicians (lawyers, physicians, etc.), 2,400 persons participated in the higher examinations and 988 persons passed. In the general examinations, 155 out of 1,150 participants passed.[30]

In order to qualify for public office, Formosan-born Chinese took a special civil service examination in 1954, at which time

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29. Constitution, Article 85.

30. A high-school graduate is qualified to take the general examination. A college graduate or one who has successfully passed the general examination may participate in the higher examination. Those who have passed the general examination may fill clerical positions, and the successful candidates of higher examinations may fill higher posts in the government.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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647 84 persons passed the higher examination and [illegible] were eligible for promotion. Telegraph and other public utilities are state enterprises and their employees are considered public functionaries.

INTERPRETATION AND AMENDMENT OF THE CONSTITUTION

642 In a democratic country, the most important function of a written constitution is to safeguard the political or public rights of the people. Although the rights and freedoms of the Chinese people are defined in the Chinese Constitution, there is no well-established glossary of legal concepts. For example, just what is meant by "freedom of speech?" What are its dimensions and how far may it be restricted? Such questions will continually [illegible] discussion. Since the Constitution provides that individual freedoms and rights may not be curtailed or restricted by legislation, except in consideration of the social interest and general welfare (Article 23), we must ask what, exactly, constitutes "social interest" and "general welfare"? It is obvious that the guaranty of freedom may be infringed upon if the meaning and scope of social interest

45:Stanford U. S-4, 5 1956 AD1 Formosa
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[illegible] or general welfare are not [illegible]

[illegible]

In Article 173 of the Constitution, it is provided that the "Interpretation of the Constitution shall be undertaken by the Judicial Yuan." Laws that are in contravention of the Constitution shall be null and void. When doubt arises as to whether or not a certain law is in contravention of the Constitution, the Judicial Yuan is to render its opinion thereon.[32]

Amendments to the Chinese Constitution may be made in the following manner. When the National Assembly is in session, an amendment may be proposed by one-fifth of the total number of the delegates to the National Assembly and it must be passed by three-fourths of the delegates present at a meeting having a quorum of two-thirds of the entire Assembly. When the National Assembly is not in session, an amendment may be [illegible]

31. Shao-chang Hsieh, A Brief Survey of the Chinese Constitution, Taipei, China, Cultural Service, 1954, pp. 45-46.

32. Constitution, Article 171.

45;Stanford U; S-4; 5 1956 AD1 Formosa
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and submitted to the National Assembly for consideration at its next session by the Legislative Yuan. Such an amendment must be proposed by at least one-fourth of the members of the Legislative Yuan and resolved by three-fourths of the members present at a meeting having a quorum of three-fourths of the members of the entire Legislature. The proposed amendment to the Constitution is to be published at least six months before the convocation of the National Assembly.[33]

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33. Ibid., Article 174.

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Annex "A," Subparagraph 2b.1,
Political Background

STRUCTURE AND FUNCTIONS OF THE CHINESE NATIONAL GOVERNMENT

642 186 The Chinese Nationalist Government is a democratic republic. The national flag has a red background which denotes the spirit of liberty and sacrifice, a white sun with twelve points, which represent twelve hour-periods of day, symbolizing unceasing progress, and a blue sky which signifies equality and justice for all.

I. THE NATIONAL ASSEMBLY

646 The existing Chinese government derives its powers from the National Assembly which, according to the Constitution, exercises political powers on behalf of the people. (A chart showing the organization of the Chinese national government is appended at the end of the present chapter.)

The delegates to the National Assembly are elected on the basis of regional and vocational representation. There should be at least one delegate from each hsien or municipality. When the population of a hsien or a municipality exceeds 500,000, there should

646 be one additional delegate for each additional 500,000. The number of delegates to be elected by occupational groups (trade unions and professional associations), as well as by racial minorities, are "prescribed by law."[1] The first National Assembly, elected in November 1947 before the Mainland of China was overrun by the Communists has 3,045 delegates.

The functions and powers of the National Assembly are enumerated in the Constitution[2] as follows: (a) election of the President and the Vice-President, (b) recall of the President or the Vice-President, (c) amendment of the Constitution, and (d) ratification of Constitutional amendments proposed by the Legislative Yuan.

Delegates to the National Assembly are elected to serve a six-year term. The term of the present Assembly expired in 1954. Because the China Mainland is occupied by the Communists and a new election is impossible,

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1. Subject to change. The number of representatives may be increased or reduced by legislation before the election.
2. Constitution, Article 27.

646 the tenure of the First National Assembly has been prolonged by a special act of the Legislative Yuan. The second session of the National Assembly was convened in Taipei on February 19, 1954 and was attended by 1,578 delegates. On March 10, it adopted a resolution to recall Vice-President Li Tsung-jen for dereliction of duty.[3] On March 22, the National Assembly re-elected Chiang Kai-shek as the President and two days later elected Ch'en Ch'eng as Vice-President of the Republic of China.

II. THE PRESIDENT

643 Under the Constitution the President is the head of the State with power to represent the nation in foreign relations. He commands the army, navy, and air force, and promulgates laws and issues mandates with the counter-signature of the President of the Executive Yuan. Subject to the restraints of the Legislative Yuan he exercises the power to conclude treaties, declare war, and make peace. He may declare martial law, and grant general amnesty, pardon, remission of sentences, and

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3. Li Tsung-jen has been living in the United States since December 1949 and has steadily ignored appeals by the Chinese government and the Kuomintang to return to Free China to direct the affairs of State.

643 restitution of civil rights. In accordance with law, the President appoints and removes civil and military officers, confers honors, and awards decorations.[4]

From the Constitution it may appear that the position of the Chinese President is similar to that of the French President or the British monarch. His decrees are not effective unless they are countersigned by the President of the Executive Yuan (a position corresponding to that of Prime Minister), whose appointment is subject to the approval of the Legislative Yuan. But unlike the French or the British system, the Chinese President is under no obligation, legal or political, to appoint the leader of the dominant party in the Legislature to be the President of the Executive Yuan. Chiang Kai-shek himself is the indisputable chief of the ruling party, the Kuomintang, so he is almost free to appoint anyone personally acceptable to him. Another source of the dominating power that President Chiang Kai-shek wields is his personal control over the armed forces. The air, ground, and naval commands on Formosa maintain their highly

4. Constitution, Articles 35-42.

643 autonomous character, and real military control is exercised directly by the President.[5]

645 The tenure of office of the President and Vice-President is six years, with eligibility for a second term. The office of the President is called Tsung-t'ung-fu. Supervising the President's secretariat are a Secretary-General, a deputy Secretary-General, and a Director of Military Affairs (often referred to as Personal Chief of Staff to the President), under whom there are three bureaus in charge of civil affairs, military affairs, and general administration, respectively. Attached to the Tsung-t'ung-fu are a number of tzu-cheng (senior political advisers) most of whom are retired high officials. The present Secretary-General is General Chang Ch'ün, a former Prime-Minister, and General Huang Chen-ch'iu, former Vice-Minister of National Defense, is the Director of Military Affairs.

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5. Joseph W. Ballantine, Formosa, A Problem for United States Foreign Policy, Washington, D. C., Brookings Institution, 1952, p. 98.

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III. THE FIVE GOVERNMENT DEPARTMENTS

642 One of the special features of the governmental organization of the Republic of China is that, instead of the conventional three political divisions in Western countries representing the legislative, executive, and judicial powers, the National Government of China has five branches. The two additional departments are in charge of the censorial power or the power of impeachment, and the power of examination or the power of regulating the personnel of the government. For tens of centuries preceding the establishment of the Republic, "while the emperor, as the sources of all powers, was the only person rightfully to exercise the legislative, executive, and judicial powers, the power of examination and the power of impeachment, however, were exercised by his Ministers in a way independent of him, to insure an efficient and honest government."[6] Dr. Sun Yat-sen, founder of the Chinese Republic, pointed out in his Fundamentals of National

6. Hsieh Kwan-sheng, A Brief Survey of the Chinese Constitution, Taipei, China Cultural Service, 1954, p. 4.

642 Reconstruction[7] that it had been an admirable system and should be preserved in the new Constitution of China. Therefore the framers of the Chinese Constitution have carefully worked out a new system of the division of powers, slicing out of the legislative branch the power of impeachment and out of the executive branch the power of examination of civil servants and delegating those powers to two independent branches of the government. Thus, the Chinese national government has five departments -- the Legislative, the Executive, the Judicial, the Censorial (named Control Yuan), and the Examination Yuan.[8] These five branches of the national government represent five independent political functions from which the new Constitution of China is known as the "five-power constitutional system."

A. The Legislative Yuan

646 The Legislative Yuan is the highest law-making organization in Nationalist China.

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7. Sun Yat-sen, Fundamentals of National Reconstruction (English translation), Taipei, China Cultural Service, reprint 1952, p. 38.

8. Yuan, literally meaning a hall, court, or college, is a government department on the highest level.

646 Its members are elected directly by popular vote -- five for each province or municipality -- with a population of less than 3,000,000. Where the population exceeds 3,000,000, there should be one additional member for each additional million persons. Mongolia, Tibet, and other racial minorities as well as professional groups elect their own members to the Legislative Yuan as separately prescribed by law.[9] Any citizen over the age of twenty-three is eligible to be a member of the Legislative Yuan.

The present Legislative Yuan was elected in May 1948. Its total membership is 773, including:

560	representing 35 provinces
62	representing 12 municipalities
22	representing Mongolia
15	representing Tibet
6	representing minority racial groups
19	representing overseas Chinese
89	representing various professional groups
773	Total

9. Chinese Constitution, 1947, Article 64.

646 Actually 760 members were elected, of whom 684 members attended the first session at Nanking in 1948. Now 523 members are in Formosa; this number includes 110 new members who[10] fill the vacancies caused by death or deprivations of membership of the members remaining on the Mainland.

The term of office of a member of the Legislative Yuan is three years, with eligibility for re-election. The term of the first Legislative Yuan expired on May 6, 1951, but, in view of the extraordinary circumstances which render a new election impossible, the term of office has been extended several times

The Legislative Yuan has extensive legislating powers, including the sanction of national budgets, ratification of treaties and agreements, adoption of laws, consent or rejection for the nomination of the President of Executive Yuan by the President. In practice, after the government was moved to Formosa, the Legislative Yuan has adopted most of the bills presented to it for consideration with only slight amendments. On a few occasions, such as the government

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10. There were formerly alternate members, i.e., people who during the election, received the second highest number of votes.

646 proposal to raise the rate of electricity, the bills were first severely criticized and rejected, but they were adopted when the Executive Yuan requested re-consideration.[11]

Although the censorial power is allocated to a different branch of the government, the Legislative Yuan has the right to interpellate the President and the heads of the various ministries and commissions of the Executive Yuan on their administrative policies and activities. This right of inquiry has been frequently exercised by the present Legislature. In one such inquiry, a serious case[12] of corruption involving the Minister of Economic Affairs was bared. Court action ensued and the Minister of Economic Affairs was compelled to resign.

B. The Executive Yuan

645 The Executive Yuan, comparable to the cabinet in other countries, is the highest administrative organ in Nationalist China. All

11. The Executive Yuan may request the Legislature to reconsider a resolution only with the approval of the President of the Republic. The President has no veto power, nor has he any power to dissolve the Legislature Yuan.

12. The case of the Yangtze Lumber Company.

645 the provincial governments and a number of large municipalities[13] are under the direct supervision of the Executive Yuan.

There are eight ministries and two commissions under the Executive Yuan.[14] The President and the Vice-President of the Executive Yuan, together with the eight ministers, two chairmen of the commissions, the ministers and chairmen of the commissions are called the Ministers of State, and five to seven ministers without portfolio form the Executive Yuan Council to which all statutory and budgetary bills, important state affairs, and matters of common concern are submitted for discussion and decision. Assisting the President and Vice-President of the Executive Yuan, and of the other four Yuan, are a Secretary-General and a Deputy 000 Secretary-General. Directly under the

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13. Twelve large metropolises like Shanghai, Canton, and Peiping are under the direct jurisdiction of the Central Government. Other cities are under the jurisdiction of the provincial government.

14. Before the removal of the Central Government to Formosa, there were fourteen ministries and three commissions. The reorganization took place in March 1948.

647 Directly under the Executive Yuan there are also a number of subordinate organs. They are: the office of the Comptroller-General, the Government Information Bureau, the Council for United States Aid, the Economic Stabilization Board, the Planning Board, and the Commission on Rationing for the Central Government Personnel.

645 The President of the Executive Yuan or the Premier is nominated and appointed by the President with the consent of the Legislative Yuan, but other members of the Yuan, including the Vice-President, the ministers of various departments and heads of the commissions, and the ministers without portfolio, are nominated by the Premier to the President of the Republic; appointments are made by the latter without consulting the Legislative Yuan. Therefore, legally speaking, the President of the State is responsible to the people as represented by the National Assembly, the Premier (President of the Executive Yuan) is responsible to the President and the Legislature jointly, and the Ministers are responsible to the President and the Premier jointly.

According to the Constitution,[15] the President of the Executive Yuan resigns if an

15. Article 57.

645 important government bill is rejected by the Legislative Yuan and his request for reconsideration is overruled by two-thirds of the
643 attending members. The Constitution provides
645 that the President of the Republic, in accordance with law, "appoints and removes civil and military officers,"[16] but it is not definitely stated whether the President of the Republic may dismiss at will a President of the Executive Yuan whom he has appointed with the consent of the Legislative Yuan. However, the President could always compel the Premier to resign by refusing to sign the decrees or orders presented by the latter for promulgation. So far no such case has occurred. There is no collective responsibility. The Premier alone is responsible to the Legislative Yuan. Theoretically, the Ministers of State do not have to resign in bloc when the President of the Yuan resigns; however, in practice, a new Premier has been free to choose new personnel to fill all the Ministerial posts. In the last reorganization of the Executive Yuan only one minister and one chairman of a commission[17] and four ministers without portfolio retained their posts.

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16. Article 41.

17. George Yeh, Minister of Foreign Affairs, and Cheng Yin-fun, Chairman of the Overseas Affairs Commission.

C. The Judicial Yuan

692 642 The functions of the Judicial Yuan according to the Constitution[18] are: (a) the interpretation of the Constitution and other laws and decrees; (b) the adjudication of administrative suits and disciplinary punishment of public functionaries. In other countries the last-named functions -- jurisdiction over administrative cases and disciplinary actions against government employees -- normally fall within the authority of the administration.

The President and Vice-President of the Judicial Yuan are nominated and appointed by the President of the Republic with the consent of the Control Yuan. They with a number of Grand Justices form the Council of Grand Justices.[19] The Council of Grand Justices is charged with the power and responsibility of interpreting the Constitution. It is also concerned with the interpretation of laws and ordinances with a view to adjusting

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18. Constitution 1947, Articles 77 and 78.

19. According to Article 3 of the Organic Law of the Judicial Yuan, the Council of Grand Justice is to be composed of seventeen judges of high standing. Twelve of them were appointed in 1948 but only two accompanied the National Government to Formosa. Seven new justices were appointed in 1952.

692 differences and bringing about their uniform
642 application. The tenure of office of a Grand Justice is nine years.

692 Under the Judicial Yuan there are the Supreme Court, the Administrative Court, and the Committee on the Discipline of Public Functionaries. The judicial system in China is based upon the principle of three trials in three grades of courts -- the District Court, the High Court, and the Supreme Court. The Supreme Court is the highest tribunal of the land. It consists of a number of civil and criminal divisions,[20] each of which is formed by a presiding judge and four associate judges. The judges are appointed for life, and they are above party affiliations.[21]

The Administrative Court is concerned with legal procedings against government agencies. Any individual who is convined that his proper rights or interests have been injured by an unlawful decision or act of a government agency, and who has failed to receive satisfactory redress from the superior

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20. Before the removal to Formosa it had thirteen civil divisions and fourteen criminal divisions. At present it maintains three civil divisions and two criminal divisions.

21. Constitution, 1947, Articles 80 and 81.

authorities on first and second complaints, may bring the matter to the Administrative Court. The Court, like the Supreme Court, is headed by a President, and consists of several divisions.[22] Each division has a presiding judge and four associate judges. In 1954 there were ninety-six administrative suits, out of which seventy-eight cases were settled. Many of the suits brought before the Administrative Court in that year arose from the implementation of Land Reform initiated in 1953. Others were related to wine and tobacco monopolies, requisition of dwellings for public use, and the confiscation of smuggled goods by the Customs. In all cases the decision was against the government.

The Committee on the Discipline of Public Functionaries is composed of a chairman and nine to fifteen members, whose duty is to mete out proper punishment to government officials who have been either impeached by the Control Yuan or referred to the Committee by the competent superior authority. The disciplinary punishment may be suspension or dismissal from office, demotion, reduction of salary, or a warning. Where a criminal law is involved, the case is turned over to a criminal

22. Two to three divisions, Organic Law of Administrative Court 1948, Article 3.

court. In 1954 there were fifty-one cases involving seventy-two officials of different ranks brought before the committee.

The District Court and the High Court are under the direct supervision of the Ministry of Justice of the Executive Yuan. The judges and procurators are appointed by the Minister of Justice. In principle, each hsien should have a District Court and each province a High Court. In practice, several hsien may share a District Court if their area is small. In provinces, where the area is extensive and the population large, there may be one or more branches of the High Court. Both the District Court and the High Court are under the direction of a President, and the judges are divided into civil and criminal divisions. The district court handles all civil and criminal cases of the first instances; the High Court, both hears appeals against decisions of the District Courts and takes under advisement cases of the first instance of insurrection, treason, conspiracy with a foreign power against the Government, and actions detrimental to the foreign relations of the country.[23] The Supreme Court, which is a part of the Judicial Yuan, is the court of last resort.

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23. Organic Law Governing the Law Courts, 1932, Article 17.

45 Stanford U. S-4. 5 1956 AD1 Formosa
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692. On Formosa a High Court sits in Taipei, a branch High Court in Tainan, and twelve District Courts in the cities of Taipei, Taichung, Tainan, Hsinchu, Chiayi, Kaohsiung, Pingtung, Taitung, Penghu, Yilan, Hualien, and Keelung. There is a Juvenile Court in Hsinchu.

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COURT CASES IN 1954*

	Pending and New Cases	Settled in 1954	Pending at End of Year	Pendency#
District Courts				
Civil	81,578	77,111	4,476	50 1/2 days
Criminal	48,555	46,947	1,578	29 1/2 days
High Courts				
Civil	7,649	6,341	1,308	67 1/2 days
Criminal	11,089	9,674	1,415	52 days

* Source: Report of the Ministry of Justice to the Editors' Committee of China Handbook 1955-56, which is going to press.
# Average number of days required for settlement.

D. The Control Yuan

647 The functions of the Control Yuan are threefold. (1) It exercises a censorial power over the behavior of public functionaries, both in the central government and in the local governments, for dereliction of duty or for violation of law. An impeachment, when instituted, is referred to the Judicial Yuan for displinary action, and if it involves a criminal offense, the case is turned over to the law court. An impeachment of the President or the Vice-President of the Republic by the Control Yuan, however, must be presented to the National Assembly for consideration. (2) Through the Ministry of Audit, the Control Yuan supervises the execution of the government budget. It has the power of investigation before and after public money is spent. It checks receipts and disbursements of government offices and public enterprises, and it examines their final financial statements. The Ministry of Audit reports any irregularity in financial matters on the part of an official or a government body to the Control Yuan, which institures impeachment proceedings. (3) In the appointment of the President, Vice-President, and Grand Justices of the Judicial Yuan, and the President, Vice-President, and members of the Examination Yuan by the President of the State, previous consent of the Control Yuan is necessary. A nominee must pass a Review Committee before

647 being accepted by the general meeting of the Control Yuan.[24]

The members of the Control Yuan are elected by the provincial and municipal councils, the district councils of Mongolia and Tibet, and overseas Chinese groups in the following proportions: five members from every province,[25] two members from every special municipality,[26] eight members each from Mongolia, Tibet, and Chinese nationals residing abroad. The tenure of the members of the Control Yuan is six years. The total maximum membership of the Control Yuan is 223. Actually before the National Government was moved to Formosa, 180 members had been elected. The current membership is 155.[27] Like the members of the Legislative Yuan, members of the Control Yuan cannot be held responsible outside the Yuan for opinions expressed or votes cast in the Yuan, and they cannot be

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24. Law governing the Application of the Power of Consent adopted by the Control Yuan in June 1948.

25. Of the five members from each province, one must be a female.

26. Municipality under the direct jurisdiction of the Executive Yuan.

27. China Handbook 1954-55, Taipei, China Publishing Co., 1954, p. 168.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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647 arrested or detained without the permission of the Yuan.

E. The Examination Yuan

The Examination Yuan is the fifth independent branch of the Chinese National Government. According to the Constitution, its function is "to attend to matters such as examination, appointment, registration, ranking, checking of records, salary scales, promotion and transfer, safeguarding tenures, commendation, compensation, retirement, and pension;[28] in other words, it deals with all affairs pertaining to government personnel.

The President, Vice-President, and a number of members (examining commissioners) of the Examination Yuan are appointed by the President of the Republic with the consent of the Control Yuan. Their term of office is six years. The Examination Yuan has two ministries, one in charge of matters pertaining to examination, and the other in charge of registration of records and review of qualifications of government employees. Several examinations are given each year.

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28. Constitution 1947, Article 83.

647 Generally speaking, there are two kinds of examinations: (1) to qualify candidates for election to public office or for appointment to government posts and (2) to qualify specialists and technicians for professional practice. The Chinese Constitution expressly stipulates that no person may be appointed to a public office unless he has been qualified through examination.[29] Architects, lawyers, accountants, doctors, pharmacists, nurses, wireless operators, and navigators, in order to obtain their licenses, must either successfully pass a public examination or satisfy the Committee of Review of the Ministry of Examination with sufficient testimony of their educational attainments and past experience. A higher examination and a general examination are usually given simultaneously for each field. High school graduates may take part in the general examination, while college graduates, qualified technicians, public functionaries who have served in the government for three years in a minor capacity, and those who have passed the general examination are permitted to take the higher examination. Those who pass the general examination are qualified for clerical work. Those who pass the higher examination are qualified for higher posts in the government or for professional practice.

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29. Article 85.

Annex "A," Subparagraph 2b. 2,
Political Background

PROVINCIAL AND LOCAL GOVERNMENT AND POPULAR ELECTIONS

I. THE PROVINCIAL GOVERNMENT

631 Formosa was made a province upon its
632 retrocession to China after World War II. The Taiwan Provincial Government holds jurisdiction over the main island of Formosa, twelve smaller islands in adjacent waters, and the sixty-four islands of the Penghu group known to the Western world as the Pescadores. The total area of these islands is 13,880 square miles and the population, excluding the military, was 8,695,843 in February 1955.[1]

The capital of the province is Taipei, which is also the capital of the Nationalist Government of the Republic of China in refuge. The provincial capital, according to a recent air defense plan, will move to Taichung when the necessary construction work in the latter city is completed.[2]

634 Taiwan Province is divided into sixteen administrative areas called hsien (a hsien is roughly comparable to a county in the United States) and five municipalities under the direct jurisdiction of the provincial government. The

1. Report of the Department of Civil Affairs, Taiwan Provincial Government.

2. According to a Taipei broadcast on Dec. 27, 1955, provincial capital was to move to Taichung in April 1956.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

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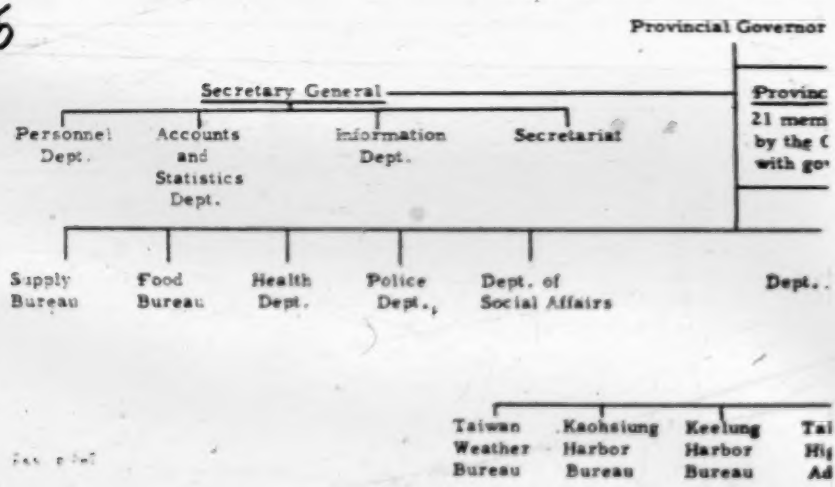
STRUCTURAL CHART OF TAIWAN



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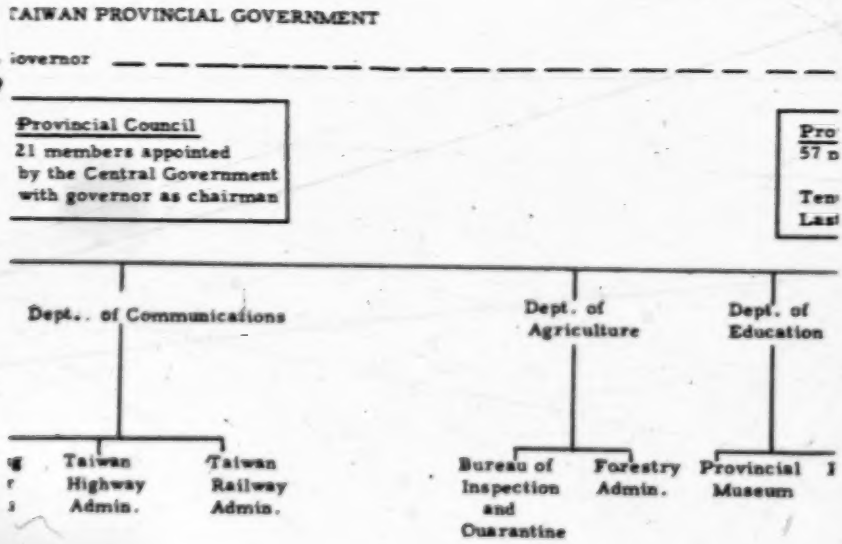

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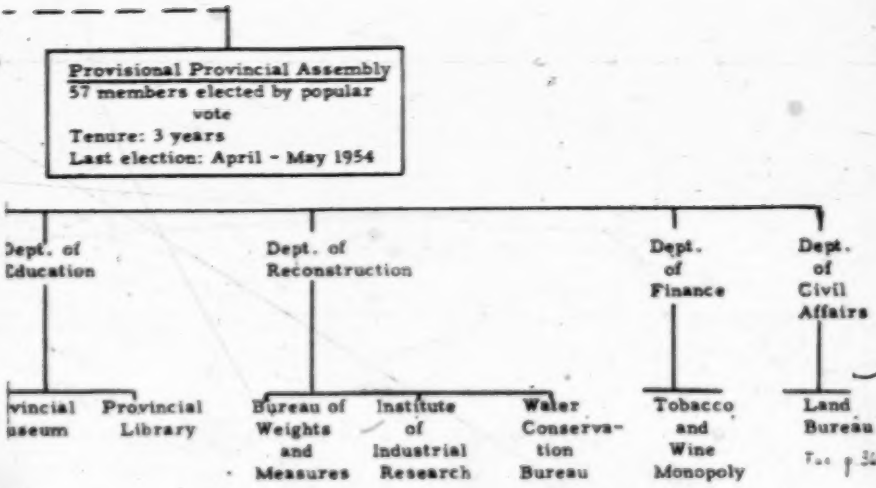

[facing p. 367 - part c]

634 following hsien are on the western slope of the mountain ranges: from north to south, Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua, Nantou, Yunlin, Chiayi, Tainan, Kaohsiung, and Pingtung. Three hsien cover the eastern slope of the mountains; these are Yilan, Hualien, and Taitung. The Pescadores form a separate hsien, Penghu. Two of the five municipalities, Keelung and Taipei, are located at the northern tip of the island, the remaining three, Taichung, Tainan, and Kaohsiung, are on the western side of the island. The scenic resort, Yangmingshan, where President Chiang Kai-shek resides, is a northern suburb of Taipei and forms a special administrative district.

632 The sixteen hsien are each divided into chen (towns) and hsiang (groups of villages or rural districts). Chen and hsiang are further subdivided, respectively, into li (wards) and ts'un (villages). The five municipalities are dividied into ch'ü (districts or sections) and ch'ü are divided into li. A ts'un (village) is composed of 100-200 households and a li (ward) of 150-300. The smallest community organization is called lin (neighborhood) and consists of 6-15 households. In the province of Taiwan there are 82,290 lin which form 3,066 ts'un and 3,489 li. These ts'un and li combine to form 77 chen and 235 hsiang.[3]

631 At the head of the provincial government is 635 the governor, who is the chairman of the Provincial Council. The Taiwan Provincial Council is composed of twenty-one members, six of whom are concurrently commissioners of provincial departments.

3. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China 1953], Taipei, 11/30/53, p.643.

631
636 The Provincial Council meets once a week to listen to the reports of the various departments of the provincial government and discuss proposals brought up by the governor or the provincial departments. Although resolutions are passed or submitted to the Executive Yuan in the name of the Provincial Council, it appears in actual practice that the powers of the members of the council are limited to deliberation and final decisions do not depend on majority rule. The governor passes or vetoes each resolution.

According to the Chinese Constitution,[4] each province is to enact its own self-government law and the provincial governor is to be elected by the people of that province. In Formosa, since the provincial self-government law has not been enacted, local self-government is at present confined to the hsien and municipal levels. The provincial government remains under direct control of the central government. The governor is nominated by the president of the Executive Yuan and appointed by the president of the Republic. The department heads and members of the provincial council are selected by the governor and recommended to the Executive Yuan for appointment.

The Taiwan Provincial Government has a secretariat, headed by a secretary-general, and a number of administrative departments, each

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4. Constitution, 1947, Articles 112 and 113.

63/ under a commissioner or a director. The pro-
635 vincial legislature, called the Provisional Provincial Assembly, is the representative body of the people.[5] In 1951 its members were elected by the hsien and municipality assemblies. In 1953 the law was altered to permit direct election by the people.[6] The present assembly, composed of 57 members, was elected by popular vote in April-May 1954. A hsien or municipality with a population of 150,000 or less is entitled to elect one member to the assembly. If it has a population exceeding 150,000, it is entitled to elect one additional member for each additional 150,000. If the remaining population exceeds 75,000, the hsien or municipality may elect another additional member. When a hsien or a
[642] municipality elects four or more representatives, one of the members must be a woman. In the present assembly there are six woman members. The autochthonous tribes living on the plains elect one representative, those living in the mountains elect two representatives. The tenure of office of the present assembly is three years.[7]

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5. So called because the provincial government is under the direct control of the central government, and the provincial council does not exercise full power.

6. Regulations governing the organization of the Provisional Provincial Assembly, promulgated by the Executive Yuan on August 22, 1953.

7. The tenure of the First Provincial Assembly, elected in 1951, was two years.

63/636 Nominally the Provisional Provincial Assembly possesses broad legislative powers. The provincial government has to present to the assembly for discussion and decision all measures affecting the rights and obligations of the people, the provincial budget, and the disposal of public property. However, the prerogatives of the assembly is circumscribed by a provision in the organic law of the assembly that in the event of a disagreement between the provincial government and the provisional provincial assembly, the former may request a reconsideration.[8] Should the assembly uphold its original resolution, the provincial government may submit the dispute to the Executive Yuan for final judgment. Moreover, when the assembly is in recess, the provincial government with the approval of the Executive Yuan may take any emergency action and report the matter to the assembly at its next session. Since the assembly meets for a period of ten to fifteen days every six months,[9] the provincial government is not seriously restricted by the assembly. The Executive Yuan has the right to dissolve the Provisional Provincial Assembly and order a new election, if it considers the assembly is acting in contradiction to national policy.[10]

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8. Article 23.

9. In case of necessity a session may be extended, but the extension may not exceed seven days.

10. Article 24 of the Regulations Governing the Organization of the Taiwan Provisional Provincial Assembly.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

STRUCTURAL CHART OF THE CHINESE RA

64R

National Assembly
first session 1948 — 3,045 delegates
second session 1954 — 1,578 delegates

President of the Republic of China
Chiang Kai-shek

Vice-President — Chen Cheng

The Executive Yuan
President - O. K. Yui
Vice-President - Huang Shao-ku

Executive Yuan Council
The President and Vice-President of the Yuan, the 10 ministers of State and 5-7 Ministers without portfolio

Overseas Affairs Commission
Chairman - Cheng Yin-fun

Mongolian and Tibetan Affairs Commission
Chairman: Liu Lien-ko

Ministry of Economic Affairs
Minister - Kiang Piao

Ministry of Finance
Minister - Hsu Peh-yuan

Ministry of of Foreign Affairs
Minister - George K.C. Yeh

Judicial Yuan
President - Wang Chung-hui
Vice-President - Hsieh Kuan-sheng

Supreme Court

High Courts

District

rincial Governments and
icipalities under the direct
isdiction of the Executive
s

sn and city governments

[Facing p.372 - part a]

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

642 THE CHINESE NATIONAL GOVERNMENT

Committee on the Discipline of Public Functionaries

Cou
Jus
Pre
Pre

District Courts

Ministry of of Foreign Affairs
Minister - George K.C. Yeh

Ministry of Interior
Minister - Wang Teh-pu

Minister of Defense
Minister - Yu Ta-wei

Ministry of Education
Minister- Chang Chi-yun

Ministry of Communications
Minister - Yuan Shou-chien

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45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

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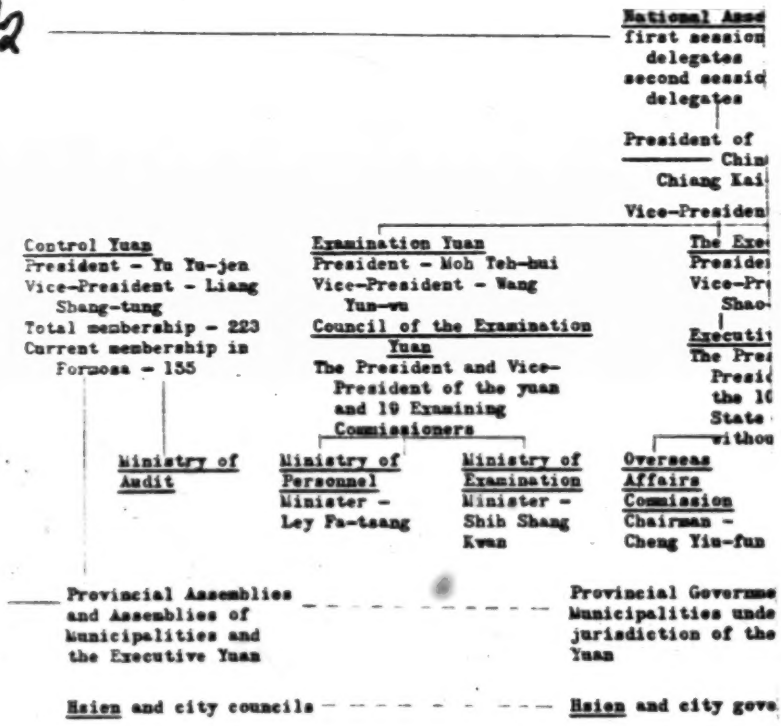

[Facing p. 372 - part e]

45: Stanford U. S-4,5 1956 AD1 Formosa AD1

642

Legislative Yuan
President - Chang Tao-fan
Vice-President - Huang-Ku[illegible]
Total membership - 773
Actual in Formosa at present
523

Discipline
aries

Council of Grand Justices
President and Vice-President of the Yuan and 17 Grand Justices
Actual in Formosa
9 Grand Justices

Ministry of Education
Minister-
Chang Chi-yun

Ministry of Communications
Minister -
Yuan Shou-chien

Ministry of Justice
Minister - Ku Feng-hsiang

[facing p. 372-part]

fol. p 372

II. HSIEN AND MUNICIPAL GOVERNMENTS

630 The province of Taiwan is divided into 16 hsien and 5 municipalities. At the head of each hsien government a hsien-chang (magistrate) and each municipality is headed by a shih-chang (mayor). In the hsien or municipal government, there are a number of bureaus in charge of civil affairs, finance, education, economic reconstruction, police, land, and public health. The number of bureaus varies according to the importance of the district and the size of its population. Each hsien or municipality has a representative body of the people called the hsien assembly or municipal assembly. The subdivisions of hsien and municipality are chen, hsiang and ch'ü, each headed by a chief. They have each a representative body of the people called chen or hsiang assemblies.

631 Local self-government was promulgated in Formosa in April 1950. All members of the councils of towns and rural districts, members of hsien and municipal assemblies, the heads of towns, rural districts, mayors of municipalities, and hsien magistrates were elected by direct suffrage. A second election took place in 1954. The term of office for magistrates, mayors, and heads of towns, rural districts,

633 and sections of a municipality is three years and the term office for the assemblies and local councils is two years. If a magistrate or a mayor commits a crime or fails to effectively carry out the order of a superior authority he may be dismissed by the provincial government or recalled by a referendum of the voters. In such cases, a new election must be held within a month. Similarly, the administrative heads of a town, rural district, or section may be relieved of office by an order of the magistrate or mayor or by a referendum recall.

634 The hsien and municipal assemblies are authorized to decide on all matters related to local self-government (i.e., education, public health, communications, public utilities, and local industries), to sanction local budgets, to audit local expenditures, to decide on the disposal of local public property, to call for administrative reports, to make interpellations, and to issue hsien or municipal ordinances. The assemblies hold a session every four months and no limit is imposed on the length of each session. If the hsien or municipal government should find the resolution of the representative assembly difficult to enforce, it may, with the approval of the provincial government, request a reconsideration. If two-thirds of the attending members of the assembly support the original resolution, it becomes binding. The hsien and municipal assemblies are not subject to dissolution; evidently they possess a much greater latitude of power than the provincial assembly. The citizens'councils of towns and rural districts meet once every three months.

They look after affairs of local interest such as local contributions to public welfare and the relations with neighboring towns and rural districts.[11]

II. POPULAR ELECTIONS

Members of hsien and municipal assemblies are elected on the basis of one representative for every 10,000 persons. The only exceptions are those districts of Hualien, Taitung, and Penghu, where each member represents 5,000 persons. Every tenth member of hsien and municipal assemblies is a women. The minimum membership of each hsien or municipal assembly is fifteen.

Any citizen, irrespective of sex, religion, race, class, or party affiliation, who is over twenty years of age, and has resided in a single district for a period of six months or more, is eligible to vote and hold any local office except that of magistrate and mayor. In the election

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11. According to the measures for the enforcement of self-government of hsien and municipalities in Taiwan Province (as revised by the Executive Yuan on August 22, 1953), a magistrate or a mayor may be relieved of office by a resolution of the provincial council and with the concurrence of the provincial assembly. A recall motion must be initiated by one-fifth of the electorate and passed by majority of referendum votes.

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In 1950, a candidate for magistrate or mayor had to be at least thirty years of age. In an election held in 1954, other qualifications were added: to be a candidate for the office of magistrate or mayor, a person must either be a college graduate or have passed a senior civil service examination or have met the requirements set by the Examination Yuan. Secret ballots were cast in all elections. The order of the candidates on public notices and on the ballots were determined by lot. For the benefit of those voters who could not read, pictures of the candidates were printed next to their names; thus the voters would have no difficulty in voting correctly for the candidate of their choice.[12]

666 625 President Chiang Kai-shek proclaimed three principles on which the government was to formulate the regulations governing elections: a law-abiding spirit, an avoidance of waste, and the election of the good and the capable.[13] Accordingly, candidates were not permitted to spend more than a certain amount of money in campaigning and were forbidden to bribe their constituents or make a campaign issue of the private lives of their opponents. Supervisory offices were established by the Taiwan Provincial Government, which declared that stern measures would be taken against those who "use force, threat or other illegal means

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12. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 473.
13. Ibid., p. 470.

to interfere with the election campaign of the candidates, obstruct the casting and counting of votes, and hamper the performance of duties by those in charge of the election affairs." Generally speaking, the elections were conducted in an orderly manner. No report of election "irregularities" has appeared in newspapers. Mr. Hsu Fu-lin, acting chairman of the Democratic Socialist Party, in answer to the query of an American newspaper correspondent, said that there had been no discrimination against the candidates of his party during the election campaign. A British newspaperman observed that "if Formosan elections cannot be regarded as free by the standards of the West, they have nevertheless been considerably more democratic in character than anything yet known in the Far East outside Hong Kong. The secret ballot prevails, but no candidate fundamentally opposed to the regime would have the temerity to stand for election."[15]

[161] The Civil Affairs Department of Taiwan Provincial Government reported the population of Taiwan Province to be 8,438,016 at the end of 1953. This number included 741,016 foreign-born (Mainlanders) but excluded military

14. A General Report Made by Governor O.K. Yui before the Fifth Session of the Provisional Provincial Assembly of Taiwan on Dec. 14, 1953, Taipei, Dept. of Information, Taiwan Provincial Government, 1954, p. 31.

15. H. Maclear Bate, Report from Formosa, London, Eyre & Spottiswoode, 1953, p. 23.

666 personnel, According to the regulation govern-
635 ing the election and recall of assembly members Mainlanders who have resided in Formosa for six months or more have the right to vote and stand for election. Members of the police and military forces and students may vote but are not eligible candidates for office.[16] The number of qualified voters at the end of 1953 was 3,715,552, approximately 45 per cent of the total civilian population.[17] The ratio of actual voters to qualified voters at the time of the two popular elections held in Formosa was as follows:[18]

Election	Year	Percentage of Participation
Provisional Provincial Assembly	1954	74.41
Hsien and Municipal Assemblies	1950	80.73
Hsien and Municipal Assemblies	1953	79.72
Magistrates and Mayors	1950	80.87
Magistrates and Mayors	1954	75.33

The first Provisional Provincial Assembly was elected by the hsien and municipal assemblies. After the first election, the percent of partici-

16. Tai-wan Sheng Cheng-fu Kung-pao [Official Gazette of Taiwan Provincial Government], Taipei, Secretariat of Taiwan Provincial Government, Autumn issue, No. 48, August 25, 1953, p. 611. [17,18 - next page]

pating voters decreased slightly, but the actual number of people who cast their votes in subsequent elections increased. For instance, in the election of hsien and municipal assemblies the total number of votes cast in 1950 was 2,769,696; the number of votes cast in 1953 totalled 2,961,941. Of a total of 1,846 candidates, 860 members of the hsien and municipal assemblie were elected in 1953. Seventy-four members were women.

The educational background of local legislators is much lower than that of the members of the Legislative Yuan. Over ninety per cent of the members of the current Legislative Yuan are college graduates; of the 860 members of the hsien and municipal assemblies, only 202 are graduates of universities or technical colleges, 342 are graduates of high schools, and the remainder attended primary schools or were privately tutored.

The occupations of the members of local legislatures have been reported as follows:[19]

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17. Number of civilian population on Formosa in February 1955 was 8,695,843; number of qualified voters: 3,997,226, according to report of Civil Affairs Dept. of Taiwan Provincial Government.

18. The China Handbook 1954-55, pp. 474-76.

19. Reports of the election offices, Dept. of Civil Affairs, Taiwan Provincial Government.

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631 635 Farming	273
Mining	15
Manufacturing	31
Transportation	16
Trade	228
Professionals (doctors, lawyers, etc.)	126
Civil Service	104
Others*	67

* Including 39 housewives and 17 retired industrialists and merchants

Of the 860 members of the hsien and municipal assemblies, 806 are native-born and 54 are Mainlanders. The magistrates and mayors elected to office in 1954 are, with two exceptions, all native-born. The exceptions are Kuan-i Hsieh, the mayor of Keelung, the largest port city of Taiwan Province, and the magistrate of Penghu hsien, Yü-lin Li. Hsieh and Li came to Formosa after World War II. The preponderance of Formosa-born candidates elected to the local governments and local assemblies suggests that the Nationalist Government is willing to encourage self-rule in Formosa. After the local election of 1950, one American observer concluded: "That the Taiwanese are making headway toward local political responsibility is clear." [20]

20. Fred W. Riggs: Formosa Under Nationalist Rule, New York, Institute of Pacific Relations, 1952, p. 52.

631 At the provincial level, 16 of the 21 members
635 of the provincial council are native-born, and the secretary-general, the commissioners of the provincial departments of civil affairs and reconstruction, and the directors of the department of health and the food bureau are natives of Formosa. It seems likely that as Formosa-born persons gain experience in government they will demand broadened jurisdiction for the provincial assembly and the election of a Formosan as governor of the province.

Annex "A," Subparagraph 2c,
Political Background

POLITICAL DYNAMICS

642 On Formosa, "Chiang Kai-shek still runs a one-party government, and, in many respects, a one-man government. He is the President of China, Director-General of the Kuomintang, and Commander in Chief of the armed forces."[1]

Ever since the second century B.C. China has been a unified country with a centralized government which might be a benevolent or malevolent autocracy, but the highly centralized policy has held the vast Chinese nation intact for thousands of years. Only during the years when the central government was weak, in times of chaos that the provincial governments asserted their power beyond limits. Dr. Sun Yat-sen remarked in his San-min Chu-i [Three People's Principles]: "The different provinces in China were always under one central government. They were not separate states, neither are they now in such a different position that unified rule is less possible. History tells us

1. "Man of the Single Truth" Time, Vol. 65, No. 16, April 18, 1955, p. 32.

642 that whenever the country was unified, we had a time of peace and tranquility, and whenever the country was split, we had anarchy."[2] Federal system, such as existing in the United States, in which vast powers are reserved to the local constituents, is alien to the Chinese conception of government.

642 It is true that the Constitution of the
631 Republic of China has devoted five articles[3] to the enumeration of the powers of the central and local governments, but it does not attempt to define the relation between the central and local governments. What those articles attempt to do is the distribution of administrative duties among the different levels of government according to expediency or convenience. Generally speaking administrative duties are distributed on the principle that whatever can most efficiently be done by the central government will be distributed to the central government. Provincial and hsien governments handle only matters of local interest and anything else that

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2. Dr. Sun Yat-sen: Discource on Democracy, San-Min Chu-i [The Three People's Principles].
3. Constitution 1947, Articles 107-111.

642 the central government may assign to them.
631 The central government has the power of re-demarcating the administrative divisions of the country at any time. For instance, before the last world war, Manchuria consisted of three provinces, but after the war the number of provinces was changed to nine. In normal times, the central government retains legislative and supervisory powers over practically all matters, and so far no occasion has arisen to call for the redefining of relations between the national and local governments.

631 On Formosa, since the loss of
635 Mainland China to Communism, a peculiar situation has been in existence. Taiwan Province has become the only territory over which the national government of the Republic of China exercises effective control. Two levels of governmental mechanism -- the central government and the provincial government -- have been operating side by side. Except the departments of foreign affairs and defense, administrative functions of all other departments of the central government are overlapping with those of the provincial government. Many foreign visitors are under the impression that most of the administrative powers of the provincial government are being exercised directly by the central government and that only limited residual powers are left to the provincial government. But the facts do not seem to

631 substantiate this contention. For instance,
635 in the realm of finance, all taxes with the exception of customs duties, are collected by the provincial government. The Bank of
[652] Taiwan, a provincial bank, takes over all the functions of the central bank. It issues currency notes, supplies foreign exchange, and acts as the fiscal agent both of the national and provincial governments. With
871 regard to education, only the Taiwan National
631 University is under the supervision of the
635 Ministry of Education of the national government. All other schools in the province, including the College of Engineering and the Normal University are under the direct jurisdiction of the provincial government. Actually the different ministries in the national government have undergone so much consolidation after they had been moved to Formosa, that most of them are now maintaining only a skeleton staff.[4]

631 The relative importance of the Taiwan
635 provincial government does not, however, diminish the highly centralized authority of President Chiang Kai-shek, for the provincial

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4. There are now 12,000 employees in the national government vs. 113,000 in the provincial government. Time, op. cit., p. 34.

631 government enjoys no autonomous power.
635 The governor and all the personnel in key positions of the provincial government are all chosen by the President or at least appointed
643 with his approval. Just like the men in high posts of the national government and the military command, only those considered absolutely loyal are appointed by him. President Chiang Kai-shek has often been criticized in his choice of personnel for rating personal loyalty to himself above everything else. This should not occasion surprise if one is familiar with Chinese history. Ever since the earlier Han Dynasty (202 B.C.-23 A.D.) Confucianism has been the dominant political philosophy of China. Confucius was born in a time of growing political and social unrest. He sought to re-establish order and peace by advocating a beneficent monarchy with all its subjects loyal to the sovereign. Through the milleniums, in the interest of maintaining order and peace as well as perpetuating their rule, Chinese rulers honored and supported Confucius. The emperors always singled out personal loyalty as the criterion for appointment, and President Chiang is merely upholding a deep-rooted political tradition.

Then, China became a republic in 1912. For sixteen long years there were incessant strifes created by different military factions, and chaos gripped the country. With a thousand cadets of the Whampoa Military

643 Academy of which he was president, Chiang started from Canton in 1926 to pacify the country, and in two years he succeeded in establishing a national government at Nanking. In the ensuing years, however, revolts still broke out here and there. As late as 1936, Chiang himself was kidnapped by a former warlord[5] in connivance with the Communists. It was only in the face of Japanese invasion that threatened China's national existence that the country rallied to the support of the Nationalist Government. But, during the disastrous struggle with the Communists after the war, defections were common; even some of Chiang's most trusted commanders turned against him. His profound training in Confucianism together with his unpleasant memory of the recent defections of his trusted men, must have convinced him to value the personal loyalty of his subordinates above every other virtue.

Although it could be said that Chiang's insistence on rating personal loyalty over efficiency or integrity might have in some measure contributed to his own downfall on the Mainland,[6] the same insistence may

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5. Chang Hsüeh-liang who is interned in Formosa at present.

6. It is common knowledge that some of his trusted friends and relatives abused Chiang's confidence in them to amass fabulous

(continued next page)

643 constitute the source of his strength. No matter what position Chiang Kai-shek may be holding in the government, his leadership is never disputed. Even during his retirement in his native village in 1949, he was able to conduct military operations against the Communists and direct the evacuation of government and military personnel to Formosa.

665 Another source of President Chiang's political power is his position as Director General[7] of the Kuomintang. The Kuomintang or the Nationalist Party was founded by Dr. Sun Yat-sen. Its predecessors, the Hsing Chung Hui (Revive China Society), the Hui (Common Alliance Society), and the Chung-kuo Ko-ming Tang (China Revolutionary Party), also organized by Dr. Sun, all contributed to the overthrow of the Manchu monarchy. The Frst National Congress of the Kuomintang was held in Canton in 1924. It adopted Dr. Sun's San-min Chu-i [Three People's Principles] as the creed of the Party. The three principles

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6. (continued) fortunes at the expense of the nation. They are the persons who have identified the nationalist government as a corrupt regime. Chiang Kai-shek himself has always led a life of simplicity, according to those close to him.

7. Tsung-ts'ai in Chinese.

665 are nationalism, people's rights, and people's livelihood. Nationalism implies the abolition of unequal treaties and restoration to China her full sovereignty.[8] The rights of people include those of initiative, election, recall and referendum. To improve the livelihood of the people, Dr. Sun advocated the equitable distribution of wealth by the following means: assistance to the tiller to enable him to own his land; the suppression of private speculation on urban land; the regulation of private capital by means of progressive taxation, and the development of state capital.

In another work, entitled Fundamentals of National Reconstruction, Dr. Sun Yat-sen outlined the three stages for constitutional government. The first stage was that of the unification of the country by military force. Then it was to be followed by the second stage, that of political tutelage under the Kuomintang. The final stage would begin with

8. The limitations on China's sovereignty -- foreign concessions in treaty ports, extra-territoriality, restrictions on tarriff, foreign post offices and wireless stations -- were gradually removed between 1929 and 1943.

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the adoption of a permanent constitution. Dr. Sun further advocated a "five-power constitution," under which the power of impeachment is taken out of the legislative and the power of selecting civil employees by means of competitive examination is made independent of the executive department. Instead of the customary three branches of governmental powers found in the Western democracies, the Chinese Nationalist Government would have five independent branches,[9] the executive, legislative, judicial, control, and examination.

Thus the Kuomintang had an excellent political program to begin with. Unfortunately, Dr. Sun Yat-sen died in 1925. In the following year, Chiang Kai-shek as Commander in Chief of the Revolution Army undertook to unify the country. His northern expedition was highly successful. In two years Chiang Kai-shek not only brought the whole country south of the great wall more or less under his control, but after a bitter struggle with the radical wing and Communist elements of the Kuomintang also firmly established himself as leader of the party, thus ridding the Kuomintang of Communists and Russian advisers whom Dr. Sun Yat-sen had tolerated. Even since, Chiang has become the archenemy of the Communists.

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9. In Chinese, Yüan.

645 With the establishment of the Nationalist Government in Nanking in October 1928, the second stage of Dr. Sun's program of political reconstruction -- the political tutelage period -- commenced. In this period, political power was to be assumed by the Kuomintang. The Communist Party was outlawed, and no other political party was recognized. Facing no competition, the members of the Kuomintang gradually were divided into rival cliques. People often criticized Chiang Kai-shek for not taking measures to remedy the situation. They have even blamed him for relying on the cliques to maintain his own supremacy. Instead of training the people to exercise their suffrage, recall, initiative and referendum and to pave the way for constitutional government as Dr. Sun expected, the Kuomintang began to drift away from the people. The deteriorating situation was described by a leading Chinese authority[10] as follows: "The leader of Kuomintang is not only the head of its organization, but actually holds it together. Or to state it in another way, the leader has allowed the party to be segmented so that he alone supplies the link between its several segments. It is in this all-important feature,

10. Ch'ien Tuan-sheng: The Government and Politics of China, Cambridge, Harvard University Press, 1950, p. 132.

665 rather than in its doctrine, or in its organization, or even in the social basis of its membership, that one can discover a key to the understanding of the Kuomintang."

665 At the outbreak of war with Japan, the 667 Kuomintang and the Communist Party composed their differences, resulting in a truce. A People's Political Council was established. Leaders of the Communist Party as well as several smaller parties which had pledged their support to the national war effort were chosen to direct a united front against Japanese aggression. However, the political honeymoon did not last very long. As soon as the United States entered the war and ultimate defeat of Japan was assured, hostilities again broke out between the Kuomintang and Communist forces. Minority parties then clamored for the relinquishment of the one-party rule by the Kuomintang. Mediation by the United States, the convocation of the National Assembly, and the adoption of a new Constitution which placed all political parties on a footing of equality, failed to prevent the outbreak of civil war. In the subsequent political and military clashes, the weakness of the Kuomintang became more and more obvious. The party was almost on the verge of total collapse. President Chiang, in introducing a reform program for the Kuomintang in 1950, admitted[11] that the disastrous military

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11. Addressing the Central Executive Committee of the Kuomintang in July 1950. China Handbook 1952-53, Taipei, China Publish-

(continued next page)

665 reverses on the Mainland was not due to the
727 overwhelming strength of the Communists, which would be not strong enough to defeat the Nationalist forces, but due to the Nationalist Party's organizational weaknesses, loose discipline, and low morale.

665 In his capacity as Director General of the Kuomintang, Chiang proposed to reform thoroughly the Party by "getting rid of all factional and personal differences." A Central Reform Committee of 16 members was appointed in August 1950 to overhaul the party machinery on Formosa and the party branches in various overseas Chinese communities. At the same time the Kuomintang announced that it would respect the position of and co-operate with all democratic political parties that were anti-Communist in nature in order to struggle together for the salvation of the country and the defense of democracy. The reorganizational work of the Reform Committee was concluded in October 1952. A National Congress[12] of the Kuomintang was held on October 10, 1952. It adopted a political platform for the guidance of the government and formed a Central Advisory Committee with 48 members, and a Central

11. (continued) -ing Co., 1954, p. 341.
12. The Seventh National Congress.

665 Committee with 32 members and 16 alternates to direct the affairs of the Party.

Although the Kuomintang has always been the dominating party since the inception of the Nationalist Government in 1928, party membership is not the requisite to appointment to high posts in the government. For instance the present incumbent of the Defense Ministry, Mr. Yü Ta-wei is an independent. Members of two minor parties -- the Young China Party and the Democratic Socialist Party -- have been co-operating closely with the Kuomintang since the end of World War II and participating in the government.

The present membership of the Kuomintang has never been officially disclosed. Even the number of representatives who attended the Seventh National Congress of 1952 was not revealed. In a party report,[13] it was said that "during the past two years [1952-54], more and more young men and young women have joined the Party. More than 40 per cent of the new members are farmers and workers. The members are

13. Cited in China Handbook 1954-55, p. 433.

665 divided into about 15,000 small groups to hold bi-weekly meetings to discuss Party work." A private source estimates that, excluding the military personnel, the total membership of the Kuomintang in Formosa is around 80,000. The other two political parties[14] have always kept their membership a secret. But it cannot be too far from the truth to say that membership of each of these parties does not exceed a few thousand. The Young China Party is strongly nationalistic and anti-Communist, while the Democratic Socialist Party advocates democracy and socialism as their political goals.

In the election in 1947 of the delegates to the National Assembly and members of the Legislative Yuan and Control Yuan, special arrangement was made to insure the election of the members of the two minority parties. Tacit understanding was given by the Kuomintang not to compete in certain districts where the smaller parties had announced their own candidates. In Formosa, however, the quota system was not enforced. Hence in the two local elections of 1950 and 1953, the members of the two smaller parties relied on their own merit to compete with the candidates of the Kuomintang and the

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14. A third small party -- the Democratic League -- has joined the Communists.

65 independents. As a result, only a handful members of the smaller parties were elected. The following table shows the relative strength of the three political parties in various representative organizations in Formosa.

	National Assembly	Legislative Yuan	Control Yuan	Provincial Assembly	Local Assemblies
Kuomintang	1,200	483	70	50	657
Democratic Socialists	61	14	2	2	none
Young China	85	13	8	2	3
Independents	232	73	13	3	268
Total	1,578	583	93	57	928

665 The above figures seem to bear out the statement that the Nationalist Government is a one-party government and President Chiang Kai-shek as Director General of the Party runs it.[15] The recent reorganization of the Kuomintang by eliminating its undesirable elements has only strengthened President Chiang's control.

The personalities most outstanding in present day Formosa aside from President Chiang are: his son Chiang Ching-kuo who directs the political officers in the army, the Youth corps and the security forces; General Chang Ch'un, secretary-general to the President and a former Premier, who is the President's closest political advisor; and Vice-President Chen Ch'eng who has been for many years Chiang's chief military lieutenant. All three are capable, hard-working and devoted to President Chiang and his cause. Chiang is 69 and his second term as President of the Constitutional Government

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15. The Director General [Tsung-s'ai] is virtually invested with broad power over the party. According to Articles 27-30 of the General Regulations of the Kuomintang, he directs the activities of all members, he may veto the resolutions of the National Party Congress and makes the final decision on any resolution proposed by the Central Committee.

of China will expire on May 10, 1960. It remains to be seen whether any of the three possesses the same stature as that of President Chiang Kai-shek and is able to pursue further Chiang's achievement in building Formosa into a strong bulwark against Communist aggression. In a country dominated by a strong leadership, there is always the inherent difficulty of finding an equally eminent successor.

Annex "A," Subparagraph 2d,
Political Background

LAW AND ORDER

I. CRIMINAL CODES AND PROCEDURES

681
671 The Criminal Code of the Republic of China was first enacted on March 10, 1928 and revised on January 1, 1935. The revised text came into force on July 1, 1935. The main provisions of the Chinese Criminal Code may be stated as follows:

A. Individual Responsbility. No person shall be held guilty of an offense not expressly covered in the Criminal Code. Chinese jurisprudence does not tolerate the principle of collective responsibility prevailing during the Japanese occupation, under which the family or the village could be held to share in the guilt of any of its members, fathers were punished with their sons for crimes committed by their sons, or the village leader was punished for an offense of a villager.

B. Criminal Liability. An unpremeditated or negligent act shall not be punishable except when specifically made punishable by law. As to the capacity to commit a premeditated crime, insofar as age is concerned, it is provided in the Criminal Code than an act committed by someone under fourteen years of age is not subject to punishment. Where

681 the offender is over fourteen and under eighteen
671 years of age, the sentence may be reduced. Likewise, a person judged to be insane is not held accountable for his acts. When a criminal act is committed by a person who is feeble-minded, the sentence may be reduced.[1] The Chinese Criminal Code has adopted the principle that the prevention of crime is more important than its punishment. Preventative laws require that juvenile delinquents be detained in reformatories for rehabilitation, insane persons be kept in some appropriate institution for their own protection, opium addicts and habitual drunkards be sent to hospitals for cure, and vagrants be compelled to work.[2] The government is now drafting a set of laws concerning juvenile delinquency, but has not yet presented the statutory bill to the Legislative Yuan for discussion and approval.

C. Suspension of Sentence. The Criminal Code also permits suspension of punishment and conditional release. Whoever during the execution of a sentence of imprisonment shows evidence of repentance may, after having served ten years of his sentences in cases of imprisonment for life or after having served

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1. Articles 18 and 19, Criminal Code, 1935.

2. Wen-yu Tsao, "The Development of Chinese Law," Free China Review, Vol. 3, No. 10, Oct. 1953, pp. 29-31.

681 half of his sentence in cases of imprisonment
671 for a lesser period, be granted conditional release upon application of the prison authorities to the highest judicial administration. The sphere of conditional release has been enlarged by a series of measures controlling convicts, which took effect on August 23, 1954.

The Code of Criminal Procedure was promulgated by the Nationalist Government on January 1, 1935, and enforced on July 1, 1935. The main features of the code may be stated as follows:

693 A. Public Prosecution. The procurator rep-
671 resents the state. He institutes public prosecution when the evidence obtained during preliminary investigation is sufficient to warrant suspicion of the accused. Public trial may be instituted even if the whereabouts of the accused is unknown.

The Code of Criminal Procedure provides that no complaint may be filed charging offenses against morality or the institutions of marriage and the family except by a particular party such as the lineal descendants by blood of the parties concerned or the spouse, as specified in the code.[3] A procurator need not prosecute cases involving offenses he considers obviously trivial and pardonable.

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3. Articles 230, 239, 240, Criminal Code, 1935.

693 B. Private Prosecution. A private person
694 may introduce criminal prosecution. The responsibility for the instigation of prosecution rests upon the aggrieved individual; he is granted the opportunity to avail himself of possible redress in cases where the procurator has not brought charges. Private prosecution may not begin if the procurator has already completed a preliminary investigation in the same case. However, if the procurator knows, prior to the completion of his preliminary investigation, that private prosecution has been instituted, he shall immediately cease investigations and send the case to the court, since two complaints cannot be filed in a single case.

693 The court shall, upon receipt of a private
695 petition for prosecution, immediately send a copy of the complaint to the accused and notify the procurator of the date set for hearing of the private prosecution; whereupon the procurator may appear in court and express his opinion. The judge will then conduct the trial in accordance with the provisions of the Procedural Code.[4]

C. Advocate and Public Defender. Upon the institution of charges against an individual, the accused may employ one to three advocates. If no counsel has been employed, the presiding judge shall assign a public defender for the accused in cases where the minimum punishment

4. Articles 320, 340, Code of Criminal Procedure, 1935.

693 is not less than one year of imprisonment or
695 in cases where a higher court takes jurisdiction as a court of first trial. The public defender system had been in use for some years on the Mainland; and was introduced in Formosa on June 1, 1950.

695 D. Trial and Appeal. Most criminal cases may
692 go through as many as three courts -- the district court, the high court, and the supreme court. The district court handles the first trial of all criminal cases except those for which special provisions have been made by law. The organic law governing courts provides that the high court be given jurisdiction over the first trial for offenses against the internal and external security of the state and offenses against the property or persons of a friendly foreign state.[5]

695 In cases involving the trivial offenses enumerated in Article 61 of the Criminal Code, the court of first trial may, upon application by the procurator, order the sentencing of the offender without observing the usual trial procedure, if the accused has confessed during the preliminary investigation or other evidence sufficient for conviction has been offered the court. Such a sentence is limited to a fine, detention, or not more than six months' imprisonment.[6]

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5. Article 10, Organic Laws Governing Court, 1932, and Article 4, Code of Criminal Procedure, 1935.

6. Article 442, Code of Criminal Procedure, 1935.

695 A party not satisfied with the judgment of the lower court may appeal to a higher court. The procurator, advocate, statutory agent, or spouse of the accused may also appeal on behalf of the accused. And a party not satisfied with the verdict rendered by a high court sitting as court of first or second trial may direct his appeal to the supreme court. But no appeal may be taken from the court of second trial to the supreme court for a third trial in cases involving the trivial offenses specified in Article 61 of the Criminal Code.

E. Retrial and Extraordinary Appeals. When the period for filing an appeal has elapsed, or the judgment has been rendered by the supreme court or high court at the final trial, the judgment is final. There is no other remedy for the person convicted except application for retrial or an extraordinary appeal filed in the supreme court by the procurator general, in accordance with the provisions of the Code of Criminal Procedure.

After a judgment is final, an application for a retrial may be made in the interest of the person sentenced only if the original judgment was based on evidence which can be proved to have been forced or altered or where incontrovertible evidence is discovered to prove that the sentenced person is innocent.

671 695 Article 434 of the Code of Criminal Procedure provides that if it is discovered after the judgment becomes final that the con-

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(Table faces p. 405.)

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Criminal Cases in Taiwan Province */
(1952 - 1955)

Classification of Cases	1952 Number of Cases	1952 Cases Settled	1952 Percentage Settled	1955 Number of Cases	1955 Cases Settled	1955 Percentage Settled
Purse-snatching, pick-pocketing, etc.	101	71	70%	108	96	87%
Murder and Homicide	157	145	92%	174	171	98%
Theft	7,085	4,895	67%	11,414	8,794	77%
Counterfeiting Currency	21	21	100%	8	8	100%
Assault and Battery	391	364	93%	887	805	54%
Fraud, Breaches of Promise and Usury	648	644	99%	1,223	1,178	96%
Misappropriation	174	174	100%	384	383	97%
Offenses Against the Institutions of Marriage and the Family	34	33	97%	133	127	95%
Offenses Against Morals	81	81	100%	174	169	97%
Gambling	12	12	100%	8	8	100%
Sale, Transport, Use of Opium	84	84	100%	238	238	100%
Intimidation and Kidnapping	32	32	100%	54	53	98%
Receiving Stolen Property	132	132	100%	188	188	100%
Bribery, Malfeasance in Office	71	71	100%	152	150	98%
Offenses Against the Exercise of Public Functions	12	12	100%	38	37	97%
Counterfeiting of Valuable Securities	5	5	100%	9	8	90%
Forgery	95	95	100%	135	135	100%
Malicious Accusation	15	12	80%	33	32	97%
Offenses Against Public Safety	117	89	83%	219	137	64%
Mischief	23	23	100%	50	49	98%
Suicide Attempts				870	870	100%
Car Accidents				1,270	1,239	97%
Miscellaneous	968	912	94%	1,339	1,005	75%
Total	10,540	7,828	76%	18,228	15,009	78.4%

*/ Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China], 1952, p. 695; 1955, p. 782.

[facing p. 405]

671 duct of the trial was contrary to law, the
695 procurator of the supreme court may file an extraordinary appeal in the supreme court.

674 It should be noted that the number of criminal cases is on the increase. The number reported in 1952-53 far exceeded the number reported under Japanese rule. One writer attributed the increase in the number of criminal cases on Formosa to the mitigation of punishments under the Chinese law and the relaxation of police control.[7] Of course the enormous growth of population is an important contributory cause of the increase in the number of violations. It is generally conceded that the Chinese Criminal Code is impartially administered and leniently interpreted.

697 There are eleven penitentiaries and twelve detention houses in Formosa. Juveniles are confined in the penitentiary at Hsinchu. There have been attempts to improve the facilities and the administration of the prisons in recent years. Wardens appointed to the prison must have had a high school education. The inmates are required to attend citizenship classes for two hours a day. In the workshops they are taught a variety of trades which will fit them for work outside the prison. Twenty-five per cent of the proceeds derived from their work is paid to the prisoners in exchange for their labor. The prisoners have opportunity for daily exercise and undergo physical examinations at regular intervals. Each prison has

7. Lih-wu Han, Taiwan Today, Taipei, 1952, p. 47.

697 an infirmary. Efforts have been successful in preventing epidemics and infectious diseases among the prisoners.

697 165 The number of deaths[8] in prisons and detention houses has been progressively reduced during the past five years although the number of inmates has remained more or less constant. The following table attests to the improved conditions in Formosan prisons.

DEATH RATE IN FORMOSAN PRISONS */

At End of Year	Number of Inmates In Prisons	Number of Inmates In Detention Homes	Total No. of Deaths During the Year
1949	2,909	1,691	70
1950	2,619	1,209	23
1951	3,667	2,043	19
1952	2,906	1,954	13
1953	3,021	2,346	8
1954	—	—	—

*/ Yearbook of the Republic of China, 1953, 1954.

II. THE POLICE SYSTEM

625 635 The Ministry of Interior of the Executive Yuan exercises general supervision over the

8. In 1946 there were 863 deaths caused by epidemics in Formosan prisons. The number of deaths in prison in 1947 was 222 and in 1948, 156.

625 police system of the entire country, but the
635 actual administration of police affairs is delegated to the provincial government.[9] In Taiwan Province, there are twenty-one police bureaus (one in each hsien and city, and one in Yangmingshan Special District), 90 branch bureaus, 202 police stations, and 1,268 substations, all of which are under the direction of the police department of the provincial government.

625 The functions of the police, as enumerated in the Police Law, are: (a) to issue police order; (b) to punish contraventions of police regulations; (c) to assist in the investigation of crimes; (d) to search, detain, or arrest suspects; (e) to execute administrative orders; (f) to preserve order, to regulate traffic, to protect health, to take census, to guard against fire, disaster, moral turpitude, and defacement of private and public properties.[10] The punishment for violating police regulations is limited to a fine under NT$100 or a detention of not more than fourteen days. Criminal cases are sent to law courts for prosecution.

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9. Police Law 1953, Article 3.
10. Ibid., Article 9.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table faces p. 408.)

Violations of Police Regulations in Taiwan Province a/
(1952 - 1953)

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	1952				1953			
	Number of Cases	Male	Female	Total	Number of Cases	Male	Female	Total
Disorderly Conduct	27,558	30,678	6,541	37,12[illegible]	25,864	27,990	6,884	29,874
Traffic Violations	14,223	16,222	1,738	17,960	16,350	17,127	2,168	19,295
Moral Turpitude	21,323	38,058	9,431	47,489	28,096	45,283	12,589	57,872
Offenses Against the Exercise of Public Functions	1,204	1,228	129	1,357	1,3[illegible]	1,3[illegible]	[illegible],184	1,460
Violation of Health Regulations	6,330	7,011	1,069	8,08[illegible]	8,[illegible]	8,271	1,396	9,667
Destruction of Evidence, False Evidence and Malicious Accusation	287	367	52	512	189	200	31	231
Offenses Against Personal Liberty and Property	7,785	8,294	1,990	10,28[illegible]	10,510	10,809	2,444	13,253
Total	78,698	101,774	20,860	122,6[illegible]	94,639	110,9[illegible]	25,696	136,652

a/ Yearbook of the Republic of China, 1953, 1954.

(Facing p. 408)

675 874 The exact number of personnel belonging to the police force on Formosa is not available. According to the China Handbook[11] for 1954-55, the total police force numbered a little more than 20,000 in 1953. There are two schools devoted to the training of police personnel: the Central Police Academy trains officers, the Taiwan Police Academy trains enlisted men. In 1953, ten officers were selected for advanced training in the United States and Japan.

III. MEASURES AGAINST COMMUNIST ACTIVITIES

668 648 The Communists in Peking see Formosa as a potential threat to their regime in contradistinction to the Chinese people on the Mainland, who look to Formosa in the hope of ultimate emancipation. As long as Formosa remains free, it is a thorn in their flesh. The Nationalist Government may use the island as a staging area in preparation for an attack on the China Mainland, much as the Allies made use of Britain prior to the invasion of Nazi-dominated Europe. In consequence, Communists never relent in their effort to infiltrate into the island.

648 625 The Nationalist Government, alert to the presence of saboteurs and spies, has organized a security network under the direction of Lt. General Chiang Ching-kuo, son of Chiang Kai-shek. The security network is controlled by the

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11. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 184.

648 Files Office (Tzu-liao Shih), attached to the
625 President's Office (Tsung-t'ung Fu). There are security agencies, called investigation and statistics bureaus, in the Ministry of Defense, the Kuomintang, and the Ministry of the Interior (in charge of police). These agencies operate secretly and are known to have made arrests, conducted trials in camera, and even imprisoned and executed political offenders.

Formosa's public security agency is the Peace Preservation Corps, organized in 1949 for the express purpose of maintaining peace and order on the island. Its main objective is to suppress all subversive activities before they can threaten national security. Detachments of the corps are located at strategic points for the protection of railways, bridges, waterworks, power stations, mines, and industrial plants. Mountainous areas are regularly patrolled by members of the corps, and no one is allowed to enter the mountain regions without express permission. The Peace Preservation Corps also regulates all arrivals and departures from the island to prevent smuggling as well as the infiltration of Communist agents.

[635] The governor of Taiwan Province (ex officio) is nominally the commander of the Peace Preservation Corps, but in fact the corps receives orders directly from Chiang Ching-kuo.

In 1950, an underground Communist organization, whose membership included a deputy chief-of-staff, the wife of the general in

648 charge of training the new army, and the managing director of the Taiwan Sugar Corporation, was exposed by the Peace Preservation Corps. According to the China Handbook 1954-55, approximately one-hundred espionage cases, involving some 4,500 people, have been uncovered in the past four years.[12] The Pan-Asia Alliance News Agency reported on January 3, 1956 that, according to an official release, Communist agents were most active in Formosa just before the conflict in Korea began, but since the launching of the Counterespionage Campaign in 1950, a number of Communist cells have been discovered. In 1955, two conspiracies were suppressed, although the government report does not give further details. One of these cases may have involved the attempt of Major Kuo T'ing-liang to assassinate President Chiang in May 1955. The case was widely publicized because it resulted in the resignation of General Sun Li-jen, former commander-in-chief of the Nationalist land forces, who had been Kuo's superior for many years.

In 1951, the Nationalist Government called upon Communists to renounce their affiliation with the Party; in return, they would receive assurance from the government that their life and property would be protected.[13] Several hundred

12. China Handbook, 1954-55, p. 184.

13. Procedures for Communists and Fellow-travelers to Surrender, promulgated on Sept. 16, 1951.

648 Communists have since surrendered to the
668 government.[14]

625 The tightness of security control and
64 the severity of punishment have gained for Formosa the unpleasant appellation of a "Police State." It might be true that in proportion to the size of the territory and the population the number of secret service men is unduly large. This will be no surprise if we take into consideration the fact that the security agents of the Nationalist Government formerly patrolled all of China, a territory 160 times larger than the island of Formosa, and that when the continent was overrun by the Communists, the great majority of those security men had to withdraw to Formosa, for they, more than other groups, were most hated by the Communists. Nevertheless, the swarming of secret service men in Formosa has created the impression that everyone on the island is being haunted by the shadow of a Police State.[15] It is also possible that some searches and arrests have been unwarranted. But overcaution is inevitable as Nationalist China is at war with a ruthless and unscrupulous enemy. After all, under martial law, persons endangering the safety of a nation may be sentenced to death

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14. China Yearbook, 1953, p.825: 203 Communists surrendered between May 1952 and April 1953. China Handbook 1954-55, p.184: "More than 100 Communists gave themselves up in 1953."

15. [see following page]

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or to imprisonment for not less than ten years.

The Nationalist Government has been frequently accused of showing little mercy to its enemies, of "imposing more death sentences than anyone else outside the Iron Curtain."[16] In referring to such criticism, Lih-wu Han, former Minister of Education, explains that the government cannot afford to be other than strict and severe. Extreme penalties are necessary because the safety of the island and its people is at stake. Exposure by the government of Communist espionage clearly indicates the nature and extent of the danger. "The electric plant would have been

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15. "The P. D. (Political Department of the Ministry of Defense) is undermining the Army. Instead of seeing comrades to their right and left, soldiers see political spies marching beside them." Robert S. Elegant, "How Good is Chiang's Army," The Reporter, Vol. 5, No. 13, Dec. 25, 1951, p. 18. "Throughout my stay I was haunted by the shadow of a Police State malevolent in its objectives and far-reaching in its methods." H. Maclear Bate, Report from Formosa, London, Eyre & Spottiswoode, 1952, p. 22.

16. H. Maclear Bate, ibid., p. 49.

625 blown up and water works wrecked if the Com-
648 munists had had their way. The lives of responsible personages would have been in constant danger, too. Then, the risk of internal trouble during a possible invasion from outside would have been very grave."[17] It appears that, in order to save Formosa from Communist domination, rigid government control may not be entirely indefensible.

722 During the past few years, as conditions
698 on the island grew more stable, the Nationalist
693 Government has been taking measures to guard against unwarranted arrest and imprisonment. In a decree issued on January 29, 1951, the Executive Yuan prescribed that public defenders should be provided in the military court to defend persons accused of violating martial law in cases where the minimum punishment would be not less than five years' imprisonment. A spouse, lineal blood relative, collateral blood relative within third degree, or a statutory agent may be present at the trial and testify on behalf of the accused.

722 Since 1949 Formosa has been subject to
698 martial law. Article 8 provides that the following offenses committed in strategic zones may be tried by the military court: (a) offenses against the internal security of the state, (b) against the external security of the state, (c) against public order, (d) against public safety, (e) forgery, counterfeiting of currency, valuable securities, documents, (f) murder or homicide, (g) restraining personal liberty, (h) snatching, robbery, and piracy, (i) intimidation and kidnapping, and (j) malicious mischief. If provisions

17. Lih-wu Han, op. cit., p. 49.

722 of martial law should be strictly applied, the
698 military court would replace the civil courts of law in Formosa. However, orders issued by the Executive Yuan on June 1, 1952 and reissued on October 14, 1954, restrict the jurisdiction of the military court. The order of October 14, 1954, specifies that military courts have jurisdiction only in those cases involving espionage and insurrection; all other offenses are to be tried in civil court. This order seeks to protect the rights and freedoms of the people of Formosa against infringement by over-zealous, defense-minded militarists.

Annex "A," Subparagraph 2e,
Political Background

FOREIGN POLICY

648 On October 10, 1952 the Kuomintang convened a congress of its members in Formosa at which the party formulated the following foreign policy: [1]

> "In a spirit of independence and self-reliance we will uphold the UN charter, promote international justice, and help preserve world peace.
>
> "We will strive to strengthen our relations with all other anti-Communist countries and do our best to bring about solidarity and closer co-operation among the anti-Communist countries in the Pacific.
>
> "In the interests of the fight against Communism, we are willing to co-operate and trade with those countries which, though having no diplomatic relations with us, do not belong to the Communist bloc."

This policy guides Nationalist China in its foreign relations. The government of the Republic of China has consistently supported the activities of the United Nations and participates in all con-

1. Declaration of 7th National Congress of Kuomintang, Oct. 20, 1950.

648 ferences sponsored by the United Nations and its agencies. Because of financial difficulties Free China withdrew from the International Civil Aviation Organization and the World Health Organization in 1950, and from the Food and Agricultural Organization in 1951. However, Free China was able to send representatives to the Sixth World Health Conference in 1953 and to the International Civil Aviation Organization in 1954.

When the United Nations resolved to resist the Communist invasion of South Korea, Free China offered troops to join the operations against the North Korean aggressors. Again when the war with the Communists was approaching a critical point in Indo-China and the fall of Dien-Bien-Phu was imminent, Nationalist China expressed readiness to send help to the anti-Communist forces. Although neither of these offers were accepted, Free China cooperated with the United Nations in other ways. The Chinese people on Formosa sent medical personnel and supplies to the South Korean camps, sent packages to the troops and wrote letters to Communist Chinese prisoners of war in Korea urging them to quit the Communist cause. A personal message was broadcast by President Chiang Kai-shek to the prisoners at Cheju Island, expressing his concern for their welfare and exhorting them to stand firm in their choice of freedom. The material support given them by Free China was a factor in the decision of 14,209 Chinese POWs to refuse repatriation

648 in spite of Communist coercion.[2] On the day of their release, January 20, 1954, the Nationalist Government sent a team of officers to Korea to escort them to Formosa, where new living quarters -- "freedom villages" -- had been built to accomodate them. Bowing to the general opinion of the United Nations, Nationalist China evacuated Chinese guerrilla forces from the Yunnan-Burma border. These guerrillas had been marauding the Communist border province of Yunnan and had been joined by many refugees who escaped from Communist China. Unable to dislodge them by military means and fearing that Communist China might pursue the guerrillas into Burmese territory, the Burmese government complained to the UN Assembly, which urged Nationalist China to withdraw its forces. Representatives of Burma, Thailand, the United States, and Free China worked out a plan for the evacuation of the guerrillas and the transfer was completed on May 1, 1954.[3]

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2. Some 98 per cent of the Chinese Anti-Communist POW's chose to live in Formosa.

3. A total of 6,526 men and their dependents were brought by plane from the Burma-Yunnan border to Formosa. On May 29, 1954, the commander of the Chinese anti-Communist guerrillas in Burma announced the dissolution of his Headquarters, saying that all troops formerly under his command had been transferred to Formosa.

648 Nationalist China has steadfastly resisted the efforts of the Soviet Union to unseat her in the United Nations. As long as Formosa officially represents China in the international organization, the ten million Chinese living in Southeast Asia refuse to co-operate with the Peking regime. Soviet representatives have raised the question of China's representation in successive UN meetings.[4] In 1950, having failed to expel Nationalist China, the Russian representation boycotted the Security Council for seven months.[5] Because of the opposition of the representatives of the United States and South American countries, Russian attempts to force recognition of Red China were thwarted each time by an overwhelming majority.[6]

Unable to replace Free China in the world organization, Russia, however, succeeded in smuggling the Chinese Communist regime into international conferences. The Geneva Conference on Korea and Indo-China in April 1954, the Afro-Asian Conference at Bandung in April 1955, and the current Geneva Conference on the ambassadorial level are the results of Communist endeavors to override the legitimate government of China.

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4. Up to the end of 1954, Soviet Russia had raised the subject of Chinese representation in UN Gen"l Assembly and other international gatherings not less than one hundred and eighty times. Chung-hua Nien-pao [China Annual], 1954, Vol.1, Taipei, China News Press, Feb.1955, p.10.

5. Russian representative, Jacob Malik, walked out of the Security Council on January

[continued next page]

648 The National Assembly at its second session on March 25, 1954 declared that "the government and people of the Republic of China will never recognize any international conference without the concurrence of the Chinese government." The foreign minister, George K. C. Yeh, also issued the following statement: "The Chinese Government has no intention of participating in any conference to which the Chinese Communist aggressors will be invited. The Chinese Government and people cannot recognize the validity of any decision affecting their interest which may be reached at such a conference."

The enmies of Nationalist China in the United Nations are not confined to Soviet Russia and its satellites; recently, another group of nations, the so-called neutrality bloc, dominated by India, proposed the recognition of two Chinas and the admittance of eighteen nations into the United Nations. If two Chinas were recognized by the United Nations, Nationalist China would be completely overshadowed by the Communist regime, since Red China is the stronger of the two. It would be tantamount to the replacement of Nationalist China by a Communist regime. In a public address, President Chiang Kai-shek

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5. [continued] 13, 1950, and did not return until August 1, when he was to assume the presidency of the council.

6. Forty-four nations in the UN General Assembly voted in favor of Nationalist China, eleven opposed, and six abstained in September 1955.

648 condemned the idea of two Chinas.[7] He cited an old Chinese proverb: "The loyal and the traitorous cannot co-exist." In view of the avowed policy of the Nationalist Government not to sit at the same conference table with the Communists, it seems certain that Nationalist China will withdraw from the United Nations if Communist China should be admitted.[8]

The question of the simultaneous admission of eighteen new members into the United Nations disturbed the representatives of Free China. Practically all of the member nations, with the exception of Nationalist China and Cuba, endorsed the deal. The United States, which has previously voiced strong objection to the admission of Outer Mongolia, reversed her position before the resolution came to the floor of the General Assembly. Among the proposed members, Nationalist China would have four friends -- Ireland, Italy, Spain, and Portugal. But eight others -- Albania, Bulgaria, Hungary, Roumania, Nepal, Ceylon, Finland, and Outer Mongolia -- would certainly side with the Soviet Union if the subject of admitting

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7. Address by President Chiang Kai-shek on the International Situation on February 8, 1955. English translation appears in Free China Review, Taipei, Vol. 5, No. 3, March 1955.

8. The International News Agency reported on December 26, 1955 from Washington, D. C., that the idea of an independent Formosa has made some progress in the diplomatic world.

648 Red China should be broached at the next session. If Outer Mongolia, a Soviet puppet state "with few, if any, outward appearances of nationhood,"[9] and a participant in the aggression in Korea, should be recognized as a full sovereign nation and granted membership in the UN, the admission of Communist China into the UN would follow. However, if Nationalist China should exercise her veto which had not been used before,[10] the government would risk offending many prospective members, whose friendship it did not wish to lose. The resolution was passed by the General Assembly of the United Nations by an overwhelming majority. When the resolution came before the Security Council, the Nationalist Government, fearing that a reversal of its position might affect the morale of people on Formosa and the overseas Chinese, vetoed the entry of Outer Mongolia. In reprisal, Soviet Russia barred admission of Japan into the UN, as Japan had warned Nationalist China the Russians were likely to do. The most influential Japanese newspaper, the Yomiuri Daily, on December 7, 1955, went so far as to say that Nationalist China would be "digging her own grave," should the government

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9. Time, Vol. LXVI, No. 26, Dec. 26, 1955, p. 16.

10. Soviet Russia was responsible for 77 of a total of 80 vetoes cast by the permanent members of the UN Security Council.

648 oppose the entrance of Outer Mongolia. The repercussions of this event upon the future of Nationalist China may be far-reaching. In spite of the exclusion of Outer Mongolia, the Soviet bloc in the United Nations increased from five to nine members. To the Afro-Asian bloc, often hostile to Nationalist China, six new members were added. Japan threatened to reconsider her trading policy with Formosa but has since commenced renegotiations in Taipei.[11] Other members also expressed resentment at Nationalist China fordefying the General Assembly.[12] What consequence this turn of history will have upon

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11. Japan is the largest consumer of Formosan sugar, rice, and pineapple, amounting to more than 50 per cent of the total volume of Formosa's foreign trade in 1954. UP correspondent William Miller report on Dec. 27, 1955, from Taipei, "that unconfirmed reports here said Japan has considered not renewing her trade agreement with the Nationalist Chinese after its expiration date next March." On Jan. 2, 1956, Premier Hatoyama of Japan announced that in view of the close diplomatic relations between Japan and Communist China, he had no objection to paying a visit to Peking. Asahi Daily, Jan.3, 1956, p. 1.

12. French Premier Edgar Faure said in a campaign speech on Dec.26, 1955: "Look at the membership veto just made in the United Nations. Is it realistic to consider that China is still represented by Formosa?" United Press, Paris, Dec. 27, 1955.

648 the position of Nationalist China will be revealed when the United Nations reconvenes in 1956.

Free China on Formosa at present maintains diplomatic missions in Argentina, Australia, Belgium, Bolivia, Brazil, Canada, Chile, Colombia Costa Rica, Cuba, the Dominican Republic, Ecuador, Egypt, France, Greece, Honduras, the Holy See, Iran, Iraq, Italy, Japan, Korea, Luxembourg, Mexico, New Zealand, Panama, Peru, the Philippines, Portugal, San Salvador, South Africa, Spain Thailand, Turkey, the United States of America, and Venezuela.

Diplomatic representation will soon be exchanged with Vietnam. Free China is also seeking to establish diplomatic relations with West Germany, Ireland, Laos, and Cambodia. Negotiations for a military alliance with Korea and Vietnam are pending.[13] Great Britain, in spite of the fact that she has recognized the Peking regime, maintains a consulate in Taipei to look after her commercial interests.[14] Formosa is also trading with the Netherlands and Burma, although neither country maintains diplomatic relations with Nationalist China. On the other hand, Communist

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13. Negotiations to resume diplomatic relations with West Germany have not been successful, because the latter covets trade with Communist China. Central Daily News, Taipei, Oct.22, 1955.

14. According to reports of the Inspector of Customs, Formosa's trade with Great Britain, Hong Kong, and Singapore totalled NT$401,000,000 in 1954;trade with the United States was NT$ 380,800,000 in the same year.

648 China has offered lucrative trade agreements to many countries on friendly terms with the Nationalist Government. Each of the nations attending the first Afro-Asian Conference at Bandung received an invitation to visit Peking. It appears possible that Egypt will shift diplomatic relations from Nationalist China to the Communist regime. A trade agreement between Egypt and Communist China to exchange small arms for cotton has been consummated. The next Afro-Asian Conference is scheduled in Cairo in May 1956. Egypt will play host to the Peking regime. The presence of the diplomatic representative of Nationalist China may create problems if Egypt maintains its status quo.

The main efforts of Nationalist Chinese diplomacy are directed toward the formation of anti-Communist alliances in the Pacific. In July 1949, during a visit to President Quirino, President Chiang Kai-shek proposed a closer collaboration between Free China and the Philippines against the Communist menace. In a joint statement on July 11, 1949, they declared that the Far Western countries "should at once organize themselves into a union for the purpose of achieving solidarity and mutual assistance to contain and counteract that common threat." Following his Philippine visit, President Chiang went to South Korea. On August 8, 1949, together with President Syngman Rhee, a joint appeal was issued to President Quirino to convene a conference for the purpose of organizing an anti-Communist alliance in the Pacific. Both the

648 British and American governments were cool toward the idea of forming a military alliance. The conference in May 1950 held at Baguio and attended by representatives from Thailand, Australia, India, Pakistan, Ceylon, Indonesia, and the Philippines, changed its objective to economic and cultural co-operation. Nationalist China and South Korea declined to take part, and the conference concluded without being able to report any substantial achievement.

The invasion of South Korea began on June 25, 1950. Nationalist China immediately offered to dispatch 33,000 troops, but the offer was rejected by the United Nations. President Truman ordered the Seventh Fleet to neutralize the Formosa Strait.[15] As the Communist menace in the Pacific became more manifest, the United States concluded a series of bilateral security pacts with the Philippines, Australia, New Zealand, Japan, and South Korea. Nationalist China was not included nor was she included in the Southeast Asia Treaty Organization. Nationalists feared that the United States might yield to the

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15. On January 6, 1950, President Truman, in a public statement, declared: "The United States will not pursue a course which will lead to involvement in the civic conflict in China. Similarly, the U.S. Government will not provide military aid to the Chinese forces on Formosa."

648 pressure of Great Britain and the other powers and use Formosa as the price for peace in the Pacific. In December 1953, Nationalist China proposed a security treaty with the United States. The Sino-American Mutual Defense Treaty was signed on December 2, 1954 after a year's negotiation. This treaty forges the last link in "the island chain of the Western Pacific that constitutes, for the United States and other free nations, the geographical backbone of their security structure in that ocean."[16] In a subsequent exchange of notes, Nationalist China promised not to embark on offensive military operations, or to remove military supplies and equipment from the Formosan area, without agreement of the United States.

There is no question that the Sino-American Mutual Defense Treaty has had great value in stabilization of the present position of Formosa. The people on Formosa have complete confidence in the military power of the United States; the United States made it known that it would tolerate no interference from the Communists in the evacuation of military personnel and civilians from the island, and the Communists avoided that area during the evacuation.

There are, however, two factors making for uncertainty in the Sino-American Mutual Defense Treaty. First, Article 10 provides that the treaty may be terminated by either contracting

16. President Eisenhower's message to the U. S. Congress on the Formosan situation, January 24, 1955.

648 power on one year's notice. Although similar provisions are found in treaties the United States has signed with Korea and the Philippines, the people on Formosa are apprehensive that a change in the world situation may cause the United States to abandon the determination to defend Formosa. Since the treaty does not specify a set duration, the United States is free to annul responsibility on comparatively short notice. Secondly, Article 6 states that the territories covered by the treaty are confined to Taiwan and the Pescadores; any extension of the coverage must be made by separate agreement. Although Public Law 4 enacted by the Congress on February 7, 1955 authorized the President of the United States to use armed forces wherever necessary to ensure the security of Taiwan and the Pescadores, the defense of offshore islands, namely Quemoy and the Matsus, is not specifically mentioned. The intention of the United States have never been clarified.

The importance of these offshore islands to Free China is not sufficiently understood abroad. Quemoy and the Matsus are used to block the ports of Foochow and Amoy and harass Red China's coastal trade and they can be used as advance posts in preparation for the invasion of the Mainland. As long as they are retained by the Nationalist Government, the possibility of the liberation of the Mainland is kept alive. The loss

648 of these islands would be a serious blow to the prestige of Chiang Kai-shek's government on Formosa. Chiang Ching-kuo, in answer to a question about Quemoy and the Matsus, said: "The most important thing, the thing that really means life or death to us, is the morale on Taiwan. If we lost the offshore islands, our morale -- the soldiers' and also the people's -- would be very, very low. Our people on the Mainland would feel frustration, and they would begin to believe there is no hope for their liberation."[17]

Moreover, if the islands should fall into Communist hands they would form convenient stepping stones to the Pescadores and Formosa. Their loss would attest to the superior striking power of the Communists and would immediately arouse widespread apprehension on Formosa. It is therefore understandable why Nationalist China attaches great importance to the defense of Quemoy and the Matsu islands, and fervently hopes that the United States will never be a party to the surrender of these strategic outposts to Communism.[18]

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17. Robert P. Martin, "Here's how Chiang's Son Plans to Win Back China," U. S. News, Vol.39, No.23, Dec.2, 1955, p.90.

18. In a press conference on Feb. 14, 1955, President Chiang Kai-shek declared that it was the generally accepted opinion by qualified military experts that defense of Kinmen (Quemoy) and Matsu was essential to the defense of Taiwan and Penghu. Free China Review, Vol.5, No.3, March 1955, p. 57.

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Annex "A," Subparagraph 2g,
Political Background

PROPAGANDA

PROPAGANDA AGENCIES

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647 The principal propaganda agencies of the Chinese government in Formosa are the Fourth Section of the Kuomintang Central Committee, which is in charge of publicity, operates newspapers in Formosa and abroad, publishes magazines and books, and promotes radio programs; and the political department of the Ministry of National Defense, which makes frequent airborne leaflet raids and broadcasts daily to the China Mainland. In addition, it runs a motion picture studio, stages plays, operates mobile units which urge the people to support the government, publishes periodicals, and distributes reading matter to the armed forces.

PROPAGANDA POLICY AND ACTIVITIES

Propaganda to the Mainland

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123 Propaganda is directed to the China Mainland by airborne leaflets and radio broadcasts. In 1954 some 375,000 leaflets were dropped every two weeks over Chekiang,

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208 Kiangsu, Fukien, and Kwangtung provinces.
723 Leaflets were also dropped on special occasions, such as the New Year Day, Double Ten National Anniversary, the death of Stalin, the liquidation of Beria,[1] and the arrival of prisoners of war in Formosa. Daily radio broadcasts are made by the Voice of Free China, the air force, the army, and the Cheng-i stations. The Voice of Free China, with 750 kilocycles, is able to reach all parts of China, including Manchuria and Sinkiang.[2]

The propaganda distributed in leaflet form covers a wide range of subjects, including the growing strength of anti-Communist forces, Communist treachery, corruption, extortion, oppression, and massacres, the eventual failure of Russian and Chinese Communists, and so forth. The daily broadcasts contain programs such as, "Everyday Comment," "What to Do," "Whistling," "The Comfortable Home," etc. Experts are engaged to write special features, and distinguished scholars and celebrities are invited to broadcast. The new radio station on Quemoy Island (Kinmen)

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1. China Handbook, 1954-55, Taipei, China Publishing Co., 1954, p. 265.
2. Chung-hua Nien-pao [China Annuals], 1954, Taipei, China News Press, Feb. 1955, Vol. II, p. 90.

208 is also making special broadcasts to the
723 Mainland.

The propaganda policy toward the Mainland is to damage the morale of enemy troops and weaken their fighting power as well as to urge the Chinese people not to co-operate with the Communists and to wait for the opportunity to rise against the Communist regime.

Propaganda Directed to the Overseas Chinese

The Kuomintang publishes Chinese newspapers in all parts of the world where there are large communities of Chinese. The Voice of Free China daily broadcasts news items in different local dialects and music programs for the entertainment of the overseas Chinese. Occasionally exhibits depicting Communist atrocities and documentary films showing military maneuvers and industrial progress on Formosa are circulated under the auspices of the Chinese consulates. Special personalities are sent abroad on lecture tours. One such instance was a tour arranged for representatives of the Communist prisoners-of-war who refused to be repatriated to Red China after the Korean armistice.

The purpose of propaganda work among the overseas Chinese is to guard against the growth of pro-Communist sympathies among

208 723 them by publicizing the decline in living standards on the Mainland under Communist control, and to rally support for the reconstruction work in progress on Formosa.

Propaganda in Formosa

In Formosa, stage plays and motion pictures are used for purposes of propaganda. To reach the rural population in far-off districts, mobile units have been organized to bring the people musical programs followed by the performance of a play or the projection of documentary films, interspersed with anti-Communist speeches. Maximum use is made of posters. It has been found that pictorial posters are most effective among illiterate people. Wherever one goes in Formosa, one encounteres slogans painted in huge characters on the walls, posted on every public building, even printed on the labels of beer bottles: "Wrest Back the Mainland," "Liberate Our Brothers," "Crush Communism," "Resist Russia," and "He who does not denounce traitors is a traitor himself."[3]

To military personnel, lectures on the teachings of Dr. Sun Yat-sen are given

3. The Manchester Guardian Weekly, Vol. 73, No. 13, Sept. 29, 1955, p. 12.

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regularly. Periodicals and other anti-Communistic pamphlets are distributed free to the armed forces. Among the publications written especially for military personnel are the Soul of the Nation, the Army Reader's Digest, the Light of Victory Pictorial, and Entertainment Monthly, and the Life of National Heroes.

Propaganda activities inside Formosa exhort the people to give full-hearted support to the government in its avowed policy to liberate the Mainland and strengthen the will of the armed forces to fight.

EFFECTIVENESS OF PROPAGANDA WORK

On Mainland China, all radio receiving sets must be registered with the police.[4] There is a strict ban on the reception of programs of foreign origin. As early as 1950 the Communist Liberation Daily urged readers to report those who listened to the Voice of America.[5] Even the children are encouraged

4. There are about one million receiving sets in Red China. See chapters on propaganda in the regional handbooks on China.

5. Chieh-fang Jih-pao [Liberation Daily], Shanghai, Nov. 12, 1950, p. 1.

208 to denounce their parents for illicit listening.
723 In view of the limited number of radio sets and the vigilant ban on reception, it is doubtful that many people on the Mainland would risk imprisonment by listening to the broadcasts from Formosa. At any rate, the radio receivers are owned by people of means, and broadcasts rarely reach the workers or people in rural districts.

For psychological warfare directed to the Mainland, airborne leaflets appear to be effective, and especially so if they are pictorial, in view of the high rate of illiteracy among the masses. In spite of the Communist threat to punish those who do not destroy or surrender leaflets immediately after such material is found, it stands to reason that many of the people will read the leaflets, if only out of curiosity. Leaflets are dropped in both urban and rural areas.

Political work by Free China among the overseas Chinese seems to be highly successful. The general attitude of the overseas Chinese is best reflected in the varying degrees of enthusiasm with which they observe the anniversaries of the founding of the Chinese Republic and that of the Red regime. Even in localities where the authorities have already recognize the Peking Government, and in spite of the efforts of the Communist diplomatic representatives, the Chinese residents display

less zeal each year in celebrating the Communist National Day. From radio programs and news columns the overseas Chinese are well informed of the ruthless manner in which their kinsmen in China are treated by the Communists. Anti-Communist associations have been organized in San Francisco, Chicago, New York, Mexico, Colombia, Chile, Peru, the Philippines, Tahiti, Korea, Singapore, and Thailand. Many groups of overseas Chinese have pledged moral and financial support to the Nationalist Government.

On Formosa, largely due to the intensive efforts of government propaganda, the people are wholeheartedly anti-Communist. However, some observers are skeptical about the response of the Formosan Chinese to the cause of the liberation of the Mainland.[6] Since Formosa not only serves as the rallying point for all overseas Chinese, but also keeps alive the hope for eventual emancipation of 600,000,000 Chinese people now under the

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6. "These slogans may have some effect on the youth or on the soldiers from Mainland China, but create very little impression on the adult Formosan, who views them with mild cynicism." The Manchester Guardian Weekly, Sept. 29, 1955, p. 12.

208 Communist yoke, the Nationalist Government
123 feels that it must keep on publicizing the coming liberation of the Mainland, whether or not it has the means to achieve its avowed mission. Because a gigantic military campaign would draw heavily on the resources of Formosa, it is not improbable that a section of the populace might react unfavorably to government propaganda relating to an impending invasion of China. However, in the present state of emergency an opinion adverse to the declared national policy is not tolerated. Consequently there is very little public expression by means of which one can gauge the extent of response if an invasion of the Mainland were to be launched.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 2h,
Political Background

BIOGRAPHICAL SKETCHES

647 This study has been divided into three sections -- namely, biographical sketches of key personalities in the central government, sketches of important men in provincial and local governments, and sketches of men important in commerce, industry, and in academic life.

When possible, these brief sketches include information as to the date and place of birth, education, experience, general career, and current position. Those selected are considered to be of current importance in political, military, and economic spheres. The limitations imposed by the nature of this study have, in some cases, made necessary the omission of certain personages who were prominent on the China Mainland and now live in semi-retirement in Formosa, and promising personalities whose current position may be secondary but who may prove of importance in the future. However, the sketches presented should offer a valuable background to those who wish to become familiar with the men who affect the course of events in Formosa today.

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647 In order to save space, certain abbreviations have been used in the biographical sketches which follow.

CAC -- Central Advisory Committee of Kuomintang
CAF -- Chinese Air Force
CEC -- Central Executive Committee of Kuomintang
CRC -- Central Reform Committee of Kuomintang
CSC -- Central Supervisory Committee of Kuomintang
CUSA -- Council for United States Aid
JCRR -- Joint Commission for Rural Reconstruction
KMT -- Kuomintang

Names are spelled as they most frequently appear in publications regarding Formosa or as preferred by the person concerned.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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I. PERSONALITIES IN THE CENTRAL GOVERNMENT

CHANG CHI-YUN

Origin: b., 1901, Chekiang.

Background: B.A., National Teachers' College, Nanking; professor, National Central Univ., 1927-36; prof. and dean, Dept. of History and Geography, dean, College of Arts, National Central Univ. 1936-48; Minister of Information, KMT, 1950; mem. and Sec.-Gen., CRC, KMT, 1950-52; Sec.-Gen., Central Committee, KMT, 1952-54; Pres., Chinese Geographical Society, 1950-; mem. board of directors, Chinese Assoc. for Advancement of Science, 1953-; author of many books on geography, history, education, etc.

Current Career: Minister of Education, 1954-.

CHANG CHUN

Origin: b., 1889, Szechwan.

Background: Tokyo Military Academy; mem. CEC, KMT, 1929-50; mayor of Shanghai, 1929-31; governor of Hupeh, 1933-35;

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 Minister of Foreign Affairs, 1935-37; Sec.-Gen., National Military Council, 1938; V-Pres., Executive Yuan, 1938-39; Sec.-Gen., Supreme National Defense Council, 1938-42; governor of Szechwan, director, Generalissimo's Hdq. in Chengtu, 1940-45; Pres., Executive Yuan, 1947-48.

Current Career: senior advisor to Pres., 1950-; mem., CAC, KMT, 1950-; Sec.-Gen., office of the Pres., 1954-

CHANG YI-TING

Origin: b., 1902, Shansi.

Background: Ph.D., Columbia, 1933; Sec. to Generalissimo, 1933-37; prof., Central Political Institute, 1938-40; Director, Political Dept. 8th War Area, 1940-45; Dep.-Director., Political Dept., Ministry of National Defense, 1947-54.

Current Career: Director, Political Dept., Ministry of National Defense, 1954-

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 CHEN CHENG

Origin: b., 1897, Chekiang.

Background: grad. of Paoting Milit. Acad.; V-Min. of War, 1937; governor of Hupeh, 1939-40; Minister of War, 1944-45; Chief of Gen. Staff, 1946-48; director, President's Hqs. in Northeast, 1948; Pres. Executive Yuan, 1950-54.

Current Career: mem., CRC, KMT, 1950-; mem. Central Committee, KMT, 1952-; V-Pres., Republic of China, 1954-.

CHENG CHIEH-MIN (or Kai-min)

Origin: b., 1899, Kwangtung.

Background: grad. of Whampao Milit. Acad., 1925; attended Moscow Sun Yat-sen Univ., 1928; director, 2d Dept., Milit. Operations Board, 1944-46; director, 2d Dept., Ministry of National Defense, 1946-47; mem., Executive Hqs., Peiping, 1946-47; V-Minister of National Defense, 1947-50; Asst. Chief of Gen. Staff, 1950-52; Chief, Mainland Operations Dept., Ministry of National Defense, 1952-54; author A Study of Military Intelligence; A Study of Guerrilla Warfare; etc.

Current Career: mem., Strategy Advisory Committee, office of the pres., 1952-;

45:Stanford U. S-4, 5 1956 AD1 Formosa
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director, National Security Bureau, 1954-.

CHIANG CHING-KUO

Origin: b., 1906, Chekiang.

Background: studied in USSR; Admin. Comdr. for Southern Kiangsi, 1940-45; Foreign Affairs Comdr. for Northeast, 1945-47; Dep.-Sup., Economic Control, Shanghai, 1948; chm., Taiwan Prov. KMT Hqs., 1949-50; head, political dept., Ministry of National Defense, 1950-54; mem. CRC, KMT, 1950-52.

Current Career: mem., Central Committee, KMT, 1952-; Deputy Sec.-Gen., National Defense Council, 1954-.

CHIANG KAI-SHEK (CHIANG CHUNG-CHENG)

Origin: b., 1887, Fenghwa, Chekiang.

Background: grad. of Paoting Milit. Acad., 1906; Tokyo Milit. Acad., 1907; joined Tung Meng Hui in Japan; participated in 1911 Revolution; Comdr. Whampoa Milit. Acad., 1923; appointed Commander-in-Chief, Revolutionary Armies, 1926, to lead Northern Expedition, resulting in unification of

45:Stanford U. S-4, 5 1956 AD1 Formosa
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China, 1928; elected Pres., National Govt., 1928; 1928-31 held posts of Pres. of Executive Yuan, Minister of Education; Pres., National Military Council, 1932-46; between 1932-37, concurrently Chief of Gen. Staff, chm. of National Economic Council, Pres. of Executive Yuan; mem. CEC, KMT, 1926-50; elected Tsungtsai (Director-General) of KMT, 1938; elected Pres. National Govt., 1943, to succeed late Pres. Lin Shen; Supreme Comdr. Allied Forces in China Theater, World War II.

Current Career: President of Republic of China, 1948-.

CHOU CHIH-JOU

Origin: b., 1898, Chekiang.

Background: Paoting Milit. Acad.; instructor, Whampoa Milit. Acad., 1925-26; Deputy Comdng.-General, 18th Army, 1933; Comdr., Central Aviation Acad., 1934; Director, Committee on Aeronautical Affairs, 1936; Comdng. Officer, Advanced Hqs., CAF, 1937; Comdr., Central Air Officers School, 1939; Comdr., Air Staff College, 1940-41; Comdng. General, CAF, 1946-52; Chief of Gen. Staff., Chinese Armed Forces, 1950-54.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 Current Career: Sec.-Gen., National Defense Council, 1954-.

HO YING-CHIN

Origin: b., 1889, Kweichow.

Background: grad. of Tokyo Milit. Acad.; Pres., Kweichow Milit. Acad., 1918; Comdr., Kweichow Mixed Brigade, 1919; Chief of Staff, Kweichow Prov. Army, 1921; Police Commissioner, Kweichow, 1921; Comdr., Whampoa Milit. Acad., 1924; Comdr., 1st Training Regiment, 1924; Comdr. 1st Div., 1925; mem. CEC, KMT, 1925-50; Comdr., 1st Army, 1925; Commander-in-Chief, East Route Army, Northern Expeditionary Campaign, 1926; Pacification Commissioner, East River Region, Kwangtung, 1926; Garrison Comdr., East Kwangtung, 1926; state councilor, 1927; chm., Chekiang Prov. Govt., 1928; Chief of Staff, ground, navy, and air forces, 1928; Supt. of Milit. Training, 1928; Chief of Gen. Staff, 1929; Minister of War, 1930-44; chm., Peiping Branch, National Milit. Council, 1933; Chief of Staff, National Military Council, 1936-46; C-in-C, Chinese Army, 1944-46; represented Generalissimo, Japanese surrender 1946; chm., President's Hqs., Chungking,

45:Stanford U. S-4, 51956 AD1 Formosa
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1946; chief delegate to UN Milit. Staff Committee, and chief, Chinese Milit. Mission to USA, 1946-48; Minister of National Defense, 1948-49; Pres., Executive Yuan, 1949.

Current Career: mem., CAC, KMT, 1950-; chm., Advisory Committee on Strategy, office of the President, 1950-.

HSIAO YI-SHU

Origin: b., 1898, Szechwan.

Background: Yunnan Milit. Acad.; Deputy Army Comdr.; Chief of Staff, Army Hqs.

Current Career: Deputy Chief of Gen. Staff; director, Mobilization Planning Bureau, Ministry of National Defense, 54-.

HSU PO-YUAN

Origin: b., 1902, Chekiang.

Background: B.A., College of Commerce, National Southeastern Univ.; grad. study, Univ. of Illinois, Univ. of California; manager, Bank of Communications,

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000 Peiping, Tientsin, and Kunming, 1935-38; Political V-Min. of Finance, 1946-48; Dep.-Gov., Central Bank of China, and chm. board of directors, Bank of Taiwan, 1951-52; chief delegate, Chinese Delegation to International Monetary Fund, 1952; Commissioner of Finance, Taiwan Provincial Govt., 1952-54.

Current Career: Minister of Finance, 1954-.

HSU SHAO-CHANG

Origin: b., 1913, Chekiang.

Background: grad. of Central Political Institute; Univ. of Southern Calif.; V-Consul, Los Angeles, 1937-45; Consul-Gen., Rangoon, 1947-48; Counselor, Chinese Embassy, Seoul, 1949-51; Counselor-Charge d'Affaires, Chinese Embassy, Teheran, 1952-54.

Current Career: Dir., Dept. of American Affairs, Ministry of Foreign Affairs, 1954-.

HUANG CHEN-CHIU

Origin: b., 1898, Kwangtung.

000 Background: grad. of Paoting Milit. Acad., 1919; Comdng. Gen., Army Service Forces, 1945-46; Comdng. Gen., Combined Service Forces, 1946-47; Dep.-Chief, Gen. Staff, and V.-Min. of National Defense, 1947; Dep.-Director, President's Hqs. in Canton, 1947-48; Dep. Pacification Commissioner at Canton, 1948-49; Comdng. Gen., Combined Service Forces, 1950-54.

Current Career: Pol. V.-Min. of National Defense, 1954-; Chief of Staff to President, 1955-.

HUANG CHIEH

Origin: b., 1893, Hunan.

Background: grad. of Whampoa Milit. Acad. and Staff College; Dep.-Comdr., Garrison Forces of China-India Road, 1945; Comdr., Central Training Institute, 1945-48; Dep. Pacification Commissioner, Changsha, 1948-49; gov. of Hunan, 1949; Garrison Comdr., Taipei, 1953-54.

Current Career: mem., CAC, KMT, 1952-; C-in-C of Army, 1954-.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 HUANG JEN-LIN

Origin: b., 1901, Kiangsi.

Background: B.A., Vanderbilt, 1924; Director, War Area Service Corps, National Milit. Council, 1937-46; Deputy Comdng. Gen., Combined Service Forces, 1948-49, 1950-54.

Current Career: Acting Comdng. Gen., Combined Service Forces, 1954-.

KIANG PIAO

Origin: b., 1900, Kiangsu.

Background: Diplom Ingenieur, Technische Hochschule, Berlin, 1927; former Chief, Technical Div., Directorate of Ordnance; Comdng. Gen., 5th Arsenal; head, Ordnance Dept., China Supply Commission, Washington, D.C.; v.-chm., same commission; Director, Chinese Govt. War Supply Agency, Ottawa; Director, Board of Supplies, Executive Yuan; V.-Min. of National Defense, 1951-52; Admin. V-Min. of National Defense, 1954-55.

Current Career: Minister of Economic Affairs, 1955-.

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000 LIANG HSU-CHAO

Origin: b., 1904, Fukien.

Background: grad. of Naval College of Ship and Aircraft Construction, 1920; Chefoo Naval College; Torpedo and Gunnery College, 1924; received naval training at Miami, Florida, and Guantanamo Bay, Cuba, 1944-45; amphibious training, U.S. Naval Amphibious Base, Coronado, San Diego, 1954; served on various Chinese naval ships, 1931-39; chief, Naval Station, Kweilin, 1940; aide to C-in-C, 1943; aide to C-in-C with rank of comdr., 1943; comdr. of officers' group of 8 naval vessels taken over from U.S. Navy, simultaneously CO on CS Taikang; Captain and CO on CS Aumee, 1946; Comdr. and latter Commandant of 4th Naval District, Hainan, 1949; chief, 5th Bureau, Naval Hqs., 1949; Comdr., Afloat Training Command, 1951; Comdr., Amphibious Force Command, 1954.

Current Career: C-in-C of the Navy 1954-.

PENG MENG-CHI

Origin: b., 1907, Hupeh.

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000 Background: B.A., National Chungshan Univ.; grad., Whampoa Milit. Acad., Japanese Artillery School; chief instructor, artillery school, 1931; Battalion Comdr., 1st Artillery Brigade, 1932; Comdr., Kaohsiung Fort Command, 1946; Comndg. Taiwan Garrison Hqs., 1947; Deputy Comdr., Taiwan Peace Preservation Hqs., 1949-54.

Current Career: mem., Central Committee, KMT, 1952-; Deputy Chief of Gen. Staff, 1954-; Chief of Gen. Staff. 1954-.

SHEN CHANG-HUAN

Origin: b., 1913, Kiangsu.

Background: B.A., Kwang Hua Univ., 1933; Yenching Univ., 1934-35; M.A., Univ. of Michigan, 1937; professor, National Sun Yat-sen Univ., Canton, 1937-40; joined Ministry of Foreign Affairs, 1941; V.-Minister of Information, 1950; mem. CRC, KMT, 1950-52; chief, 4th Section, CRC, KMT, 1952; chief, 4th Section, Central Committee, KMT, 1952-54; govt. spokesman, 1950-52.

Current Career: personal secretary to President Chiang Kai-shek, 1945-; advisor, Executive Yuan, 1950-; mem.,

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000 Central Committee, KMT, 1952-; Political V.-Minister of Foreign Affairs, 1954-.

SOONG MEI-LING (MADAME CHIANG KAI-SHEK)

Origin: b., 1901, Kwangtung.

Background: B.A., Wellesley College; LL.D., Rutgers Univ.; former mem., Legislative Yuan; Sec.-Gen. Commission on Aeronautical Affairs; founder and Director of National Chinese Women's Assoc. for War Relief; author China in Peace and War, etc.; active in welfare work.

TSIANG TINGFU F.

Origin: b., 1894, Hunan.

Background: Ph.D, Columbia, 1923; prof., National Tsing Hua Univ., 1929-35; Director, Dept. of Political Affairs, Executive Yuan, 1935-36; ambassador to USSR, 1936-38; Director, Dept. of Political Affairs, Executive Yuan, 1938-44; Director, Chinese National Relief and Rehabilitation Admin., 1944-47; publications include Modern Chinese History, Selected Documents on China's Diplomatic History.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 Current Career: permanent representative, UN Security Council, 1947.

TUNG HOLLINGTON K.

Origin: b., 1889, Chekiang.

Background: A.B., Missouri, 1912; Columbia, 1913; asst. editor, China Weekly (English), 1916-25; editor, China Press, Shanghai, 1931-35; Managing Director, China Times, Ta Wan Pao & Shun Shih News Agency, 1935; V.-Min. of Information, 1938-45; Dir., Govt. Information Office, 1947-48; Minister without Portfolio, Executive Yuan, 1948; Director, Dept. of Information, KMT, Tsungtsa's office, 1949-50; mem., CAC, KMT 1950-52; Gen. Manager, Broadcasting Corp. of China and chm. of board of directors, Central Daily News, 1950-52; author Biography of Generalissimo Chiang Kai-shek, Dateline: China!

Current Career: ambassador to Japan, 1952-.

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300 WANG MARTIN PENG

Origin: b., 1910, Kiangsu.

Background: Aurora Univ.; Ecole Central des Arts et Manufactures, Paris; chief, Supply Division, Szechwan-Yunnan Railways Co., 1940-41; deputy chief, China-India Road Survey Party, 1941-43; executive officer, Lend-Lease Affairs, War Production Board, 1944-45; resident-agent in UK for CNRRA, 1946-50.

Current Career: Sec.-Gen., CUSA, 1951-.

WANG SHU-MING

Origin: b., 1904, Shantung.

Background: grad. of Whampoa Milit. Acad., 1924; 1st Class, Kwangtung Aviation Acad., 1925; Soviet Advanced Fighter Flying School, 1928; Advanced Class, Central Aviation School, 1932; former Comdr. 2d Bomber Sqdn.; Comdr. Central Aviation School, CAF: Comdr., 3rd Route Air Force, CAF: Comdr., 5th Route Air Force, CAF: Comdr., Air Staff College, CAF: Dep.-Director, Commission on Aeronautical Affairs Deputy Comndg. Gen. and Chief of Staff, CAF, 1946-49; Dep.-Comdr.,

45:Stanford U. S-4, 5 1956 AD1 Formosa
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CAF, and Cmndg. Gen., Air Defense Command, Ministry of National Defense, 1949-52.

Current Career: C-in-C, CAF, 1952-.

WANG TE-PU

Origin: b., 1896, Shenyang.

Background: B.A., College of Law and Administration; Adm. V.-Min. of Interior; chm., National Opium Suppression Commission; mem., KMT.

Current Career: Minister of Interior, 1954-.

WU NAN-JU

Origin: b., 1898, Kiangsu.

Background: LL.B., Peiyang Univ.; London School of Economics; Columbia Univ.; 1st Sec., Chinese Legation, London, 1926-29; mem. of Treaty Commission, Senior Sec., Director of International Affairs Dept., Director of Information and Intelligence Dept., Min. of Foreign Affairs, 1929-33; Counselor and Charge d'Affaires, Chinese Embassy,

Moscow, 1933-37; Minister to Denmark, 1937-43; Chief of Protocol, Director of European Dept., Ministry of Foreign Affairs, 1943-46; Minister to Switzerland, 1946-50; alternate delegate to Gen. Assembly, League of Nations, 1935; chief delegate to diplomatic conference, Geneva, 1949; delegate to many international conferences; Director of Govt. Information Bureau, 1953-56.

Current Career: ambassador to Iran, 1956-.

YEH GEORGE KUNG-CHAO

Origin: b., 1904, Kwangtung.

Background: B.A., Amherst College, Mass. 1924; M.A., Cambridge; professor of English, National Peking Univ., 1926-27; prof. of English, National Chinan Univ., 1927-29; prof. of English, National Tsing Hua Univ., 1929-36; prof. of English, National Peking Univ., 1936-39; rep. in Singapore, Ministry of Information, 1942-46; counselor and concurrently Director of European Affairs Dept., Ministry of Foreign Affairs, 1946-47; Admin. V-Min. of Foreign Affairs, 1947-49. ambassador extraordinary on special mission to Burma, 1947; Political V.-Minister of Foreign Affairs, 1949; medallist, Royal

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 Society of Arts of Great Britain, 1943; author Social Forces in English Literature, Introducing China, The Concept of Jen, etc.

Current Career: Minister of Foreign Affairs, 1949-.

YU DAVID TA-WEI

Origin: b., 1899, Hunan.

Background: Ph.D., Harvard, 1922; Dir., Army Ordnance Admin., 1933-45; V.-Min. of War, 1944-45; Minister of Communications, 1946-48; special asst. to ambassador, Chinese Embassy, Washington, 1951-?.

Current Career: Minister of National Defense, 1954-.

YUAN SHOU-CHIEN

Origin: b., 1903, Hunan.

Background: grad., 1st Class, Whampoa Milit. Acad.; Sec.-Gen., Supreme Army Hqs., Central China Area; Political Commissioner and Sec.-Gen., Milit. and Political Affairs Administration for Southeastern Provinces, 1949-50; V-Min. of National Defense, 1950-54.

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000 Current Career: Minister of Communications, 1954-.

YUI O.K.

Origin: b., 1898, Canton.

Background: B.A., St. John's Univ.; mayor of Shanghai, 1937; managing director, Central Trust of China, 1938-40; V.-Min. of Finance, 1941-44; governor of Taiwan Province, 1953-54.

Current Career: chm., board of directors, Bank of Communications, 1950-; member, Central Committee, KMT, 1953-; Prime Minister, 1954-.

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II. PERSONALITIES IN THE PROVINCIAL AND LOCAL GOVERNMENTS

CHANG CHI-CHUNG

Origin: b., 1915, Taiwan.

Background: grad. of Nippon Medical College, Japan; mem., KMT.

Current Career: speaker, Taichung Municipal Assembly.

CHANG JEN-TAO

Origin: b., 1907 Kiangsu.

Background: B.S., National Chiao Tung Univ.; M.A., Engineering, Univ. of Michigan; Dep.-Director, Public Utilities Bureau, Shanghai Municipal Govt.; Dep.-Commissioner, Dept. of Reconstruction, Taiwan Provincial Govt; mem. KMT.

Current Career: Director, Taiwan Supply Bureau.

000 CHEN CHING-WEN

Origin: b. 1907, Taiwan

Background: grad. of Taihoku Middle School; mem., KMT.1

Current Career: speaker, Kaohsiung Hsien Assembly.

CHEN HAN-PING

Origin: b. 1905, Hunan.

Background: B.A., Central Univ.; Dep.-Chm., Issue Dept., Central Bank of China; Dep.-Chief, 7th Section, KMT; V.-Minister of Finance, 1952-54.

Current Career: Finance Commissioner, Taiwan Provincial Govt., 1954-.

CHEN HSI-CHING

Current Career: magistrate, Changhua hsien

CHEN HSIEN-CHOU

Current Career: Commissioner, Taiwan Taiwan Provincial Police Administration.

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000 CHEN HSIN-AN

Current Career: magistrate, Kaohsiung hsien.

CHEN PAO-TAI

Origin: b. 1907, Chekiang.

Background: B.A., Futan Univ.; Director, Shanghai Social Affairs Bureau; mayor, Kaoh-siung Municipality; mem., Taiwan Provincial Council; mem., KMT.

Current Career: Director, Yangmingshan Administration.

CHIN YANG-KAO

Origin: b. 1911, Hopei.

Background: B.A., Chin-ling Univ; study, Cornell Univ., Univ. of Kansas; technical expert, JCRR; mem., KMT.

Current Career: Commissioner, Dept. of Agriculture and Forestry, Taiwan Provincial Govt.

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000 CHU SHENG-CHI

Origin: b. 1905, Taiwan.

Background: B.A., Nippon Univ.; attorney at law; lecturer, Nippon Univ., mem., KMT.

Current Career: magistrate, Hsinchu hsien, 1954.-

CHUANG CHIN-HO

Origin: b. 1898, Taiwan.

Background: mem., KMT.

Current Career: speaker, Hsinchu Hsien Assembly.

HSIEH CHENG-CHIANG

Origin: b. 1911, Taiwan

Background: B.A., Keio Univ.; mayor Chiayi; mem., KMT.

Current Career: mayor Kaohsiung Municipality, 1954-.

45:Stanford U, S-4, 5 1956 AD1 Formosa
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000 HSIEH KUAN-I

Origin: b. 1901, Hunan.

Background: B.A., Yale Univ. of Chang-sha, 1925; M.A., Univ. of Michigan, 1927; mem., KMT.

Current Career: mayor, Keelung municipality.

HSIEH TUNG-MIN

Origin: b. 1906, Taiwan.

Background: B.A., National Chung-shan Univ., mem., CEC for Taiwan, 1943; magistrate, Kaohsiung hsien; mem., CRC for Taiwan Province.

Current Career: Sec.-Gen., Taiwan Prov. Govt.; mem., Taiwan Provincial Council.

HSIN WEN-PING

Origin: b. 1911, Taiwan.

Background: B.A., Meiji Univ.; mem., KMT.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 Current Career: speaker, Tainan Municipal Assembly.

HSU TSUNG-TE

Origin: b. 1910, Taiwan.

Background: B.A., Ritsumeikan Univ., Japan; mem., KMT.

Current Career: magistrate, Taoyuan hsien, 1954-.

HUANG CHAO-CHIN

Origin: b. 1898, Taiwan.

Background: M.A., Univ. of Illinois, 1926; chm., board of directors, First Commercial Bank of Taiwan; Chinese Consul-General, San Francisco, 1935-39; mem., Central Committee, KMT.

Current Career: speaker, Taiwan Provisional Provincial Assembly, 1952-.

HUANG CHI-HSIEN

Origin: b. 1905, Taiwan.

Background: B.A., National Amoy Univ.; M.A., Yenking Univ.; professor, National

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 Amoy Univ.; speaker, Chiayi Hsien Assembly; Dep.-Commissioner, Dept. of Education, Taiwan Provincial Govt.; mem., KMT.

Current Career: Commissioner, Dept. of Reconstruction, Taiwan Provincial Govt.; mem., Taiwan Provincial Council.

HUANG TUO-JUNG

Origin: b. 1909, Taiwan.

Background: grad., Tainan Teacher's School; Director, Taitung Hsien Farmers' Assoc.; mem., KMT.

Current Career: speaker Taitung Hsien Assembly.

KAN AH YEN

Origin: b. 1895, Taiwan.

Background: grad., Taihoku (Taipei) Teacher's School; superintendent, Yilan Elementary School.

Current Career: magistrate, Yilan hsien, 1954-.

000 KAO WEN-JUI

Origin: b. 1893, Taiwan.

Background: grad., Taihoku Teacher's School; mem., KMT.

Current Career: magistrate, Tainan hsien, 1954-.

KAO YU-SHU

Background: business career in Japan.

Current Career: mayor, Taipei Municipality, 1954-.

LAI SHUN-SHENG

Current Career: magistrate, Miaoli hsien.

LI KAI-JIH

Origin: b. 1899, Taiwan.

Current Career: speaker, Taoyuan Hsien Assembly.

45:Stanford U. S-4, 51956 AD1 Formosa
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LI KUO-CHENG

Origin: b. 1911, Taiwan.

Background: B.A., Waseda Univ.; news correspondent; mem., KMT.

Current Career: magistrate, Nantou hsien, 1951-.

LI MU-SUNG

Current Career: magistrate, Chiayi hsien.

LI YU-LIN

Current Career: magistrate, Penghu hsien.

LIEN CHEN-TUNG

Origin: b. 1904, Taiwan.

Background: B.A., Keio Univ.; Sec.-Gen., Taiwan Provincial Assembly; Commissioner, Dept. of Reconstruction, Taiwan Provincial Govt.; mem., KMT.

000 Current Career: Commissioner, Dept. of Civil Affairs, Taiwan Provincial Govt.

LIN CHIN-PIAO

Origin: b. 1898, Taiwan.

Background: grad., Taihoku (Taipei) Teacher's School; teacher; speaker, Taichung hsien; mem., KMT.

Current Career: mayor, Taichung Municipality, 1954-.

LIN MU-SHENG

Current Career: magistrate, Hualien hsien.

LIN SHIH-CHENG

Origin: b., 1911, Taiwan.

Background: B.A., Chuo Univ., Japan; speaker, Pingtung Hsien Assembly; mem., KMT.

Current Career: magistrate, Pingtung hsien, 1954-.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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DOO LIN TING-LI

Origin: b. 1907, Taiwan.

Background: B.A., Meiji Univ.; Director, Political Office, Taiwan Provincial Garrison Hqs.; mem., KMT.

Current Career: Sec., Taiwan Provisional Provincial Assembly, 1951-.

LIN TSAI-TIEN

Origin: b. 1901, Taiwan.

Background: grad., high school; Director, Yilan Hsien Farmers' Assoc.

Current Career: speaker, Yilan Hsien Assembly.

LIU HSIEN-YUN

Origin: b. 1910, Hupei.

Background: B.A., Chunghua Univ.; Sec.-Gen., Hupei Provincial Govt.

Current Career: Commissioner, Dept. of Education, Taiwan Provincial Govt.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 PAI CHIN-CHUAN

Origin: b. 1918, Taiwan.

Background: grad., Toa Commercial School; mem., Taiwan Provisional Provincial Assembly; mem., KMT.

Current Career: speaker, Taipei Hsien Assembly.

TAI TE-FA

Origin: b. 1911, Taiwan.

Background: grad., Taipei Medical College, 1935; speaker, Taipei Hsien Assembly; mem., KMT.

Current Career: magistrate, Taipei hsien, 1954-.

TUNG CHIN-SHUH

Origin: b. 1906, Taiwan.

Background: grad., Tainan Teacher's School; teacher; Director, Taiwan Provincial Farmers' Assoc.; mem., KMT.

Current Career: speaker, Pingtung Hsien Assembly.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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000 WU CHIN-YU

Current Career: magistrate, Taitung hsien.

YANG CHING

Current Career: mayor, Tainan Municipality, 1954-.

WU CHING-CHENG

Current Career: magistrate, Yunlin hsien.

YANG CHUN-MU

Origin: b. 1909, Taiwan.

Background: mem., KMT.

Current Career: speaker, Changhua Hsien Assembly.

YEN CHIA-KAN

Origin: b. 1905, Kiangsu.

Background: B.S., St. John's Univ.,

45;Stanford U, S-4, 51956 AD1 Formosa
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Shanghai, 1926; chm., board of directors, Fukien Provincial Bank, 1941; Finance Commissioner, Govt.-Gen. of Taiwan, 1946-47; chm., board of directors, Bank of Taiwan, 1946-49; mem., CUSA, Executive Yuan, 1948; Minister of Economic Affairs, 1950; Minister of Finance, 1950-54.

Current Career: V.-Chm., CUSA, 1950-; Gov. of Taiwan, 1954-.

YEN CHUN-HUI

Origin: b. 1907, Taiwan.

Background: B.S., Yenching Univ., 1928; Doctor of Medicine, Peking Union Medical College, 1932; Doctor of Public Health, Univ. of Toronto, 1938; professor in Bacteriology and Immunology, National Peking Univ.; publications - A Practical Course in Bacteriology and Immunology (in Chinese) and articles in American and Canadian medical journals.

Current Career: Commissioner of Health, Taiwan Provincial Govt.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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III. PERSONALITIES IN ACADEMIC, COMMERCIAL, AND INDUSTRIAL FIELDS

CHANG TSE-KAI

Origin: b. 1900, Kwangtung.

Background: M.B.A., New York Univ., 1932; Gen. Manager, Chinese Petroleum Corp., 1947-49; V.-Minister of Finance, 1950-51; V.-Pres. and Gen. Manager, Philippine Bank of Communications, Manila, 1951-52; Minister of Economic Affairs, 1952-54.

Current Career: chm., board of directors, Bank of Taiwan, 1953-.

CHEN CHI-CHING

Origin: b. 1902, Taiwan.

Background: B.A., Political Science, Meiji Univ.; mem., Taiwan Provincial Council; chm., Taiwan Fed. of Chamber of Commerce; mem., National Assembly.

Current Career: Gen. Manager, Taiwan Cement Corp., 1954-.

45;Stanford U, S-4, 5 1956 AD1 Formosa
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000 CHEN CHING-FEN

Origin: b. 1909, Taiwan.

Background: grad. of Japan Art School; studied Academy Ranson, Paris; mem., Taiwan Provincial Council; mem., KMT.

Current Career: chm., Taiwan Tea Exporters' Assoc.; Director, Commercial Arbitration Assoc. of the Republic of China.

CHIANG MONLIN

Origin: b. 1886, Chekiang.

Background: Ph.D., Columbia Univ., 1917; Pres., Chekiang Univ., Minister of Education, 1928-30; Chancellor, Peking Univ., 1930-45; State-Councilor, National Govt., 1947-48; chm., Chinese Assoc. for Advancement of Science, 1952-; mem., KMT; author Tides from the West.

Current Career: chm., JCRR, 1948-.

CHIEN SSU-LIANG

Origin: b. 1908, Chekiang.

Background: B.S., National Tsing Hua Univ., 1931; M.S., Univ. of Illinois, 1932;

45:Stanford U. S-4, 51956 -AD1 Formosa
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000 Ph.D., Illinois, 1934; professor, National Peking Univ., 1934-40; research fellow, New Asiatic Chemical and Pharmaceutical Research Institute, 1941-45; prof. and head, Dept. of Chemistry, National Peking Univ., 1946-49; Pres., Chinese Chemical Society 1951-52.

Current Career: President, National Taiwan Univ., 1951-.

CHIEN TIEN-HO

Origin: b. 1893, Chekiang.

Background: M.S., Agriculture, Cornell Univ.; asst. professor, Nanking Univ., 1919-23; regional advisor to Foreign Operations Administration, 1947-48; chief, Agricultural Improvement Division, JCRR, 1948-51; mem., KMT.

Current Career: Commissioner, JCRR, 1952-.

CHIEN WAN-CHUAN

Origin: b. 1907, Taiwan.

Background: B.A., Tokyo Univ. of Commerce, 1931; mem., KMT.

45:Stanford U: S-4, 5 1956 AD1 Formosa
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000 Current Career: Gen. Manager, Hua Nan Commercial Bank; Director, Bank of Taiwan.

CHIN TA-CHUN

Origin: b. 1901, Kiangsu.

Background: Ph.D., Engineering, Technische Hochschule, Aschen, Deutschland; Commissioner, Examination Yuan; mem., KMT.

Current Career: Pres., Taiwan Provincial College of Engineering.

CHOU PU-TI

Origin: b. 1894, Taiwan.

Background: grad., Kokugo School of Taiwan Govt.-Gen.; entered Taiwan Commercial and Industrial Bank, 1923.

Current Career: Gen. Manager, 1st Commercial Bank, 1947-.

CHU CHIA-HUA

Origin: b. 1893, Chekiang.

000 Background: Ph.D., Berlin Univ.; professor, National Univ. of Peking, 1917-26; V.-Chancellor, National Sun Yat-sen Univ., 1927-30; Chancellor, same university, 1930-31; Chancellor, National Central Univ., 1930-32; Minister of Education, 1932-33; Minister of Communications, 1932-35; Governor of Chekiang, 1936-37; Sec.-Gen., Academia Sinica, 1936-38; V.-Pres., World Federation of League of Nations Union, 1937-46; V.-Pres., Examination Yuan, 1941-44; Minister of Education, 1944-48; V-.President Executive Yuan, 1949-50.

Current Career: senior advisor to Pres., 1950-; chm. board of trustees, Sino-British Educational and Cultural Endowment Fund, 1932-; Pres., Chinese Assoc. for UN, 1946-; Pres., Academia Sinica, 1940-; Hon. Pres., World Fed. of UN Assoc., 1946-.

HUANG HUI

Origin: b. 1903, Fukien.

Background: B.S., Nanyang Univ., 1926; M.S. Cornell Univ., 1930; Director, Hsiang River Electricity Works; senior technical expert, National Resources Commission, 1937-44; mem., technical mission in USA, same commission, 1944-45; Gen. Manager, Taiwan Power Co.

000 Current Career: Pres., Taiwan Power Co., 1950-.

KAO SI-CHIN

Origin: b. 1903, Shantung.

Background: B.S., Purdue Univ.; M.S. Univ. of Illinois; Gen. Manager, Taiwan Machinery Manufacturing Corp.; Gen. Manager, Taiwan Machinery and Shipbuilding Co.; mem., KMT.

Current Career: Director, China Productivity Center, 1955-.

KUO YU-HSIN

Origin: b. 1907, Taiwan.

Background: B.S., Taihoku (Taipei) Imperial Univ.; mem., KMT.

Current Career: mem., Provisional Assembly, Taiwan Province, 1951-; chm., Fruit Exporters Assoc., Taiwan District, 1951-.

LI CHAN-CHUN

Origin: b. 1902, Taiwan.

000 Background: a vocational school of commerce; advisor to industrial section, Economic Stabilization Board, Executive Yuan.

Current Career: chm., Cotton Textile Manufacturers' Assoc., Taiwan District.

LI CHIEN-HSING

Origin: b. 1890, Taiwan

Background: 10 years, private tutoring in Chinese Classics; chm., Taiwan Provincial Coal Adjustment Commission; mem., KMT.

Current Career: coal tycoon.

LI LIEN-CH'UN

Origin: b. 1903, Taiwan.

Background: grad., Kobe School of Commerce.

Current Career: Director, Provincial Food Bureau, 1945-.

LIU CHEN

Origin: b. 1912, Anhwei.

000 Background: B.A., National Wuhan Univ.; Tokyo Univ. of Literary and Scientific Studies; professor, National Hupeh Teachers College, 1942; mem., Legislative Yuan, 1948; author Educational Administration.

Current Career: Chancellor, Taiwan Normal University, 1949-.

LIU CHI-KUANG

Origin: b. 1905, Taiwan; originally known as Hou Chao-tsung.

Background: joined anti-Japanese movement and fled to Mainland prior to World War II; magistrate, Hsinchu hsien; chm., Taipei Chamber of Commerce.

Current Career: chm., board of directors, Hua Nan Commercial Bank, 1948-.

SHEN TSUNG-HAN

Origin: b. 1895, Chekiang.

Background: Ph.D., Cornell, 1927; professor of Plant Breeding, Univ. of Nanking, 1926-37; chief technician, National Agricultural Research Bureau, 1934-38; Dep.-Director, same bureau, 1938-46;

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Director, same bureau, 1946-50; author The Agricultural Resources of China.

Current Career: Commissioner, JCRR, 1948-.

SUN CHING-HUA

Origin: b. 1904, Fukien.

Background: Ph.D., London Univ., 1935; acting Gen. Manager, Electro-Chemical and Metallurgical Works, National Resources Commission, 1944.

Current Career: Gen. Manager, Taiwan Aluminum Corp., 1948-.

TANG JUNG

Origin: b. 1882, Fukien.

Current Career: owner of largest privately owned steel works, 1940-.

TANG YUAN-CHI

Origin: b. 1904, Kiangsu.

Background: Ph.D., Munich Univ., 1931; Manager, Szechwan Alcohol Distillery,

000 1940-42; Manager, Tsun Yi Alcohol Distillery, National Resources Commission, 1942-45.

Current Career: Gen. Manager, Taiwan Fertilizer Co., 1946-.

TU TSUNG-MING

Origin: b. 1894, Taiwan.

Background: Doctor of Medicine, Tokyo Imperial Univ., dean of Medical College, National Taiwan Univ.

Current Career: Pres., Takau Medical College (private), 1955-.

WANG CHUNG

Origin: b. 1898, Sungkinag.

Background: B.S., Akita Univ., Japan; Director, Personnel Dept. and Gen. Affairs Dept., Central Bank of China, 1941-45; Political Commissioner, President's Hqs. in Northeast, 1945-48; Northeast Representative, Central Bank of China, 1945-48; Taiwan Representative, Central Bank of China, 1949.

Current Career: Director, Issue Dept., Central Bank of China, 1949-; Gen. Manager, Bank of Taiwan, 1951-.

000 WANG I-CHI

Origin: b. 1905, Kiangsu.

Background: B.A., Chin-ling Univ.; mem. National Assembly; mem., KMT.

Current Career: chm., China Chamber of Commerce.

YANG CHI-TSENG

Origin: b. 1898, Anhwei.

Background: B.S., Technische Hochschule Zur Charlottenburg, Deutschland, 1926; V.-Minister, National Defense, 1950; Director, Dept. of Ordnance, Ministry of National Defense, 1944-49; President, China Society of Engineers; mem., KMT.

Current Career: Gen. Manager, Taiwan Sugar Corp., 1950-.

YU KUO-HUA

Origin: b. Chekiang, about 1910.

Background: B.A., Tsinghua Univ., 1935; M.A., Univ. of Michigan; alternate Exec. Director of China, International Monetary Fund; Personal Sec. to Pres. Chiang Kai-shek.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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005 Current Career: Managing Director, Central Trust of China, 1955-.

YU MI-CHIEN

Origin: b. 1897, Taiwan.

Background: B.A., Nippon Univ.; study, Univ. of Paris; professor, National Taiwan Univ.; mayor, Taipei; mem., Taiwan Provincial Council.

Current Career: chm., board of directors, Taiwan Paper and Pulp Corp., 1954-; mem., National Assembly.

Annex "A," Subparagraph 3a',
Economic Background

GENERAL STRUCTURE OF ECONOMY

Two-thirds of Formosa is mountainous and one-third is lowland. The mountains are rugged and covered with dense forests, but most of the lowland is well suited to the production of commercial crops. Though the Tropic of Cancer passes through the island, its climate is mild, with moderate temperatures and abundant rainfall. Two major crops a year are usual and a third crop of vegetables often increases the total yield. The soils are generally fertile, but frequent inundation and heavy year-round cropping cause excessive leaching. To maintain fertility, large quantities of fertilizer become a necessity.[1]

Mineral resources do not appear to be abundant. However, since much of the mountainous regions has not been thoroughly

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1. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop. Chiao-min Hsieh and Alice Taylor, "Formosa" Focus, N. Y., April 1955, p. 5.

135 explored geologically, the situation with respect to mineral resources could be changed considerably in the future. Bitumous coal is abudant in the northern part of the island, and some high-grade coking coal has been recently discovered at Nanchuang near Miaoli. Large reserves of copper and sulphur and some gold veins are located in the northeast part of the Taipei area. Pyrites in limited quantities are mined in the north, primarily for use in the fertilizer industry. Limestone and glass sand are also available for building purposes. But such ores indispensible to industrial development as iron, bauxite, lead, zinc, tin, and magnestie[2] are scarce or non-existent on the island and must be imported. As much of the rock formation on the island is petroliferous, large oil and natural gas fields may be discovered in the future, but as yet petroleum finds and development have been insufficient to offset reliance on foreign sources of supply.

241 The economy of Formosa is essentially agrarian; although only one-fourth of the total land area is arable, most of the population is engaged in farming. Ever since the Dutch

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2. Mercury and manganese ores are found in the mountains near Yilan.

241 occupation in the first half of the seventeenth century, rice and sugar have been the staple products of the island.

241 Under Chinese rule in the eighteenth
245 and nineteenth centuries, a constant influx of immigrants from the mainland reclaimed the extensive western plains of Formosa for the cultivation of rice and sugar. The foothills surrounding the plains were terraced for the growing of tea. Further in the mountains,
278 camphor was gathered from the dense forests. In the more isolated mountain region, aboriginal tribes practiced hunting and slash-and-burn agriculture. Coal mines were operated for a time by the government but were later abandoned.

489 Except for a 60-mile stretch of railway between Keelung and Hsinchu, communications was primitive until the present century. Rafts, boats, and junks were used along the coast and on lakes and rivers. Overland, the inhabitants were obliged to travel either in man-borne palanquins[3] or ox-drawn carts.
431 Western merchants handled a small international trade, consisting of tea, camphor, and sugar.

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3. A closed litter commonly used as a conveyance in China.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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648 Under the Japanese from 1895 to 1945, the economy of Formosa was geared entirely to that of the colonial power. The island was developed as a major source of foodstuffs to feed the rapidly growing population of Japan. All possible arable land was brought under cultivation. The production of rice [439] more than doubled between 1905 and 1935; the sugar crop tripled between 1910 and 1940.[4] Great strides were made in modernizing communications and transportation throughout the island, including the construction of a network of railways and roads. After 1937, 648 178 439 some effort was directed toward the industrialization of the island. Factories were built, electric power developed, highways and railways improved, and harbors enlarged. A number of large plants were established to use the raw materials of Southeast Asia in the production of semi-finished goods to supply Japanese industry. The chief emphasis was on metals and chemicals. No attempt was made to achieve industrial self-sufficiency on the island. Fertilizer and textiles, two of the most important industrial products in an agrarian economy were totally neglected.

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4. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 24.

[FR] Economic dependency on Japan was accentuated
648 by the employment of only Japanese in both
489 technical and managerial positions. From the beginning of the Japanese control, trade was confined almost exclusively to territories within the Japanese empire and managed for the most part by Japanese personnel. Japan took between 90 and 95 per cent of Formosa's exports and supplied 85 to 90 per cent of the island's imports. Some sugar and coal were shipped to China, and small quantities of tea and camphor were sent to the United States.
648 Banking and currency were linked to the
454 Japanese system, and all capital investment was controlled by the Japanese.[5] "Every year, for at least fifteen years previous to the war, Japan is believed to have gained directly 150 million yen from her investments in Taiwan, and for the fifteen years before that lesser but still significant sums".[6]

648 Some of the Japanese industrial projects
727 were never completed. Others wer destroyed

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5. By 1939, 90% of all the capital invested in the island was held either by the Japanese government or Japanese nationals; the remaining 10% held by Formosans was mostly invested in small shops. Taiwan, A Geographical Appreciation, Ottawa, Department of Mines and Technical Surveys, Government of Canaca, 1952, p. 16.

6. Ginsburg, op. cit., p. 25.

648 or severely damaged by Allied bombing during
727 World War II. Further depreciation and deterioration of Japanese installations were caused during and immediately after the war by typhoons and floods coupled with lack of maintenance and repair. Even the railway system, the principal means of freight and passenger transportation, was capable of handling only a fraction of the freight and passenger demand. "Rails were worn thin, one-third of the cross ties were rotten, rolling stock was seriously depleted or in need of complete overhaul."[7] The war and
727 the repatriation of Japanese nationals after-
433 ward also caused disruption of rural services in credit collection, processing, and marketing of farm produce. Due to a scarcity of imported fertilizers, production of the two principal cash crops, sugar and rice, dwindled considerably. The production of rice fell from 1,100,000 metric tons in 1943 to 600,000 metric tons in 1945 and sugar production dropped from 1,022,000 metric tons in 1942-43

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7. "Economic Progress on Formosa" Chinese-American Economic Co-operation, pub. by Mutual Security Agency Mission to China, Taipei, Vol. 1, No. 2., Feb. 1952, p. 12.

727 to 86,000 metric tons in 1945-46. The
433 Formosan farmer was faced with the "worst prospect in living memory," as one observer remarked.[8]

434 In spite of the seriousness of economic
178 conditions on Formosa, the Chinese government was able to make only limited progress in reconstruction following the restoration of the island to Chinese control. For one thing, the Nationalist Government was involved in a costly war with the Communists and faced with a huge rehabilitation program on the Mainland. Furthermore, without a surplus of exportable goods, China could not obtain the foreign exchange necessary to re-equip the damaged plants and restore agricultural production on Formosa. The island's economy continued to deteriorate until 1949, when Mainland China was overrun by the Communists and the National Government was withdrawn to Formosa.

458 The sudden influx of over one million
185 mainlanders and half a million soldiers further strained the resources of the island. Inflation was running wild and food was short. However, the removal of the national government to Formosa was not without benefit to the island.

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8. H. Maclear Bates, Report from Formosa, New York, Dutton, 1952, p. 117.

185 First of all, the presence of President Chiang
458 Kai-shek strengthened the political stability of the island. Then the arrival of technical and experienced personnel and capital equipment from the Mainland greatly facilitated the island's economic rehabilitation. With the gold evacuated from the Central Bank of China at Shanghai, the Nationalist Government was able to institute currency reform. Steps were immediately taken to increase the production of food-stuff, and a program was initiated to relieve the Formosan farmers' burden of high rents and high taxes. Taxation was simplified by discontinuing numerous special levies. To insure the cultivator a fair share of his crop, a land reform program was undertaken. Land rents were cut from their previously usurious rate of about 60 per cent of the main crop to a maximum of 37.5 per cent. A limit was set on the ownership of tenanted land. Any land holding in excess of the stated limit was bought by the government and resold to the tenant.

648 In 1950 economic improvement quickened. At the outbreak of the Korean conflict, the United States government assigned the Seventh Fleet to patrol duty in the Formosa Strait. Fear of Communist invasion, which had been the underlying cause of the constant flight of capital, was dispelled. Public confidence was further enhanced by the revival of American economic assistance in June of the same

648 year.[9] The aid program permitted prompt and substantial importation of fertilizer, the repair and rebuilding of basic industries, and the rehabilitation and improvement of communication facilities. Since 1950 the United States government has made special annual appropriations for extending aid to China.

American aid to China has three basic objectives: (1) To help achieve economic stability on Formosa; (2) To support military defense; and (3) To improve Formosa's economic productive capacity for self-support.[10] To implement these objectives, the U. S. Foreign Operations Administration (FOA), now the International Co-operation Administration (ICA), maintains a Mutual Security Mission to China (MSMC) in Taipei. The mission to China, through its commodity program, finances the importation of essential commodities such as fertilizer, cotton, soybean, wheat and flour, rubber, metals and machines, and petroleum products to meet

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9. The U.S. Foreign Economic Assistance Act signed by President Truman on June 5, 1950 authorized a program of economic assistance "in any place in China and in the general area of China which the President of the United States of America deems to be not under Communist control."

10. Office of Information, FOA-MSMC, "A Background Summary of the U.S. Economic Assistance Program in Free China." Chinese

(continued next page)

618 the immediate needs of both the people and Formosan industry. MSMC also supplies urgently required replacement parts and materials for the restoration and development of basic industries and public utilities. The proceeds from sales of American aid commodities are deposited in a special account with the Bank of Taiwan. By agreement, the government of China deposits in Chinese currency an amount equivalent to the cost of the American commodities. These deposits, called the counterpart fund, are used to carry out FOA-approved projects, to meet the expenses of aid agencies, to help the Chinese government reduce its budgetary deficits, and to promote production by extending loans to public and private industries. To administer this fund the Chinese government has established within the cabinet an agency called the Council for United States Aid (CUSA), of which the Chinese premier is the chairman ex-officio.

618 178 The mission to China also provides technical assistance to public and private enterprises on Formosa. Under a MSA- and MSMC-financed contract between J.G.

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10. (continued) American Economic Co-operation, Taipei, Feb. 1955, p. 1.

648 White Engineering Corporation of New York
178 and the Chinese Government, six to nine consulting engineers are retained in Formosa to render technical advice in industrial reconstruction. The objective of the industrial program is to make Formosa self-supporting by fully utilizing its natural resources and developing its existing industrial facilities. Among the island's assets are its potential hydro-electric power, the mineral and forest resources, an industrious population, and the industrial base laid by the Japanese. In the past five years a series of specific projects designed to develop basic industries, electric power, transportation, mining, and fertilizer manufacturing have been carried
648 out. MSMC also renders financial assistance to various projects in social fields, such as public health, education, and public administration. It pays the Public Administration Service of Chicago, which has been retained to make studies and develop plans for improvement in these areas. Under the technical assistance program, a number of Chinese technicians have been sent to the United States and Japan for advanced training and observation.

The greatest achievement of American economic assistance is undoubtedly in the rural program, which affects directly or indirectly every phase of rural life on Formosa. Farm produce accounts for 80 per cent of the value of the island's total production, and three-quarters of grainfully employed Formosans

are engaged in farming. The rural program is entrusted to the Joint Commission on Rural Reconstruction (JCRR). The commission is composed of two American members appointed by the President of the United States and three members appointed by the President of the Republic of China. It was established in 1948 on the Mainland. After the loss of the Mainland, the commission concentrated its efforts on increasing agricultural production in Formosa and improving the living conditions of the rural people. JCRR has compiled a comprehensive statistical report on land distribution in Formosa and helped the Chinese government in many ways to implement its land reform program. The working principle of JCRR is to help the Chinese to help themselves, so it avoids direct assistance and carries out its program indirectly by giving financial and technical assistance either to a government agency like the Provincial Department of Agriculture and Forestry or to a rural organization like the Farmers Association. The commission also conducts surveys and experiments in co-operation with the Taiwan National University and Agricultural colleges.

In the rural areas, JCRR assists farmers to increase production by making proper use of fertilizer, composts, and green manures. The commission is instrumental in distributing to the farm population fertilizer and bean-cake,

648 improved crop seeds and animal breeds, and large quantities of insecticides for the control of crop diseases. Help has also been given in expanding and improving irrigation and flood control systems and in promoting soil conservation and reforestation. Through the establishment of health stations and improvement of hospital facilities, JCRR assists government agencies in eradicating malaria, controlling tuberculosis, and improving rural health in general.[11] The practical benefits of JCRR activities to the farm households are widespread and evident, and the above-mentioned improvements have been accomplished with relatively little money.

648 With American aid, substantial progress
433 in economic reconstruction has been achieved in the past five years. Industrial production at the end of 1954 exceeded the peak production under the Japanese by 50 per cent.[12] Electric power has been doubled. Textiles, which were practically non-existent before the war, are now actually overproduced. Rice production in Formosa has been increased

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11. Chinese American Joint Commission on Rural Reconstruction, General Report IV, Taipei, 1954, p. 3.

12. For details, see chapter on Industry.

both in yield per acre and in total amount, so there is at present not only a sufficient supply to feed the increased population, but also a substantial amount for export.

United States aid appropriations for China from 1951 to 1954 was as follows:

1951	US$ 98,034,000
1952	81,479,000
1953	105,503,000
1954	111,821,000
	US$ 396,837,000

In fiscal year 1955, the allotment totaled US$102,000,000, distributed among the following programs:[13]

Military program	US$ 37,000,000
Commodity aid	34,000,000
Industrial construction	28,000,000
Technical assistance	3,000,000
	US$ 102,000,000

From the disorganized and demoralized condition of Formosa in 1949, the joint Chinese

13. As reported by Martin Wong, Secretary-general of the Council for U.S. Aid on Aug. 12, 1955.

178 and American efforts have effected tremendous
648 change. However, in spite of steady gains,
433 the economy of Formosa has not achieved complete stability. Industrial and agricultural production is higher than before the war, but because of the tremendous increase in population, per capita production is still below the pre-war level. The Nationalist Government has been able to meet yearly budgetary deficits only by relying on American aid and resorting to the printing press. Forty per cent of the annual imports into Formosa are financed by United States aid. Inflation is steadily mounting. The economic situation would be very grave without United States assiatance.

185 On the avowed basis that "a nation's
433 progress and prosperity cannot be a gift from others, but must be sought through production and reconstruction,"[14] the Nationalist Government formulated a four-year plan for economic reconstruction in 1953. The plan aims at developing the island's economy production to a self-sufficient level. By the time the plan is fully implemented, the government intends that Formosa, without

14. Report of Premier Chen Cheng (now Vice-President) before the National Assembly, March 4, 1954.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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185 foreign aid, will be able to provide its people
433 with the goods and services necessary for a satisfactory standard of living and yield sufficient revenue to support needed public services, including defense. The general co-ordination and review of the plan is the responsibility of the Economic Stabilization Board (ESB), established in July 1, 1953 within the Executive Yuan.

The Four-Year Economic Development Plan, is divided into two parts -- agricultural and industrial. The agricultural plan is directed at increasing the production of rice, sugar, pineapple, tea, peanuts, and soybean as a means of increasing exports and reducing imports. Since agriculture in Formosa is comparatively well developed,[15] the aim of the Four-Year Plan is to expand farm production 20 per cent by 1957.

The major emphasis of the Four-Year Plan is on industrial development, and top priority is given to the production of power and fertilizer. The following goals have been announced[16] for expanding the output of major products on completion of the plan in 1956 (production in 1952 equals 100):

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15. Practically all arable land is now in use. The possibility of enlarging the cultivated area depends largely on expanded irrigation.

16. Industrial Development Commission of the Economic Stabilization Board, The Four-year Economic Development Plan, Taiwan, Taipei, 1955, pp. 4, 7.

Item	1956 Index	Item	1956 Index
Rice	118	Coal	131
Sugar, white	138	Canned pineapple	217
Sugar, brown	181	Flour	2,060
Wheat	126	Cotton yarn	171
Peanuts, unhulled	150	Cotton cloth	122
Soybean	187	Paper	162
Tea	122	Soda ash	1,830
Pineapple	129	Phosphate	159
Fish	139	Cement	141
Timber	124	Shipbuilding	436
Poultry	122	Power	174

185
433 According to the report of the Industrial Development Commission of the Economic Stabilization Board, "annual production goals as set out in the Plan have generally been realized. In some instances, such as canned pineapple and textile production, actual production has been greater than planned."[17] A new Four-Year Plan is being drawn up to cover the period 1947-1960. These development plans indicate the determination of the Chinese government to put the economy of Formosa on a more solid basis. At the end of these two four-year plans the government envisions that, despite the heavy strain of military requirements, the national budget will be balanced; inflation will be halted; there will be enough export to balance foreign exchange payments; and the economic development will be great enough to take care of the rapidly growing population.

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17. Ibid., p. 8.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3a",
Economic Background

LAND REFORM

I. LAND TENURE BEFORE REFORM

423 For many years the most crucial problem
162 confronting Formosa, as is the case with most countries on the continent of Asia, has been that of too many farmers and not enough land. There has been an enormous growth of population in the past half-century. For lack of industrial development, over 51.93 per cent of the total population in Formosa is engaged in farming.[1] The agricultural
[161] population grew[2] from 3,318,235 in 1944 to 4,381,816 in 1953. Only 24.7 per cent of the land in Formosa is arable.[3] As is always the

1. Taiwan Agricultural Yearbook, 1954 Edition, compiled by the Provincial Department of Agriculture and Forestry, Taipei, October 1954, p. 1.

2. Ibid., p. 25.

3. Ibid., p. 8. The total area of Taiwan Province, including the Pescadores and adjacent small islands, is 3,707,658 chia (or 35,961 square kilometers) and the total area of public and private cultivated land is 903,273 chia (or 8,082 square kilometers) in 1953. (Chia is the unit of measurement of land on Formosa; one chia is equal to .9699 hectare or 2.3968 acres.)

423 case in heavily populated countries with limited
162 land, very little land is offered for sale. The majority of the farmers are tenants. When the population grows larger the competition becomes keener. Consequently, the landlords are able to impose high rentals and other harsh terms. As time goes on, the landlords grow progressively richer and the tenants progessively poorer. The general poverty from which the poor peasants are unable to lift themselves is the primary cause of social unrest. Before the land reform programs were launched at the end of 1948, the distribution of tenure among the agricultural population in Formosa was as tabulated below.[4]

	Number of Farm Families	Percentage
Owner-cultivators	211,649	35
Part-owners	154,460	26
Tenants	231,224	39
Total	597,333	100

4. Ibid., p. 24.

423 The foregoing tabulation shows that
162 tenants and part-tenants who own no land, or only part of the land they till, constituted 65 per cent of the farm population, and only 35 per cent were independent farmers. The scarcity of land coupled with inequitable distribution led to the continued exploitation of the tenant farmer by the landlord.

427 Prior to 1949 the land rental averaged 50 per cent of the total yield per annum; in some cases more. In Taichung and Hsinchu there were instances where the tenants paid to the landlords 70 per cent of their annual harvest. In addition to the high rental, the tenants often were required to pay the landlord a large rent deposit. Then there was uncertainty of tenure. In most cases there was no written lease. Even when there was a written contract, the period of lease generally covered only one to two years, or was not definitely stated. This left the landlord free to terminate the lease at will. Since the dispossessed tenant was not entitled to any compensation, the resulting hardship could be easily imagined. The need for reform was evidently urgent.

II. LAND REFORM

423 Land reform for the sake of social justice was advocated by Dr. Sun Yat-sen,

423 founder of the Republic of China, in his San-min Chu-i.[5] He called it the Land-to-the-Tiller Policy. It had been tried out in the provinces of Szechwan, Kwangsi, and Kweichow after World War II and met with some degree of success; but the reform program was interrupted by the Communist uprising. When Gen. Chen Cheng became the governor of Formosa in December 1948, he undertook with great zeal and determination to carry out the much-needed land reform in the insular provinces.

423 185 With the aid of the Sino-American Joint Commission on Rural Reconstruction (JCRR), a detailed program of land reform was mapped out. The program was to be carried out in three successive stages, namely, reduction of farm rent in 1949, sale of public farm lands in 1951, and redistribution of private lands in 1953.

A. Rent Reduction

423 429 On April 14, 1949, the Taiwan Provincial Government promulgated a set of regulations

5. San-min Chu-i [The Three Principles of the People], Taipei, China Cultural Service, reprinted 1953, p. 187.

403 governing the lease of private farm land in
407 the province, which limited farm rent to 37.5 per cent of the annual yield of the main crop. The new law provides that if the rent originally agreed upon exceeds this percentage, it must be reduced accordingly. If it is less than 37.5 per cent, it must not be increased. It represents a substantial reduction from the customary 50 to 60 per cent that most tenants had been paying. Moreover, "the total annual yield" does not mean the actual annual yield on the farm; it refers to the standard amount of yield fixed on the basis of the productivity grade of the land at the time of lease. A standard amount was determined by the Rent Reduction Committee in each locality to conform with current conditions. As long as the lease remains in force, this standard amount is not subject to change. As a result of the reform, not only the customary amount of rent is reduced, but the increased production from the land resulting from the tenants' extra efforts (such as the increasing use of fertilizers, improvement in farming practice, etc.) is fully enjoyed by the tenant themselves; the basis for rent calcualtion is fixed and not subject to change.[6]

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6. T'ang Hui-sun, "Steps in the Implementation of Land Reform in Taiwan," in Land Reform in Free China, published by Free China Review, Taipei, May 1, 1953, pp. 8-9.

423 In case of crop failure, the tenant
422 farmer may request the Farm Tenancy Committee of the village, township, or district office to investigate the extent of loss and decide on measures for the reduction of rent. Should the total yield be less than 30 per cent of the normal yield, the entire rent payment shall be remitted.[7]

To guarantee the security of tenure it is further provided that all lease contracts between the landlord and the tenant must be written and registered with the government. The Farm Rent Reduction Act of 1951 specifies that the period for which farm land is leased shall not be shorter than six years. If the period originally agreed upon is longer than six years, it shall remain unchanged.[8] At the expiration of the lease, the right of the landlord to take back his own land is subject to many restrictions.[9] Even if the land is offered for sale, the tenant has the right to continue using the land during his tenure. In other words, the landlord may transfer his right of ownership, but not the right of use.

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7. See Article II, Farm Rent Reduction to 37.5% Act, promulgated by the Chinese National Government on June 7, 1951.
8. Ibid., Article V.
9. Ibid., Article XIX.

423 The benefits of the rent-reduction program
427 are noticeable in the improvement of the
511 tenant farmers' living conditions. The saving in rent payments, amounting 25-30 per cent of their gross income, can now be used to buy new clothing for their families, to send their children to school, to repair their houses, or to purchase farm land. They also work harder
423 because any inc reace in production accrues to
433 them. This factor contributed to the substantial annual increase of rice production from 1949 to 1954.

Production of Unhulled Rice*

Year	Metric Tons
1949	1,215,000
1950	1,421,000
1951	1,485,000
1952	1,570,000
1953	1,642,000
1954	1,695,000

* Taiwan Economic Data Book, compiled by FAO Mission to China, Part II, Vol. III, March 1955, Taipei, p. 5. The average production of rice perhectare increased from 1,624 kilograms in 1949 to 2,183 kilograms in 1954. Central Daily News, Oct. 22, 1955, p. 3.

423 425 427 Another effect of the rent reduction is the steady decline in the price of land cultivated by tenant farmers, because the reduction of rent has lessened the landlords' interest in making investments in land and stimulated their desire to sell it. At the same time, the increase of farm income has enabled some tenant farmers to buy land. According to the statistics of the enforcement of the Rent Limitation Program compiled by the Provincial Land Bureau, 66,328 tenant families bought 35,522 chia (85,139 acres) during the five-year period[10] from 1949 to 1953.

B. Sale of Public Lands

423 The reduction of rent relieves the tenant farmer of his excessive financial burden, but it does not satisfy his wish to own the land he tills. The ultimate object of land reform is to help the tenant to realize his cherished dream of owning the land he and his forefathers have tilled for decades.

Over 20 per cent (181,490 chia or 434,900 acres) of the total arable lands[11] in Formosa belonged to the government. They

10. T'ang Hui-sun, op. cit., p. 64.

11. Total area of farmland in Formosa in 1949 was 891,689 chia, or 1,137,200 acres, and public land amounted to 181,490 chia, or 434,000 acres.

423 had been the property of the Japanese colonial government and included large areas owned by Japanese industrial enterprises. When the island was retroceded to China, all the lands formerly owned by Japanese nationals were expropriated by the Chinese Nationalist Government.

In May 1951 the Nationalist Government decided to sell public lands to farmers as the initial step in the implementation of the land-to-the-tiller policy. Prior to the sale, 60 per cent had been leased to tenants at a low rent, generally 25 per cent of the annual yield. The measures for the sale of public farmland for the creation of owner-farmers in Taiwan were approved by the Executive Yuan on May 30, 1951. Approximately 90,000 chia (216,000 acres) of public lands were offered for sale. Of the public lands retained for public use, the largest part was retained by the Taiwan Sugar Corporation for the growing of sugar cane, and the remainder was kept by various government departments and schools for their own specific uses.[12]

The public lands offered for sale were sold mostly to the original tenant farmers. The

12. T'ang Hui-sun, op. cit., p. 67.

423 price was fixed at 2.5 times the value of the annual main crop,[13] and was to be paid off in ten annual equal installments, each of which was not to exceed, including the land tax, 37.5 per cent of the value of the total annual main crop yield of the land purchased.[14] As the land value was appraised at 2.5 times the total annual main crop, each of the ten yearly installments would be 25 per cent of the total main crop yield, or the equivalent of the annual rent which the farmer had been paying as lessee before he made the purchase. So the transfer of ownership from the state to the tenant farmer was accomplished without increasing in the least the financial burden of the farmer.

The public lands were offered for sale in five groups from 1951 to 1953. A total of 63,000 chia (151,000 acres) or nearly 70 per cent of the total area designated for sale, was purchased by 77,211 families. The remaining 30 per cent of public lands were struck off the official list for sale because they were found to be too poor in fertility or lacked irrigation facilities for proper cultivation by

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13. Article VIII of the Measures for the Sale of Public Farmland for the Creation of Owner-Farmers in Taiwan.

14. Ibid., Article IX.

423private individuals.

C. Redistribution of Private Lands

As a basic preparation for the final consummation of the land-reform program -- the redistribution of the private lands -- a general landownership classification was undertaken by the Taiwan Provincial Government with the technical assistance of the Sino-American Joint Commission on Rural Reconstruction. "A total of 4,039,685 Land-Record Cards, involving 3,972,112 plots of registered land, of 1,046,892 Landownership Cards involving 829,864 families of landowners, and of 1,574,846 Joint Ownership Cards, involving 1,480,227 plots of land was compiled."[15] From the new Land-Record Cards new cadastral statistics were compiled to serve as a basis in mapping out projects for the redistribution of farmland. This gigantic undertaking was completed in June 1952. Mr. Worf I. Ladejinsky, the American expert on land problems who had planned the postwar land reform in Japan, was invited to Formosa for consultations. On July 24, 1952, in order to give the proposed program an added impetus, the Kuomintang passed a resolution to the effect

15. T'ang Hui-sun, op. cit., p. 100.

423 that a land-to-the-tiller program shall be enforced in Taiwan beginning from January, 1953; all Kuomintang members in responsible government positions shall regard this as the central task for the year, and all activities of the Kuomintang shall be effectively co-ordinated therewith.

The Land-to-the-Tiller Act was drafted by the Provincial Government on August 13, 1952, approved by the Executive Yuan on November 12, and enacted into law by the Legislative Yuan on January 20, 1953. Its main provisions are: (a) All tenant-cultivated land exceeding 3 chia (7.19 acres) of medium grade paddy field or 6 chia (14.38 acres) of medium-grade dry land[16] shall be purchased by the govenment for resale to the tenant farmers.[17]

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16. Farm lands in Formosa are classified into 26 grades according to their productivity. Lands from the 7th to the 12th grade are considered medium grade. If the acreage of land under self-cultivation already exceeds the retention limit, no portion of the tenanted land shall be retained by the landlord.

17. Article 10 of the Land-to-the-Tiller Act.

423 (b) The price of the land to be purchased by the government shall be calculated at two and a half times the total amount of its annual main crop yield, and the purchase price of the land shall be paid 70 per cent in land bonds redeemable in kind and 30 per cent in government enterprise stocks.[18] (c) Farm land purchased by the government shall be resold to the present tiller. The resale price shall be the same as the purchase price, plus 4 per cent interest, payable also in kind in ten equal annual installments.[19] The amount of land a tenant farmer may purchase is restricted by the same rule that applies to owner-cultivators. (d) The annual aggregate burden to be borne by the tenant-purchasers, namely, the annual installments of the purchase price, the interest, the land tax, surtax, water charge, and household tax, shall not exceed that presently borne by a tenant under the 37.5 per cent rent limitation program. (e) In case of crop failure due to natural causes, the tenant-purchaser may be permitted to defer the payment of the installment of that particular year. A 30 per cent postponement will be allowed in case the crop failure is less than 30 per cent; 50 per cent in case of crop failure

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18. Ibid., Articles XIV and XVI.
19. Ibid., Article XIX and XX.

less than 40 per cent; and 100 per cent postponement if the crop failure is over 50 per cent.[20]

Land Bonds in rice and sweet potatoes were issued by the Taiwan Provincial Government to pay for 70 per cent of the value of land to be acquired by the government for resale. Rice and sweet potato are the two principal farm products on Formosa, rice being raised in paddy fields and sweet potatoes on dry land. Rice Bonds are used to pay for the paddy fields and Sweet Potato Bonds to pay for dry land. It was estimated that 179,000 chia (429,000 acres) or 70 per cent of the tenanted land should be purchased by the government under the Land-to-the-Tiller Act, and so Land Bonds equivalent to 1,260,000 metric tons of rice and 440,000 metric tons of sweet potatoes was issued. The amortization of principal and the payment of interest are entrusted to the Taiwan Land Bank. The principal and interest of Rice Bonds are paid in rice, while those of Sweet Potato Bonds are paid in cash by conversion at the market price at the time of maturity of the installment.[21] Based on commodities, the value of Land Bonds is not subject to fluctuation

20. Ibid., Article XXVI.
21. Ibid., Article XI.

due to changes in the value of the currency. The other 30 per cent of the purchase price is paid by the transfer of the stocks of government-owned enterprises. The stocks of the Taiwan Cement Company, the Taiwan Paper and Pulp Corporation, the Taiwan Agriculture and Forestry Corporation, and the Taiwan Industrial and Mining Corporation were to be transferred to the landowners as part payment for land purchased.

The Land-to-the-Tiller Program was launched on February 1, 1953. A limit of one year was set for its completion. By the end of 1953, a total of 143,568 chia (344,104 acres) had been purchased by the government from 104,049 landlords and resold to 195,823 tenants and part-tenants. A total of Land Bonds equivalent to 889,123 metric tons of rice and 315,476 metric tons of sweet potatoes were actually issued. The Taiwan Cement Company, the Taiwan Paper and Pulp Corporation, and several plants belonging to the Agricultural and Forestry Corporation and to the Industrial and Mining Corporation have been sold to the landlords. The total value of government industrial stocks paid to landowners as

423 662 compensation amounts to NT$659,774,640.[22]

D. Urban Land Reform

423 In addition to the reform program for rural land, the Chinese Nationalist Government on August 26, 1954, issued regulations governing the equalization of urban land ownership. The aim of the new law is to curtail speculation by preventing the concentration of ownership and to tax the unearned profit from the rising price of urban land. The main features of the law are restriction of the acreage of land an individual or a body corporate may possess, and the levy of progressive taxes over the value of the land and its increment.

Under the new law a private landowner may not own more than one-tenth of a hectare

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22. This cash equivalent is obtained by converting the 30 per cent payment in rice and sweet potatoes according to the average market price of these two items in December 1952. To prevent the concentration of the stock of any one enterprise in the hands of large landowners, it is provided in the Rules Governing the Transfer of Public Enterprises to Public Ownership that the 30 per cent compensation to landlords would be paid seventy per cent with the government stocks of the Cement Corporation and the Paper and Pulp Corporation, and thirty per cent with those of two other corporations.

423 (0.248 acre) of urban land. Any excess portion should be sold in two years, after which period the hsien or municipal government could expropriate it at the assessed value. The area of urban land devoted to industrial use shall be determined according to the requirement in each case.[23]

423 As to taxation, the higher the price of
651 the land, the heavier will be the tax. The minimum is 1.5 per cent and maximu, 6.5 per cent. The land value increment tax is levied at the time of any transfer of ownership or at the completion of a ten-year period. Any increase of value from previous transfer shall be taxed progressively from 30 per cent to 100 per cent.[24]

423 It is estimated that 10,000 hectares (24,700 acres) of urban land throughout the province will be affected by the new regulations.[25] The steady growth of population, better communication facilities, and more prosperous industry and commerce have caused a great
[455] advance in land price. Urban land has become the object of speculation. The need for reform of urban land is as evident as the need for reform

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23. Article XXXIV and XXXV, Regulations Governing the Equalization of Urban Land Ownership.

24. Ibid., Articles XX and XXI.

25. United Nations, Economic Survey of Asia and the Far East, 1954, Bangkok, Feb. 1955, p. 89.

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423 of farm land. The provincial authorities have already assessed the value of land in various cities and towns, and the registration of architectural improvements has been completed. It is reported that the new measures will be enforced in June 1956.

III. ASSESSING THE REFORM PROGRAM

The results of the land reform program in Formosa are shown in the statistics tabulated below.

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Land Tenure 1949-53*
(One chia = 2.3968 acres)

Year	Owner-Cultivated Land	Tenanted Land	Land Retained For Public Use	Total
1949	450,224 (50.5%)	366,934 (41.1%)	74,531 (8.4%)	853,564
1950	458,359 (51.1%)	364,746 (40.6%)	74,531 (8.3%)	891,689
1951	492,255 (54.6%)	334,189 (37.1%)	74,531 (8.3%)	897,636
1952	517,059 (57.2%)	311,683 (34.5%)	74,531 (8.3%)	900,975
1953	681,346 (75.4%)	147,396 (16.3%)	74,531 (8.3%)	903,273

* T'ang Hui-sun, Land Reform in China (previously cited), pp. 14 and 18.

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Land Purchase by Tenant-Farmers 1949-53*

	Area (in chia)#	Number of New Owner-Farmers
Direct from owners	35,522	66,328
Public Land	63,000	121,953
Under Land-to-the-Tiller Act	143,568	194,823
Total	242,090	383,104x

* Land Reform in Free China, p. 18.

\# One chia = 2.3968 acres.

x This figure is not exact, because a tenant-farmer who has purchased two lots of land is counted twice. A commissioner of JCRR, Mr. William H. Pippin, recently announced that the number of new owner-farmers is 320,000 (Central Daily News, Taipei, October 22, 1955).

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Farm Land Before and After the Implementation of Land Reform*
(in chia)#

Public Land

	1949	1953
Retained by public bodies for their own use	74,531 (41.1%)	74,531 (41.1%)
Leased to tenants	106,959 (58.9%)	43,959 (24.2%)
Sold to farmers	- -	63,000 (34.7%)
Total	181,490	181,490

Private Land

	Dec. 1949	June 1952	Dec. 1953
Owner-cultivated	372,964 (55.5%)	418,503 (61.4%)	577,717 (84.8%)
Private-tenanted	299,395 (44.5%)	262,651 (38.6%)	103,437 (15.2%)
Total	672,359	681,154	681,154

* From Statistics compiled by the Provincial Land Bureau and Agricultural Yearbook, 1953 edition.

\# One chia = 2.3968 acres

423 From these summaries we can assume
427 that the land reform program not only has succeeded in doing away with the exorbitant rental that the Formosan tenants were obliged to pay, but has succeeded in changing 383,104 tenant-farmers to owner-farmers. In five years the area of tenanted land has been reduced from 41.1 per cent to 16.3 per cent of the total farm land. Land reform is certainly the most noticeable achievement of the Chinese Nationalist Government since the island reverted to its control.

The measures of land reform in Formosa are both moderate and equitable, and have been well supported by the general public, although some complaint and opposition did arise from the landlords who had been deprived of the opportunity to exploit their tenants and who had been forced to sell their surplus land to the government. But the interests of the landlords have not been altogether neglected. They are reasonably compensated, and to guard against the loss by possible inflation, they are repaid yearly with commodities, not with currency. Part of their compensation is paid with industrial stocks, thus turning capital investment from agricultural into industrial channels. They fare better than the large Japanese landowners. The Japanese Land Reform Act of 1946 was imposed by the Allied occupation forces. The landlords were paid with government bonds, the value of which

423 was entirely wiped out by subsequent devaluation
427 of the currency. The Formosan landlord should be especially contented, when he ponders the lot of his brothers on the Mainland. In sharp contrast with the moderate measures in Formosa, the Communists liquidate the landlords, confiscate their land, and make collective serfs of the peasants. The effect of the land reform in Formosa is expected to be more far-reaching than the economic betterment of the peasant class; it is an important asset of the Nationalist Government in anticipation of the liberation of the China Mainland.

423 In connection with the successful
241 redistribution of land in Formosa, it should be added, however, that we must not assume the economic problems of the Formosan farmers who comprise 52 per cent of the total population have been completely solved. First of all, the average size of the farm is too small for economic sufficiency, for 47 per cent of farmer families own less than 0.5 chia (1.2 acres) of farm land, 70 per cent own less than one chia (2.4 acres) and 93 per cent less than three chia (7.2 acres).[26] The average

26. From Statistics on Landownership Classification in Taiwan China, 1952, compiled by Provincial Land Bureau, Taipei, June 1952.

423 land owned by each farming family in Formosa
24 is 1.28 chia or 2.8 acres as compared with 215.3 acres owned by each farming family in the United States.[27] The small size of the farms limits the living standard and the purchasing power of Formosan farmers. Even the small parcel of land owned by the average farmer is threatened with further partition on account of the enormous rate of natural increase in population. The average size of farms on Formosa has decreased from nearly 2 chia (.5 acres) in 1937 to the present 1.3 chia. Unless industrialization of the island can divert members of the growing farming families to industrial enterprises, the size of farmland per family will be further reduced through inheritance and will become too small to maintain even a marginal subsistence. It will be indeed a serious situation. Furthermore, for lack of capital, and relying principally on human labor, the efficiency of Formosan farming is low, and the cost of production is
387 high. The soil of the western coastal plain is
24 alluvial, lacking sufficient humus to be fertile. Fertilizer is needed to increase its productivity.[2]

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27. Report of United States Bureau of the Census for 1950.

28. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop, whereas in Japan, the figure is 66 to 98 pounds.

387 The Chinese Nationalist Government with
241 American aid has made special effort to expand the production of fertilizer in the past five years[29] and make it available to the farmer through the Land Bank of Taiwan and the farmers' associations. The Kaohsiung Ammonium Sulfate Corporation reduced the selling price of fertilizer, from NT$3,100 to NT$2,800 per metric ton in June 1954 and then to NT$2,200 in August 1954. But the present production still falls short of the estimated annual requirement of 740,000 metric tons.[30]

241 At present, farm mechanization is in
407 its infancy. Little power is employed in agricultural production. Farm implements are crude and clumsy; they do not plow deeply and evenly, and so the distribution and the depth of the seeds sown are not uniform. The Sino-American Joint Commission on Rural Reconstruction is sponsoring many projects to

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29. Production was increased from 45,840 metric tons in 1949 to 168,491 metric tons in 1954.

30. The amount of fertilizer actually used in 1952 was 535,801 metric tons-- (732,600 short tons), JCRR General Report IV, Taipei, 1953, p. 55.

241 improve the designs of local farm implements --
409 the plow, the hoe, the sickle and the rice thresher; it is also introducing the use of hand-operated semi-automatic sprayers and rotary dusters. A demonstration of mechanized farming was made on an abandoned pineapple farm in Laopei. It was found that, with deep sub-soiling and deep plowing by a tractor, the cost of production can be reduced from 35 to 40 per cent. This clearly proves that land reform is but one step toward the amelioration of the economy of the farming population in Formosa. In order to raise the standard of living of the farmer, when the arable area is limited and the average holding is small, the per unit and per capita yield must be increased. To enhance a program of productive efficiency, which would include the application of greater amounts of fertilizer, the mechanization of the farms, and other improvements of agricultural techniques, the farmer himself must learn these modern methods in order to increase the value of the land he holds.

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Annex "A," Subparagraph 3a,
Economic Background

AGRICULTURE

I. INTRODUCTION

241 162a 431 Formosa's economy is predominantly agricultural. Household registration in 1950 indicates that of a gainfully employed male population of 2.1 million, roughly 57 per cent were farmers.[1] The Taiwan Agricultural Yearbook reports that about 52 per cent of the total population in 1953 were directly dependent on agriculture for a living.[2] Approximately 49 per cent of the total national income in 1951 was derived from agriculture.[3]

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1. George W. Barclay, A Report on Taiwan's Population, Princeton, Princeton University Press, 1954, p. 59.

2. Provincial Government of Taiwan, Taiwan Agricultural Yearbook, 1954, Taipei, 1954, p. 1.

3. Industrial Development Commission, Economic Stabilization Board, Industry of Free China, November 1954, Vol. 2, No. 5, Taipei, p. 7. Agriculture is defined to mean all productive activities involved in farming, livestock-raising, forestry, and fisheries.

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241 The importance of agriculture to the national
434 economy is made more obvious by the fact that a large percentage of Formosan industries involve the processing and transporting of agricultural commodities. Agriculture products also provide an important source of foreign exchange for the island. In 1953, total
[43] exports amounted to approximately US$130,000,000, of which over 90 per cent was derived from the export of agricultural products.

241 The climate in Formosa is eminently suitable for agricultural production. The tropical and sub-tropical atmosphere and abundant rainfall in most parts of the island encourage the cultivation of rice, sweet potatoes, sugar cane, tea, bananas, and vegetables. Rice cultivation is carried on in all parts of the island; sugar cane, sweet potatoes, and peanut are grown in the central and southern sections; tea is cultivated in the northern districts.

648 During the Japanese occupation of
241/ Formosa, the policy of economic development was geared to the economic needs of the Japanese Empire. When a shortage of rice was felt in Japan, rice was produced in

648 241 greater abundance in Formosa. Japan's inability to purchase sugar in the international market was balanced by the great quantity of sugar produced in Formosa. Japan's greatest economic efforts on the island were concentrated upon agricultural production in order to exploit to the full Formosa's agricultural potential.

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Table 1. Crop Production, 1902-1939*

	Arable Land (1,000 ko)	Rice (1,000 koku)	Sugar Cane (million kin)	Sweet Potatoes (million kin)
1902	451	2,821	1.1	501
1925	780	6,443	8.8	1,909
1939	886	9,152	21.4	2,132

* Taiwan keizai nenpo, 1941 [Taiwan Economic Annual, 1941], Tokyo, Taiwan keizai nenpo kankohai, 1941, Appendix. One ko = one chia; one ko = 0.961 hectare. Koku is a Japanese measure of volume. One koku of brown rice weighs approximately 188 kilograms. One kin (Taiwan catty) = 1.31 pounds, or 0.597 kilogram.

II. ARABLE LAND

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The amount of arable land available for agricultural production was more than doubled during the period of Japanese rule. With improved production techniques and methods of irrigation, there was a twentyfold increase in sugar cane, a fourfold increase in sweet potatoes, and a threefold increase in rice production. The production of pineapple increased over a hundred times.

By 1936, Japan turned its efforts toward the development of industry on Formosa. This was due, in part, to wartime needs as well as to the fact that the development of available arable land had reached its limit. Yet agricultural production under the Japanese set a record that required more than five years' effort after World War II to surpass.

Today, it is generally believed that Formosa has exhausted the possibilities of its arable land. However, if better fertilizer, improved seed, new farming techniques, and adequate pest control are introduced, it

[433] would seem possible for the island to produce
311 more food to meet the needs of an increasing population. It is also possible that irrigation projects, now in the planning stage or but recently begun, may increase the amount of irrigated land available.

Table 2. Cultivated Land*
(1,000 hectares)

	Paddy Fields	Others	Total
1945	504.7	311.3	816.0
1949	528.1	336.8	864.9
1953	533.3	339.4	872.7

* Taiwan Provincial Government, Taiwan Agricultural Yearbook, 1954, Taipei, 1954, p. 20.

Steep and rugged mountains cover the major portion of Formosa. The island's total land area has been estimated at 3,596,000 hectares, of which only 24 per cent is considered suitable for agricultural purposes. For the past eighteen years, the

311 total arable land has remained more or less constant, in spite of the fact that some land along the eastern coast of the island as well as some 300,000 hectares of grass land in the mountains might be developed either for crops or as grazing land if the expense of such projects did not seem to indicate that the cost would be prohibitive.[4] When the [65] Shihmen dam and reservoir project is completed, waste land on the banks of Tanshui River can be converted into paddy fields. It is believed that the completion of the dam will make possible the reclamation of at least 54,000 hectares.[5]

241 Paddy fields constitute about 60 per cent of the total cultivated land in Formosa. They are classified in two categories -- double-cropping fields and single-cropping fields. The former yields two crops of rice each year. Between rice crops, one crop of vegetables is planted and harvested. In single-cropping fields, besides one crop of

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4. Table 196, "Summary of Statistics of Taiwan for the Past Fifty-one Years," Taiwan Agricultural Yearbook, 1954, p. 20.

5. Chung-yang Jih-pao [The Central Daily News], Taipei, July 1, 1955.

241 rice, one or two crops of sweet potatoes, peanuts, wheat, or flax are planted, the number depending upon the time necessary for the harvest. The fertility of the soil is heavily taxed by the practice of multiple-cropping, and the intensive use of fertilizer is necessary. Ch'en Cheng-hsiang places the index of multiple-cropping at about 160 per cent -- the ratio of crop area to cultivated area.[6]

III. FARM PRODUCTIVITY

241 432 The productivity of Formosan farmland seems to depend upon the intensity of cultivation. It has been reported that the average yield per chia of both first and second

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6. Ch'en Cheng-hsiang, T'ai-wan T'u-ti Li-yung [Land Utilization in Taiwan], Taipei, National Taiwan University and Joint Commission on Rural Reconstruction, 1950, pp. 95-96. The per cent quoted is an average for the period 1938-42. The index may be slightly higher in recent years as the land is utilized to greater advantage and the practice of multiple-cropping is used to increase production.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 3 faces p. 536.)

Table 3. Selected Crops - Yield Per Hectare*
(in kilograms)

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	Prewar Peak Years	1945	1949	1950	1951	1952	1953	1954
Rice	2,242 (1938)	1,273	1,624	1,845	1,882	1,998	2,109	2,183
Sweet Potatoes	12,734 (1937)	8,650	9,172	9,443	8,737	8,953	9,576	10,459
Sugar Cane	78,860 (1939)	38,628	50,606	48,064	45,237	49,003	74,136	
Wheat	628 (1941)	296	720	1,042	1,058	1,139	1,058	1,403
Crude Tea	375 (1917)	61	283	279	294	305	305	291
Soybean	520 (1922)	264	594	618	577	602	617	683
Jute	667 (1939)	326	797	766	894	1,242	787	

* Taiwan Agricultural Yearbook 1954, Taipei, 1954, pp. 1-81. Yields for the prewar peak years are calculated by the author from the same source. The 1954 figure are from China News Press, China Annual 1954, Taipei, 1954, Vol. 3, pp. 6-7.

(facing p. 536)

241 rice crops tends to decrease as the size of
433 the farm increases.[7] The smaller the farm, the more intensive the cultivation, the higher the yield. Productivity also varies according to the fertility of the land and the efficiency of the cultivation.

241 As a rule, farmers on the island do not regard farming as a source of profit but as a means of insuring the subsistence of their families.[8] Those who make their livelihood by growing rice will continue to grow rice even when other crops seem to offer a greater margin of profit. To them, rice is their sole security, and they use rice to pay their taxes, to barter for other commodities, and to feed their families. Rice becomes "money in the bank."

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7. The chia is a local measure of land area = 2.4 acres.

8. Bank of Taiwan, Economic Research Department, T'ai-wan Yin-hang Chi-k'an [Bank of Taiwan Quarterly], Vol. 5, No. 4, March 1953, Taipei, pp. 1-27.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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433 The yield per unit area of various crops has been increasing steadily since 1945. However, the highest yields in the postwar years are lower than the highest yields in the prewar period. Any number of reasons has been advanced to explain this failure to regain prewar productivity. Less chemical fertilizer is available at present. Lack of funds has postponed extensive development of arable land. The percentage of spoilage each year is high because storage facilities are inadequate. Serious losses have been caused by insects and blight. When these problems are solved, according to the Joint Commission on Rural Reconstruction, the yield per hectare can be increased, as follows:

	Feasible Goals (kg. /hectare)
Rice	2,500
Sweet Potatoes	13,000
Peanuts	1,000
Sugar	10,000
Crude Tea	500
Bananas	12,000
Pineapples	14,000

These goals represents increases in per hectare yield of amount varying between 10 and 50 per cent of highest yields achieved in

241 438 the postwar years. These goals can be attained without the expansion of present planted acreage and are more optimistic than the goals contemplated for 1956 in the Formosan Four-Year Plan.[9]

If the per unit yield can be increased and additional land is made productive, there is no reason why Formosa cannot substantially expand its yearly production. Rice is now planted on approximately 780,000 hectares of land; upon the completion of Shihmen dam and reservoir, it will be possible to grow rice on 835,000 hectares. If the yield per hectare is 2,500 kilograms, the total yield will be 2,100,000 metric tons, enough to feed 14 million people.[10]

IV. FARM MECHANIZATION

241 407 As in most undeveloped countries, agriculture in Formosa is conducted on a primitive basis. The average farmer has only

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9. The Four-Year Plan, begun in 1952, is designed to bring about the economic independence of Formosa by increased production in agriculture and industry.

10. The Central Daily News, July 1, 1955.

(continued next page)

241 his strong back and a few simple implements.
407 If he is fortunate, he owns a water buffalo. The Taiwan Sugar Corporation owns 500 tractors, but this is the only large-scale use of farm machinery on the island. Mechanization would help to increase farm yields, but many difficulties are presented by the small size of the fields and the many natural obstacles to any plan which calls for the co-operative use of farm machinery. Moreover, private ownership of tractors or other modern farm implements is prohibitively expensive, and the farmer has no experience in repair and maintenance of such machines. On the other hand, water buffaloes are of value to the farmer as a source of fertilizer, meat, and hides.[11] Additional study is necessary to determine whether extensive mechanization of agriculture would be economical for Formosa.

V. DOMESTIC CONSUMPTION

241 Formosa, as a rule, has produced
438 sufficient agricultural products to meet the

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10. (continued) The Shihmen dam and reservoir will increase the irrigated land in Formosa by approximately 55,000 hectares.

11. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 38.

241 433 demands of domestic consumption. Surplus rice is exported each year, and the supply of vegetables is considered adequate. Meat is expensive, and the ability to buy meat [262] determines socio-economic position in Formosan society. Data on dietary habits, 146 433 caloric requirements, and so forth are not available, probably because extensive surveys have never been conducted on the island. There is no way of ascertaining basic food requirements to maintain a desirable nutritional level.

433 The Provincial Food Bureau has estimated the per capita rice requirement for civilians to be 143.4 kilograms, and for the military, 308 kilograms. (These figures do not provide for surplus storage, waste, spoilage, or seeds.) Rice requirements for the next ten years may be estimated as indicated in Table 4. Note that the size of the military force on Formosa is assumed to remain constant (600,000).

45:Stanford U. S-4, 5 1956 ADI Formosa
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Table 4. Rice Requirements for 1955-56*
(in 1,000 metric tons)

Year	Estimated Population (1,000)	Civilian Rice Requirements	Military Rice Requirements	Total Requirements
1955	10,400	1,405.3	184.8	1,590.1
1956	10,712	1,450.1	184.8	1,634.9
1957	11,033	1,496.1	184.8	1,680.9
1958	11,364	1,543.6	184.8	1,728.4
1959	11,705	1,592.4	184.8	1,777.2
1960	12,056	1,642.8	184.8	1,827.6
1961	12,418	1,694.7	184.8	1,879.5
1962	12,790	1,748.1	184.8	1,932.9
1963	13,174	1,803.1	184.8	1,987.9
1964	13,569	1,859.8	184.8	2,034.6
1965	13,976	1,918.2	184.8	2,103.0

45;Stanford U. S-4, 5 1956 AD1 Formosa
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* The estimated population for 1955 is based on the study of population in this handbook. Population for subsequent years is calculated on the assumption that annual increase will be approximately 3 per cent.

The civilian population is each year's population minus a constant armed forces of 600,000 men. Per capita rice consumption is assumed to be 143.4 kg. a year. Military per capita rice consumption is 308 kg. a year. These per capita estimates are based on statistics furnished by the Provincial Food Bureau.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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433 Since Formosa produces as much as 1,700,000 metric tons of rice each year, there is no reason why the island cannot maintain its present surplus until 1958, provided that nothing affects productivity. After 1958, there will be a shortage of rice, unless productivity is increased. If per hectare yield should be increased to 2,500 kilograms per year, and planted acreage expanded to 835,000 hectares, as has been projected in the Four-Year Plan, Formosa's annual rice supply will be sufficient for domestic consumption until 1965.

VI. MAJOR CROPS

24/43 The most important food crops produced on Formosa are rice and sweet potatoes. These two crops in 1953 accounted for approximately 60 per cent of total production (rice, 52.8 per cent; sweet potatoes, 7.2 per cent). Of special crops, sugar cane accounted for 13 per cent, vegetables, 3.2 per cent, peanuts, 1.8 per cent, crude tea, 1.5 per cent, tobacco, 1.2 per cent, and bananas, 0.8 per cent.[12]

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12. Taiwan Agricultural Yearbook 1954, Taipei, 1954, pp. 30-31.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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231 The raising of hogs is Formosa's third most profitable endeavor, only surpassed by the annual crops of rice and sugar cane. Pork and fish are the major sources of protein in the diet of the islanders. The annual production of various agricultural produce is presented in Tables 5, 6 7, and 8.

45;Stanford U. S-4, 5 1956 AD1 Formosa
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Table 5. Food Production*
(in 1,000 metric tons)

	Rice	Sweet Potatoes	Soybeans	Peanuts	Wheat
1937	1,319	1,770	6	32	1
1938	1,402	1,726	6	28	1
1939	1,307	1,279	4	28	6
1940	1,129	1,512	3	29	4
1941	1,199	1,693	3	22	7
1942	1,171	1,556	3	13	6
1943	1,126	1,406	3	10	2
1944	1,068	1,521	5	12	2
1945	639	1,165	2	12	1
1946	894	1,331	4	37	1
1947	999	1,783	10	47	4
1948	1,068	2,003	12	53	6
1949	1,215	2,166	12	53	10
1950	1,421	2,201	13	57	19
1951	1,485	2,021	13	61	15

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45:Stanford U. S-4, 5 1956 ADI Formosa
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1952	1,570	2,090	15	60	17
1953	1,642	2,277	17	60	14
1954	1,695	2,324	17	67	15
1955	1,633	2,290	24	70	19

* Data for the years 1937-53, from Foreign Operations Administration Mission to China, Taiwan Economic Data Book, Part II, Volume III, Taipei, 1955; for 1954, from Industrial Development Commission, Industry of Free China, Vol. 3, No. 4, April 1955, Taipei; for 1955 from the Central Daily News, February 3, 1956.

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45:Stanford U. S-4, 5 1956 ADI Formosa
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Table 6. Commercial Production*

	Sugar Cane	Tea	Citronella	Jute
	(in 1,000 metric tons)			
1937	8,563	13	-#	9
1938	9,061	13	-*	14
1939	12,822	14	-*	15
1940	9,977	12	273	11
1941	8,392	12	174	7
1942	10,250	12	319	11
1943	10,092	8	201	7
1944	8,468	4	35	4
1945	4,159	1	29	2
1946	1,007	3	12	1
1947	796	7	61	3
1948	3,116	8	213	11
1949	6,194	10	380	9
1950	5,861	10	762	7
1951	3,585	10	1,274	11

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1952	4,801	12	2,561	20
1953	8,394	12	2,527	5
1954	6,130	13	-	12
1955	-	14	-	19

* Data for 1937-53, Taiwan Economic Data Book, Part II, Volume III; for 1954, Industry of Free China, Vol. III, No. 4, March 1955; for 1955, the Central Daily News, February 3, 1956.

\# February 3, 1956 not available.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Table 7. Production of Fruit*

	Pineapple	Banana	Citrus
	(in 1,000 metric tons)		
1937	108	219	33
1938	116	202	36
1939	146	182	35
1940	129	169	32
1941	130	191	39
1942	116	196	34
1943	94	142	29
1944	43	65	21
1945	18	32	17
1946	17	53	20
1947	40	124	25
1948	39	110	28
1949	43	98	27
1950	46	117	28
1951	52	100	27

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1952	63	107	28
1953	68	96	29
1954	62	109	31
1955	64	90	33

* Data for 1937-53, from Taiwan Economic Data Book, Part II, Volume III; for 1954, from Industry of Free China, Vol. III, No. 4 April 1955; for 1955 from the Central Daily News, February 3, 1956.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 8 follows p. 550.)

Table 8. Production of Livestock*
(in 1,000)

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	Hogs	Cattle	Chickens	Ducks
1937	1,849	358	7,073	1,958
1938	1,827	325	7,095	2,023
1939	1,653	325	6,680	1,931
1940	1,205	300	-#	-
1941	1,158	309	-	-
1942	1,358	312	-	-
1943	1,257	325	4,543	1,896
1944	862	331	3,837	1,358
1945	578	291	3,998	1,136
1946	768	280	4,555	1,647
1947	1,006	298	5,119	2,247
1948	1,167	310	4,525	1,985
1949	1,362	357	4,989	2,217
1950	1,620	365	5,143	2,547
1951	2,262	375	5,387	2,991
1952	2,611	383	5,593	2,912
1953	2,820	390	6,165	3,103

* Data on hogs and cattles are from Taiwan Economic Data Book, Part II, Vol. III; on chickens and ducks 1937-39, from Taiwan keizai nenpo 1941 [Taiwan Economic Annual 1941]; for 1943-53, from Taiwan Agricultural Yearbooks.

\# Not available.

[table 8 follows p. 550]

45:Stanford U. S-4, 5 1956 AD1 Formosa
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A. Production of Rice

433 The production of rice has increased steadily in the postwar years; production in 1950 exceeded the 1938 production level peak achieved by the Japanese. However, because relatively less fertilizer is available for use, the per hectare yield of Formosan fields has not reached the record yield of 2.242 kilograms achieved under Japanese rule. Rice exports have been sacrificed to meet the domestic requirements of the swelling population of the island. In 1938, nearly 50 per cent of the 1.4 million metric tons of rice produced was exported; in 1954, only 36,000 metric tons of rice were available for export in spite of the fact that nearly 1.7 million metric tons were produced in that year. Such a drastic decrease in rice export has affected the dollar reserves of the Formosan people and made it difficult for the country to import the industrial goods necessary for continued economic development.[13]

243 Rice and sugar cane, the two most
249 valuable crops, compete for use of land

13. Industrial Development Commission, Industry of Free China, Vol. 3, No. 6, June 1955, p. 80 .

243 resources. Since rice cultivation and
249 harvesting takes about four months and sugar cane takes anywhere from fifteen to seventeen months before it can be harvested, rice has gradually taken the lead. Competition for land is especially keen in the area near Taichung, where paddy fields can be used either for the cultivation of rice or of sugar cane.

243 There are four main types of rice grown on Formosa -- Ponlai rice, native rice, upland rice, and glutenous rice -- and many varieties. Ponlai rice was introduced in Formosa during the Japanese occupation because it suited the tastes of the Japanese. It remains the most popular type of rice cultivated on the island because it has a high yield and good milling quality. Ponlai rice accounts for approximately 55 per cent of current rice production.

B. Production of Sweet Potatoes

244 Sweet potatoes are the second most important food stuff produced on Formosa. They are a staple of diet and are also used as raw material for alcohol and yeast as well as for hog feed. The major part of the annual
251 crop of sweet potatoes is sun-dried to produce chips which can be stored with minimum waste.

C. Production of Sugar Cane

249 648 433 Sugar cane is the raw material for Formosa's sugar industry. Postwar increase in production is all the more remarkable since in the years before the war the Japanese did all they could to exploit the potentialities of sugar cane production to meet the sugar requirements of Japan proper.

Sugar cane is usually planted in the summer June to September. About a year and a half are required before the cane is ready for harvest. Under the International Sugar Agreement concluded in London in 1953, Formosa is permitted to export 600,000 metric tons of sugar annually. Government policy has been adapted to meet this quota and allow for domestic consumption. Land once used for sugar cane is now being used to produce other products.

D. Production of Wheat

243 433 Wheat produced on Formosa accounts for less than one per cent of the total value of the island's farm production. For this reason it has been generally believed that Formosa lacks the conditions suitable for

243 optimum wheat production. Postwar research
433 has proved that wheat can be grown between rice crops in the regions centering on Taichung, Changhua, and Tainan, and the amount of land given to wheat production has been increasing gradually.

E. Production of Tea

245 About 90 per cent of the tea produced
433 on Formosa is exported to American and European markets. The production of tea and its planted acreage has been more or less constant since 1880. Commercial growing of tea began about 1865, and there are three major groups -- Paochung, Oolong, and black -- which are most successfully grown on the island.

VII. FORESTRY

313 Forests cover about 64 per cent of
433 the total area of Formosa because abundant rainfall is favorable to the growth of trees. The island's forests furnish all domestic lumber and prevent erosion in mountainous areas. Forestry products accounted for approximately three per cent of the total value of all goods produced in 1953. The total timber reserve, as of 1954, was estimated

313 at approximately 202,258,000 cubic meters.[14]
433 Broadleaved trees account for about 65 per cent of this reserve; the remainder is made up of coniferous trees. Only 4.3 per cent of the reserve is privately owned; about 90 per cent is owned by the government, which maintains complete control of the island's forestry. It is estimated that about 1,000,000 cubic meters of timber may be cut annually without impairing the total reserve. Production of timber in 1953 was estimated at 515,000 cubic meters; in 1954, at 546,000 cubic meters. Government policy has been to cut less than 50 per cent of available timber, and the government's reforestation program assures that an area equivalent to the timberland cut is replanted each year.[15]

VIII. FISHERIES

208 There are four main categories of
433 fisheries on Formosa -- deep sea, inshore,

14. Ibid., No. 3, March 1955, p. 104.
15. Ibid., p. 106.

MC: Stanford U. 3-4, 3 1956 ARI Formosa ARI

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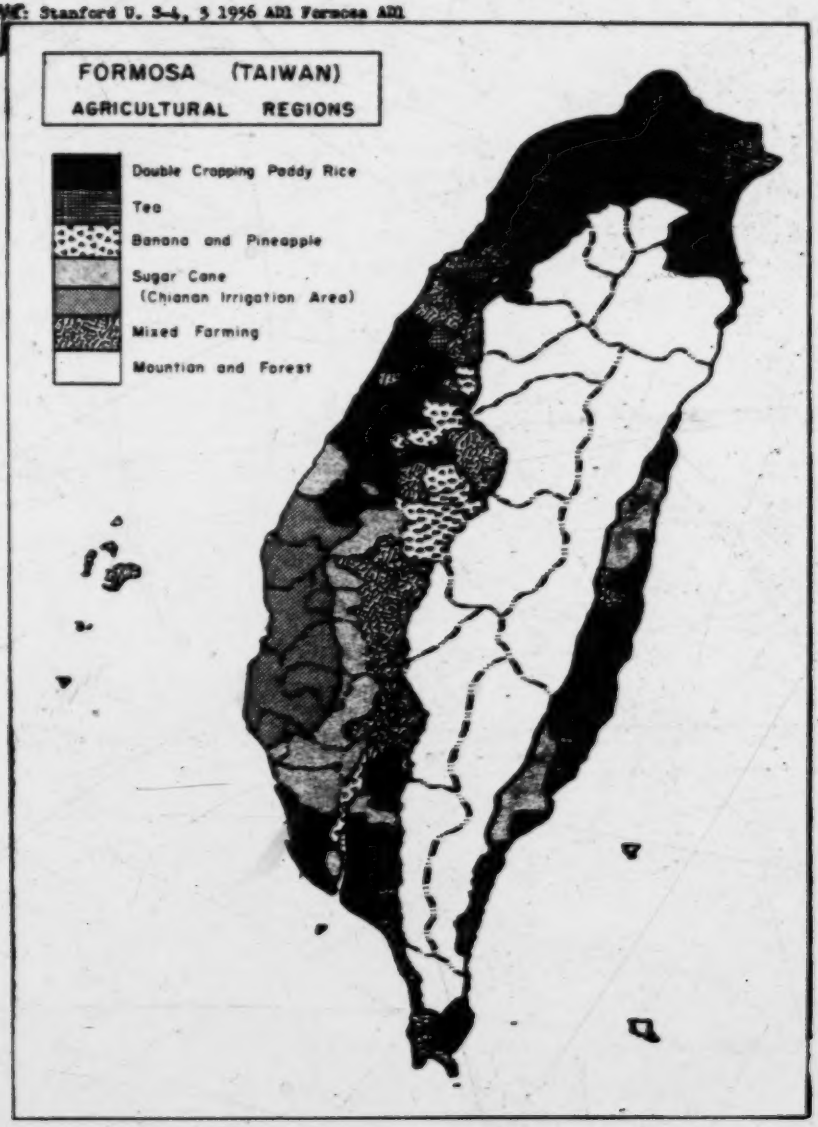

[Facing p 564]

45:Stanford U. S-4, 5 1956 AD1 Formosa
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coastal, and fish culture. Coastal fishing is most important, since it furnishes more than 50 per cent of the fish catch every year and serves as a source of income for over 140,000 fishermen -- approximately 61 per cent of the population who earn their living in the various fishing industries.[16]

Fishing has become an increasingly valuable part of the island's economy (see Table 9). More efficient methods have been introduced, there are a greater number of powered fishing vessels available today, and a large area is under culture. However, annual production still falls short of the minimum per capita consumption requirements, estimated to be approximately 42 grams per day. Only in the year 1954, when production was approximately 152,500 metric tons, was the minimum requirement reached. Further increases are necessary, for the optimum per capita consumption is estimated to be as high as 84 grams per day. Neither coastal fishing nor fish culture can be increased substantially. The Formosan government must find means to encourage deep-sea and inshore fishing.

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16. China Annual 1954, Vol. 3, p. 86.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 9 follows p. 556.)

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Table 9. Production of Fish*
(in 1,000 metric tons)

	Total	Ocean Fish Catch			
		Deep Sea Fisheries		Coastal fisheries	Fish culture
		Government	Private		
1936	93.0	26.0		52.0	15.0
1937	94.0	30.0		48.0	16.0
1938	90.0	34.0		39.0	17.0
1939	98.0	40.0		43.0	15.0
1940	119.0	57.0		52.0	10.0
1941	85.0	28.0		45.0	12.0
1942	68.0	21.0		33.0	14.0
1943	47.0	5.0		32.0	10.0
1944	23.0	1.0		16.0	6.0
1945	17.0	-#		12.0	5.0
1946	51.0	2.6	0.4	38.0	10.0
1947	62.0	3.0	-	44.0	15.0
1948	83.0	2.7	4.3	51.0	25.0
1949	80.0	2.9	2.1	52.0	23.0
1950	84.0	6.1	5.9	47.0	25.0
1951	104.0	10.4	5.6	63.0	25.0
1952	122.0	10.9	6.1	74.0	31.0
1953	130.6	14.6	9.6	67.9	38.6
1954	152.5	14.5	12.5	83.9	41.6

* FOA Mutual Security Mission to China, Taiwan Economic Data Book, Part II, Vol. 3, Taipei, 1955.

\# Not available.

[Table 9 follows p. 556]

Stanford U. S-4, 5 1956 AD1 Formosa ADR

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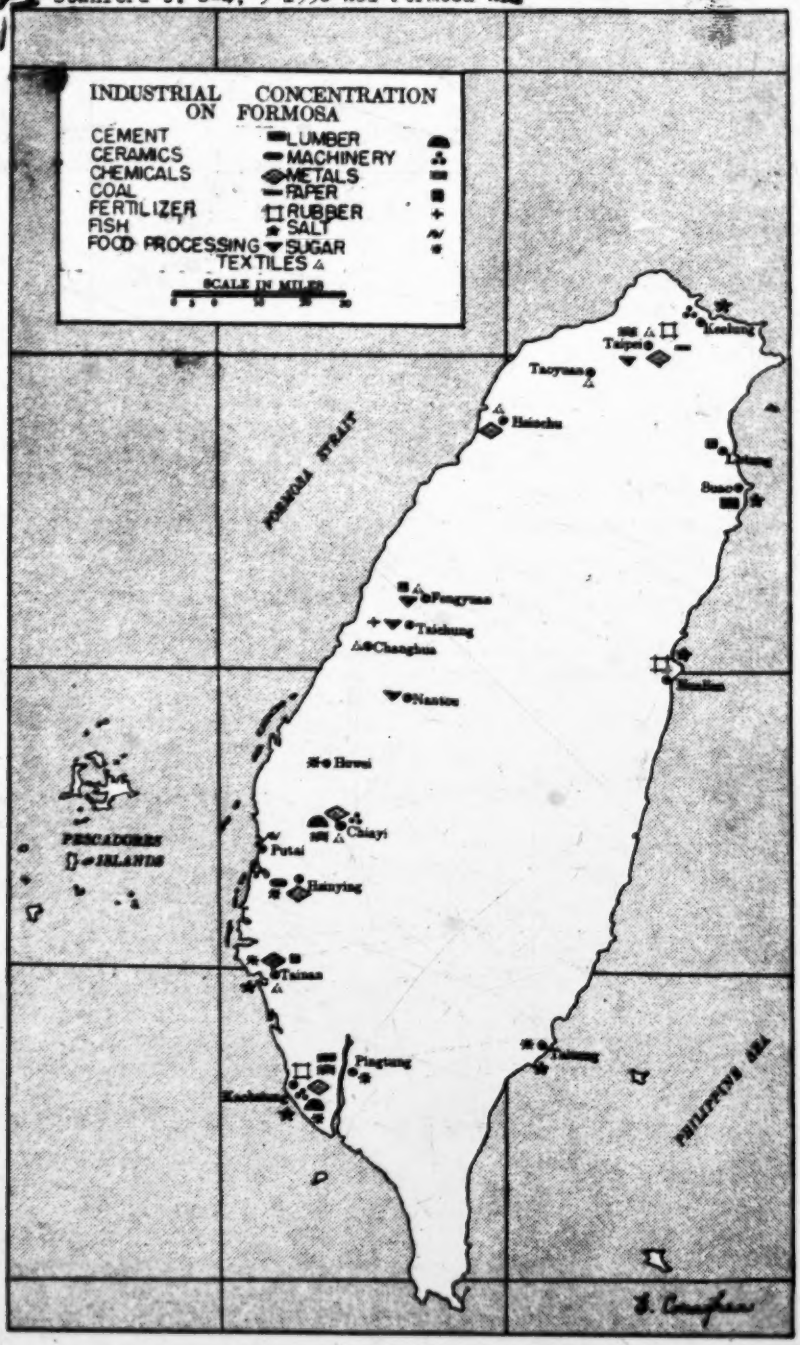

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45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3b,
Economic Background

INDUSTRY

A GENERAL SURVEY

178 Formosa's industry during the Japanese occupation was geared to the needs of Japan. Prior to 1936 the chief feature was agricultural expansion accompanied by the improvement of transportation facilities. Formosa was to grow rice and sugar, to make up the 20 per cent deficiency in Japan . The aborigines were pushed further inland by force, and a great deal of new land was brought under cultivation. Japanese services and goods, ranging from fertilizers to patent medicines and textiles, were forced on Formosa. No secondary industries of consequence were permitted on the island. From 1936 to the end of World War II, the major emphasis was on industrialization, and Formosa was transformed into a base of operations for Japan's southward expansion. Many new chemical and metallurgical plants were established either by the government or by Japanese corporations with the assistance of the government. Power-generation[1] was expanded from 501 million

1. Economic Data Book, Vol. II, mimeographed copy by FOA Mutual Security Mission to China, Taipei, Jan. 1954, p. 146.

178 kilowatt-hours in 1936 to 1,195 million kilowatt-hours in 1943. Aluminum factories were built at Kaohsiung and Hualien, the combined production of which was 12,000 metric tons in 1942, one-eighth of the total production of the Japanese empire.[2] An oil refinery was constructed in Kaohsiung in 1942 for the use of the Japanese Navy. The largest single investor was the Government-General. "By 1939, 90 per cent of all the capital invested was held by the government and government-backed Japanese; the remaining 10 per cent, held by Formosans, was mostly invested in small shops."[3] Sugar accounted for 54.5 per cent of all exports[4] from Formosa in 1937. Taiwan Seito was the largest of the four sugar companies, and the Japanese imperial family was its principal shareholder.

178 Most of the machinery of the new industrial 179 plants were either made in Japan or had been used in Japan for a number of years. During the war, industrial production was at the breaking point. Machinery and equipment which had become obsolete were not replaced and

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2. Ibid., p. 123.

3. Taiwan: A Geographical Appreciation, published by the Department of Mines and Technical Surveys, Canadian Government, Ottawa, Canda, 1952, p. 16.

4. E.B. Schumpter, The Industrialization of Japan and Manchukuo 1930-40, New York, Macmillan Co., 1940, p. 295.

727 were rapidly worn out. After 1943, Allied
178 aerial attacks dealt them a further crippling blow.

At the time of Japan's surrender it was found that thirty-four of the forty-two sugar mills in Formosa had been reduced to ruins by American bombing. The oil refinery at Kaohsiung suffered 800 bomb hits. The generating capacity of the Western Power System at Sun-Moon Lake was reduced from 308,000 kilowatts to 32,000 kilowatts. The mills of the Taiwan Pulp and Paper Corporation were damaged -- 50 per ent of the buildings and 30 per cent of the machinery -- by Allied aerial bombings.[5]

471 On August 14, 1945, Japan surrendered to the Allies, and Formosa was restored to China. The Chinese government took over all the industrial enterprises previously owned by Japanese nationals. Some of these, including printing houses, match and food

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5. Industrial Enterprises of National Resources Commission in Taiwan -- General Information, National Resources Commission, Taipei, 1951.

47/factories, and some sixty coal mines, were sold to private owners. The rest were grouped under the management of eighteen public corporations, operated either by the National Government or by the Provincial Government, or by the two jointly.[6]

Industries that were operated by the National Government were:

(1) Chinese Petroleum Corporation
(2) Taiwan Aluminum Works
(3) Taiwan Gold and Copper Mining Administration
(4) Chinese Salt Corporation
(5) Hsinchu Coal Mining Administration
(6) Taiwan Steel Works

The industries operated jointly by the National and Provincial governments were:

(7) Taiwan Power Company
(8) Taiwan Sugar Company
(9) Taiwan Fertilizer Company
(10) Taiwan Cement Company

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6. Han, Lih-wu, Taiwan Today, Taipei, Hwa Kuo Publishing Co., revised edition, 1952, pp. 106-07.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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(11) Taiwan Pulp and Paper Corporation
(12) Taiwan Shipbuilding Company
(13) Taiwan Machinery Manufacturing Corporation
(14) Taiwan Alkali Company

Those operated by the Provincial Government were:

(15) Taiwan Industry and Mining Corporation
(16) Taiwan Camphor Bureau
(17) Taiwan Tobacco and Wine Monopoly
(18) Taiwan Agricultural and Forestry Development Corporation

These public trusts replaced the government monopolies and the government-backed corporations under Japanese control. The preponderance of public enterprise on Formosa often amazed visitors, but the economic structure was dictated by circumstance rather than by choice. The editor of Industry of Free China[7] gave the following explanation for the existence of the huge government corporations:

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7. Industry of Free China, a monthly published by the Industrial Development Commission, ESB, Vol. I, No. 4, Taipei, April, 1954.

471 1. During the Japanese occupation, all modern industries on Formosa were owned by the Japanese, and, as enemy property, they passed under the control of the Chinese government.

2. Many public enterprises on the Mainlan were evacuated to Formosa with the withdrawal of the Nationalist Government to the island.

3. Allied bombings had caused the widespread destruction of industrial plants. Extensive repairs were necessary. Only the government with immense resources was able to undertake such extensive rehabilitation.

4. Formosans had been given only secondary positions in industries by the Japanese. They had neither the experience required to manage large-scale enterprises nor the capital needed to finance operation.

178 With the economic and technical assistance provided by the United States, systematic repairing and reconstruction of the damaged industries in Formosa were carried out by the concerted efforts of the Nationalist Government. By 1950 most of the plants have been put back into production. Since 1950 the industrial advance has been

rapid. From the state of disintegration of 1945 and 1946, some industries are now operating at levels approximating the peak production reached under the Japanese, and a few such as cement, petroleum refining, and chemical fertilizers, are exceeding it. "It would not be praising their achievement too highly to compare the result of their reconstruction work with the best in devastated Europe."[8]

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8. H. Maclear Bate, Report from Formosa, London, Eyre and Spottiswoode, 1952, p. 113.

45;Stanford U. S-4, 5 1956 AD1 Formosa
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Table 1. Index of Industrial Production in Formosa*
1941 = 100%

Industries	1937	1941	1946	1950	1952	1954
Power	56	100	46	101	134	175
Transportation	61	100	79	138	168	223
Chemical	84	100	33	136	162	267
Fertilizer	85	100	19	185	537	582
Food Processing	106	100	20	77	82	109
Metal & Machinery	49	100	29	52	66	108
Mining	75	100	34	56	87	85
Textiles	67	100	21	286	684	1,270
Timber	58	100	24	70	96	115
All Industries	79	100	32	84	111	152
Population (Millions)	5.6	6.2	6.7	8.9	9.5	10.1
Per Capita Production in All Industries	88	100	30	63	75	93

* Economic Data Book, Part II, Vol. III, prepared by FOA Mission to China, March 1955. The peak year under the Japanese was 1941.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 2 follows p. 564.)

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Table 2. Industrial Output of Formosa in 1945, 1952, 1953, 1954 as Compared with the Record Production Under the Japanese

Commodities (with unit)	Peak Year Under Japanese	1945	1952	1953	1954
Sugar (1,000 MT)	1,374 (1949)	86 (1946)	520	883	701
Flour (MT)	13,000 (1934)	3,879 (1946)	16,476	69,163	136,944
Fertilizer:					
a) Calcium cyanide (MT)	12,647 (1941)	–	69,070	73,145	71,747
b) Calcium super phosphate (MT)	25,449 (1943)	400	62,064	69,145	78,049
Laundry soap (MT)	5,115 (1939)	–	17,164	16,128	17,106
Cement (1,000 MT)	303 (1944)	78	445	519	536
Paper (MT)	25,547 (1940)	2,552	22,150	26,912	33,792
Cotton yarn [x] (bales)	–	825	74,831	107,464	127,012
Cotton cloth (1,000 yards)	4,296 (1940)	1,111	89,293	152,435	180,098
Canned pineapple (1,000 cases)	1,641 (1938)	20	426	369	779
Gasoline [y] (Kl.)	6,776 (1939)	1,006	80,316	108,943	136,266
Electricity [z] (Kw.)	178 (1944)	80	232	271	317
Coal (1,000 MT)	2,854 (1944)	880	2,286	2,392	2,117
Sulphur (MT)	1,381 (1937)	35	5,081	3,478	5,907

* Figures from Economic Data Book, Vol. III, prepared by FOA Mission to China, Part II, March 1955.

\# Fertilizers: (a) calcium cyanamide, manufactured as nitrolime; and (b) calcium superphosphate.

x One bale of cotton yarn weighs 400 pounds.

y One kiloliter is equivalent to 26.417 gallons.

z Actual peak load.

[table 2 follows p. 564]

472 While the government was restoring and expanding the basic industries and services such as electric power, transportation, chemical fertilizer, and petroleum products, the growth of private industries has been no less remarkable. The number of factories increased from 7,474 in 1950 to 12,439 in 1953.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Table 3. Number of Registered Factories in Formosa*

Industry	1950 Public	1950 Private	1950 Total	1953 Public	1953 Private	1953 Total
Food	88	3,971	4,059	79	5,405	5,484
Textiles	8	200	208	17	1,228	1,245
Chemicals	38	552	590	41	1,031	1,072
Ceramics	25	712	737	24	1,224	1,248
Metals	8	188	196	10	184	194
Machinery	21	707	728	28	1,026	1,054
Lumber	18	492	510	23	552	575
Printing	3	184	187	4	215	219
Electricity & Gas	34	-	34	34	2	36
Others	2	223	225	4	1,308	1,312
Total	245	7,229	7,474	264	12,175	12,439

* Provincial Department of Reconstruction.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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The increase from 1950 to 1953 was, for the most part, in private industries, manufacturing consumer articles, including textiles, soap, rubber goods, paints, matches, drugs, aluminum wares, bicycles, electric fans, and sewing machines. Among these, textiles, soap, and rubber goods have increased production most rapidly. Producing only 12 per cent of the textiles consumed locally in 1935, Formosa is now in a position now only to meet the expanding requirement of a growing population, but also to provide a substantial amount of cotton cloth for export. Except for automobile tires, nearly all the rubber goods needed on the island are manufactured locally. In 1939, the year of record soap production under the Japanese, 214,830 cases (5,115 metric tons) of laundry soap were produced. Today there are one government and ninety-three private producers, and the total production capacity of laundry soap is 125,000 cases (2,500 metric tons) per month.[9]

The rapid growth of private industries is attributed to the following factors:

1. Formosa has many basic raw materials, coal, salt, limestone, sulphur, ceramic clay,

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9. Economic Data Book, Part II, Vol. III, preopared by FOA Mission to China, Taipei, March 1955, p. 99.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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[433] timber, and is also rich in oil and a favorable climate.
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2. It has abundant power and good means of communication.

3. A great deal of dismantled equipment has been imported from the Mainland.

4. As a result of the massexodus from the Mainland, Formosa has many trained personnel

5. Labor supply with experience of mechanical operations is plentiful.

472 It should be noted, however, that 90 per
471 cent of the private factories are of very small size, operated by a single owner. More than half have less than 5 hired workers, one-sixth from 6 to 10, and a fifth from 11 to 30 workers. Ninety-five per cent have capital of less than NT $50,000 (US $3,000). Twenty-six per cent depend entirely on manual labor, 67 per cent use a motor under 15 horsepower, and only 7 per cent use motors of 15 horsepower or more.[10] On the other hand, the government

10. Arthur F. Raper and others, Urban and Industrial Taiwan, Crowded and Resourceful, published by FOA/MSM to China and National Taiwan University, Taipei, 1954, pp. 122-23.

factories, though much fewer in number (2.1% of the total), are far larger than the private enterprises. The contrast in size of government-owned and private factories is indicated by the value of their products, as shown in the table below.

45:Stanford U, S-4, 5 1956 AD1 Formosa
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Table 4. Approximate Percentage Distribution of Value of Major Industrial Products from Government and from Private Factories, Enterprises, and Mines on Formosa, 1953*

Type of Production	Government Enterprises	Private Enterprises	Total Value of Industrial Production
Percentage distribution of value of all industrial production	65%	35%	100%
Sugar and by-products	98	2	18
Transportation	86	14	13
Textiles	37	63	10
Mining	15	85	7
Alcoholic beverages and tobacco	100	-	6
Metal Products	16	84	6
Edible oil	3	97	6
Timber	52	48	6
Petroleum products	100	-	5

45:Stanford U. S-4, 5 1956 ADI Formosa
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(continued)

Rubber goods	6	94	4
Electric power	100	-	4
Fertilizer	100	-	4
Machinery	24	76	3
Cement	100		2
Paper	61	39	2
Chemicals	82	18	1
Canned pineapples	62	38	1
Salt production	100	-	#
All others	53	47	2

* Raper and others, ibid., p. 118.

\# Less than 1 per cent.

471 Despite the fact that private enterprises surpass in number public enterprises in the ratio of 48:1, two-thirds of the total industrial output of Formosa are controlled by the government. The dominant position of government enterprises has elicited much criticism. Private industries are in no position to compete with the government corporations, especially when the latter are accorded many special privileges, such as liberal bank credit, special rates of foreign exchange, and raw material at low cost. Besides, possessing monopolistic power, bureaucracy overtakes public enterprises. Nepotism is rampant. It is found that "in many government-owned enterprises there is an excess of management and worker personnel."[11] K. Y. Yin, former Minister of Economic Affairs, expressed the view that industries can attain a higher level of efficiency only when operated by private individuals with profit incentives.[12] Early in 1953 the Chinese government in connection with the Land Reform program decided to offer four public enterprises for sale. On November 12, 1953, Premier Chen Cheng in his administrative report to the Third Plenary Session of

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11. Raper and others, ibid., p. 4.

12. K. Y. Yin (former Minister of Economic Affairs) My Views on Taiwan's Economy, Taipei, China Culture Publishing Foundation, 1953, p. 9.

471 the Kuomintang's Seventh Central Committee, said: "We are of the opinion that whatever enterprises are capable of being run by the people should be finally transferred to private ownership. This is not only a basic principle in the development of national economy but also one of the best means to uproot bureaucratic capital."[13] In pursuance of this policy, the Taiwan Pulp and Paper Corporation and the Taiwan Cement Corporation have been transferred to private ownership. The other public properties under consideration for sale are 15 brick-kiln yards, 12 coal mines, 11 ice storage plants, 4 metal factories, 4 jute-washing factories, 2 tanneries, and about 30 miscellaneous plants.[14] Even when

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13. Quoted in Industry of Free China, April 1954, p. 1.

14. The Taiwan Pulp and Paper Corporation and the Taiwan Cement Corporation were transferred to landowners whose land had been purchased by the government for redistribution. The other public properties belong to the Agricultural and Forestry Development Corporation and the Industrial and Mining Corp. It is provided in the Rules Governing the Transfer of Public Enterprises to Private Ownership under the Land-to-the-Tiller Act that any government stocks that should still remain after allocation in payments to landlords will be sold by tenders until such stocks are sold.

471 the transfer transactions are completed, the government will still control 60 per cent of the total value of industrial output.

656 Another adverse factor affecting the development of private enterprise is the multiplicity of government controls. The prices of coal, cement, fertilizer, and many other goods are regulated by the government. "The government also operates a supply bureau, through which small private manufacturers secure much of their imported raw materials. Banks, foreign exchange, and import and export licenses are controlled by the government; the sale of exports is permitted by the government only at prices above fixed floor prices."[15] In the field of taxation, inequities are widely reported. The discrimination in favor of public enterprises and the vexatious government controls seriously hamper the
178 growth of private industry. Formosa is
4 emerging from a colonial economy into a self-sufficient economic unit. The need for the production of goods and services is tremendous. The creation of new employment opportunities is also imperative on account of the enormous increase in population in recent years. In future industrial expansion, private enterprise

15. Raper, op. cit., p. 10.

must contribute a major share. The Chinese government has promulgated regulations to attract capital investment by overseas Chinese and foreign nationals, but the result will not be encouraging until a healthy environment in favor of private investment is first created. To foster the growth of private industries the following conditions appear to be essential: (a) a relatively stable price level and reasonably cheap credit; (b) tax obligations must be clearly defined, and no price controls imposed abruptly and arbitrarily; (c) economic control should be reduced to a minimum; (d) and the virtual government monopoly in foreign trade should be modified to allow private initiative to find an outlet for surplus products. When a more favorable climate is created to insure the success of private capital, private industry will overtake public enterprises and assume an important role in the industrial revolution that is under way in Formosa.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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II. MINERAL RESOURCES [16]

135 Although many of the mountainous areas in Formosa have not been fully explored, the island does not appear to be rich in mineral resources nor are those that are known available 328 in quantity. Formosa does produce coal, some 346 gold, copper, petroleum, salt pyrite, and 347 sulphur. Some coal and salt is exported. All of the other minerals are for domestic consumption. Smaller quantities of mercury, manganese, asbestos, mica, and gypsum are also produced. Bauxite, necessary for the aluminum industry, and gypsum, used in cement production, are imported, since they are not found in sufficient quantities on the island. 316 The production of the various mining industries 133 in 1953 and 1954 is given below.

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16. Statistical information in this section, unless otherwise specified, is in large part from Taiwan Economic Data Book, Vol. 3, Taipei, 1955, by Foreign Operations Administration, MIssion to China.

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PRODUCTION OF MINING INDUSTRIES
1953-54 */

	1953	1954
Coal (1,000 metric tons)	2,393	2,100
Crude petroleum (kiloliters)	2,830	5,571
Natural gas (1,000 cubic meters)	30,925	28,962
Sulphur (1,000 metric tons)	3	6
Pyrite (1,000 metric tons)	23	25
Gold (kilograms)	772	670
Silver (kilograms)	651	624
Copper (1,000 metric tons)	13	10
Salt (1,000 metric tons)	162	369
Gypsum (1,000 metric tons)	6	3
Mica (1,000 metric tons)	24	20

*/ China Annual 1954, Vol. 3, p. 48.

135 Estimated reserves of selected minerals are given in the following table. It would appear, from this brief survey, that Formosa possesses limited mineral resources and few of the mineral requirements of modern industry.

45:Stanford U. S-4, 5 1956 AD I Formosa
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ESTIMATED MINERAL RESERVES */
(In Metric Tons)

	Quantity	Area located	Content
Coal	670,000,000	Keelung, Taipei, Hsinchu, and Chunan	-
Gold ore	5,000,000	Keelung	Au at 3.1 grams/MT
Copper ore	5,900,000	Suao and Hualien	Au at 1.3 gr/MT Cu 0.72 %
Sulphur	700,000	Taipei	S 30-45 %
Pyrite	5,380,000	Keelung and Hualien	-
Manganese	300,000	Suao	Mn 24-35 %
Iron sands	200,000	Tanshin	-
Asbestos	90,000	Hualien	-
Dolomite	2,000,000	Hualien	18-24 %
Crude oil	89,000 (cu.meters)	Chhuangkeng, Chinshui, and Miaoli.	-

*/ FOA Mission to China, Taiwan Economic Data Book, Vol. 3, 1955; Bank of Taiwan, T'ai-wan chih Ti-hsia Tsu-yüan [Underground Resources of Taiwan], Taipei, 1950, p. 171.

A. Coal

135 316 The coal mines of Formosa form a belt, roughly northeast-southwest, in the northwestern section of the island. Although relatively abundant, the coal is generally low-grade bitumen; only a limited quantity is suitable for cooking purposes. Annual production is about 2,000,000 metric tons; the estimated total reserve is 670,000,000 metric tons, most of which is located near Taipei Basin. More than 80 per cent of the coal produced is for domestic consumption. The remainder is exported.

B. Petroleum

315 Crude oil production is limited, and supplying only about one per cent of the island's requirement. There are five refineries on the island; Kaohsiung Refinery is the largest. The other four refineries are small in scale, located near oil fields in Miaoli, Chuhuangkeng, Chinshui, and Chutung. Kaohsiung Refinery, equipped with three crude distillation units, one thermal cracking and reforming unit, and one vacuum distillation unit, as well as auxiliary plants, is capable of processing 25,000 barrels of crude oil a day. The principal products are motor gasoline, jet fuel, kerosene, diesel fuel, heavy fuel oil, and asphalt. Geology experts generally agree that Formosa has ample oil reserves for domestic needs. Further exploration and the drilling of additional wells will contribute to increased production.

C. Salt

317 433 Salt, available in quantity, is not produced from rock salt but by the evaporation of sea water on the western seaboard. The fields are centered around the towns of Anping, Putai, and Peimen. About 5,000 hectares of land were used as salt fields in 1954; production amounted to 369,000 metric tons. Domestic markets require approximately 75,000 metric tons a year, thus leaving a sizable amount of salt for export.

III. ELECTRICITY

376 Formosa has a number of short, swift-flowing rivers which are estimated to possess a total gross hydroelectric potential of some 3,300,000 kilowatts. According to a report made by the Taiwan Power Company, approximately 12 per cent (378,000 kilowatts) of the gross potential had been developed as of 1955. Formosa's estimated thermoelectric generating capacity is 142,550 kilowatts, giving the island, as of 1955, approximately a total generating capacity of 520,550 kilowatts. The peak load in that year is estimated to have been 360,000 kilowatts.

377 375

377 Only the Taiwan Power Company produces electric power for general distribution. Some government and private enterprises generate power for their own consumption; notable among these enterprises are the Taiwan Sugar Corporation, the Taiwan Pulp and Paper Corporation, the Taiwan Cement Corporation, and the Taiwan

377 Aluminum Corpoation, having a capacity of 71,300 kilowatts. The Taiwan Power Company has 35 generating stations -- 24 hydroelectric stations, with a capacity of 330,400 kilowatts; 4 thermoelectric stations, with a capacity of 59,500 kilowatts; and 6 small diesel generators, with a capacity of 2,050 kilowatts. All but two of the hydroelectric plants are without storage reservoirs and are dependent upon river-flow. The two hydroelectric plants at Sun-Moon Lake (Jitsugetsutan) have a storage reservoir, but production is sometimes curtailed, as when the reservoir was nearly emptied during a drought in the winter of 1950. The Jitsugetsutan system also includes a plant at Wan-ta, and accounts for over one-third of the total generating capacity on Formosa.

376 In order to meet the demands for additional
377 light and power, power-generating plants have been expanded to serve industry and private needs. Power generation and power consumption are shown in the tables below.

POWER GENERATION */
(in million kilowatt-hours)

Year	Hydro	Thermal	Total
1950	978	66	1,044
1951	1,169	123	1,292
1952	1,203	179	1,382
1953	1,467	97	1,564
1954	1,565	240	1,805

POWER CONSUMPTION */
(in million kilowatt-hours)

Year	Industrial	Non-industrial	Total
1950	459	258	717
1951	698	258	956
1952	817	260	1,077
1953	923	301	1,224
1954	1,077	326	1,403

*/ Taiwan Economic Data Book, Vol. 3, 1955.

43 Stanford U. S-, 5 1956 AD 1 Formosa
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376 Thermal power generation serves in an auxiliary
377 capacity; hydroelectric plants furnish the bulk of power required. Industrial consumption has increased rapidly in recent years; non-industrial use has remained relatively stable. This may accounted for, in part, by the rapid expansion of the textile and chemical industries and, to a lesser extent, the increased production of metal, machinery, and food processing industries. Hydroelectric power is also available for irrigation. In 1954, the textile and chemical industries accounted for over 34 per cent of the total consumption of power on Formosa; in 1950, these industries required only a little more than 22 per cent. The gradual increase in the non-industrial consumption of power has been the result of the electrication of some rural areas.

In 1942, the Japanese then in control of the island made plans to link the two existing power generating systems. Surveys were completed, but the demands of war made necessary the postponement of the plan to channel power from the eastern system to the western system, where power was in greater demand. The two systems were linked in 1951 with the completion of a trans-island power transmission line.

In 1952, the Taiwan Power Company established a five-year plan for the expansion of power plants. It was contemplated that by 1957 an additional 302,850 kilowatts (a total of 633,850 kilowatts) would be available to meet

375 the increased needs of economy. Some seven
377 hydro stations and four thermal stations were to be built or expanded by 1957. By the end of 1954, four stations had been expanded, providing an additional 58,750 kilowatts. Listed below are those stations known to be under construction, together with their potential capacity.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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ELECTRIC POWER PROJECTS */

	Potential Capacity	Scheduled for Completion
Pei-pu Steam St ation	40,000 Kw.	1955
T'ung-men Hydro Station	21,000	1955
Kaohsiung Steam Station	40,000	1955
T'ien-leng Hydro, 2nd Extension	26,500	1956
Kaohsiung Steam, 2nd Extension	40,000	1956
Wu-she Hydro Station	20,000	1957
Nan-shih Hydro Station	20,000	1957
Chu-k'eng Hydro Station	100,000	1957
Lung-chien Hydro Station	40,000	1957
Shih-men Hydro Station	120,000	1960
Total	467,500	

*/ Mutual Security Mission to China, Economic Development on Formosa: 1951-52, Taipei, 1953, p. 25; China News Press, China Annual 1953, Taipei, 1954, Vol. 2, pp. 68-69. China Annual 1954, Vol. 3, p. 54.

379 Formosa has not yet exploited the hydroelectric potential offered by its heavy annual rainfall and the steepness of its river gradients, and no sustained effort has been made to compensate for the varying water reserves available at different times of year, headwater erosion, the narrow valleys in which the rivers flow, and the silt and gravel which combined to reduce the efficiency of the streams as a source of power. For these reasons, the economic development of potential power sites is as important to Formosa as the implementation of flood control and irrigation programs.

Currently, the Taiwan Power Company has established a committee to investigate and plan the generation of power by atomic energy on Formosa.

IV. FOOD PROCESSING INDUSTRIES

A. The Production of Sugar

249 The history of the sugar industry in Formosa
433 goes back to 1349, when islanders "boiled sea
431 water to make salt and fermented molasses to produce liquor."[17] In 1650, when the Dutch were occupying Formosa, some 6,000 metric tons of sugar cane were produced each year. Of this amount, two-thirds were exported to Japan and marketed in lands as far away as Persia. Under the rule of Cheng Ch'eng-kung (Koxinga), who

17. China News Press, T'ai-wan Ching-chi Nien-pao, 1953 [Annual of Taiwan's Economy, 1953], Taipei, 1953, p. 45.

249 defeated the Dutch, annual production rose to
433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require-
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills came under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
259 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brown Sugar Association produce brown sugar for domestic use and foreign export.

257 The milling capacity of the 26 mills controlled
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is about 12 per cent. These mills operate an average of 150

433 days a year. The Taiwan Brown Sugar Association's member mills produce only 50,000 metric tons a year, representing approximately 10 per cent to 14.5 per cent of the sugar cane processed.

Since Formosa is only allowed to export 600,000 metric tons of sugar each year, according to the terms of the International Sugar Agreement, recent efforts have been directed toward modernization of plant facilities. The level of production has been reduced, and today Formosa processes only enough sugar to meet the demands of domestic consumption and the export quota.[18] Statistics on the production of sugar and sugar by-products are given in the table below:

PRODUCTION OF SUGAR AND SUGAR BY-PRODUCTS */
(in 1,000 metric tons)

	Sugar	Brown Sugar	Molasses	Yeast (1,000 kgs.)
1937	987	20	189	48
1938	967	24	206	119
1939	1,374	45	324	152
1952	520	11	143	61
1953	883	19	212	279
1954	701	13	185	638

*/ Taiwan Economic Data Book, Vol. 3, Part II, 1955.

18. Local consumption requirements for 1955 may be estimated at 108,800 metric tons, according to the consumption pattern established during 1932-41. During this period per capita consumption of sugar averaged 10.46 kilograms a year.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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B. The Production of Canned Pineapple

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433 The Japanese encouraged the growth and canning of pineapples for export during their rule of Formosa. In 1938, Formosa was the third largest producer of canned pineapple, surpassed only by Hawaii and British Malaya. Since World War II, shortage of tinplate have caused a decrease in Formosa's pineapple production. The crops have been small, Formosa has lot many of its foreign markets, and tinplate for canning is at a premium. Efforts have been made to solve these problems, and production since 1951 has been on the increase.

PRODUCTION OF CANNED PINEAPPLE */
(in 1,000 case lots)

Year	Production
1938	1,674
1939	1,390
1950	226
1951	361
1952	427
1953	370
1954	780

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. The Production of Flour

256
433 It has been estimated that, as of 1953, Formosa required 108,000 metric tons of flour in order to meet civilian and military requirements.[19] Demand for flour has greatly increased as the result of the influx of refugees from the China Mainland, most of whom choose flour in preference to rice as the main staple of their diet. At present the island can produce only about 17,000 metric tons of wheat. Of this amount, and apparently far short of the island's requirements, only about 10,000 metric tons is available to be milled as flour; the remainder is utilized in brewing, for seed, and so forth. Natural conditions are believed to limit Formosa's optimum wheat production to 30,000 metric tons a year, and in consequence the island has found it necessary to import either flour or wheat. It was believed that the importation of wheat for domestic milling was most economical, in view of foreign exchange. The Foreign Operations Administration has been of aid in the importation of wheat and its distribution to local mills. As a result, the number of flour mills in Taiwan has increased in recent years, to the point where the milling capacity exceeds the requirements of the island.

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433 The provincial government owns two flour mills, and there are 33 relatively large private

19. James E. Auburn, "Taiwan Wheat and Wheat Flour Requirements," Chinese-American Economic Co-operation, Taipei, Mutual Security Mission to China, Vol. 1, No. 12, pp. 25-30.

[47] mills and 80 smaller mills scattered over the
256 island. Their combined productive capacity is
433 reported to be approximately 1,227 metric tons a day. If the mills were in operation only 250 days a year, their total capacity would be some 306,750 metric tons a year, far exceeding the estimated annual consumption requirement of 108,000 metric tons. The annual consumption requirement may have increased as the population increased in the past two years. The production goal for 1955 was set at 160,000 metric tons of flour, to be processed from 208,000 metric tons of imported wheat in addition to 8,000 metric tons of domestic wheat.

It should be noted that Formosa's production of flour is vitally dependent upon the importation of wheat. Delay or discontinuation of import would immediately affect local markets.

D. The Production of Edible Oil

388 Peanut oil and soybean oil are the most im-
453 portant types of edible oil produced in Formosa. The oils are used in domestic cooking. What remains after the oil has been extracted is used to feed animals or as fertilizer. Although enough peanuts are produced to meet domestic requirements, about one-third of the soybeans needed are imported. Approximately 500 producers of edible oil were reported in 1954. Most use cottage-type pressing mills, operated by human and animal labor. There are only 24 modern oil-pressing mills on the island. The production of peanut oil, peanut cake, soybean oil, and soybean cake is

shown in the following table:

PRODUCTION OF EDIBLE OIL */
(in metric tons)

	Peanut oil	Peanut cake	Soybean oil	Soybean cake
1938	3,007	4,511	2,043	19,508
1939	2,525	3,788	2,410	19,520
1952	5,112	7,846	4,980	43,835
1953	5,900	8,850	9,339	68,506
1954	5,360	8,040	7,101	51,964

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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V. CHEMICAL INDUSTRIES

A. Fertilizers

389 433 The importance of fertilizer for Formosa lies in the fact that so little of the island is suitable for agriculture that what arable land there is must be constantly enriched by chemical and natural means. The fertilizer industry is expanding, and in the next decades will offer employment to many and decrease the amount of fertilizer it is necessary to import to Formosa.

Experts attached to the Joint Commission on Rural Reconstruction have estimated that, according to Formosa's present soil and climatic conditions, the island has need of a minimum of 580,000 metric tons of chemical fertilizers each year. In order to secure optimum growth of crops, 1,000,000 metric tons of chemical fertilizers are needed annually. However, as of early 1955, the productive capacity of domestic plants was approximately 185,700 metric tons per year.[20] In order to expand production of fertilizers, the construction of four additional plants has begun, and when they are completed they will increase total capacity to over 383,000 metric tons per year. Further expansion is feasible, provided that sufficient investment capital is made available. Most of the

20. Industrial Development Commission, Fertilizer Taiwan, Taipei, 1955, pp. 4-6.

38/ Raw materials necessary for the processing of
43/ fertilizer are available on Formosa. The island has a relative abundance of limestone, coke, coal, pyrite, and serpentine; phosphate must be imported. However, the present expansion program will only provide two-thirds of the minimum fertilizer
38/ requirement of the island. The following table
43/ compares the production and importation of chemi-
45/ cal fertilizers.

PRODUCTION AND IMPORT OF CHEMICAL FERTILIZERS */

	Production	Importation
1937	31	413
1938	27	444
1939	34	356
1951	112	235
1952	150	403
1953	166	253
1954	168	359

*/ Industry of Free China, Vol. 2, November 1954, pp. 90-91, and Vol. 3, May 1955, pp. 56,70.

B. Alkali Products

385 433 The alkali industry, in support of various other chemical industries, has been expanding steadily since World War II. Caustic soda and soda ash are used in pulp-making, aluminum-making, soap-making, and glass-manufacturing. Chlorine is used for the production of bleaching powder, insecticides, and so on. Production of some alkali products are given in the table below.

ALKALI PRODUCTION *

	Caustic Soda	Soda Ash	Liquid Chlorine	Bleaching Powder
1952	8,526	609	1,286	1,526
1953	10,181	915	1,823	1,330
1954	14,487	1,163	2,667	1,787

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. Cement

339 433 Formosa's sole domestic source of cement, the Taiwain Cement Corporation, was established in 1946 when the government consolidated and reorganized three cement works and two cement-products plants formerly owned by Japanese concerns. In 1954, the management of the corporation was transferred to private ownership. The total productive capacity of the three plants -- in Kaohsiung, Suao, and Chutung-- was estimated at 670,000 metric tons a year; actual production

339 in 1954 was approximately 536,400 metric tons.
433 With the exception of gypsum, which must be imported, all the raw materials required for the manufacture of cement can be had locally. (According to production estimates for 1955, approximately 12,900 metric tons of gypsum are required in order to produce 500,000 metric tons of cement.)

D. Paper

289 Waste timber, from which pulp is made
433 for the manufacture of paper, is easily available in Formosa, and the paper manufacturing industry was extensively developed under Japanese rule. As of 1954, there were 40 paper mills in Formosa; the largest is the Taiwan Pulp and Paper Corporation. The corporation produced 12,900 metric tons of paper in 1954; all other mills combined produced a total of 14,620 metric tons.

E. Other Chemical Products

381 The yearly production of other chemical
433 industries on Formosa are listed in the following table:

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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388
433

OTHER CHEMICAL PRODUCTS */

	Unit	1953	1954
Alcohol			
DDT (100 per cent)	(kiloliter)	25,262	14,708
Camphor	(kilogram)	117,572	446,026
Soap	(kilogram)	263,906	181,043
Paint	(metric ton)	17,106	18,076
Printing Ink	(metric ton)	1,992	2,530
Active Carbon	(kilogram)	150,694	151,715
Matches	(1,200 boxes)	222,577	215,945
Toothpaste (tube)	(gross)	22,767	31,574

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD1

VI. TEXTILE INDUSTRY

Among the major industries in Formosa, the textile industry has shown the greatest expansion since World War II. (The production of fertilizer and the production of light and power have expanded only slightly less rapidly.) The textile industry was one of those major industries to which the government gave special encouragement after the war.

During the Japanese occupation of the island, approximately 10-20 per cent of the island's textile requirements were supplied by domestic mills during the period 1920-42. However, the major portion of the production was gunny sacks. Consumers' textiles were imported from Japan.

In 1945, when the island was restored to China, there were only 14,652 serviceable spindles and 1,693 power looms, of which only 8,268 spindles and 428 looms were in operation. As of 1954, there were 18,844 spindles and 11,288 power looms installed in 14 spinning mills and 269 weaving mills. In addition, there were approximately 200 hand-operated looms owned by some 100 small, privately owned mills. There were also 7 worsted mills, with 10,304 woolen and worsted yarn spindles and 208 looms. Production capacity as well as actual production far exceeded consumption requirements. In 1954, worsted mills cut production by 50 per cent, and as of September 1954, of the total of 252 privately operated weaving mills, 9 were closed, 77

288 suspended operations, and the remaining 166
433 mills reduced their work-day to eight hours.

248 The textile industry in Formosa was
433 established on the assumption that a sufficient amount of raw cotton could be imported to furnish the material for the production of cotton yarn and cotton cloth. Now efforts are being made to satisfy this demand through domestic production of cotton, and the initial experiment -- transplanting Texas cotton to Formosa -- has been pronounced a success. It is doubtful, however, that in the near future Formosa can supply her total raw cotton requirements. In 1954, raw materials imported for the textile industry cost the island approximately US$20,000,000, and it is believed that this import rate will continue if Formosa's enormous textile industry continues operation at its present level.[21] The following table gives the textile production of Formosa since 1951.

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21. T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 12, No. 1, July 1954, p. 71.

24P
433

TEXTILE PRODUCTION */

	Cotton Yarn (Bale)	Cotton Cloth (1,000 yards)	Woolen cloth (1,000 yards)	Gunny sacks (per 1,000)
1951	39,567	61,836	442	5,240
1952	74,831	89,293	556	6,593
1953	107,464	152,435	1,228	8,407
1954	127,012	180,098	1,491	9,087

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

45:Stanford U. S-4 5 1956 AD 1 Formosa.
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VII. METALLURGY AND METALWORKING

A. Aluminum

325 433 The Japanese, in the second phase of their economic development of Formosa, constructed aluminum plants at Kaohsiung and Hualien in order to take advantage of the abundant power available in the island. The Kaohsiung plant then had an annual capacity of 20,000 metric tons of aluminum ingot. (The Bayer process was utilized for ore separation.) During World War II, the plants were badly damaged. Following the war, the Kaohsiung plant was rebuilt, and what remained of the Hualien plant was sold to a fertilizer manufacturing company.

Formosa's only producer of aluminum ingot, the Taiwan Aluminum Corporation, has a productive capacity of approximately 8,000 metric tons of ingot and 4,000 tons of sheet aluminum at the Kaohsiung plant. Aluminum goods, such as home appliances, kitchen utensils, and quartermaster supplies for the military, are produced by 77 small privately owned companies and one government-owned company.

Of the raw materials needed for the production of aluminum, bauxite is imported from Bintam Island, Malaya, and petroleum coke is imported from the United States.

B. Steel and Iron

327 433 The island of Formosa produces little iron ore. Production of pig iron, derived from

327 imported iron ore, amounted to 8,6000 metric
433 tons in 1954; reclaimed pig iron, derived from scrap iron, amounted to 8,672 metric tons in the same year. The island has the facilities to produce 13,000 metric tons of pig iron and 15,290 metric tons of reclaimed pig iron annually. Small iron and steel plants (foundries, blast furnaces, rolling mills, electric furnaces) are located in Kaohsiung, Taipei, Patu, Tainan, Kangshan, Sungshan, Hualien, and Keelung.

325 Production of basic metals is given below:
327
433

PRODUCTION OF BASIC METALS */

(in metric tons)

	Aluminum ingot	Pig iron	Reclaimed pig iron
1948	2,509	9,221	3,284
1949	1,317	1,559	4,275
1950	1,764	78	5,600
1951	2,984	733	5,385
1952	3,856	620	6,415
1953	4,915	3,927	6,929
1954	7,131	8,591	8,772

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. Machinery Manufacturing

402 Formosa has a large number of machine shops, both large and small, capable of repairing, seeing to the maintenance of, and replacing small parts of various types of industrial equipment. The following items can be produced on the island: sugar refining equipment, simple chemical machinery, push-cars for railways, fishing boats, diesel enginees under 200 horsepower, low pressure boilers, textile machine parts, bicycle parts, small motors, transformers, light bulbs, electric fans, dry cell batteries, and so on.

D. Shipbuilding and Ship Repairing

396 Formosa has four government-owned and 32 privately owned shipyards, among which two of the government-owned concerns -- the Taiwan Shipbuilding Corporation and the Taiwan Machinery Manufacturing Corporation, are by far the largest. Their combined production accounts for nearly 90 per cent of the production of the island's shipyards. In most instances, these shipyards build and repair small, diesel-powered wooden craft. For example, in 1954 the Taiwan Shipbuilding Corporation produced one 30-ton landing craft, two 100-ton bull trawlers, and one 400-ton oil barge, and another two 100-ton bull trawlers were nearing completion.

Annex "A," Subparagraph 3c
Economic Background

TAXATION AND BUDGET

651 The system of taxation in Formosa has undergone considerable reform since the restoration of Chinese rule. The number of categories taxed under the Japanese has been reduced from 30 to 15 and the system of tax collection has been simplified.[1] In June 1951, taxes collected in the province were classified as national, provincial, or local (hsien or municipal). The national, provincial, and local governments have independent budgets.

National taxes include customs duties, taxes on salt and other commodities, taxes on income and inheritance, a stamp tax, and a defense tax.

Customs duties and the salt tax are collected directly by the central government. Customs duties consist principally of import duties and tonnage dues; the former is levied on dutiable imported commodities, the latter on ships which call at Formosan ports. The provincial government also levies a harbor reconstruction tax, a 2 per cent ad valorem

1. Lih wu Han, Taiwan Today, Taipei, Aug. 1952, p. 67.

651 charge upon all non-exempt import cargo. The proceeds of this tax are forwarded to the provincial treasury. Articles imported for military use, for relief, or for educational or research purposes are exempted from import duty. And customs duties are not levied on the personal effects and supplies imported for use by diplomatic officials and personnel of the administrative agencies of American aid and military missions to Formosa.

The collection of customs duty is the single largest source of income for the central government. In 1954, customs duties amounted to NT $611,022,015[2] There are two customs districts in Formosa - Taipei and Tainan. Sungshan airport is under the administration of the Taipei customs district.

687 Because of the government control on
1139 foreign trade, which forbids the importation of luxury items, smuggling is rampant. In 1954, fines amounting to NT$4,683,485 were collected.

651 The salt tax was once the most important tax on the China Mainland. In Formosa,

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2. The official exchange of Formosa currency in 1954 was NT$18.78 to US$1 and the market rate averaged NT$27.50 to US$1.

65 however, the bulk of salt produced is for export and is exempt from taxation.[3] Annual domestic consumption amounts to only 90,000 metric tons. In July 1953, the tax on table salt was fixed at NT$1,630 per metric ton; the tax on salt used by fisheries was fixed at NT$815 per metric ton. No tax is levied on salt used for agricultural and industrial purposes. In 1954, salt taxes yielded NT$90,517,419 to the central government.[4]

The tax on commodities are taxable on an ad valorem basis, regardless of whether they are domestic or imported goods:[5] cement, 15 per cent, cotton yarn, 5 per cent; woolen thread and yarn, 15 per cent; matches, 10 per cent; non-alcoholic beverages, 30 per cent. Taxes on refined sugar (35 per cent) and brown sugar (28 per cent) are collected in kind.[6]

Commodity tax rates are revised from year to year. The percentages given above

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3. In 1954, 217,438 metric tons (239,183 short tons) were exported to Japan and Korea.

4. Statistical Monthly, published by the Salt Administration, Taiwan Provincial Government.

5. Commodity tax over and above the import duty is levied on imported goods.

6. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China], Taipei, 1954, p. 147.

65 were in force in 1953-54. Commodity tax receipts increased from NT$160,516,397 in 1953 to NT$305,970,787 in 1954.

The income tax, inheritance tax, and the stamp tax are administered by the provincial government and their receipts are shared by all levels of government in the following manner:

	Income Tax	Inheritance Tax	Stamp Tax
Central Government	80%	20%	50%
Provincial Government	10%	30%	20%
Local Government	10%	50%	30%

Income tax is classified as scheduled income tax and as consolidated income tax. Scheduled income tax is divided into five categories, depending upon the source of income. The rates levied are: 5-50 per cent, on a progressive schedule, for income derived from commercial and industrial undertakings; 1-2 per cent on fixed salaries and renumeration for professional services; 3 per cent on income from interest; 6 per cent on income from rental property; and 15 per cent on incidental income, including grants, gifts, and money won by lottery.

651 The total amount of income tax collected in Formosa in 1954 was NT$306,464,916, comprising 7.6 per cent of all revenues of the island.

The stamp tax is levied on all invoices, bills, vouchers, contracts, and other documents bearing a face value of NT$9 or more. The rate varies, depending upon the nature of the documents.

Inheritance tax is collected on estates valued at NT$50,000 or more. On estates valued at NT$50,000 to NT$70,000, 1 per cent is charged. On estates valued at more than NT$70,000, a 3 per cent tax is collected on that portion between NT$70,000 and NT$100,000; 6 per cent on that portion between NT$100,000 and NT$150,000; 10 per cent on that portion between NT$150,000 and NT$250,000; 16 per cent on that portion between NT$250,000 and NT$400,000; 24 per cent on that portion between NT$400,000 and NT$600,000; 30 per cent on that portion between NT$600,000 and NT$900,000; and 40 per cent on that portion between NT$900,000 and NT$1,200,000. On estates valued at NT$1,200,000 or more, an inheritance tax of 60 per cent is charged on that portion over NT$1,200,000. Sixty per cent is the ceiling rate for inheritance tax.

651 In 1954, revenue from the stamp tax amounted to NT$157,387,218; the revenue from inheritance tax was only NT$1,733,238.

The defense tax is a surtax on other taxes, at varying rates. For example, there is a surcharge of 50 per cent on motor vehicle licenses, and there is a defense surtax of 30 per cent on business taxes. An electric-power tax, which is an item of defense tax, is levied on the consumption of electric energy. For industrial users, the tax represents 10 per cent of the total electric bill; for non-industrial users, the electric-power tax is 30 per cent of the total bill. The total revenue derived from the defense tax amounted to NT$623,141,480 in 1954.

The provincial taxes include land tax, business tax, and household tax. Land tax is collected in kind in the case of grain and in cash in the case of other produce. The grain collected is delivered to the armed forces by the provincial food bureau on behalf of the Ministry of Finance and is also rationed to civil servants. The provincial government keeps a steady supply of food not only for military and civilian consumption, but also to stabilize food prices. The value increment of urban land is taxed on a progressive scale. Land tax in Formosa in 1954 totaled NT$248,622,140

a part of which was allotted to the local governments as subsidy from the provincial government.

Business tax is levied either on the volume of business or the net profit according to the nature of the business. The rates of taxation vary from 1.5 per cent to 6 per cent. Household tax is levied on assets of individuals and corporations valued over NT$3,000. The rate is 0.5 per cent of the total value. The revenue from business tax in 1954 was NT$127,108,309 and from household tax was NT$179,454,138.

The most important items of revenue for the provincial government are the profits from tobacco and wine monopolies. During the Japanese occupation, direct taxation provided less than 20 per cent of governmental income.[7] The major portion was derived from government-owned properties and undertakings. Government monopolies covered salt, camphor, opium, tobacco, matches, and petroleum.

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7. In 1930, a year of normal prewar activity, out of a total revenue of ¥ 105,453,789, only ¥ 18,316,545 was raised by direct taxation.

651 Their profits accounted for fifty per cent of
655 the total revenue. Now under the Chinese only wine and tobacco monopolies remain. Until 1953, all the income from the monopolies went to the provincial government. Since then a part of the profits is forwarded to the central government. Monopoly profits in 1954 amounted to NT$866,571,260.[8]

651 The taxes collected by local government* in 1954 were as follows:

House Tax	NT$ 82,990,410
Slaughter Tax	NT$183,008,444
Vehicle and Vessel License Tax	NT $ 38,064,145
Entertainment and Amusement Tax	NT$ 38,373,143
Title Deeds Tax	NT$ 25,130,005

* Statistical Abstract of the Republic of China 1955.

Government revenues have been steadily increasing since 1950 as evidenced by the

8. Actual monopoly profits received by the provincial government in the fiscal year 1954-55 were NT$820,000,000.

65/following statistics; a great extent of the increase, of course, only reflects the continuous depreciation of the Chinese currency.

45;Stanford U, S-4, 5 1956 AD1 Formosa
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651

Tax Collection and Monopoly Profit, 1950-54
(in NT$)*

	Tax Collection	Monopoly Profit	Total
1950	709,671,711	174,158,146	883,829,857
1951	1,187,046,304	326,270,067	1,513,316,371
1952	1,988,836,074	547,753,227	2,536,589,301
1953	2,387,977,534	710,917,014	3,098,894,548
1954	3,173,685,192	866,571,014	4,040,256,452

* Statistical Abstratc of the Republic of China 1955.

652 Due to inflation government expenditures grew enormously. Despite the increase in tax receipts, budget deficits occurred each year. Until 1953, the Chinese fiscal year corresponded to the calender year. In 1953 a change was made in the budget law to begin the fiscal year on July 1; thus fiscal year 1954 last from July 1, 1954 to June 30, 1955. Because the 1953 budget expired on December 31, 1953, a special budget for the first six months of 1954 was prepared. According to the figures released by the Chinese government, the amount of annual deficit of the central government for the years 1950 and 1954 was as follows. *

	Total Expenditure (NT$ million)	Deficit (NT$ million)	Percentage of Deficit to total expenditure
1950	1,296	410	31.6
1951	1,432	349	24.4
1952	1,918	174	9.1
1953	2,362	29	1.2
1954**	1,603	138	8.6

* Statistical Abstract of the Republic of China 1955. The figures were the actual settlement figures.

** Special budget from January to June 30, 1954. The budget of the central government for the fiscal year 1954 is not yet available.

652. The deficit appears to be smaller than it actually was because the figures listed above only represent the receipts from bond issue and bank credit. A substantial portion of the national deficit has been met by the sale of gold and foreign exchange reserves, by disposal of government-owned property, and by applying funds derived from the sales proceeds of import articles financed by American aid (Counterpart Fund). Since government holdings of gold and foreign exchanges have been almost depleted, "Nationalist China ... [is] faced today with tremendous difficulties in balancing its in-the-red budget since U.S. aid funds no longer can be used for regular government expenditures."[9]

The largest item of government expenditure is the cost of maintaining military establishments. Other expenditures have been reduced to a minimum. At the end of 1954, excluding the military, only 11,585 persons were on the payrolls of the central government, less than 3 per cent of the total number of the civil functionaries[10] on the Mainland in June

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9. Taipei dispatch, United Press, Sept. 23, 1955.

10. The total number of civil service functionaries of the central government on June 1947 was 472,788. Statistical Yearbook of the Republic of China 1948.

652 1947. Despite efforts of retrenchment, defense expenditures still constitutes 80 per cent of the total.[11] Since a strong military force is indispensable in Formosa today, further reduction of defense outlay might be dangerous. The tax burden of the people is already extremely heavy. The national income in Formosa in 1954 was estimated at NT$23,545 million, and per capita income at NT$2,502.[12] The total amount of government taxes and monopoly profits in 1954 was NT$4,040 million, and the per capita tax burden was NT$429. Thus every Formosan is paying 17 per cent of his meager income as taxes to the government. The incidence of taxation is the heavier since all the taxes are nearly indirect taxes on the essential of life.

To raise the revenue of the central government, perhaps greater attention should be devoted to an increase in the surplus of the government enterprises. Production of government enterprises exceeded 75 per cent of the gross production of the island, and 85 per cent of the exports passed through government hands. In addition, the Chinese government

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11. Address by Mr. Hsü Po-yüan, Minister of Finance, Nov. 7, 1955 before the Central Committee of Kuomintang. Pan Asia News Alliance, Taipei dispatch, Nov. 7, 1955.

12. The population in 1954 was estimated by the statistical department of the Taiwan Provincial Government at 9,409,050.

652 owns 92 per cent of the capital of all banks in Formosa. Under Japanese rule, surplus from public undertakings was the primary source of government income. In 1954, the national government of China derived nothing from the giant state corporations,[13] and the provincial government received only a modest NT$80 million from those under its control. According to observers, "Taiwan's industry is still characterized by a combination of relative youth on the one hand and of the use of antiquated method on the other. There are numerous evidences of a lack of effective planning and over-all integration."[14] "The size of staff and worker personnel in public enterprises is generally reported to be larger than can be profitably used."[15] With proper supervision and greater efficiency in operation, public enterprises can be made to yield a greater revenue to the central government, helping it to reduce its budgetary deficits.

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13. The Taiwan Sugar Corporation alone is worth over US$120,000,000 and its annual production is valued at US$100,000,000.

14. Arthur F. Raper and others, Urban and Industrial Taiwan - Crowded and Resourceful, Taipei, Sept. 1954, p. 10.

15. Ibid., p. 63.

652 The provincial government and the local governments do not face the same serious financial difficulties confronting the central government. The provincial government is able to balance its budget each year. Its principal revenues are the land tax and the profits from monopolies. According to its published statement,[16] the total revenue of the provincial government for the fiscal year ending June 30, 1955 was NT$1,899 million. Rectipts from taxes were NT$691 million and profits from wine and tobacco monopolies were NT$820 million. Revenue from these two items amounted to 80 per cent of the total. The largest items of expenditure were for education and economic reconstruction. Educational and cultural expenditure totaled NT$180 million and expenditure for economic reconstruction amounted to NT$134 million. These two items accounted for 43 per cent of the total expenditure. The population of the province is increasing and new schools are needed; education expenses will occupy a larger proportion of provincial expenditure in future years.

The local governments have their own budgets. The total revenue of hsien and

16. Central Daily News, Taipei, Dec. 16, 1955, p. 6.

(652) municipal governments in the fiscal year ending June 30, 1955 amounted to NT$957 million.[17] Sixty-three per cent of the revenue is derived from local taxes and 26 per cent represents subsidies from central and provincial governments. Forty-two per cent of the expenditure is for educational purposes and 15 per cent for the maintenance of the local police force. For the current year there will be a serious drain on the local resources because a large number of recruits have been inducted into the army. The local governments are responsible for the support of the needy family of draftees. It is estimated that a sum of NT$80 million will be needed for this purpose.

On the town and rural district level, the budget for the fiscal year ending June 30, 1955 was NT$355 million. Fifgy-nine per cent of the revenue comes from tax receipts and 23 per cent from subsidies by the provincial government. Forty-one per cent of the expenditure goes to administration expenses, 20 per cent to the improvement of communications, 9 per cent to education, and the remainder to public health.

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17. Report to Mr. Ch'en Han-p'ing, Provincial Commissioner of Finance, to the Provincial Assembly on Dec. 22, 1955 at the 4th meeting of the Second Session.

652 Before the enforcement of self-government, local governments shared the same budgets with the provincial government. With independent budgets, the governments on the local levels enjoy a greater freedom in managing their own affairs. The local assemblies are endowed with the power to raise revenue for specific purposes by special assessments. Chinese society has been traditionally patriarchal; government has always been in the hands of the few. Self-government in Formosa is the first democratic experiment in the Chinese nation. The ability to achieve sound financial management is the crucial text of the success of this experiment. A careful survey of the administration of local affairs in the next few years will be well worthwhile.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3d,
Economic Background

BANKING AND CURRENCY

652 Modern banking, as it is known in the
436 West, came into being on Formosa during the Japanese occupation. The first bank on Formosa was a branch of a Japanese commercial bank, the Churitsu Bank, which was opened in Keelung during the first year of Japanese rule (1895). The Bank of Taiwan was established in 1899. It had the exclusive right to issue currency and was designated as the fiscal agent of the colonial government. It also did commercial banking, accepting deposits and extending loans, and dealt in foreign exchange. The notes issued between 1899 and 1904 were convertible into silver or were exchangeable at par for Japanese yen. In 1904 notes convertible into gold were issued. On notes which were not secured by gold or silver reserves, the Bank of Taiwan had to pay a tax of 5 per cent per annum. This rate was reduced to 3 per cent per annum in 1935. With
453 agricultural and industrial development of the island, banks prospered. The following banks were operating in Formosa at the end of 1944:

45:Stanford U. S-4, 5 1956 AD1 Formosa
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	Number of Branches (including head office)
453 Bank of Taiwan	14
Taiwan Commercial and Industrial Bank	37
Chang Hua Bank	28
Hua Nan Bank	4
Taiwan Savings Bank	20
Cooperative Bank	45
Sanwa Bank*	3
Hypothec Bank*	5

* Headquarters in Japan.

The Bank of Taiwan had 35 branches outside Formosa, and the Hua Nan Bank had five branches outside Formosa. In addition to the above there were also one trust company, four mutual-credit associations, and approximately 500 branches of co-operative and farmers' associations. During the first six months of 1945, to escape allied aerial bombings, banks were dispersed and the number of branch banks was increased.

652 After the war the Nationalist Government took over all the banking institutions on Formosa. Shares owned by the Japanese government and by Japanese firms and individuals were

652 confiscated. The Bank of Taiwan continued to be the banker for the Provincial Government and for other banks. When the central government of China moved to Formosa, the head offices of the four Chinese national banks also moved to the island. The Central Bank of China (1) delegated its functions -- the issuance of notes, custody of the treasury, role as fiscal agent for the government -- to the Bank of Taiwan. The Bank of China (2) limited its activities to the supervision of its overseas branches.[1] The Bank of Communications (3) and the Farmers Bank of China (4) have suspended operations. Only the Central Trust of China engages in importing and exporting transactions and acts as the purchasing agent for the government.

The Japanese-controlled banks taken over by the Chinese authorities underwent reorganization. The Taiwan Savings Bank and the local branches of the Sanwa Bank were merged into the Bank of Taiwan. The branches of the Hypothec Bank of Japan, which once provided long-term credit for agriculture, were reorganized into the Land Bank. The Land

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1. The Bank of China has branch offices in New York, Saigon, Havana, Bangkok, Phnom Penh, Osaka, Tokyo, and Sydney.

652 Bank took control of a considerable amount of farm land once owned by the Japanese Taiwan Development Company, which also make a practice of extending long-term loans to farmers. The Co-operative Bank was renamed the Taiwan Provincial Co-operative Treasury. It continues to co-ordinate and provide financial assistance to the co-operatives and the farmers' associations on the island. The Taiwan Provincial Government is also in complete control of the three commercial banks since it now owns the shares which belonged to the Japanese. The Taiwan Commercial and Industrial Bank has been renamed the First Commercial Bank.

Provincial Banks
(June 1955)

	No. of Offices*	Shares Owned (per cent)		
		Taiwan Provincial Gov.	Bank of Taiwan	Private
Bank of Taiwan	39	100	-	-
Land Bank	30	100	-	-
Co-operative Treasury	23	60	-	40#
First Commercial Bank	65	54	13	33

Hua Nan Bank	43	4	49	43
Chang Hua Bank	58	47	-	53

* including head office and branches
\# owned by co-operatives and farmers' associations

After reorganization, new directors and officials were chosen for all the provincial banks. The majority of directors, including the chairman of the board and managing directors, are native Formosans with the exception of those of the Bank of Taiwan. The Bank of Taiwan, nominally a provincial bank in practice, is controlled directly by the Central Government. The chairman of the board of directors is named or appointed with the approval of President Chiang Kai-shek. Its policy is dictated by the Ministry of Finance, but the provincial governor also has the right to supervise the operation of the bank. This dual control is a source of friction between the national and provincial governments. The Land Bank and the Co-operative Treasury are co-ordinated by the provincial government. The Land Bank has been instrumental in the implementation of the land reform program in Formosa.

All commercial banks are required to deposit a reserve fund at the Bank of Taiwan.

652 Effective May 1, 1953, reserve required is 13 per cent of demand deposits and 8 per cent of fixed deposits. The government supervises the credit policy of the commercial bank through the Bank of Taiwan. Except for the general supervision of the Department of Finance of the provincial government, the administration and operation of the commercial banks are left to their respective boards of directors. For the lower income group there are private money lenders and credit unions (hui).[2] They do very little business because the rate of interest charged is exorbitant.

2. The credit union is a form of mutual-aid organization. For detailed description of its operation, see Arthur F. Raper and others, Urban and Industrial Taiwan - Crowded and Resourceful, Taipei, 1954, pp. 184-85.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Bank Deposits and Loans*

	Deposits (NT$ million)	Indices (June 1949 = 100)	Loans and Discounts (NT$ million)	Indices (June 1949 = 100)
1949	207	209	441	678
1950	659	666	632	972
1951	1,283	1,296	837	1,288
1952	2,096	2,117	1,488	2,289
1953	2,668	2,695	1,984	3,052
1954	3,278	3,311	2,711	4,171
(to April) 1955	3,991	4,031	3,066	4,717

* Far Eastern Economic Review, Vol. XIX, No. 6, Aug. 11, 1955, p. 183.

45:Stanford U. S-4, 5 1956 ADI Formosa
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Interest Rates on Time Loans*
(Monthly)

	Bank of Taiwan	Other Banks	Private Lenders
1949	3.90	9.9	17.4
1950	2.10	3.9	12.0
1951	1.80	4.8	10.5
1952	1.80	3.3	6.6
1953	1.20	2.4	4.3
1954	0.99	1.9	4.1
1955 (June)	.99		4.2

* Statistics of Economic Research Department, Bank of Taiwan.
# on unsecured loans in the city of Taipei. Interest rates vary from city to city; from 2.4 per cent to 4 per cent monthly, as of June 30, 1955.

453 The Bank of Taiwan once granted preferential interest rates to public enterprises, but the practice was deprecicated by private industry and has been discontinued. The reduction of interest rates, in spite of inflation, is a healthy sign, because a lower interest rate enables manufacturers to increase their capital investment and to reduce the cost of production, thus contributing to industrial expansion.

45, Stanford U. S-4, 5 1956 ADI Formosa
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BANK LOANS AND DISCOUNTS* (April 1955)
(unit: NT$1,000)

		Total
Public Enterprises		1,617,094
a. Production enterprises	966,605	
b. Provincial Unified Fiscal Account#	599,329	
c. Communications	51,010	
d. Others	150	
Private Enterprises		1,179,203
a. Production enterprises	691,027	
b. Communications	44,502	
c. Others	443,674	
Grand Total		2,796,297

* Data from the Bank of Taiwan. Of the total, 68 per cent was loaned by the Bank of Taiwan and 32 per cent by all other banks.

Including Wine and Tobacco Monopoly Bureau, Forestry Administration, Taiwan Food Board, Bureau of Supplies, Coal Adjustment Commission, and the Provincial Railway and Highway Administrations.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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453 The total deposits in banks as of December 31, 1954 was NT$3, 110 million, of which NT$1, 390 million was from public and governmental agencies. Nearly two-thirds of the total bank deposits in the province, NT$1, 957 million were held by the Bank of Taiwan.[3] These statistics indicate the dominant position of the Bank of Taiwan in the economic life of Formosa.

436 Formosa enjoyed a stable currency before Japan attempted the conquest of China. After 1937, a period of inflation began. The amount of currency in circulation increased from 64. 2 million yen in 1936 to 536. 2 million yen in 1944. Through price- and wage-control and enforced savings, the Japanese administration was able to fight inflation. In 1945, however, the note issue jumped to a monthly average of 1, 568 million yen. There was a shortage of food and other consumer goods, and the whole system of economy broke down. Prices soared.

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3. Statistical Abstract of the Republic of China, 1955, Directorate General of Budgets, Accounts, and Statistics, Executive Yuan, Taipei, 1955, pp. 174-75.

436 Formosa came under Chinese control in November 1945. The same monetary unit was continued in circulation but was renamed the Taipi, or Taiwan dollar (T$). At the end of 1945, the total amount of currency in circulation amounted to T$2,311 millions. The dislocation of the credit system, the loss of the Japanese market, the acute shortage of consumer goods, and the urgent need to repair war damages led to the continuous expansion of note issues and bank credit. In three years, currency in circulation increased to T$142,041 million as of December 31, 1948.[4] In 1949, the Chinese National Government was moved to Formosa. The island was faced not only with an influx of refugees requiring consumer goods, but the need to finance a national army and a government administration. Inflation mounted. On June 14, 1949, currency notes reached the astronomical figure of T$527,000 million, and "cash orders," a substitute for currency issued by the Bank of Taiwan amounted to T$1,214,000 million. The total currency and substitute-currency in circulation was T$1,741,000 million. (A U.S. dollar was worth T$235,000.) Prices rocketed. At the last moment a financial crisis was averted by currency reform. On June 15, 1949 new currency was introduced, called Hsin Taipi or the New Taiwan dollar (NT$).

4. Financial Report of the Bank of Taiwan for 1948.

436 The old currency was converted to New
652 Taiwan dollars at T$40,000 to NT$1. The outstanding currency notes and cash orders were reduced to NT$44 million. A ceiling for the new note issue was set at NT$200 million, equivalent to U.S. $40 million at the official rate of NT$5 to US$1. The new note issue was backed by 100 per cent reserves of gold and foreign exchange.

Because of huge military disbursements and the need for the rehabilitation of government enterprises, the Chinese government was compelled to borrow heavily from the Bank of Taiwan. At the end of 1949, the total note issue reached NT$198 million, approaching the nominal maximum. During the following years the law was altered several times to permit the issue of "extra limit currency." (Extra limit currency may be secured by commercial bills of acceptance, warehouse receipts, and loans against packing or packed commodities.) The note issue steadily expanded; at the end of 1954 the total issue reached NT$1,043 million, five times the maximum limit. Despite the efforts of the government to avoid further inflation, general price levels increased with the increase in the amount of notes in circulation.

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Note Issue*

End of Year	Total Amount of Note Issue (NT$million)#	Indices of Note Issue (June 15, 1949 = 100)	Loans and Advances to Public Treasury[x] (NT$million)	Wholesale Prices Indices in Taipei (June 30, 1949 = 100)
1949	198	452	15	183
1950	248	569	497	345
1951	390	895	684	526
1952	589	1,350	681	544
1953	773	1,773	828	631
1954	1,043	2,390	1,138	616
1955[y]	1,164	2,650	not yet available	

* Statistical Abstract of the Republic of China 1955, pp. 164-67.

\# Amount of subsidiary currency is not included in these figures. At end of 1954 subsidiary notes in circulation amounted to NT$175 million.

x Granted to both the central and provincial governments.

y Chung-yang Jih-pao [Central Daily News], Taipei, Jan. 3, 1956, p. 3.

435 It should be noted that price levels have
457 risen 700 per cent and the amount of notes issued has increased 2,600 per cent. Similarly foreign exchange has not depreciated to the same extent as the increase of money in circulation. The official exchange rate[5] for US dollars has increased from NT$5 to NT$24.78; the market rate[6] for US dollars has increased from NT$7.82 on December 31, 1949 to NT$37.50 on November 6, 1955.

458 The pressure of inflation on the economy
652 of Formosa has been alleviated by a number of factors. The enormous growth in population and industrial expansion tend to absorb a part of the increased money supply. The government controls an abundant reserve of rice, wheat flour, and other essential goods, which may be used to stabilize prices. The depreciation of the external value of the currency has been partially offset by aid from the United States and the personal expenditure of United States advisory personnel in Formosa.

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5. The 1955 figure includes the bank exchange rate of NT$15.65 plus 20 per cent defense tax (NT$3.13) plus the certificate price of NT$6.00.

6. United Press dispatch, Taipei, Nov. 6, 1955.

However, these favorable factors may be of no help if the trend toward inflation continues unabated. The principal cause of continued inflation is government borrowing. Advances to the public treasury at the end of 1954 amounted to NT$1,138 million; the total note issue was only NT$1,043 million. Unless the Chinese government is able to drastically reduce its huge budgetary deficit by raising more revenue and cutting its expenditures, it will be difficult to control inflation, and unless the dangers of inflation are avoided, it will be impossible to achieve financial stability.

Annex "A," Subparagraph 3e,
Economic Background

TRADE

I. DOMESTIC TRADE

438 434 The most recent complete estimate of Formosa's national income reveals that, in 1951, domestic trade, including wholesaling and retailing, contributed a little more than 11 per cent to the gross national product.[1] This percentage, however, does not include production in terms of storage and transportation related to wholesaling and retailing. If this fact is taken into consideration, it would appear that domestic trade occupies a more important position in the formation of the national income than the statistical figure indicates. As of 1953, about 8.5 per cent of the total working population of 2.9 million were engaged in domestic trade.[2] Popular

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1. Industrial Development Commission, Industry of Free China, Vol. II, No. 5, Nov. 1954, p. 6. Many wholesaler may be engaged in foreign trade and other activities, but detailed classification is not available. Therefore the figure here is an approximate indication.

2. China News Press, China Annual 1954, Vol. 3, p. 77. For detailed breakdown, see the chapter on Population in this handbook.

438 belief has been, particularly in the postwar
434 years, that in Formosa more opportunities for money-making exist in trade and enterprise than in other fields.

A. Channels of Trade

438 The marketing system of Formosa is in
656 part free and in part controlled. Certain commodities are strictly in the hands of the government as far as production and distribution are concerned. Prices of some commodities
[436] are regulated and the movement of other commodities is controlled by the government. Some commodities are controlled in their production phase and some in their distribution phase. Since it is difficult to describe the marketing system in general terms, the process as it applies to a few typical commodities will be discussed.

Rice: To effect control on movements of rice, the Provincial Food Bureau has established seven food districts on the island - Taipei, Hsinchu, Taichung, Tainan, Kaohsiung, East Taiwan, and Penghu - designating each as either "surplus," "self-sufficient," or "deficient." Only the Taipei and Penghu districts are considered deficient areas. Taichung, Hsinchu, Kaohsiung, and Tianan are surplus districts. The regional movement of rice is determined at the discretion of the Provincial

438 Food Bureau. Shipment of rice from one dis-
656 trict to another is prohibited unless prior permission has been granted by the local district office or a branch office of the Provincial Food Bureau. For example, a Taipei merchant cannot purchase and move rice from the Tainan district without permission from the district office of the Provincial Food Bureau in Tainan.

442 Within this framework of control, rice merchants engage in one or more marketing activities -- transporting, milling, wholesaling, or retailing. They may be roughly classified into eight groups:

1. Local wholesalers and retailers -- receive unhulled rice from farmers for milling and sell to local retailers or to wholesalers at transit market.

2. Wholesalers at transit market -- buy rice, mostly brown, from the local wholesaling mills and sell to wholesalers at consumption markets, say in Taipei. These merchants are usually located in Taichung and Hsinchu, and at times they utilize the service of brokers to effect sales.

3. Wholesalers and retailers at transit market -- their function is the same as the wholesaler at transit market, although

442 they also sell at retail to local consumers.

4. Wholesalers at consumption market in large cities and in the vicinity of Taipei and Penghu.

5. Wholesalers and retailers at consumption market.

6. Retailers -- retail polished rice to consumers.

7. Brokers -- there are two kinds of brokers: one acts for local mills in the producing area and wholesalers at the transit market and one acts for wholesalers at transit markets and wholesalers at consumption markets.

8. Warehousers -- provide storage space for farmers at harvest season and for transit wholesalers when rice is shipped to consumption areas. The former are in producing areas, the latter are generally in large cities such as Keelung and Taipei. Farmers' associations also store rice for growers.

442 443 Some retailers and most wholesalers own milling and refining facilities to provide rice of various grades of whiteness. Although milling is often included in the process of wholesaling and retailing, these services also

442 function independently to provide sales
443 facilities for some large mills which engage only in processing.

In addition to the independent activities described above, some rural co-operatives also store, mill, and wholesale rice.

As of early 1953, there were 8,115 rice merchants of one kind or another on the island: 2,813 wholesalers, 2,305 retailers, 2,936 mill operators, 49 brokers, and 12 warehousemen.[3]

656 The Provincial Food Bureau, as well
435 as maintaining control over the movement and distribution of rice, also acquires a considerable amount of the rice produced yearly (some 30 per cent in 1951), since the government may barter fertilizer (which it controls) in exchange for rice and also receives some rice in payment of taxes. The bureau rations its rice to civil employees and sets aside a certain amount

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3. Hsieh Shen-chung, "T'ai-wan Ti Nung-ch'an Yün-hsiao Chih-tu," ["The Marketing System of Agricultural Produce in Taiwan"], T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 10, No. 4, Taipei, April 1954, pp. 29-34. The classification used here appears rather arbitrary. It may be that those registered as wholesalers are also engaged in retailing.

656
43each year to meet emergencies and maintain a stable market price.

244 Vegetables: Taipei, with a population
443of nearly 700,000 as of late 1955 consumes more vegetables (as well as other commodities) than other cities on the island. Vegetables for the city are produced in its suburban areas and in the regions of Taichung and Changhua during spring and winter. Yilan also supplies a sizable quantity of vegetables to Taipei (about 3,000 metric tons a year). Producers in the vicinity of Taipei sell vegetables directly to consumers or to local vegetable traders who sell to city dealers. In areas at a greater distance from the consumer, local vegetable traders sell to sales-agents, who sell to retailers at 6 per cent commission. The retailers clean and grade the vegetables before offering them to the public.

656 Salt: The Taiwan Salt Works, the sole
317producer of salt in Formosa, supplies salt directly to industrial consumers. The supply to general consumers is controlled by the Provincial Food Bureau, which has offices near railroad stations in the vicinity of the salt fields. The allotment of salt to licensed wholesalers is governed by directives from the Provincial Food Bureau.

339 656 426 Cement: Cement was originally distributed under the supervision of the Cement Distribution Secreening Committee of the Provincial Department of Reconstruction. To effect tighter control over the sale and use of all building materials, cement was placed under the supervision of the Provincial Supply Bureau in September 1953. The bureau determines allotments to building material traders' associations and cement traders' associations throughout the island; they in turn allocate cement to their members, and the members to consumers. The wholesale price is fixed, currently at NT $30 per bag (about 50 kgs.); however, the retail price is allowed to fluctuate according to supply and demand -- about NT $50 per bag in early 1955, and about NT $40 in late 1955.[4]

655 Tobacco and Alcoholic Beverages: Production and distribution of these goods are completely under government monopoly. The Taiwan Tobacco and Wine Monopoly Bureau has eleven branches and two business offiees, which handle distribution of these commodities to three types of wholesale establishments -- the city, county, and town co-operatives; the

4. Kung-shang Yüeh-k'an [Industry-Commerce Monthly], Vol. 3, No. 10, p. 94; The Central Daily News, Dec. 4, Dec. 15, 1955.

655 tobacco and beverage wholesale houses; and the bureau's own wholesale offices. The tobacco and beverage wholesale houses sell directly to general retailers; all the other types of wholesalers of these commodities sell to their own retailers. All the wholesalers and retailers must be approved by the bureau, which fixes prices at both levels.

B. Small Business

443 Retail sales in large cities are handled by modern department stores, speciality stores and shops, general stores, roadside stands, and peddlers. In general the organized [435] department stores and other shops sell goods at a fixed price whereas the roadside stands and peddlers have no fixed prices. The large stores and shops generally operate at a higher cost and margin of profit than do the peddlers and proprietors of roadside stands, who are satisfied with a small profit, need only minimum capital, and pay no interest, rent, or taxes. Small business has increased in Formosa due to lack of other opportunities for employment. Enterprising people create marginal self-employment by establishing roadside stands for the sale of food and other everyday necessities., The buying public seems to favor this type of "little" business where various items can be bought more inexpensively than in

443 established stores and shops, provided one has skill in bargaining. Some operators at times manage to sell their items at high prices to unsuspecting customers.

II. FOREIGN TRADE

439 459 Foreign trade has had a stimulating effect upon the economic life of Formosa. The island must export its surplus products to afford the necessary imports of materials vital to its industrial and consumption needs. Businessmen are particularly concerned about the timely arrival of goods from foreign exchange. A great part of a businessman's profit or loss is predicated on his ability to anticipate and take advantage of government changes in the rate of foreign exchange and trade control measures. To operate successfully in Formosan society, a foreign trader must not only have experience and intuition concerning the right time and place to buy and sell, but also must possess initiative, shrewdness, and influence.

Formosa's principal exports include such items as tea, salt, sugar, rice, canned pineapple, bananas, coal, and camphor. Formosa is dependent upon foreign countries for such articles as precision machinery, motor vehicles, raw cotton, gypsum, crude oil, chemical fertilizers, bauxite, wheat, dairy

43/ products, modern medicines, and soybeans.
45/ If export commodities are not sold overseas, the prices of these articles at home may be adversely affected; delay in the arrival of, or restrictions on, imported commodities may cause prices in Formosa to rise; and price changes of import and export commodities may cause a sharp increase in the prices of domestic goods. Shrewd manipulators take advantage of these market conditions to increase their profits. For the economy of Formosa to function and prosper, a stable and efficient system of import and export is imperative.

A. General Position of Trade

In terms of volume, the recent history of Formosa's foreign trade is characterized by a rapid expansion during the two decades preceding 1940, a sudden drop immediately after World War II and a gradual increase since 1945. In prewar years, a constant positive trade balance had accumulated; the postwar years have produced a persistent trade deficit, which in large has been met by aid from the United States.

Japan, the United States, Hong Kong, and Britain have been the most important trade partners of Formosa in the postwar years:

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Formosan Trade, 1953*
(per cent)

Country	Export to	Import from
Japan	45.55	30.63
United States	4.18	38.67
Hong Kong	8.19	5.74
Britain	6.67	4.11
Egypt	3.46	1.61
Netherlands	3.05	3.11
Straits Settlements and Federated Malay States	7.89	1.57
Arabia	2.24	2.57
Other countries	18.72	11.99
Total	100.00	100.00

* The Inspector-General of Customs, The Trade of China, 1953, Taipei, 1954, Chart 4.

Currently, annual trade amounts to about 300 million American dollars whereas the annual trade in the years 1935-37 was about 200 million dollars.[5] When adjusted to prewar

5. Ministry of Economic Affairs, Republic of China; Navy Department, Civil Affairs Handbook, Taiwan - Economic Supplement, Washington, D.C., 1944, p. 72.

439 prices, current trade is still below the prewar
457 level. Many reasons account for this change, but in the main it is caused by a transfer in the management of the island's economy. The Japanese exploited Formosa as a colony, and thus there was a constant flow of goods from the island, creating a trade surplus. The favorable trade balance was based on Formosa's position as an agricultural colony of Japan. The present administration, with aid extended by the United States, is endeavoring to build an independent and self-sufficient economy for the welfare of the people on the island. The recent announcement of Hsu Po-yüan, Minister of Finance, that the island will launch its second Four-Year Economic Plan in 1957 indicates an intention to continue present policy. This, in effect, means that the government will attempt to minimize foreign expenditures and increase foreign earnings while efforts are made to balance domestic production and consumption. As far as foreign trade is concerned, this in no way means the reduction of Formosa's dependence on the outside world. To continue the development of its textile industry, the island still requires imported raw material amounting to over US$20,000,000 annually. The swiftly expanding fertilizer industry depends on the import of phosphate, and the flour industry relies heavily on the import of wheat. The same applies to the petroleum refining industry, which would

439 450 probably have to cease operation if the import of crude oil stopped. However, it is clear that the import of raw materials instead of manufactured goods will tend to decrease the total value of import expenditure. To a certain extent, world market conditions and production costs in Formosa also account for the low rate of trade in recent years.

The most important exports of the island have been sugar and rice. In 1954, sugar export accounted for 60 per cent of the total foreign exchange, and rice for about 8 per cent. Tea export was third in volume before 1954; in 1954 it accounted for nearly 10 per cent of the total export. Next in importance are bananas, salt, canned pineapple, coal, and citronella oil, each accounting for from one to five per cent of the total exports in various years.[6]

Import commodities in 1954 were listed by the ministry of economic affairs in the following order of value: machinery and tools, metals and metal products, chemical fertilizers, raw cotton, wheat and flour, and soyabeans, each valued at from US$14,000,000 to US$25,000,000; crude oil and gasoline, medicines,

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6. Ibid.

439 ships, motor vehicles and parts, wool and
457 artificial fabrics, fat and wax, chemicals, and salted and dried fish, each valued from US$3,000,000 to US$11,000,000. In recent years, imports of investment goods and industrial raw materials have been increased, while consumer items have been greatly decreased.[7]

Increased activities in industrialization and an expanding population in the last seven years have necessitated a rising volume of imports; exports have failed to keep pace. The following table presents a picture of the situation:

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7. Ibid.

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FORMOSA -- TOTAL IMPORT AND EXPORT* (In millions of U.S. dollars)

	Total export	Total import#	Trade deficit
1950	93.1	110.1	17.0
1951	93.1	143.3	50.2
1952	119.5	207.0	71.9
1953	129.8	190.6	60.8
1954	97.8	203.7	105.9
1955	130.0[x]	-[y]	

* Ministry of Economic Affairs, Formosa.

\# Including commercial import, U.S. aid import, and import through self-provided foreign exchange.

x From Asia Foundation Bulletin, January 20, 1956.

y Not available.

459 The government has established in the past
459 years a set of schemes for control of foreign exchange and trade flow to prevent the flight of capital abroad and reduce the trade deficit.[8]

B. Trade and Foreign Exchange Controls

The Foreign Exchange and Foreign Trade Screening Committee of the Executive Yuan is charged with the duties of determing foreign exchange and foreign trade measures and of examining the use of foreign exchange. The committee functions only as a screening and licensing unit; the Bank of Taiwan is the only organization on the island given authority to engage in foreign exchange business. All imports by public enterprises or private firms, with few exceptions, must be licensed,[9] and the issuance of an import license carries with it approval for the allocation of necessary

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8. Trade deficit here is viewed from an overall economic standpoint. Frequent reports indicating a favorable trade balance only relate to commercial import as compared with export.

9. The exceptions are: imports by the International Co-operation Administration Mission to China, official supplies and personal effects of foreign consulates and diplomatic personnel, commercial samples, etc.

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(This table follows p. 652.)

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APPENDIX III

A TABLE OF WEIGHTS AND MEASURES

Area

Hectare	Taiwan (Chiao)	Shih Mou	Mou	Japanese Tsubo	Acre
1	1.03108	15.00000	16.27830	[illegible]	2.47114
0.09697	0.09675	1	1.08508	[illegible]	0.14374
0.61444	0.65235	0.92150	1	[illegible]	0.11125
0.00025	0.00024	0.00006	0.00008	1	0.00002
0.00092	0.01022	0.14976	0.16142	[illegible]	0.01421
0.98992	1	14.54980	15.79237	[illegible]	2.39000
0.40489	0.42724	6.07021	6.58577	[illegible]	1

Length

Meter	Kilometer	Shih Foot	Chinese Foot	Foot	Mile
1	.00100	3.00000	3.12500	[illegible]	[illegible]
0.33333	.00033	1	1.04167	[illegible]	0.00021
0.32000	.00032	0.96000	1	[illegible]	[illegible]
0.32000	.00030	0.90000	0.94097	0.99621	[illegible]
0.30479	.00030	0.91430	0.95500	1	0.00019
1000.00000	1	3000.00000	3125.00000	[illegible]	0.62139
3239.27273	3.92727	11781.81820	12272.72728	[illegible]	2.46034
1609.31488	1.60931	4827.94477	5025.12002	[illegible]	1

Weight

Kilo	Taiwan Catty	Shih Catty	Japanese Kin	Pound	Long Ton
1	1.67	2.00	1.66	2.20	[illegible]
0.59882	1	1.19	0.99	1.31	[illegible]
0.50000	0.83	1	0.83	1.02	[illegible]
0.60000	1.00	1.20	1	1.32	[illegible]
0.00373	0.01	0.01	0.01	1	[illegible]
0.45359	0.75	0.90	0.75	[illegible]	[illegible]
1016.04754	1702.45	2032.09	1692.41	2000.00	1
907.18600	1520.05	1814.37	1511.97		[illegible]

Volume

Hectoliter	Liter	Japanese Koku	Japanese To	Gallon Standard
1	100.00	0.55	[illegible]	[illegible]
1.80	180.29	1	10.00	[illegible]
0.01	1	0.01	0.05	0.26
0.02	1.80	0.01	0.10	0.47
0.18	18.02	0.10	1	4.75
0.04	4.54	0.02	0.21	1.20
0.03	3.78	0.02	0.20	1

[this table follows p. 652]

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foreign exchange.

Before arranging for shipment of exportable goods, exporters must make a declaration of value in terms of foreign currency to the Bank of Taiwan. If the sales price is not at least equal to the floor price set by the bank, a separate appraisal by the customs is required. Exporters are required to surrender their export proceeds in foreign exchange to the Bank of Taiwan, receiving in return foreign exchange deposit certificates and New Taiwan dollars at the bank rate; the proportion between two methods of payment is determined by the bank. The deposit certificate are negotiable for ninety days after the date of issuance. Upon expiration, the certificate must be resold to the bank at an officially determined price. The current price[10] amounts to a total exchange rate of NT $24.66 per US $1, figured on the basis of an official exchange rate of NT $15.50 per US $1 plus a "certificate price" of NT $6 per US $1 and a defense tax equivalent amounting to 20 per cent of the existing exchange rate. However, nearly all exporters negotiate the certificates on the open market where a "certificate price" of NT $16-17 per US $1 raises the total exchange rate[11] of the

10. Regulations Governing Measures Pertaining to Sales and Purchase of Foreign Exchange, promulgated on October 22, 1955.

11. The Central Daily News, Nov. 28, 1955.

439 certificate to NT $34-35 per US $1. Certificates
457 bring high prices on the open market because importers must submit certificates in amounts equivalent to the foreign exchange alloted them by the licensing authorities. The supply of certificates is always less than the demand since there are more importers than exporters and because export-import traders often retain their own certificates against import requirements. If the exporter holds the certificate beyond ninety days, however, he suffers a loss amounting to the difference between the open market and official certificate price. An exporter cannot convert all his foreign exchange proceeds at the market rate since he receives only a part of them in certificates -- in the case of sugar, 80 per cent and bananas, 50 per cent. On the portion of his foreign sales for which New Taiwan dollars are issued, the exporter sustains a loss amounting to the differences between the exchange rates.

Licensing of imports is carried out within an "import budgeting system," in which the authority announces an import budget once every two months covering imports for the following two months. Each budget specifies what commodities are to be imported and allocates to each commodity a specific amount of foreign exchange. An importer must be

439 duly registered with the government, and he
457 is permitted to apply for permission to import only one kind of commodity during the budget period. Also, a maximum is set on the amount of foreign exchange any one importer may be allotted. The foreign exchange aportioned against any single commodity during a given period may be so small that when it is divided among a number of importers none is assured of a reasonable profit. Some importers sell their import licenses at prices ranging from NT $23,000 to NT $27,000, the cost of import[12] for the buyer of the license will be increased by an amount ranging from NT $11.50 to NT $13.50 per US $1. There exists an acute shortage of foreign exchange in spite of the fact that the government at times engages in the sale of foreign exchange deposit certificates in the open market. A private importer must pay NT $15.65 bank exchange rate at the Bank of Taiwan, plus 20 per cent as defense tax, and must submit the equivalent foreign exchange in deposit certificates. Government enterprises are not required to submit the certificates but must pay the official certificate price of NT$6 to US$1. Thus, the government enterprise is in a more

12. Ibid.

439 advantageous position than the private importer,
451 who has to buy certificates in the amount he needs at current market rates. In effect, government enterprises pay NT $24.78 per US$1 for import and private importers pay NT $34-35 per US $1. The actual rate at which private importers pay for their exchange is thus largely affected by the current market price for the certificates and by the cost of fees that may be necessary to secure additional import licenses.

In summary, trade control is primarily affected by the requirement that exporters and importers to do business must be duly registered with the government, which may refuse to register an applicant. In addition, export prices must be in line with the price determined by the Bank of Taiwan; import is restricted by the import budget. In foreign exchange control, the foreign exchange deposit certificate system is implemented by the partial relationship maintained between export and import and by the existence of multiple exchange rates. As well as the official rates for import and export, there exists a black market rate[13] for American

13. Tzu-yu Chung-kuo Pao [Free China Daily], San Francisco, Nov. 7, 1955.

439 notes -- about NT $38 per US$1. There also
457 is a "preferential" rate of NT $34 per US$1 for cash or remittances surendered to the Bank of Taiwan by American personnel and by visiting overseas Chinese.[14]

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14. Courtesy of Professor Li Ch'ao-ying of National Taiwan University.

1: Stanford U. S-4, 5 1956 AD1 Formosa AD1

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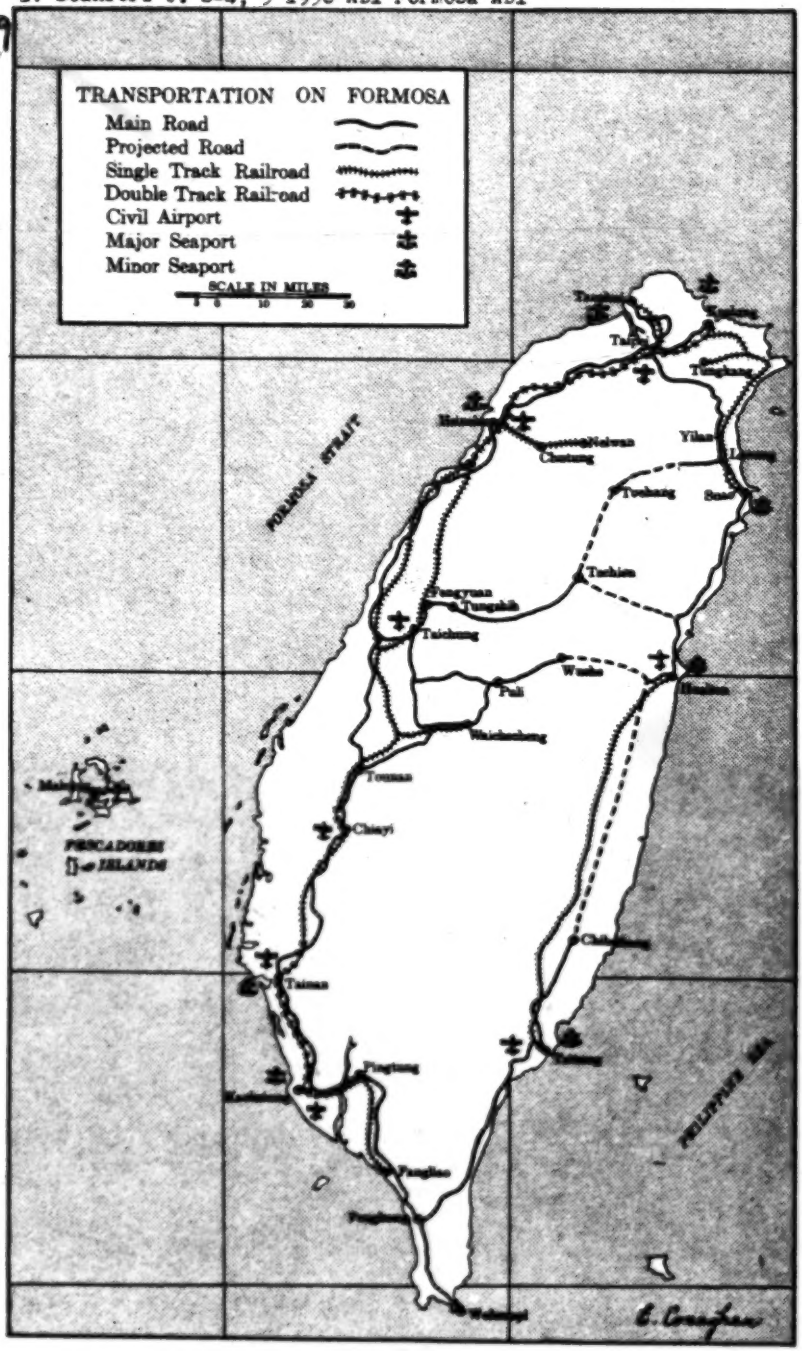

A B C

Reduce AC to BC

Transportation, facing p. 630

[Facing p. 658]

Annex "A," Subparagraph 3f,
Economic Background

TRANSPORTATION

I. INTRODUCTION

489 Western Formosa is well served by a network of railways and highways. The mass of the people who have to travel relatively long distances, depend on the railroad; highway buses are utilized for shorter trips. Due to natural barriers, there are no railroad connections between the west coast and the east coast of Formosa. The transportation facilities on the east coast are relatively poor. There are no roads for vehicular traffic across the central mountain barriers. Plans to overcome the latter difficulty are now underway, however. With the exception of a gap between Chihshang, north of Taitung, and Hualien, highways now make a circuit of the island. Supplementing the railroad and highway lines are privately owned pushcar lines operating cars known as "daisha" or "T'ai vehicles" (Taiwan vehicles). Small flat cars are pushed manually along 18-20" gauge rails; they are used for passengers and the transport of sugar cane, coal, and lumber. In most instances they serve towns in the interior of the island and are often the only means of transport for a sizeable area. Pedicabs are used extensively in the cities, and ox-driven cart s and man-pulled carts are used in both city and country.

504 There are only two important natural harbors, Keelung and Kaohsiung. Almost all foreign shipping passes through these two ports. Coastal shipping is carried on largely through ports of secondary importance such as Hualien, Suao, Makung, Tanshui, Anping, Lukang, Tungkang, Taitung, and Hsinkang. These harbors with the exception of Hualien, are only capable of accomodating small vessels and fishing boats.

506 Domestic air transport is in its infancy. International air lines connect with the United States, Japan, Korea, Hong Kong, the Philippines, and Thailand.

II. RAILWAY TRANSPORT

497 The Formosa railway constitutes the foundation of the island's transportation system. However, its position is in process of being challenged by increasing activity in highway transportation. The government-owned Taiwan Railway Administration (TRA) operates an extensive network of lines called the Western System and the single-tracked line which forms the Eastern System. Taiwan Sugar Corporation also operates railroad lines totaling 1,543 miles (2, 649 kilometers). The 30" tracks of the sugar corporation extend over sugar-producing areas for the purpose of transporting sugar cane, supplies, and fertilizers.[1] In addition, this system offers passenger service. The Taiwan Forestry Administration owns, besides a number of small narrow gauge railways, three lines of 30"gauge, used for the transporation of lumber and a few passengers; these lines connect Chiayi with the

1. Foreign Operation Adm., Mission to China, Taiwan Economic Data Book, Part II, Vol. III, 1955, Taipei.

497 with the A-li-shan (阿里山) forestry area, link Fengyuan to Pahsien-shan forestry area, and unite Tuchang (土場) with Lotung westward for lumber from Mount T'ai-p'ing (太平). There are many other companies and various coal mines that operate shor sections of narrow gauge railways.

496 The TRA is the largest and the sole publicly owned carrier on the island. Its western system comprises a network of main and branch lines of 42" gauge tracks approximately 472 miles (760) kilometers) long. The main line links Keelung with Kaohsiung while connecting major cities of Taipei, Hsinchu, Taichung, Chiayi, Tainan, and Pingtung. This line has four tracks between Keelung and Patu, double tracks between Patu and Chunan, between Minhsiung and Chiayi, and between Hsinshih and Fengshan, and single tracks for the rest. It forms a loop between Chunan and Changhua with one track along the coast and the other through the mountains. The Eastern System, of 30" gauge single track, connects Hualien and Taitung over a distance of 110 miles (176 kilometers).[2]

497 Traffic (both freight and passenger movements) has been on the increase in recent years due to the increase in population and the expansion of industria activities. Railroad facilities are taxed to their limit in spite of the fact that new rolling stock has been added, some branch lines have been extended, and operational efficiency has been increased. In 1955, the number of passengers carried by TRA alo

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2. Ibid.

49 reached over 74 million; approximately 66.8 million passengers were carried by the same company in 1954. In terms of the average mileage covered by those passengers in 1955, the traffic was 2,272.9 million passenger-kilometers. Commuters account for an important portion of the total - 43 per cent. The remainder are ordinary passengers (46 per cent) and special passengers (i.e., military troops -- 11 per cent). Of the commuters, over 80 per cent are students, reported by TRA to be about 50,000,[3] who attend school in the cities and return to their village homes each day. There is, in consequence, a congestion problem in morning-evening rush hours, whereas some carriers are nearly empty during the slack hours of the day. Commutation tickets are sold at a considerable discount in order to help students who otherwise might not be able to attend distant schools.[4] In 1955, a total of 10 million metric tons of freight was carried; in terms of average distance covered, 157.3 million ton-kilometers. Movement of coal accounted for 12 per cent of the tonnage carried. Rice and sugar, respectively accounted for 6.7 per cent and 6.2 per cent. Other major freight hauled included fertilizer, cement, road building materials, lumber, and salt; military freight was 21.4 per cent of the total. It is reported that an average of 2,000 tons of freight are carried

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3. Ibid.

4. The Central Daily News, Jan. 5, 1956.

497 daily. There is an increasing need for additional freight cars.[5]

The erosive soil of Formosa, frequent typhoons and floods cause damage to roadbeds, bridges, and tunnels. This is especially true for the Eastern System of the TRA; services are frequently discontinued temporarily because of the damage done the lines by floods and earthquakes.

493 The TRA seeks the modernization of equipment as well as the rehabilitation and renovation of the equipment on hand. A drive to change motive power from steam locomotives to diesel engines is underway. Diesel cars are now operating on regular runs to the four major cities on the main line, namely, Taipei, Taichung, Changhua, and Chiayi. It has been reported that two diesel cars were to begin a regular express run between Taipei and Kaohsiung in early 1956 and are expected to make the run in 5-1/2 hours.[6] The administration plans to convert all passenger trains with diesel engines. Cushioned seats, at one time provided only in "first" and "second" class cars, are now replacing wooden seats in coaches. Manual signaling devices are being replaced by automatic block signals.

III. HIGHWAY TRANSPORT

491 The highways along the west coast of the island are well developed; those on the east coast are in

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5. Ibid.
6. The Asia Foundation Bulletin, Nov. 17,1955.

491 poor condition. An arterial highway 404 kilometers long, linking the principal ports, runs from Keelung to Kaohsiung. It has a minimum width of 21 feet (6-1/2 meters) over most of its length and can support 9-ton trucks.[7] Gravel roads connect Suao with the arterial highway, and other roads serve the southern part of the island, passing through Taitung and ending at Chihshang. There is no highway between Chichshang and Hualien. Su-hua highway, running between Suao and Hualien, is a single lane of about 28 miles (45 kilometers), passing along the face of the sea-cliffs. Construction of this road was a major engineering feat. The road is sometimes blocked by landslides. Generally, the gravel roads in Formosa are very rough and the bridges very narrow.

Currently, surveyors are at work in preparation for the building of highways across the central mountains from Tungshih to Tachien. One branch will extend to Lotung by way of Tuchang and another will connect with the Su-hua highway through Kuanyuan and Taloko Gorge.

493 Formosa has a comparatively small number of motor vehicles. As of the end of 1954, there were 3,875 passenger cars (654 for public hire) to a population of about 10.4 million. Almost all of the population must depend on mass transport of one kind or another. In 1954 there were 1,774 buses on the island. The Taiwan Provincial Highway Bureau, together with seventeen private companies and five city bus services carried a total of 275 million

7. T'ai-wan Kung-lu Kung-ch'eng [Taiwan Highway Engineering], Vol. 2, No. 1, Nov.1,1953, p. 9.

494 passengers over an average distance of 9.4
489 kilometers in 1954. The increase in the total traffic volume in recent years has been remarkable -- 943 million passenger-kilometers in 1951 and 2,582 million passenger-kilometers in 1954. In the same period, railroad passenger traffic increased slightly, from 2, 154 million passenger-kilometers to 2,217 million passenger-kilometers.[8]

489 All highway truck services are operated by private concerns; in 1954 there were 455 trucking companies, with a combined total of 2,401 trucks. In that year the companies carried 4.7 million metric tons of goods over an average distance of 27.4 kilometers. However, the actual total volume of trucking on the island may be somewhat greater, since many factories and enterprises own trucks.

With improved roads and better highway facilities -- as in the case of the completion of a surfaced road between Taoyuan and Tainan, the completion of Silo bridge, and so on -- highway transportation systems will expand. The United States is furnishing bus chassis and motor assemblies for this purpose.

499 The completion of Silo bridge deserves attention. Before 1952, the north-south arterial highway was interrupted by the Cho-shui River at Silo. At this point, the river is about 1.3 miles (two kilometers) wide. In order to cross the river, traffic detoured some 53 miles (85 kilometers) With American aid, the government proceeded

8. Statistical Abstract of the Republic of China, 1955, Tables 126-28.

499 to erect 31 spans upon the existing concrete piers built by the Japanese in 1937. The completion of the bridges provides the railroad tracks of the Taiwan Sugar Corporation, and sugar cane and other agricultural products can be transported at much less cost than heretofore.

493 The comparatively few passenger automobiles are supplemented by the bicycles, pedicabs, and motorcycles. The extensive use of bicycles for short-distance transport, particularly within a city, is necessary where bus service is infrequent and buses overcrowded. It is reported that in 1955 in the city of Taipei alone there were over 120,000 bicycles and more than 100,000 pedicabs.[9]

Pedestrians on the highways and in the streets must exercise extreme caution to avoid recklessly driven vehicles. During the first nine months of 1955, there were 1,694 accidents caused by motor vehicles, resulting in 250 deaths and 1,837 injuries. Sixty-eight per cent of the accidents was attributed to reckless drivers and 13.3 per cent to the carelessness of pedestrians.[10]

IV. SHIPPING

505 Keelung in the north and Kaohsiung on the southwest coast are the island's two most important natural harbors. All exports and imports pass through these harbors, and they handle, in addition, approximately 10 per cent of coastal shipping. Keelung is able to accomodate at a single time up to twenty-five 3,000- to 20,000-ton

9. The Central Daily News, Nov.14,1955.
10. Ibid.

505 ocean-going vessels, and in 1954 handled imports amounting to 671,000 metric tons; exports from Keelung amounted to 235,000 metric tons. Kaohsiung, large enough to accomodate as many as thirty-seven ships of up to 20,000-ton capacity, handled 60 per cent of the island's total imports[11] and approximately 70 per cent of total exports in the year 1954. Major export commodi[illegible] handled by the harbor at Kaohsiung include sugar, salt, and cement. The volume of export has fluctuated considerably in the past several years.[12]

Coastal shipping makes possible bulk transport between the western and eastern sections of the island, which might otherwise be delayed during certain seasons when typhoons damage or render the highways impassable. Shipping between the island proper and offshore islands such as Quemoy, Matsu, and the Pescadores is dependent upon small steamship and motor-powered sailing boats.

V. AVIATION

509 Formos'a most important international airport is situated at Sunghan, a suburb of Taipei. The airfields at Tainan, Makung, and Pingtung are designated as supplementary airports for emergency landings. The airfield at Sungshan is
507 equipped with four air-ground high frequency radiotelephone transmitters (3485 kc., 56125 kc., 8220 kc., and 13240 kc.), assuring communication

11. FOA, Mission to China, op. cit.
12. Industry of Free China, Vol. III, No.5, May 1955, Table 12.

509 with all aircraft flying within the Taiwan Flight Information Region (21°00'N, 117°30'E -- 21°00'N, 121°30'E -- 29°00'N, 123°00'E -- 29°00'N, 117° 30'E -- 21°00'N, 117°00'E). Furthermore, the airfield at Sungshan, Tainan, and Hualien have APN-2 radar for their runways. The Tainan field has two high frequency radio-telephones at 8515 kc. and 6557 kc.[13]

509 Currently, Formosa is served by Northwest Airlines (American), Thai Airways (Thailand), Korean National Airlines, and Hong Kong Airlines. Domestic air transport is the province of Civil Air Transport and Foshing Airlines. Civil Air Transport also fly China-Korea, China-Japan, China-Hong Kong, and China-Philippines routes.[14] A "round-the-island" route starts at Taipei and serves the airports of Makung, Tainan, Taitung, Hualien. Scheduled flights are available between Taipei and Hualien, and non-scheduled service is provided between Taipei and Quemoy.

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13. China Publishing Company, China Handbook 1953-54, Taipei, 1953, p.

14. Ibid.

Annex "A"

APPENDIX I

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MUTUAL DEFENSE TREATY

BETWEEN

THE UNITED STATES OF AMERICA AND THE

REPUBLIC OF CHINA

December 2, 1954

The Parties to this Treaty,

Reaffirming their faith in the purposes and principles of the Charter of the United Nations and their desire to live in peace with all peoples and all Governments, and desiring to strengthen the fabric of peace in the West Pacific Area,

Recalling with mutual pride the relationship which brought their two peoples together in a common bond of sympathy and mutual ideals to fight side by side against imperialistic aggression during the last war,

Desiring to declare publicly and formally their sense of unity and their common determination to defend themselves against external armed attack, so that no potential aggressor could be

000 under the illusion that either of them stands alone in the West Pacific Area, and

Desiring further to strengthen their present efforts for collective defense for the preservation of peace and security pending the development of a more comprehensive system of regional security in the West Pacific Area,

Have agreed as follows:

ARTICLE I

The Parties undertake, as set forth in the Charter of the United Nations, to settle any international dispute in which they may be involved by peaceful means in such a manner that international peace, security and justice are not endangered and to refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes of the United Nations.

ARTICLE II

In order more effectively to achieve the objective of this Treaty, the Parties separately and jointly by self-help and mutual aid will maintain and develop their individual and collective capacity to resist armed attack and Communist subversive activities directed from without against their territorial integrity and political stability.

ARTICLE III

000 The Parties undertake to strengthen their free institutions and to cooperate with each other in the development of economic progress and social well-being and to further their individual and collective efforts toward these ends.

ARTICLE IV

The Parties, through their Foreign Ministers or their deputies, will consult together from time to time regarding the implementation of this Treaty.

ARTICLE V

Each Party recognizes that an armed attack in the West Pacific Area directed against the territories of either of the Parties would be dangerous to its own peace and safety and declares that it would act to meet the common danger in accordance with its constitutional processes.

Any such armed attack and all measures taken as a result thereof shall be immediately reported to the Security Council of the United Nations. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.

ARTICLE VI

000 For the purposes of Articles II and V, the terms "territorial" and "territories" shall mean in respect of the Republic of China, Taiwan and the Pescadores; and in respect of the United States of America the island territories in the West Pacific under its jurisdiction. The provisions of Artcles II and V will be applicable to such other territories as may be determined by mutual agreement.

ARTICLE VII

The Government of the Republic of China grants, and the Government of the United States of America accepts, the right to dispose such United States land, air and sea forces in and about Taiwan and the Pescadores as may be required for their defense, as determined by mutual agreement.

ARTICLE VIII

This Treaty does not affect and shall not be interpreted as affecting in any way the rights and obligations of the Parties under the Charter of the United Nations or the responsibility of the United Nations for the maintenance of international peace and security.

ARTICLE IX

This Treaty shall be ratified by the United States of America and the Republic of China in accordance with their respective consti-

000 tutional processes and will come into force when instruments of ratification thereof have been exchanged by them at Taipei.

ARTICLE X

This Treaty shall remain in force indefinitely. Either Party may terminate it one year after notice has been given to the other Party.

In witness whereof the undersigned Plenipotentiaries have signed this Treaty.

Done in duplicate, in the English and Chinese languages, at Washington on this second day of December of the Year One Thousand Nine Hundred and Fifty-four, corresponding to the second day of the twelfth month of the Forty-Third Year of the Republic of China.

FOR THE UNITED STATES OF AMERICA:

JOHN FOSTER DULLES

FOR THE REPUBLIC OF CHINA:

GEORGE K. C. YEH

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD1

APPENDIX II

Geographical Names

1031. Places

European	Chinese Characters	Japanese
Anping	安平	Anpin
Changhua	彰化	Shoka
Chaochow	潮州	Choshu
Checheng	車城	Shajo
Chiayi	嘉義	Kagi
Chichi	集集	Shushu
Chihpen	知本	Chihon
Chihshang	池上	Chijo
Chinshui	錦水	Kinshui
Chishan	旗山	Kizan
Chuhuangkeng	出磺坑	Shukkoko
Chunan	竹南	Chikunan
Chungli	中壢	Chureki

European	Chinese Characters	Japanese
[continued]		
103 Chutung	竹東	Chikuto
Erhchungkang	二重港	Nijuko
Fangliao	枋寮	Boryo
Fantsetien	番子田	Banshiden
Fengkang	楓港	Fuko
Fenglin	楓林	Fulin
Fengshan	鳳山	Hozan
Fengyuan	豐原	Toyohara
Hengtsun	恒春	Koshun
Hsichih	汐止	Sekishi
Hsinchu	新竹	Shinchiku
Hsinchuang	新莊	Shinso
Hsinhua	新化	Shinka
Hsinkang	新港	Shinko
Hsinshih	新市	Shinshi

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD 1
[continued]

European	Chinese Characters	Japanese
103 Hsintien	新店	Shinten
Hsinying	新營	Shinei
Hualien	花蓮	Karenko
Huwei	虎尾	Kobi
Kangshan	岡山	Okayama
Kaohsiung	高雄	Takao
Keelung (Chilung)	基隆	Kiirun
Kuanyuan	關原	Sekihara
Linpien	林邊	Rinhen
Lotung	羅東	Rato
Lukang	鹿港	Rokko
Makung	馬公	Mako
Minhsiung	民雄	Minyu
Miaoli	苗栗	Byoritsu
Nanchuang	南莊	Nanso
Nantou	南投	Nanto

European	Chinese Characters	Japanese
[continued]		
103 Neiwan	内灣	Naiwan
Panchiao	板橋	Itahashi
Peikang	北港	Hokko
Peitou	北投	Hokuto
Pingtung	屏東	Heito
Puli	埔里	Hori
Putai	布袋	Hotei
Shihlin	士林	Shirin
Shuifang	瑞芳	Zuiho
Silo (Hsilo)	西螺	Seira
Suao	蘇澳	Suo
Sungshan	松山	Matasuyama
Tachi	大溪	Taikei
Tachia	大甲	Taiko
Tachien	達見	Takken
Tahu	大湖	Daiko
Taichung	台中	Tainan
Tainan	台南	Tainan

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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European	Chinese Characters	Japanese
[continued]		
103 Taipei	台北	Taihoku
Taitung	台東	Taito
Takuan	大觀	Taikan
Tamali	大麻里	Daimari
Tanshui	淡水	Tanshui
Taoyuan	桃園	Toen
Tawu	大武	Daibu
Touliu	斗六	Toroku
Tounan	斗南	Tonan
Tsaoshan, or Grass Mtn., or Yangmingshan	草山 陽明山	Sozan
Tsoying	左營	Saei
Tuchang	土場	Dojo
Tungkang	東港	Toko
Tungshih	東勢	Tosei
Woluanpi	鵝鑾鼻	Garambi
Wushe	霧社	Musha

European	Chinese Characters	Japanese
[continued]		
103 Yilan	宜蘭	Giran
Yingko	鶯歌	Oka
Yuanlin	員林	Inrin
Yuli	玉里	Tamazato

2. Islands

European	Chinese Characters	Japanese
103 Kweishan I.	龜山島	Kizanto
Lanyü	蘭嶼	Kotoshu
Liuchiu I.	琉球島	Shoryukyu
Lutao	綠島	Kashoto
Pescadores (Penghu Islands)	澎湖諸島	Hokoshoto

3. Peninsulas

European	Chinese Characters	Japanese
Fukweichiao	富貴角	Fukikaku
Santiaochiao	三貂角	Sanchokaku

4. Mountains

Hsiu-ku-luan Shan	秀姑巒山	Skukoranzan
Kuan Shan	關山	Kanzan
Mt. Morrison (Yü Shan)	玉山	Nihitaka Yama
Mt. Sylvia (T'zu-kao Shan)	次高山	Tsugitaka Yama

European	Chinese Character	Japanese
103 Nan-hsin-kao Shan	南新高山	Minamini-hitaka Yama
Pei-hsin-kao Shan	北新高山	Kitanihitaka Yama
Tung-t'zu-kao Shan	東次高山	Higashitsugitaka Yama

5. Rivers and Lakes

European	Chinese Character	Japanese
Cho-shui R.	濁水溪	Dakushui Kei
Lower Tan-shui R.	下淡水溪	Shimotanshui Kei
Sun-Moon Lake or Lake Candidius	日月潭	Jitsugetsutan
Ta-chia R.	大甲溪	Taiko Kei
Tan-shui R.	淡水溪	Tanshui Gawa
Tsang-wen R.	曾文溪	Sobun Kei

46: Ruey--1 E-5 (1949) 1950 AD1 Formosa
Formosan Aborigines AD4

601 /1/ A Preliminary Study of the Atayal Kinship of Pinsebukan, Taiwan (Formosa) China

By Ruey Yih-fu

The study of kinship system in anthropology is built upon the classification of kinship terms (kinship nomenclature). Although classification is not the ultimate aim of kinship system study, it is nevertheless the only method by which simple terminology can be employed to explain the characteristics and correlations of complicated kinship terms. Hence, to study the Atayal kinship system it is necessary first to understand its kinship terms. In July last year, when I participated in the Pinsebukan Anthropological Survey, financed by Lin's Educational Farm Fund, I had listed in advance kinship terms as one of the items for survey. Before the surveying party set off, Mr. Lin Heng-li was kind enough to furnish me with data, not yet published, of his survey of the kinship terms of Atayal in Wu Lai-she near Chia Ban Shan of Hsing Chu district, requesting that I supplement them with my findings. On arrival in Pinsebukan, a few hours after I had examined the family registers, I made inquiries and checks, item by item, on the basis of Mr. Lin's data and supplements were made thereto. Because of the limited time, the supplements made were far from complete and inclusive. As I hoped that another opportunity might present itself for a more comprehensive survey, I have not, for over one year, undertaken to compile the materials I gathered. Now that the editor of this magazine has pressed me for an article, I find no alternative but to have the data, though not sufficiently detailed and inclusive, compiled and edited for publication. I shall appreciate corrections that may come from readers

I.

Elucidation of the Atayal Kinship Terms

The following elucidation of the Atayal kinship term, using as a basis Mr. Lin's survey record, has taken into account the report by Wassao-Nokan, former 4th Chieftain of Pinsebukan and Head of Li-hsing Village, Jen-ai County, Chung-feng Region, Tai-chung District and corrections from time to time by his wife, Yongai-Nabo. Translations were done by Ho Ting-sui and Sung Wen-hsun, of the

History Department of National Taiwan University and were subsequently recorded by the author. We now group their male-speaking and female-speaking kinship terms under two categories, consanguineal and affinal, and explain each separately as follows: 601

I. Male speaker's (ego's) consanguineal relatives and their spouses

A. Two generations higher (ascending):

1. father of parents: yutas (father's father or mother's father)
2. mother of parents: yaki (father's mother or mother's mother)

Note: Designations for 3 or more generations higher are the same except for prefixing "yaba" (father) or "yaya" (mother) together with "ni" (possessive case) to yutas or yaki when differentiating lineal generations ascending; e.g., yaba-ni-yutas for father of father's father or father of mother's father; yaya-ni-yutas for mother of father's father or mother of mother's father, etc.

B. One generation higher (ascending):

3. father: yaba
4. mother: yaya
5. parents' older and younger brothers and husbands of parents' older and younger sisters: mama
6. parents' older and younger sisters and non-mama' older and younger brothers' wives: yaki

Note: Terms in 5 & 6 above are suffixed with miravai ("first line"), minpusai (second line), yaki/ minteyul (third line) to differentiate between the close and distant relationship; e.g. mama-miravai, /parents' brother or parents' sister's husband/; mama-minpusai, /parent's male first cousin/; mama-minteyul /parent's male second cousin/.

C. Same generation:

7. ego's spouse: kanerii (wife)
8. older brother and older sister: qabusuyan
9. younger brother and younger sister: sasoi

Note: In 8, 9 above, for differentiating sexes, suffix "melikui" (male) or "kanerii" (female) to qabusuyan or sasoi; e.g. "qabusuyan-melikui" for older brother; "qabusuyan-kanerii" for older sister; for differentiating close or distant relationship, suffix "bulai" (real) or "mineyul" (first line), "minpusai" (second line), or "minteyul" (third line) to qabusuyan or sasoi; e.g. "qabusuyan-bulai"

601 or "qəbusuyan-minəxal" for ego's own older brother and sister; "qəbusuyan-minpusal" for older first cousin; "qəbusuyan-minteyul" for older second cousin. The same rule applies to "səsoi".

10. wife of ego's own older brother or of ego's elder male cousin: iəax (sister-in-law)
11. wife of ego's own younger brother or of ego's younger male cousin: soəqi
12. yanai - husband of ego's own older or younger sister, or husband of a female cousin
13. rawin - a common designation for addressing each other among male first and second cousins.
14. nəqin - older and younger sisters, female first or second cousins.

D. One generation lower (descending).

15. laqei - son, daughter, brother's son and daughter, sister's son and daughter, wife's sister's son and daughter, wife's brother's son and daughter

Note: For differentiating sex suffix "[illegible]" (male) or "[illegible]" (female) to laqei, e.g. laqei-[illegible] for son; laqei-kaneril for daughter; for indicating [illegible] relationship suffix "na" (possessive) "qəbusuyan" or "[illegible]" to laqei, e.g. laqei-na-qəbusuyan for son and daughter of an older brother, sister, or first cousin, laqei-na-[illegible] for son and daughter of a younger brother, sister, or first cousin. For two generations lower relationship terms are based on those for one generation lower given above excepting when indicating lines descending, to suffix "na" (possessive) "laqei" (son and daughter) to "laqei", e.g. "laqei-na-laqei" for son's son or daughter, daughter's son or daughter etc.

16. ina - used for wife of son, brother's son, sister's son and of all male relations descending named in 15 above.
17. yama - used for husband of all female relations descending named in 15 above.

/3/ Note: Regarding kinship terms in 16, 17 above use the rule governing "laqei" for indicating lineal and coll relations.

II. Male speaker's (ego's) affinal relatives and their spouse (wife's blood relations) 601

A. One generation higher (ascending):

1. wife's father: yutas (father-in-law)
2. wife's mother: yaki (mother-in-law)

Note: Father-in-law and mother-in-law's older and younger brothers and older and younger sisters' husband are all called "yutas"; father-in-law's and mother-in-law's older and younger sisters and older and younger brothers' wives are called "yaki".

B. Same generation relationship:

3. wife's brother (younger and older): yanai
4. wife's older sister and older brother's wife: irax
5. wife's younger sister and younger brother's wife: soaqi
6. wife's older and younger sisters' husbands: mawan

C. One generation lower (descending):

7. wife's older and younger brothers' son and daughte laqei-na-yanai
8. wife's older sister's son or daughter: laqei-na-irax.
9. wife's younger sister's son or daughter: laqei-na-soaqi.

Note: The three terms in 7, 8, and 9 are generally designated as "laqei", same as son and daughter; only when differentiation is absolutely required is "na-yanai" or "na-irax" or "na-soaqi" suffixed.

The above explanation does not cover ascendants of two generations higher as the kinship terms are the same as with ascendants of one generation higher. Wife's brother's son's wife and wife's sister's son's wife are both called "ina". wife's brother's daughter's husband and wife's sister's daughter's husband are both called "yama". Unless differentiation is necessary "na-yanai" or "na-irax" or "na-soaqi" is suffixed. (Translator's remark: there appears to be some misprint in this paragraph as the meaning is obscure).

III. Female speaker's (ego's) consanguineal relations and their spouses

601 A. Same generation

1. ego's spouse: melikui (husband)
2. wives of ego's younger brother or male cousin: yango
3. husbands of ego's older sister or female cousin: nana
4. husbands of younger sister or female cousin: soaqi
5. older and younger brothers, male first and second cousins: nəqun.
6. female first and second cousins: langi.

Note: The above explanation is limited to ego's generation kinship. For ascending and descending generations the kinship terms are same as those of a male speaker and are therefore not repeated. Also, in ego's generation, older brother and sister (qəbusuyan), younger brother and sister (səsoi), and older brother's wife (irax) are designated by the same kinship terms as for a male speaker /4/ and are not repeated. The two kinship terms "nəqun" and "soaqi" though they may be used by the male, are to address females; when used by a female speaker, they are to address males.

IV. The female speaker's (ego's)affinal (husband's consanguineal) relations and their spouses:

A. One generation higher:

1. husband's father: yutas.
2. husband's mother: yaki.

Note: father-in-law's and mother-in-law's older and younger brothers and older and younger sisters' husbands: yutas; father-in-law's and mother-in-law's older and younger sisters and older and younger brother's wives: yaki. Kinship terms for two generations higher are based on those for one generation higher.

B. Ego's generation kinship:

3. husband's older brother and older sister's husband: nana.
4. husband's younger brother and younger sister's husband: soaqi.
5. husband's older sister and older brother's wife: irax.
6. husband's younger sister and husband's younger brother's wife: yango.

C. One generation lower kinship: 601

7. husband's older brother's son and daughter: laqei-na-nana.
8. husband's younger brother's son and daughter: laqei-na-soaqi.
9. husband's older sister's son and daughter: laqei-na-irax.
10. husband's younger sister's son and daughter: laqei-na-yango.

Note: The kinship terms in 7, 8, and 9 above are generally designated by a simple "laqei"; only when differentiation necessary is "na-nana", or "na-irax" or "na-yango" suffixed.

The above explanation does not cover kinship of two generations higher as the terms are the same as in one generation higher. Wives of husband's brother's son and husband's sister's son are both called ina; husbands of husband's brother's daughter and husband's sister's daughter are both called yama. Unless differentiation is necessary, do not suffix "na-nana," "na-soaqi," or "na-irax" "na-yango", etc., thereto.

II.

/5/ General Explanation of Nuclear Kinship Terms of Atayal

The kinship terms explained in the preceding chapter can be grouped into 22 basic terms, namely, ascending generation kinship, 6; same generation kinship, 13; descending generation kinship, 3. Now let us again explain them one by one.

A. Ascending generations:

1. Yutas (meaning "old man") - (1) used by both sexes to address male consanguineal kinsmen of the second ascending generation, father of parent, i. e., grandfather on the father's or mother's side; (2) used by the male to address affinal males of the first ascending generation, i. e., wife's father, his brothers, and his sisters' husbands; (3) used by the female to address affinal males of the first ascending generation, i. e., husband's father, his brothers, and his sisters' husbands.
2. Yaki (meaning "old woman") - (1) used by both sexes to

601 address consanguineal females of the second ascending generation, i.e., mother of parent; (2) used by the male to address affinal females of the first ascending generation, i.e., wife's mother, wife's father's sisters and his brothers' wives; (3) used by the female to address consanguineal females of the first ascending generation, i.e., husband's mother, husband's father's sisters and his brothers' wives.

3. Yaba (meaning "big")- used by both sexes to address consanguineal and lineal males of one generation ascending, i.e., father.
4. Yaya (meaning "close") - used by both sexes to address consanguineal and lineal females, i.e., mother.
5. Mama (original meaning not available) - used by both sexes to address collateral male kinsmen of the first ascending generation, i.e., parents' brothers and parents' sisters' husbands.
6. Yaya (original meaning not available) - used by both sexes to address collateral female kinsmen of the first ascending generation, i.e., parents' sisters and parents' brothers' wives.

B. Same generation:

7. Malikui (meaning "man") - used by woman to address her own spouse or husband.
8. Kaneril (meaning "woman") - used by man to address his own spouse or wife.
9. Qabusuyan (meaning "elder") - used by both sexes to address kinsmen of the same generation but older in age without distinction as to sex, i.e., older brother, sister, or first cousin.
10. Sasoi ("younger") - used by both sexes to address kinsmen of the same generation but younger in age without distinction as to sex, i.e., younger brother, sister, or first cousin.
11. Rawin (meaning "dear") - used exclusively by males to address collateral kinsmen of the same sex and generation without distinction as to age; i.e., male first or second cousin, male sibmate.
12. Langi (meaning "friendly") - used exclusively by females to address collateral kinsmen of same sex and generation

without distinction of age; i. e., female first or second cousin, female sibmate.

/6/ 13. Naqun (Meaning "connecting") - (1) used by males to address kinsmen of the same generation but opposite sex without distinction as to age, i. e., older and younger sisters, female first or second cousins, female sibmates; (2) used by females to address kinsmen of the same generation but of opposite sex without regard to age, i. e., older and younger brothers, male first or second cousins, male sibmates.

14. irax (original meaning not available) - (1) used by both sexes to address female affinal relativesof the same generation, i. e., older brother's wife, wife of older male cousin; (2) used by males to address older female affinal relatives of the same generation, i. e., wife's older sister, wife's older brother's wife, etc.; (3) used by females to address female affinal relatives of the same generation, i. e., husband's older sister, husband' older brother's wife, etc.

15. noaqi (original meaning not available) - (1) used by males to address female affinal relatives of the same generation, i. e., younger brother's wife, wives of younger male cousins; also used to address egos' wife's younger sister and wife's younger brother's wife; (2) used by females to address affinal males of the same generation, i. e., younger sister's husband, husbands of younger female cousins: also used to address ego's husband's younger brother and husband's younger sister's husband, etc.

16. yengo (original meaning not available) - used by females to address affinal females of the same generation, i. e., younger brother's wife, wives of younger male cousins; also to address ego's husband's younger sister and husband's younger brother's wife, etc.

17. nana (original meaning not available) - used by females to address affinal males of same generation, i. e., older sister's husband and husbands of older female cousins; also to address husband's older brother and husband's older sister's husband, etc.

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18. yanai (original meaning not available) - used by males to address affinal males of same generation, i.e., older and younger sisters' husbands, husbands of older and younger female cousins.
19. mawam (original meaning not available) - used by males to address affinal males of same generation, i.e., wife's older and younger sisters' husbands.

C. Descending generations

20. laqei (meaning "child") - used by both sexes to address kinsmen of descending generations without regard to sex, i.e., son and daughter, son's son and daughter, daughter's son and daughter, brother's son and daughter, sister's son and daughter; also used by males only to address wife's brother's son and daughter and wife's sister's son and daughter.
21. ina (meaning "married over") - used by both sexes to address affinal females of descending generations, i.e., son's wife, brother's son's wife and sister's son's wife; also used by males to wife's brother's son's wife and wife's sister's son's wife.
22. yama (original meaning not available) - used by both sexes to address affinal males of descending generations, i.e., daughter's husband, brother's daughter's husband, sister's daughter's husband, etc.,; also used by males to address wife's brother's daughter's husband, wife's sister's daughter's husband.

The above twenty two (22) kinship terms are applicable to relations within three generations, higher and lower, from ego's generation. Kinsmen within these three generations who are of the same generation status such as: great grandparents' older and younger brothers' and sisters' son's and daughter's son's and daughter's son and daughter, grandparents' older and younger brothers' and sisters' son's and daughter's son and daughter, /7/parents' older and younger brothers' and sisters' son and daughter, are addressed reciprocally between male and female as "nəqun" and marriage between them is impossible. Kinsmen of the same generation status beyond four generations cease relationship (spayatas

xələq) and therefore can not be addressed as "nəqun"; 601
marriage is permissible between them without regard to the generation status.

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PUBLIC HEALTH AND DEMOGRAPHY IN THE FAR EAST

Report of a Survey Trip
September 13 - December 13, 1948

by

Marshall C. Balfour, Roger F. Evans
Frank W. Notestein, Irene B. Taeuber

THE ROCKEFELLER FOUNDATION - 1950

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Foreword

In the ordinary course of its work The Rockefeller Foundation occasionally needs information on present developments or future prospects in certain subjects or areas of Foundation interest. Recently, for example, the Foundation required answers to the following questions: What is the present status of linguistic studies, and what developments are in prospect in this field? To answer questions such as these the Foundation from time to time engages the services of experts in various fields to undertake special studies. The primary and usually the exclusive purpose of these studies is to provide the officers and Trustees of the Foundation with the knowledge which they require in appraising projects for which Foundation aid is sought, or in recognizing lacunae in the fields of scientific research and scholarship.

The present volume presents the results of one such study, in which the efforts of representatives of several disciplines are combined. Dr. Marshall C. Balfour, at the time this study was projected, was Regional Director in the Far East for the International Health Division and was thoroughly familiar with the public health problems of the Far Eastern countries. Mr. Roger F. Evans, Assistant Director for the Social Sciences in the Foundation, had lived for a number of years in China and was familiar generally with political and social factors in Far Eastern life. Dr. Frank W. Notestein and Dr. Irene B. Taeuber of the Office of Population Research, Princeton University, are distinguished demographers. The results of the work of this group have been embodied in a report to the Foundation and should, we think, be made available to the scholars and scientists interested in this subject. A limited edition of the report is now made available, with minor revision to excise the specific recommendations concerning administrative and other problems of The Rockefeller Foundation.,

Chester I. Barnard, President

I. INTRODUCTION

Desiring a review of the problems of human welfare in the Far East, with special regard for their demographic and public health aspects, The Rockefeller Foundation financed, in the autumn of 1948, a preliminary reconnaissance in selected countries of that region. The group undertaking this survey represented the fields of public health, social science and demography and consisted of the following four persons:

Marshall C. Balfour, Regional Director in the Far East, International Health Division, The Rockefeller Foundation

Roger F. Evans, Assistant Director for the Social Sciences, The Rockefeller Foundation

Frank W. Notestein, Office of Population Research, Princeton University

Irene B. Taeuber, Office of Population Research, Princeton University

The itinerary followed was based on our desire to see as wide a variety of urban and rural situations as time permitted. From September to December, 1948, visits were made to Japan, Korea, China, Taiwan, Indonesia and the Philippine Islands. In each of these areas we inspected facilities, conferred with governmental and academic personnel in the fields of public health and population problems, and endeavored to see representative living and working conditions. A summarized itinerary and a list of organizations and persons interviewed and other activities of the group will be found in the Appendix.

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We construed our function of preliminary reconnaissance as involving a general appraisal of the population problems of the region; assessment of the information available for analysis; discussion with, and evaluation of, the people interested in population problems, and exploration with serious students in each country of feasible approaches to solutions.

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The survey was made primarily in the interests of The Rockefeller Foundation and the full report submitted to the Foundation included recommendations for its consideration. in connection with the policy and program of that organization. By courtesy of the Foundation, the present slightly abridged version is made available privately as a possible service to scholars, officials and others concerned with these problems.

The observations, assessments and analyses herein contained are made on the individual responsibility of the members of the group and they do not necessarily represent in any way the view or judgment of The Rockefeller Foundation.

This report is written on the basis of information acquired in the field or available to us in the United States on or before October, 1949. Names of places are those current at the time of our visit. Finally, we wish to express our gratitude to the many people who assisted our work with unfailing generosity in the midst of difficult and often momentous times. We have found it possible to include only a partial list of ~~their~~ names in the Appendix. To them and to many unnamed colleagues here and in the field go our heartfelt thanks. For all errors of fact, interpretation and judgment we take full responsibility.

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New York, March, 1950

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IV. TAIWAN AND KOREA

THE HERITAGE OF THE JAPANESE EMPIRE

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The preceding chapter showed that although the population problem of Japan Proper is clear-cut, its solution is conjectural. It is the problem of population growth from a current 80 million to a future 100 million or possibly 125 million. It is the problem of an industrial people too numerous to subsist on the products of their own land. Demographically, the Japanese people are in midtransition from the familial values of the rice lands of Asia to the individual values of a Western urban milieu, i.e. from mortality-dominated to fertility-controlled rates of population increase. The Japanese Empire bequeathed more than 80 million Japanese to a land and a culture ill-prepared to maintain them. It also stimulated population growth in all the conquered areas without developing the material base to sustain such growth or the psychological changes to terminate it. Taiwan had 2.6 million inhabitants in 1896 and 5.9 million in 1940. Korea had 14.8 million in 1912 and 24.3 million in 1940. The subject peoples of the Empire as a whole numbered 21.8 million in 1920 and 32.1 million in 1940, an increase of over 10 million or 48 per cent within 20 years.

The process that generated this growth was the same throughout the Empire: the decline of mortality within a social and economic setting that preserved intact the high fertility of the peasant East. This was a necessary by-product of political control and economic development. Today's people, whose numbers have already doubled or trebled, still face a long period of growth checked only by mortality.

Asian imperialism had its positive aspects. The defeated Japanese left to their former colonies the improved agriculture, the incipient industrialization and the roads, railroads and buildings in which the forced savings of the Empire had been invested since the initial conquest of Taiwan. The Japanese also left great university plants to which some "natives" had gone, a more widely diffused literacy than that prevalent elsewhere in the Far East and a substantial number of workers with industrial experience.

The peoples temporarily united under the rule of the Japanese had long histories behind them. They face divergent futures. The Japanese period was an interlude, but the political domination was so complete and the

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development plan so uniform that similar demographic consequences resulted from the occupation and similar population problems plague the future. Moreover, for the period of Japanese rule there are censuses and vital statistics of unusual accuracy, for Japan's statistical system was always among the paraphernalia of her export. Hence it is possible in each instance to secure a minimum picture of the population when the Japanese came, to trace its expansion during their rule and to assess the magnitude of the population problem bequeathed to the future.

The description of the demographic impasse of Taiwan precedes that of Korea, for Taiwan is a striking demonstration of demographic principles and problems. Its Chinese people contributed the labor force for the most successful of Japan's colonies. As death rates dropped lower and lower, the population increase approached that geometric pattern which Malthus believed to be the potential of human reproduction. A long series of censuses and vital statistics document this expansion of a Chinese people under almost optimal conditions for population increase. An analysis is sobering, though, for there was only China's ancient pao-chia system to record the demographic aspects of the fluctuations in economy, public health and political cohesion that followed the Japanese withdrawal and the re-establishment of Chinese suzerainty.

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The Heritage of Japanese Rule. The City of Taipeh.

TAIWAN (FORMOSA)

Taiwan is a small island of less than 14,000 square miles. Its culti- 131
vable land is a narrow plain bordered by mountain ranges extending 250 miles from north to south. Scarcely more than 100 miles to the west are South China's commercial cities and rice lands. Two hundred miles to the south is the Philippine island of Luzon. The Ryukyu Islands and Kyushu lie to the north. This strategic location, combined with the fertile western plain, the tropical climate and the impregnable mountain areas, has made the people of Taiwan pawns of the empires that have fought for the suzerainty of Asia's Pacific Littoral.

177 Polynesian peoples inhabited Taiwan for centuries, and perhaps for millenia, unable to develop any effective political organization but sufficiently warlike to prevent the infiltration of peasants from the Mainland. In the sixteenth century the Portuguese came to the Ilha Formosa but did little more than give it the name. The Dutch, who ruled from 1624 to 1661, reported an immigration of Chinese sufficiently strong to be troublesome. This was a period of crisis in China, for the Manchus had replaced the Ming Dynasty in the North and were pushing southward. The exodus of Ming civilians and soldiers across the narrow waters to Taiwan increased until there was a sufficient concentration of strength to capture the Dutch fortresses. In 1683 Taiwan became a district of Fukien Province, a tiny segment of the great Empire of the Manchus.

161 177 The patterns of demographic and economic development that made modern Taiwan evolved in the two centuries of Manchu suzerainty. Population growth was appreciable as immigrants from the crowded provinces of Fukien and Kwantung re-enforced the natural increase of the earlier settlers. By the latter part of the nineteenth century, when Japan had awakened from Seclusion and was ascertaining the areas available for Empire, Taiwan was considered a prize worth acquiring. Three million Chinese peasants were occupied in the production of rice, sugar, camphor, oilcake and other tropical products. "Incidents" occurred, war ensued and the Treaty of Shimonoseki gave Taiwan to the Japanese in 1895.

ECONOMIC DEVELOPMENT

177 433 The economic development of Taiwan required the expansion of health and sanitary facilities that would permit the residence of Japanese and guarantee the expansion of a cheap and docile labor force to produce the agricultural surpluses that were the goal of conquest. The achievement of military and, ultimately, civilian control necessitated roads and transport facilities. These were built before products were available for movement to the coast and shipment to Japan. The cultivated area was expanded, great irrigation systems built, techniques improved, more efficient varieties of rice and sugar developed and fertilizers introduced. Numerous agricultural experiment stations insured the necessary research, while hundreds of Japanese men in the field supervised the productive process from the initial preparation of the soil to the final processing and marketing. The Chinese had

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,600 physicians were registered as engaged in private practice or public service. There were about 600 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per cent in this 35-year period and virtually all 161 241 177

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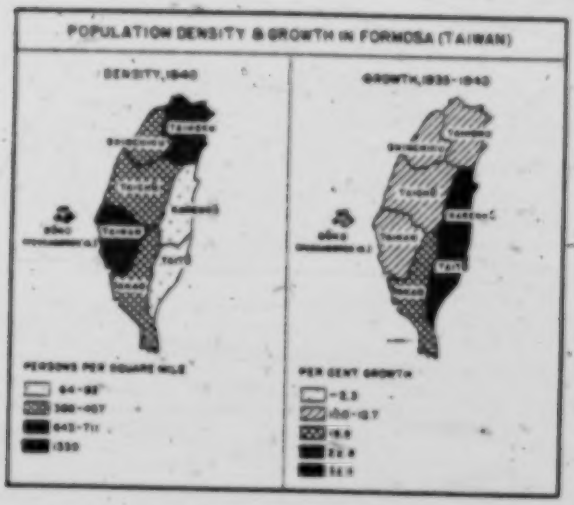

Taiwan, Population Density (1940) and Growth (1935-1940)

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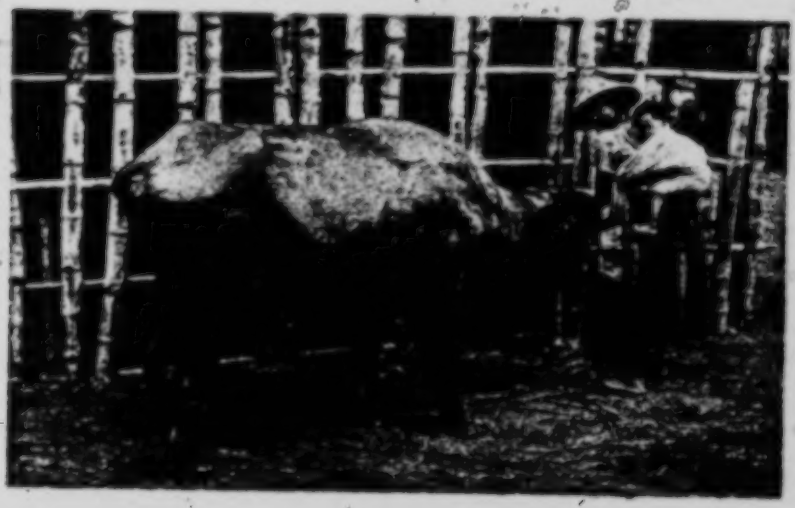

Peasant Scene in Southern Taiwan

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 378 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

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declined consistently from 33 per 1,000 total population in 1906 to 1909, to 20 in 1930 to 1937, with temporary setbacks only during World War I.

Life tables for the Japanese and the Chinese as of 1926 to 1930 place in sharp focus the low economic and health position of the native peoples as contrasted to the alien elite. The expectation of life at birth for males was 38.8 for the Chinese and 48.5 for the Japanese. The excess deaths of the Chinese were concentrated among children. Deaths during the first year of life amounted to 174 for each 1,000 boy babies among the Chinese and only 85 for the Japanese. Only 73 per cent of the Chinese boy babies lived to reach age 5.

The decline in the mortality of the Taiwanese under Japanese domination was appreciable but it did not approach the attainment of the standards deemed minimal in the West. At the end of the Japanese period the expectation of life at birth was perhaps 10 years greater than it was for the people of China or of India when there were no major epidemics or famines. The allocation of a larger portion of the production of the Island to the health, educational and cultural needs of the people could have produced sharp declines in the death rate and hence an even more rapid rate of population increase. An altered distribution of income within the existing technological

Taiwanese Children

matrix could easily have reduced death rates to 12 or 15 per 1,000 total 165
population and, if birth rates had remained at 45, shot the rate of natural 563
increase from 2.5 per cent per year to 3.0 per cent or more.

THE BIRTH RATE

Neither the extension of cultivation, the increase of yields nor the 163
health and medical activities in Taiwan produced any major changes in the familial patterns of the peasants. The recorded birth rate of the Chinese remained above 40. There were some slight evidences of a lower birth rate in the more prosperous and urbanized provinces, but the social and occupational groups that might have adopted the modern individual and familial values, rather than the traditional Eastern values, were few in numbers.

The growth implicit in the maintenance of fertility at the level that existed in Taiwan during the last decade of Empire was indeed rapid. The gross reproduction rate for the entire population was over 3.2 and the net rate over 2.0.

It is obvious that no population dependent on agriculture and inhabiting a limited and already densely settled area could reproduce indefinitely at the rate implicit in these figures. Potential growth was more rapid than the actual growth of the thirties, though, for any social and economic changes that would improve levels of living and contribute ultimately toward a reduction in fertility would produce immediate and more rapid declines in the death rate.

THE PROSPECTS: PREWAR JAPANESE VIEW

The balance between the people and the land in prewar Taiwan may have 433
appeared precarious to the Western student but the Japanese foresaw many de- 241
cades of further expansion before the Malthusian pressures of the people on 439
the food supply would limit either population growth or exportable surpluses. Rice production had increased from 2.1 million koku in 1900 to 4.9 million in 1923 and 9.7 million in 1940. In the latter year the export surplus amounted to five million koku. By 1950 rice production would amount to 12.8 million koku and the quantity available for export to Japan Proper would increase by almost a million koku.

The Japanese also realized that Asian hegemony implied a destiny beyond the agrarian for the once subject peoples and that Japan's own demographic

433 241 439 resources would have to be supplemented by the integration of Taiwanese and Koreans into the industrial nexus of Empire.

THE CONTEMPORARY PROSPECTS

178 727 Today the plans of the Japanese for the further development of Taiwan are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

177 198 The political travesty of the Chinese liberation of the Chinese population of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

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POPULATION GROWTH AND SOCIAL CHANGE IN TAIWAN

CHEN SHAO-HSING

The original title of this paper was "Population Change and Social Change in Taiwan". Owing to the limitation of space, it had to be divided into two parts. With the consent of the author, the first part is being printed under the above title, the part on population change will be printed in next number.—Editor.

I. INTRODUCTORY REMARKS

1. *Significance of the Study of Taiwan's Population.*

121 As universally admitted, the population problem is one of the most important problems of the present world. Since one fifth of the world population is Chinese, the study of Chinese population is an urgent task. But, sorry to say, we still have no population census, and though there are some population statistics, all are fragmentary and only for a short period of time. Because of these circumstances, "Taiwan is the only place where it is possible to study the processes of change of a Chinese population over a substantial period of time on the basis of excellent data" (Notestein's preface to G. W. Barclay's Colonial Development and Population in Taiwan, p. v. See No. 1 of the main references enumerated on the last page of this paper. Hereafter, the quotation will be abbreviated as follows, 1: p. v.). The study of Taiwan's population will tell us how a part of Chinese population has changed under a specific set of circumstances, and thus enable us to estimate the potential population change in China. This is the reason why the several millions of people on this little island are worthy of our consideration.

2. *Characteristics of the Data of Taiwan's Population.*

161 In order to promote an effective colonial administration, the Japanese started complete surveys of land and population in the early years of their occupation of Taiwan. During the half century of Japanese occupation (1895–1945), there were population figures of the whole island for 48 years from 1896 to 1943. The statistics from 1905 to 1943, that is from the year when the first census was taken to two years before the Japanese surrender, are especially trustworthy, judged by G. W. Barclay as "complete" and "correct", and Taiwan's statistical system was "a paragon even among those of the technologically advanced nations in the world" (1: p. 145, p. 164). For administrative reference, the population of Taiwan was registered according to different ethnic stocks, and by this we can trace the change of a part of the Chinese population under certain specific circumstance. The subject of this paper is not to treat the population of Taiwan as a whole, but to analyze how a part of Chinese population has changed in

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Taiwan[1].

Before the Japanese occupation there was frequent migration between the China mainland and Taiwan. After the Japanese occupation, the fundamental policy of the colonial government was to cut off the relation between China mainland and Taiwan. Thus the entrance of mainlanders to Taiwan and the departure of Taiwanese to the mainland was strictly controlled. After the restoration of Taiwan to China in 1945, especially since 1949, many people came to Taiwan from the mainland, and the populations factors have changed greatly. During the half century of Japanese occupation the Chinese population in Taiwan was a "closed" population (1: p. 12), its change was almost wholly caused by natural increase, and the influence of migration was insignificant. It seemed that Taiwan was kept as a laboratory for experimentation on Chinese population change, and this is a very valuable condition from a demographic point of view. 161

Besides dependable data of population statistics, there are statistical data of administration, industry, communication and transportation, hygiene, and education, etc., which will enable us to trace the interrelation of population change and social change. Usually, statistical records begin after a society has attained some degree of development, and the data of the initial stages of modernization are not easy to find. Besides, neglect of birth and death registration is unavoidable in early statistics. Thus even when there are statistictical records, dependable data are hard to get. Taiwan is an exception in these points. Since statistical records were taken by the colonial government under strict police control, dependable statistics from the initial stages of modernization are available, which will enable us to make a study of a complete processes of population change and social change. "It is", as pointed out by Notestein, "if not the only case, then certainly one of the very few cases in the world" (1: p. v.). 161 178 127

Social change in western Europe took place from within, developed by inner necessity, and the change was from the base to the top. Social change in Taiwan was different from this, as pointed out by G. W. Barclay. In Taiwan the Change was started and pushed by the colonial ruler. It was passive in character, and was from the top to the bottom. There are many areas in the world which were occupied as colonies in former times, and their social change shows the same trend as that of Taiwan. The study of social change in Taiwan will help us to understand the colonial type of social change. 178

By the time of the Japanese occupation (1895), the islands of Taiwan and Hainan had about same size of population, around two and a half million. Fifty years thence, the population of Hainan remained almost the same, but the Taiwanese population had 161

Note 1: Hitherto the population of Taiwan was treated as a whole in most articles and books. In a paper by the present writer: "Sociological Study of Mortality in Taiwan", published in 1947-48 (main references, No. 6), a different standpoint was adopted, Chinese population in Taiwan was the subject of the analysis. Two books by G. W. Barclay published in 1954 also adopted the same standpoint.

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161 increased one and a quarter times[11]. What is the reason for the remarkable contrast between these two islands? It is an interesting and significant problem, and the analysis contained in this paper should shed some light on it.

II. POPULATION GROWTH IN TAIWAN

162 ### 3. *Ethnic Composition of Taiwan's Population.*

As soon as the Japanese occupied Taiwan, they started a survey of the population, and as early as 1896 there were population figures of the whole island. Though the figure was not accurate enough, it was not incompatible with figures obtained by the first census in 1905, and we can say the survey was fairly dependable. In October, 1905, the first census was taken, and an accurate figure of total population was obtained for the first time. The total population was 3,123 thousand, 94% of it was Taiwanese (that is Chinese in Taiwan, transfered to Japan by the Manchurian government), 0.26% was the mainlander (that is Chinese who came to Taiwan after the Japanese occupation, and who were treated as overseas Chinese by the colonial government), 3.62% was aborigine, 1.90% was Japanese. The total population of Taiwan from 1896 to 1943 by ethnic stocks is given in table 1. During this period, the proportion of Taiwanese was always more than 90%.

Table 1, A: Taiwan's Total Population and its Ethnic Composition, 1896-1943.

Year	Total	Taiwanese	Mainlander	Aborigine			Japanese	Korean	Other Foreigners	Taiwanese Computing Population	Taiwanese Static Population	Total Computing Population
				Total	Living off Reservations	Living on Reservations						
Column	1	2	3	4	5	6	7	8	9	10	11	12
1896	2,587,688	2,577,194					10,584					
1900	2,846,108	2,707,322	5,160	95,597			37,954		75			
1904	3,079,[illegible]22	2,915,984	5,917	104,334			53,365		92			
1905	3,123,302	2,942,266	8,223	113,195	36,752	76,443	59,618			2,979,018	3,055,461	3,046,859
1910	3,299,493	3,064,499	14,840	122,106	41,724	80,382	98,048			3,106,223	3,186,606	3,219,111
1920	3,757,838	3,436,071	24,836	130,310	45,762	84,548	166,621			3,481,833	3,566,381	3,673,290
1930	4,679,066	4,259,523	46,691	140,553	54,399	86,154	232,299			4,313,922	4,400,076	4,592,912
1940	6,077,478	5,523,912	46,190	158,321	62,386	95,935	346,663	2,299	93	5,586,298	5,682,233	5,981,543
1942	6,427,932	5,827,857	50,429	162,031	63,991	98,040	384,847	2,692	76	5,891,848	5,989,888	6,329,892
1943	6,585,841		52,020			100,397	397,090	2,775	89	6,033,470	6,133,867	6,485,444

Figures of 1905-1930, column 3 included the figures of other foreigners (col. 9). Before 1930, Korean (col. 8) was included in Japanese (col. 7).

Data: 1896-1904, from 13, No. 8: Table 31; 1905 after, from 14.
Column 1, 3, 7, 8, 9, 11 from 14: Table 45; Col. 2=11-4; Col. 4, from 14: Table 53; Col. 5=4-6; Col. 6=11-10 (The figures of Col. 5 and 6 can be found in "Household Registration of the Aborigines", published by Government-General). Col. 10, 12, from 14: Table 96.

Note 2: BAKER, J. E.: The Balance between Population and Production. Pub. by Chinese Association for the United Nations, 1951.

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The population figures of Taiwan are sometimes confusing. Often we can find different figures of total population or Taiwanese population for the same year. This table will clear up the confusion. From the administratrative point of view, those people living in Taiwan and with Japanese nationality were registered as Taiwanese. This is the figure of col. 11; in fact, it is the total of Taiwanese and aborigines (11=2+4). The figure of Taiwanese (excluding aborigines) was enumerated in earlier statistical records, but was dropped out after 1905. Strictly speaking, the figure of Taiwanese in col. 2 still included some acculturated aborigines. In the seventh census of 1940 for instance, the number of acculturated aborigines was 58,160. Though the larger part of the aborigines were living in the reservations, some of them were living outside of the reservations. The former were comparatively backward, and their vital statistics were rather incomplete, and thus were omited from vital statistics. According to the inclusion or exclusion of aborigines living in reservations (col. 6), there are two kinds of population totals: when col. 6 is included, it is the total static population (col. 1); when col. 6 is excluded, it is the total computing population (col. 12). As aborigines were included in Taiwanese population in statistical records, there are also two kinds of totals for Taiwanese population: when col. 6 is included, it is the Taiwanese static population (col. 11); when col. 6 is excluded, it is the Taiwanese computing population (col. 10). 162

Table 1, B: Index of Increase of Taiwan's Total Population and its Main Ethnic Groups, 1896-1943.

	Total		Taiwanese		Main-lander	Aborigines			Japanese	
						Total	Off Reser-vation	On Reser-vation		
1896	100.00		100.00						100.00	
1900	109.96		105.05		100.00	100.00			258.59	
1904	119.01		113.14		114.67	109.23			504.20	
1905	120.69	100.00	114.16	100.00	159.36	118.40	100.00	100.00	563.28	100.00
1910	127.50	105.64	118.91	104.15	287.59	127.72	113.52	105.15	926.37	164.46
1920	145.21	120.31	133.33	116.78	481.31	136.31	124.51	110.60	1,574.27	279.48
1930	180.82	149.81	165.28	144.77	904.86	147.02	148.01	112.70	2,194.81	389.64
1940	234.86	194.58	214.34	187.74	895.15	165.61	169.74	125.49	3,275.34	581.47
1942	248.40	205.80	226.13	198.07	977.30	169.49	174.11	128.25	3,636.12	645.52
1943	254.50	210.86			1,008.13			131.33	3,751.79	666.05

4. Population Growth.

The population growth of the half century under Japanese occupation was tremendous. The total population during the 48 years from 1895 to 1943 increased one and a half times, increased 1.1 times during the 39 years from 1905 to 1943. The increase of Taiwanese population during the 47 years from 1896 to 1942 was 1.26 times, and almost doubled during the 38 years from 1905 to 1942 (cf. Table 1, B). A comparision with 161

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161 other parts of the world will help us to understand the implication of the rate of increase. The population of England, Scotland and Wales doubled during the first half of the 19th century, and incresed 80% during the second half of the same century. In Sweden, the increase in the same periods were 48% and 47% respectively (16: pp. 12–13). The population of Japan proper almost doubled during 64 years from 1872 to 1935 (19: p. 27). It took half a century for Britaip and more than sixty years for Japan to double its population, but only 38 years for Taiwan (Taiwanese population). However we must keep in mind that, the population growth here compared took place in Britain a century earlier, and the size of population compared is markedly different. Thus it is not a comparision under the same conditions, but still the quick population growth in Taiwan is an undeniable fact.

A comparision of population growth during the same period of time will give us a more concrete idea. Population growth of selected countries during 21 years from 1920 to 1940 was compiled by the National Office of Vital Statistics of the United States. A selection of the representative countries from the data with the figure of Taiwanse is given in Table 2.

Table 2: Percentage Change in Total Population Size: Selected Countries, 1920–1940.

Countries	Percentage of Increase	Countries	Percentage of Increase
France	1.0	Korea	40.9
Sweden	7.9	Netherlands East Indies	42.8
Belgium	12.5	New Zealand (Maoris)	42.9
Spain	21.5	Union of South Africa (Non-Europeans)	54.1
Egypt	26.9	Taiwan (Taiwanese)	60.4
Japan proper	30.6	Malaya	65.6
Ceylon	33.8	Honduras	72.0
Mexico	37.1	Dominican Republic	94.9
Panama	39.6	Palestine (settled population)	134.0

Source, 22: p. 11.

There are four areas with an higher rate of growth than Taiwanese, but the rate of natural increase of these areas in 1940 were all lower than the Taiwanese[3], and their high rate of growth was caused by immigration. So, during 1920–1940, from the standpoint of natural increase, population growth of the Taiwanese seemed to be the hightest in the world.

The annual rate of natural increase of Taiwanese was around 2.5% in 1940. Supposing that this rate of increase will continue, then what will be the future population? It will double about every 28 years. It will increase to 450 million within one

Note 3: The rate of natural increase in 1940: Malaya, 20.6 per 1,000; Honduras, 21.0 per 1,000; Palestine (settled population), 20.2 per 1,000; the figure of Dominican Republic is uncertain (22: p. 21). The rate of Taiwanese was 24.0 per 1,000.

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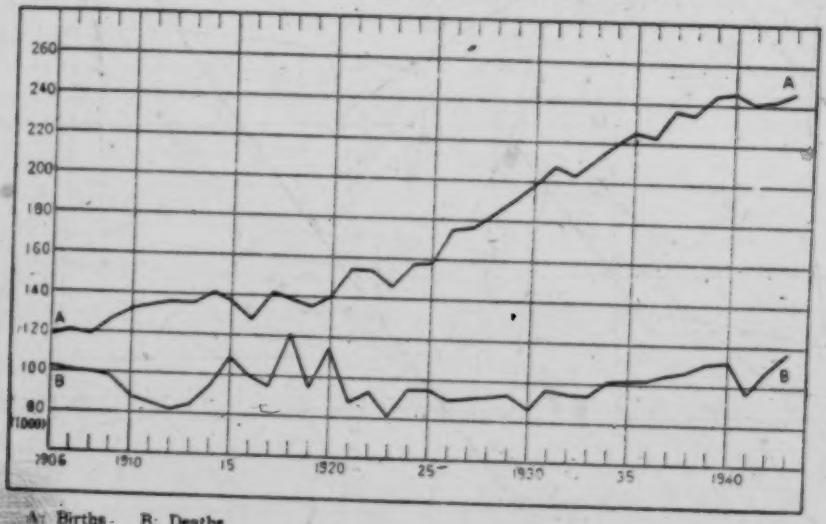
century and a half, and will attain the figure of present world population within two and a half centuries (1: p. 13; 2: p. 45; 4: p. 73-74). As a matter of course these suppositions assume that the present conditions will continue, and that a change of conditions will cause population growth to show another aspect. With regard to the estimation of future population, Sun-Ken Quo has a different point of view based on a different perspective (3). 161

5. The Cause of Population Growth.

Natural increase and immigration are two causes of population growth. Since the colonial government strictly controlled the emigration of Taiwanese to the mainland and the immigration of mainlanders to Taiwan, migration was quite insignificant for the population growth of Taiwanese, and 96% of its total growth was the result of natural increase[4]. 161 167

Now, how was this natural increase achieved? From Figure 1 we can see that between 1906 and 1943 the annual number of deaths of Taiwanese did not show any remarkable change, it remained around one hundred thousand. In contrast with this, 163 165

Fig. 1: Number of Births and Deaths of Taiwanese, 1906-1943



A: Births B: Deaths

Source. 14: Table 96

Note 4: The total of the annual increase of Taiwanese population between 1906 and 1943 was 3,078,406 (14: Table 49, 3). (The Taiwanese population in 1905 was 3,055,461, the increase between 1906 and 1943 was 3,078,406, and the grand total of these two figures, 6,133,867 was the Taiwanese population in 1943. 14: Table 49, 2. cf. Table 1, A, column 11 of this paper). Total of the annual natural increase of the Taiwanese between 1906 and 1943 was 2,947,998 (14: Table 96) was 95.76% of the total increase. Total annual increase other than natural increase of the same period was 130,408, and occupied only 4.24% of the total increase.

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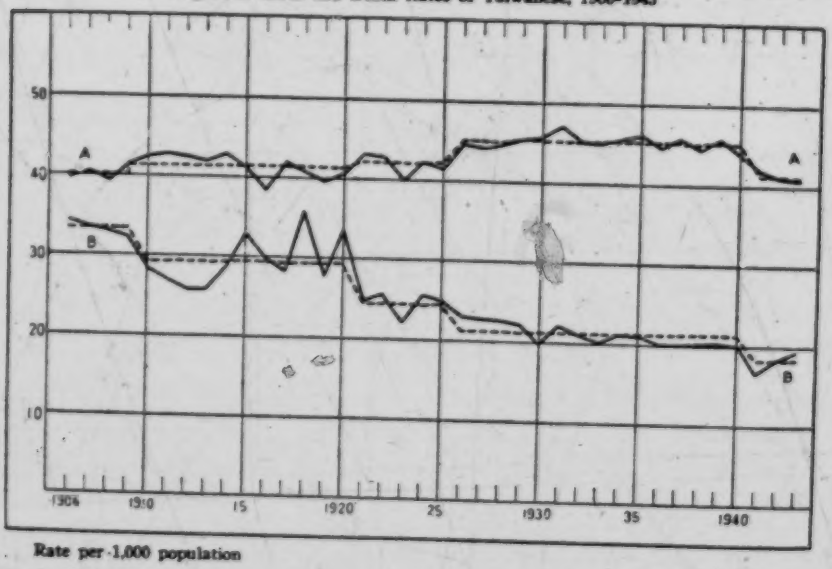
163 the number of births has increased markedly, it was around 120 thousand by 1906, it
165 had doubled to around 240 thousand by 1943. The number of deaths remained about the same and the number of births was doubled; this was the cause of Taiwanese population growth.

Analyzing the rates of birth and death, the situation will be clearer and easier to
161 grasp. Though the number of births was doubled between 1906 and 1943, the birth rate remained almost the same, around 40 per thousand. Though the birth rate has
163 remained the same, the number of births has increased in accordance with the increase
165 of population. Despite the annual increase of population, the number of deaths has remained almost unchanged. This indicates a decline in the death rate (cf. Fig. 2). The death rate of Taiwanese was 34.4 per 1,000 in 1906, it dropped to 18.4 per 1,000 by 1942, a decline of 16 per 1,000. The birth rate remained almost the same and death rate dropped 16 per 1,000. This is the cause, of Taiwanese population growth. The result is clearly shown in the amount of natural increase. The space between line A and line B of Figure 1 represents the amount of natural increase, and the space between line A and line B of Figure 2 represents the rate of natural increase (cf. Table 3). Decline of death rate was the key factor of the Taiwanese population change during the half century under Japanese rule.

Figure 2: Birth and Death Rates of Taiwanese, 1906–1943



Rate per 1,000 population

A: Birth rate B: Death rate (The dotted lines represent the average rate of each period.)

Source, 14: Table 64

6. *Population Change and Social Change.*

From Figure 2 we can observe the trend of the death rate between 1906 and 1943. The graph naturally divides into five periods each with its characteristic type of change

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as indicated in Table 3. The birth rate also shows the same periodical tendency. It is very significant that there is an intimate interrelation between population change and social change in each period, and we even may infer that population change is the index of social change. This will be analyzed in subsequent sections. The average rates of birth, death, and natural increase (Table 3) and main features and changes of each period will be clear from the following table.

Table 3: Five Periods of Taiwanese Population Change.

Period	I	II	III	IV	V
Years	1906-09	1910-20	1921-25	1926-40	1941-43
Number of years	4	11	5	15	3
Average Birth Rate (per 1,000)	40.25	41.40	42.08	45.24	41.10
Average Death Rate (per 1,000)	33.35	29.37	24.61	21.20	18.23
Average Rate of Natural Increase (per 1,000)	6.90	12.03	17.47	24.04	22.83

First Period (before 1909): Wide spread epidemics and malaria, frequent revolts of the people against the Japanese characterize this unstable period. The birth rate was high (more than 40 per 1,000), but the death rate also high, more than 30 per 1,000 on an average, and the fluctuation was remarkable and frequent. The rate of natural increase was about 7 per 1,000.

Second Period (1910-1920): Epidemics were wiped out by the end of this period, the prevention of malaria had started. The uprisings of the Taiwanese were suppressed around 1915, the revolts of the aborigines were largely mitigated by 1920, and comparative social stability was more or less attained. Political, cultural and social movement of the modern type began for the first time after World War I, and took the place of armed uprising. The Japanese colonial policy had changed somewhat. Birth rate increased slightly, death rate declined to an average of around 30 per 1,000, and the rate of natural increase rose to 12 per 1,000.

Third Period (1921-25): Vigorous cultural and social movement marked this era. This was a period preparatory to the following period of expansion. Transportation was improved, mobility of people increased. Agricultural products and processed agricultural products increased, the productivity was raised, and the consumption of daily necessities increased slightly. The attitude of the people began to change, they began to adopt new ways of life more readily. Use of mechanical facilities gradually increased, and the number of doctors of western medicine exceeded the number of physicians who practiced Chinese medicine. The spread of primary education was promoted. The birth rate increased again, the death rate was 4.8 per 1,000 lower than the foregoing period, and the rate of natural increase rose 5.5 per 1,000.

Fourth Period (1926-40): During this period there was a tremendous increase in the output of agricultural products, attaining the peak production during the Japanese rule. The hydroelectric plant of Sun Moon Lake was completed in 1934, and industry

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161 was much promoted by it. Prevention of malaria was successful to a large extent, the
178 activities of preventive hygiene being started by the 1930's. There was reduction in the number of cases of diarrhea, enteritis, and tuberculosis. Infant mortality began to decline. The birth rate rose to a peak, the death rate declined again, and the fluctuations became fewer and of lesser extent. The rate of natural increase attained a peak of 24 per 1,000. Age composion changed, the proportion of infants and children increased markedlv.

Fifth Period (1941-1943): The value of industrial products exceeded the value of agricultural products, and the quick tempo of urbanization began. The birth rate began to decline, and death rate continued to drop, to around 18 per 1,000; the rate of natural increase declined slightly. Infant mortality declined further. In comparision with 1906, the average expectation of life of Taiwanese at birth in 1940 was 13 years longer for males and 16.7 years longer for females.

Objectively considered, there were improvements in Taiwan during the half century of Japanese rule; and it is evident at the same time that under the scheme of colonial administration, the improvements were limited in character. The specific character of this social change can be traced in the population data. In order to let her colony carry out its function, in order to make it a good supplier of rice and sugar which Japan urgently needed, various kinds of basic establishments and developments had to be accomplished, such as the wiping out of epidemics, prevention of endemics, basic sanitation, development of transportation, primary education etc. In order to make her colony a good market for manufactured products, the purchasing power and the level of living of the people had to be raised somewhat. But if the "improvement" was pushed too far, it would enable the people to resist and revolt, so it must be kept within certain limits. The Japanese were quite clear on these points, and developed the island within the colonial scheme. The results were successful, even to the extent of Taiwan being called the "ideal colony". Here is the fundamental character of social change in Taiwan. Some data will help us to understand the situation concretely.

161 Though the death rate of Taiwanese had declined, its tempo was slow, and still
165 remained very high in comparision with the death rate of Japanese in Taiwan. In the early years of occupation, the death rate of Japanese in Taiwan was tremendously high, but declined quickly and steadily, and with the passage of time the rate was not only lower than in Japan proper, but even attained the level of the most advanced western countries. To take the death rate of 1925 for instance, it was 24.84 per 1,000 for Taiwanese, 20.27 per 1,000 in Japan proper, but was as low as 11.34 per 1,000 for the Japanese in Taiwan. Though it is somewhat higher than Australia (9.2 per 1,000) and Netherlands (9.8 per 1,000), it is still lower than Sweden (11.7 per 1,000), England and Wales (12.2 per 1,000). The age composition of the Japanese in Taiwan was specific,
[162] there were more youths and adults in its population, and no doubt this was one of the causes of its low death rate. But even after the difference of age composition was

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertilizer and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertilizer increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyze the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1943, p. 201.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

[121] 669 people were forced to sell their land cheaply to sugar corporations. The influence of the revolution lead by Dr. Sun Yat-sen on the mainland was also felt. After 1916, the uprisings were suppressed by a forceful police system. Since 1921 the revolts of the aborigines have been largely mitigated.[5] After the 1920's peace was generally preserved in Taiwan, and the resistance of the people changed gradually from revolt by force to organized political and social movements.

000 Peoples' attitudes are much influenced by peace and war. Disturbances do not give the people the needed security of life and property. They must keep a cautious and watchful attitude at all times. It is impossible to invest the surplus of their production for the extension of their business. They have to exchange the surplus of production for gold and silver, and bury it under the ground for safety. Direct and immediate self-sustainance was their main daily concern, and the idea of future development was unfamiliar to them. This society is approximataly the same as the "militaristic type of society" defined by Herbert Spencer, and no development can be expected from it. In peace time people need not spend their time and energy defending themselves against thieves and bandits. They can concentrate their strength on their work. They can extend their business and gradually plan for the future. Again, we may use Spencer's definition and classify this state as an "industrial type of society". Once 178 established, its development will be accelerated. In Taiwan, after peace and order were established by the colonial government police system, production was extended, 648 and the population gradually increased.

The various kinds of social change in Taiwan were basically influenced by the colonial policy of Japan. Before World War I the policy was typically colonial. After the war, the spirit of democracy permeated the whole world. In Japan, serious social problems broke out. Democratic and Socialistic movements likewise became widespread. Social movement of the modern type among students and young people broke out in China at about the same time. Under the influence of both China and Japan, political, social, and cultural movements started in Taiwan for the first time around 1920. At first the colonial government tried to suppress them by force, but the current was too strong and the government had to change its policy somewhat. From around 1920, the policy of assimilation was adopted, and there were some improvements in administration. Though the improvement was limited in character, it had a fairly significant effect on Taiwan, and its results were reflected in population data. From [161] 1926 on the system of modern Taiwan was generally molded, and after that date population growth was speeded up.

Japan started her invasion of Manchuria in 1931, intruded in northern China in 1937, and then struck Pearl Harbor in 1941. As the war for expansion was extended, Taiwan was considered a strategic base, and the colonial policy had to change again.

Note 6: Yanaihara, T.: Taiwan under Imperialism. 1929, Tokio, pp. 241-242. Shiomi, T.: "Police System and Economy of Taiwan under Japanese Rule". Quarterly of the Bank of Taiwan. Vol. 5, No. 4, 1953, Taipei, pp. 259-261.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Hitherto the development of chemical production, heavy industry, and consumer goods industries on Taiwan had declined, but now they were earnestly promoted. This gave another impetus to social change. 178 648

8. Elimination of Epidemics

After the occupation of Taiwan, two things troubled the Japanese most: the revolts of the Taiwanese and epidemics. One branch of the Japanese expeditionary army landed on the Pescadores on March 21, 1895. By mid-May, fully 1945 people out of 6,190 were afflicted by cholera, and 1,247 died. Another branch of the expeditionary army landed on Taiwan at about the same time and was also stricken with cholera, malaria, dysentry, typhus, pneumonia, and beri-beri. Only one fifth of the total army was free from illness by the end of September (5: Vol. 2, No. 12). During the early years of the Japanese occupation epidemics spread widely, and thus, elimination of epidemics was the first administrative task for the new rulers of Taiwan. 648 164

Plague, cholera, and small-pox were three serious epidemics in Taiwan. Plague broke out in Hongkong in 1894, invaded in Taiwan two years later, and had spread to many places during the next twenty-two years. During this time more than thirty thousand people were inflicted, and twenty-four thousand died. It was wiped out in 1917 (5: Vol. 2, No. 12). The activities of extermination and prevention by police power were conspicuous. They included the isolation of patients, destruction and burning of contaminated houses, extermination of rats, quarantine at sea ports etc. Though the means adopted were harsh and cruel, they were effective. Cholera was not as serious as plague in Taiwan. A greater prevalence of cholera occured in 1902, 1912, 1913, and 1920. After 1921 the preventative arrangements were more or less completed and by the cooperation of the people and the public health system, the occurence of cholera could be closely controlled. 164 164 144

During the early years of Japanese occupation small-pox was a serious problem. With the enforcement of vaccination, it began to decline after 1903. Since then, except for a greater prevalence in 1918–1920, small-pox has not been a menance in Taiwan (5: Vol. 2, No. 12).

Plague was wiped out in 1917. Cholera and small-pox were under control by 1920. Since then there has been no serious problem of epidemics in Taiwan. Incidentally, the cattle pest which ravaged Taiwan from 1896 and killed more than forty thousand head of cattle, was also exterminated in 1920.[7]

Whether or not a society is menaced by epidemic is always a significant social fact. We may say that freedom from epidemics is the first step toward modernization. In Taiwan, the course of this change can be traced in the data of population change. Before 1920 the death rate was high, and it also fluctuated frequently, and the extent of fluctuation was great. This is a sign of the uncertainty of life. In fact, living in a society where epidemics constantly spread, one could not estimate in the morning what would be happen before nightfall. Fatalism, such as shown in the saying "man proposes, 161 164

Note 7: Animal Resources of Taiwan, published by the Bank of Taiwan, 1962, p. 172, p. 296.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

161 but God disposes", "Der Mensch denkt, und Gott lenkt", "Der Mensch schaltet, Gott
164 waltet", was fostered under such circumstances. In Taiwan there was a saying: Confucius did not accept an invitation for the next day, since he didn't know whether he would be still alive in the evening or not. Under these circumstances, the attitude of the people is always "looking backward", and planning for the future will be laughed at as utopian. Once epidemics were wiped out, the death rate not only lowered, but its fluctuation became more infrequent and of lesser extent. This is a sign of more stability of life, and thus the traditional fatalism gradually dies out. The attitude of the people changes from "looking backward" to "looking forward", and planning for the future becomes a realistic idea. Ancestor worship and all kinds of cult and ritual are the main concern of people who are always looking backward, but for the peole who are looking forward, the upbringing and education of the younger generation is the most important.

9. *Prevention of Endemic Disease*

164 Malaria was the main endemic of Taiwan. Though epidemics are disastrous enough, their prevalence is intermittent, and the extent of their devastation is not necessarily very large. In contrast, malaria creeps in slowly, destroys vitality and attacks human life directly and indirectly. From the time of the Japanese occupation (1895) until 1916, about one tenth of all the deaths in Taiwan were caused by malaria, and during this period it was always the first or second in rank among the leading causes of death. Unaccustomed to the climate of Taiwan, the Japanese in Taiwan had to pay a heavy toll to malaria. In 1899 for instance, one quarter of the total deaths of Japanese in Taiwan were caused by malaria. In 1907, under the supervision of a professor of
165 medicine, prevention of malaria was started by a camphor manufacturing corporation
744 in a village of southern Taiwan, and some results were obtained. Preventative activity by the government-general was started at Peito, a town near Taipei, in 1910. As it was found effective, the regulations for the prevention of malaria were enacted in 1913, and were enforced through the system of police and paochia. The area of prevalence was designated, inhabitants within the area were complelled to have a blood test, and the patients were compelled to take medicine. The use of mosquito nets, drainage, and other sanitary works were enforced. The means adopted were harsh, but the result was good. The malaria death rate began to decline after 1916, considerable improvement has been made since 1925, and as a result the crude death rate was lowered. (cf. Fig. 11)

10. *Activities of Preventive Hygiene*

The devastation from epidemics and malaria was great, and thus the activities for their prevention were begun first. Some simple facilities for patients of leprosy and mental disease were also provided in earlier years. Other diseases, such as tuberculosis, venereal diseases, trachoma, and parasitic diseases, did not show any serious devastation, and they were not considered as serious problems by the government. The administration in Taiwan was mainly an imitation of that in Japan. What they had

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

done in Japan was adopted in Taiwan with some slight time lapse. In 1916 a hygienic survey was made in Japan, and five years later, in 1921, the same project was adopted in Taiwan. Between 1922 and 1925, and also from 1926 to 1928, an extensive hygienic survey was carried out in various parts of the island. After the results were published the planning of sanitary works was mostly based on the data of the survey.

The prevention of trachoma was started around 1926, and was most active in the 1930's. The prevention of tuberculosis began from 1932. The Association for the Prevention of Tuberculosis was organized in 1934, Regulations for the Prevention of Tuberculosis were enacted in 1938, Tuberculosis Prevention Day was initiated in 1939, and a sanatorium was constructed in most prefectures, most of them being completed in 1942–43. These activities were quite effective, and the death rate from tuberculosis declined after 1938 (cf. Fig. 11, line D.) Activities of tuberculosis prevention were started in the U. S. in 1890, and as a result, deaths from tuberculosis declined sharply. It has been pointed out by a social scientist that, though the improvement in living conditions will lower the death rate from tuberculosis, community preventive activity is also very significant (20: p. 631). It is interesting to note that, this was true both in the U. S. and in Taiwan.

The preventive activities against venereal disease, mental disease, parasitic disease, and leprosy were also started by the 1930's. For the administration of these activities, a section of preventive hygiene was added to the Health Department of the government-general in 1935. This may be taken as a sign that more emphasis was put on preventive hygiene.

11. Sanitary Facilities and Medical Personnel

Various kinds of basic sanitary facilities such as drainage, water supply, disposal of garbage and night-soil, supervision of slaughter-houses and markets, inspection of food and businesses such as barber shops, restaurants, and hotels were started rather early. These were started in the cities, particularly in the wards of the city which were largely occupied by the Japanese, and gradually extended to wider areas. The establishment of public hospitals and public doctors was also early in time. Naturally, these were established first and foremost for the benefit of the Japanese in Taiwan. Japanese business men in Taiwan had enjoyed various kinds of privileges, Japanese officers received an allowance 60% greater than that of their brothers at home, and all of them could utilize these public facilities. This was the reason why their death rate was not only lower than the death rate of Japan proper, but even comparable to that of the most advanced countries in the world.

Before the Japanese occupation there were a few hospitals operated by Christian missions. Physicians in these hospitals were the only doctors of western medicine, and other physicians were doctors who practiced Chinese medicine. Some Japanese doctors of western medicine came to Taiwan after the occupation, but their number was very small. In response to the urgent need for medical personnel, training classes for doctors and nurses were set up in Taipei Hospital in 1897. The medical training class

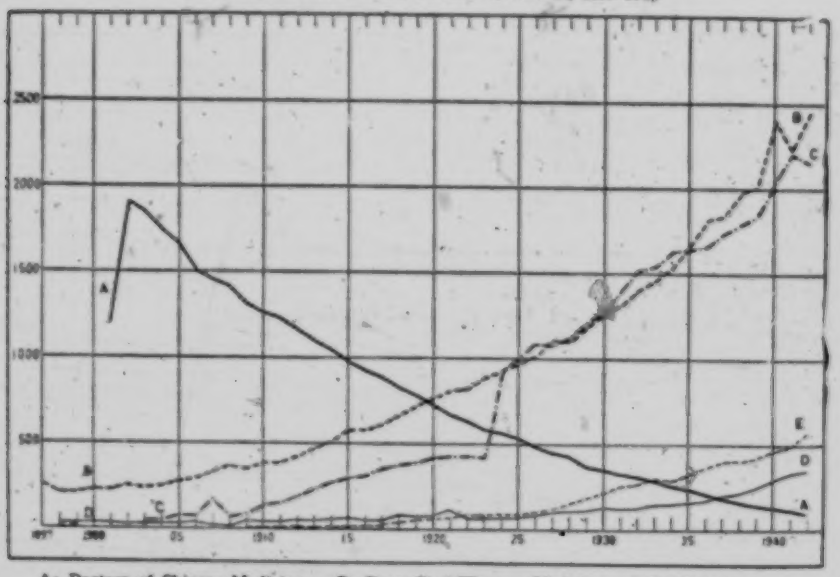
48: Chen E-4 (no date) 1955 ADI Formosa ADI

was raised to a medical vocational school, to a medical college, and at last became a school of the Taipei Imperial University. Within the 47 years between 1899 and 1945, a total of 2,813 doctors (1,888 Taiwanese doctors and 925 Japanese doctors) were trained by the school.[8]

The trend of change in the number of medical personnel in Taiwan is given in Figure 3. The decrease in the number of doctors of Chinese medicine and the increase of doctors of western medicine is interesting. It is also significant to note that, the number of the latter exceeded the number of the former by 1920. As to the ratio of inhabitants to doctors (of western medicine), the number of inhabitants per doctor was as follows:

years	number of inhabitants per doctor
1897–1906	10,000–12,000
1907–1911	8,000– 9,000
1912–1913	around 7,000
1914–1916	around 6,000
1917–1919	around 5,000
1920–1926	around 4,000
1927–1935	around 3,000
after 1936	around 2,000

Fig. 3 Number of Medical Personnel, Taiwan, 1897–1942



A: Doctors of Chinese Medicine B: Doctors of Western Medicine C: Midwives
D: Pharmacists E: Dentists
Source, 14: Table 484

Note 8: Li Ting-yeh: Part on Sanitation, Manuscript of the History of Taiwan Province, 1952, Taipei, p. 10.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

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In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

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Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W. S. Thompson, who stayed some months in Nanking, China, in 1930-31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67-68).

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Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation,

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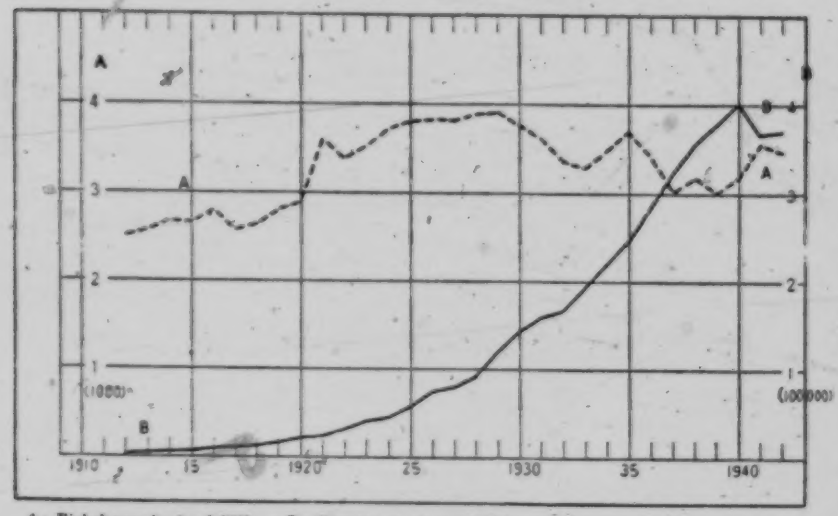
Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparison of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1952, Taipei, p. 66.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

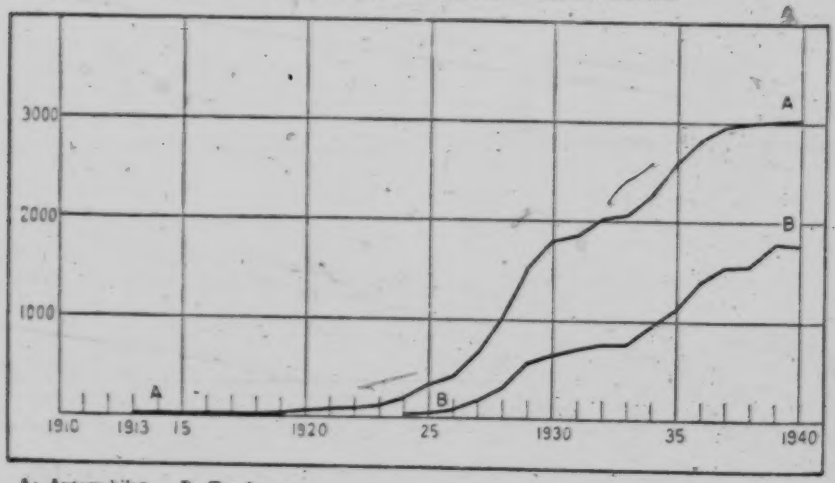
161 During the early years of Japanese occupation,
163 the difference in the rates of birth and death in different localities was remarkable.
165 As time passed, the development of different localities was gradually equalized, so the

Fig. 4 Number of Rickshaws and Bicycles, Taiwan, 1912-1942



A: Rickshaws (unit: 1,000) B: Bicycles (unit: 100,000)
Source, 14: Table 457

Fig. 5 Number of Automobiles and Trucks, Taiwan, 1913-1943



A: Automobiles B: Trucks
Source, 14: Table 457, 455

48: Chen E-4 (no date) 1955 ADl Formosa ADl

rates of birth and death were more and more equalized. The difference between the highest and the lowest birth rate among different localities was 13.4 per 1,000 in 1906, but had fallen to 8.5 per 1,000 in 1935; the difference between the highest and the lowest death rate among different localities was 32.6 per 1,000 in 1906, but it was only 8.9 per 1,000 in 1935 (see Table 4, cf. 1: p. 169).

Table 4: The Highest and the Lowest Birth Rate, the Highest and the Lowest Death Rate of Different Prefectures of Taiwan in Selected Years (Rate: per 1,000 population)

		1906		1935				1906		1935	
Birth Rate		Whole Province	39.3	Whole Province	45.2	Death Rate		Whole Province	34.0	Whole Province	20.5
	The Highest	Nanto Prefecture	47.7	Tainan Prefecture	48.1		The Higheat	Chiai Prefecture	52.9	Taitung Prefecture	24.4
	The Lowest	Yansuika Prefecture	34.3	Taipei Prefecture	39.6		The Lowest	Hsinchu Prefecture	20.3	Penghu Prefecture	15.5
	Differece		13.4		8.5		Difference		32.6		8.9

Source: 10:1906, 1935.

13. *Agriculture and Industry*

To get primary agricultural products and processed agricultural products, especially rice and sugar, which Japan needed urgently, was one of the main policies of Japan in Taiwan. The colonial government had spent much of time and money for the promotion of the production of rice and sugar. They made various kinds of surveys, researches, and experiments, used the system of police and pao-chia for enforcement, and as a result, the outputs of rice and sugar had increased tremendously.

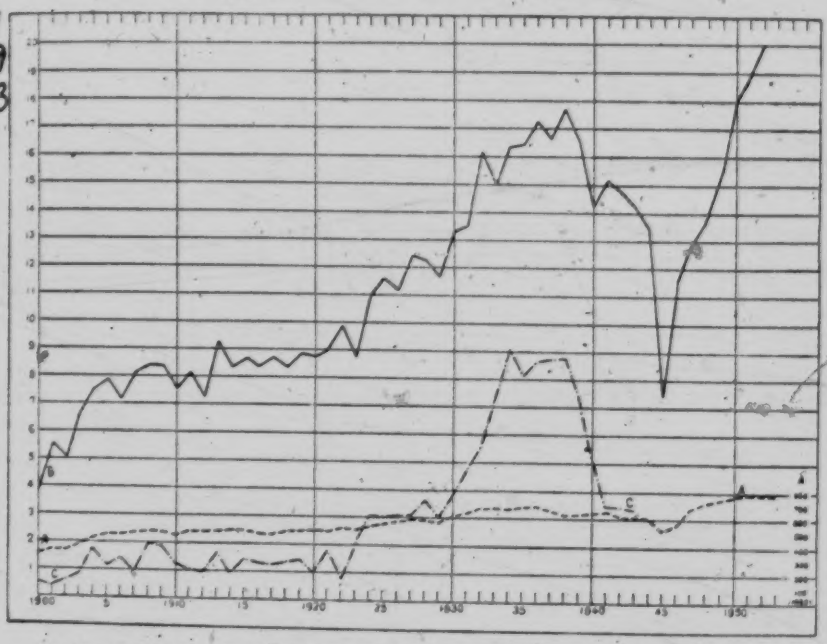
Among the various types of production in Taiwan, agriculture and manufacturing were the two main types, and the proportion occupied by forestry, fishery, and mining was rather small. In 1912, the value of the total output of all types of production amounted to 146,374 thousand yen. Among these, the proportion of agriculture was 63%, manufacturing was 32%, and the total of three other types (forestry, fishery, and mining) was only 5%. By 1942, manufacturing had developed fairly well, its production value had exceeded that of agriculture. The value of the total output of all types of production in 1942 was 1,515,627 thousand yen. Agriculture's share of this was 42%, manufacturing was 46%, and the total of three other types was 12%. Agriculture and manufacturing, the two main types of production, were again represented by rice and sugar respectively. The proportion of the value of rice to the total value of agricultural products was 59% in 1912, and 39% in 1942. The proportion of the value of sugar to the total value of manufactured products was 79% in 1912 and 42% in 1942. Considering these facts, it seems not unproper to take rice and sugar as representative of Taiwan production.

From figure 6 we can see, that in comparision with the increase of acreage of cultivation (line A), the increase in the output of rice (line B) was tremendously high.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Productivity was raised by improvements in various aspects. The rapid increase in the output of rice from the 1920's was the result of the adoption of a new strain (Ponlai rice). By the 1930's, the production of rice in Taiwan was so large as to be twice its local demand, and the surplus rice was exported to Japan. Though the price of Taiwan rice was controlled by the Japanese government and the profit of trade in rice was mainly monopolized by big Japanese traders, the increase of production did have some benefits for Taiwanese, and no doubt, this contributed to the lowering of the death rate after 1920.

Fig. 6 Acreage of Cultivation, Amount of Production and Exportation of Rice, Taiwan, 1900-1953



A: Acreage of Cultivation (unit: 1,000 ha) B: Amount of Production (unit: 1,000,000 hectoliter)
C: Amount of Net Export (unit: 1,000,000 hectoliter)
Source, 1900-1948, from the Rice of Taiwan, 1949, Taipei.
1949-1952, from Taiwan Agricultural Yearbook, 1952, Taipei.

The condition of sugar was a little different from that of rice. The profit in sugar manufacturing was exclusively monopolized by the Japanese enterprisers. But it is undeniable that, in respect to the improvement of agricultural techniques and the raising of productivity, substantial effects were obtained.

As pointed out by W.S. Thompson, "underfeeding weakens the individual and renders him less resistant to disease, whether it be of the degenerative or of the germ

48: Chen E-4 (no date) 1955 ADl Formosa ADl

type. When we find death rates regularly mounting to 30 or 40 per 1,000 we may be reasonably certain that undernourishment is one of the factors at work" (15: p. 50). Another author has remarked: "a survey based upon prewar conditions showed that half of the population of the world was then subsisting on an average daily consumption of less than 2,250 calories per capita, and that among these peoples the crude death rate averaged 30 or more per 1,000 population around 1930. On the other hand, only one fifth of the world's population was favored with an average daily per capita intake of 2,875 or more calories, and the countries containing these peoples had an average crude death rate as low as 12 per 1,000 around 1930" (28: pp. 62–64). From this data it is safe to conclude with W. S. Thompson that, "increased productivity is and always has been the absolute prerequisite for any substantial lowering of the death rate" (16: p. 70). In the period of 41 years between 1902 and 1942 the total population of Taiwan increased about 1.2 times, but the production of rice increased 1.9 times and sugar increased 19 times (Table 5). The increase of production far out ran the increase of population. No doubt, this was the basis for the decline of the death rate and the growth of population.

Table 5: The Increase in Production of Rice and Sugar and the Increase of Population in Taiwan in Selected Years, Actual Number and Index

	Output		Population	Index					
	Rice (1,000 Hectoliter)	Sugar (Metric Ton)	(1,000)	Rice		Sugar		Population	
1902	5,090	54,522	2,907	100.0		100.0		100.0	
1906	7,159	76,433	3,081	140.7	100.0	140.2	100.0	106.0	100.0
1912	7,300	175,587	3,354	143.4	102.0	322.1	229.7	115.4	108.9
1922	9,822	352,655	3,822	193.0	137.2	646.8	461.4	131.5	124.1
1932	16,144	989,050	4,843	317.2	225.5	1,814.0	1,294.0	166.6	157.2
1942	14,789	1,101,752	6,330	290.6	206.6	2,020.8	1,441.5	217.8	205.5

Source: Rice, 14: Table 303; Sugar, Taiwan Sugar Statistics; Population, 1902, 13; 1906–1942, 14: Table 64.

Besides the increase in productivity, all kinds of public works and establishments have a significant effect on the stability of life and the lowering of the death rate. Though we cannot stop drought, flood, or other calamities, we can mitigate the damage of these calamities by forestation and the regulation of water courses. Even the ill effects already suffered can be much lowered by public assistance and other systems of social work. The influenza of 1918–19 took over half a million lives in the U. S. and 15 million lives in India. The population of the U. S. at that time was around 100 million, so the death rate from influenza was about 5 per 1,000. The population of India at the same time was around 300 million, so the death rate of influenza was about 50 per 1,000 (17: p. 226; 15: p. 219). Why was the number of victims of influenza 10 times higher in India than in the U. S.? No doubt, the differences in the degree of

48: Chen E-4 (no date) 1955 - AD1 Formosa AD1

000 productivity and the progress in public works and social establishments were the cause of this contrast.

14. *Education*

Modern society is a society based upon science and technology, and it is a prerequisite that most of its members have a scientific attitude. If many of its member do not realize that epidemics are spread by germs, if the large part of the people believe disease to be the malicious work of devils, then it is impossible to wipe out epidemics. For farmers to use modern agricultural tools and machines, for workers to work in a modern factory, for soldiers to fight with modern weapons, the scientific attitude is indispensable. In order to give its members the scientific attitude, modern society, which respects individual freedom in principle, does not allow freedom in regard to education. Thus the system of compulsory education has been universally adopted. It is only natural that the decline of death rate and the growth of population should have an intimate relation with the spread of education.

871 During the Manchurian period, except for small number of public schools operated by the government, education was carried out mostly by private schools, operated by family or kinship groups. Primary education of a modern type was started by the colonial government, and the trend of growth of the number of schools and students is given in Table 6. By the change of colonial policy, the increase was speeded up after 1920, particularly since the 1930's. Enrollment of girls was very poor in the earlier years, but had improved with the passage of time. In 1943, enrollment of school age children in primary schools was 81% for boys, and 61% for girls (14: Table 481). However, the improvement was mostly limited to primary education, and with regard to secondary and higher education, it was very poor. The improvement in education after the restoration in 1945 was essentially an improvement in secondary and higher education (cf. §6).

Table 6: Number of Schools and Students of Private Schools and Public Schools for Taiwanese in Selected Years

	Private Schools				Public Schools for Taiwanese			
	Number of Schools	No. of Students			Number of Schools	No. of Students		
		Total	Boys	Girls		Total	Boys	Girls
1899	1,721	25,215	25,089	126	96	9,817	9,435	382
1909	655	17,101	16,701	400	231	40,650	37,023	3,627
1919	301	10,936	10,347	587	438	129,580	107,253	22,327
1929	160	5,805	5,043	762	754	232,829	179,024	53,805
1939	17	932	632	300	810	546,209	361,068	185,141
1944					944	872,507	500,333	372,174

Originally there were primary schools for Japanese and primary schools for Taiwanese. In later years some Taiwanese students were permitted to enter primary schools for Japanese. The above table do not include this part of Taiwanese students.

Source: 14: Table 477.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

15. *Change in the Way of Life*

In response to the various changes which took place during the Japanese era, the way of life of the Taiwanese had gradually changed. There is much data on this point, but we can only describe some of it in this limited space. The increase in the mobility of the people should be pointed out first. How many times each person has

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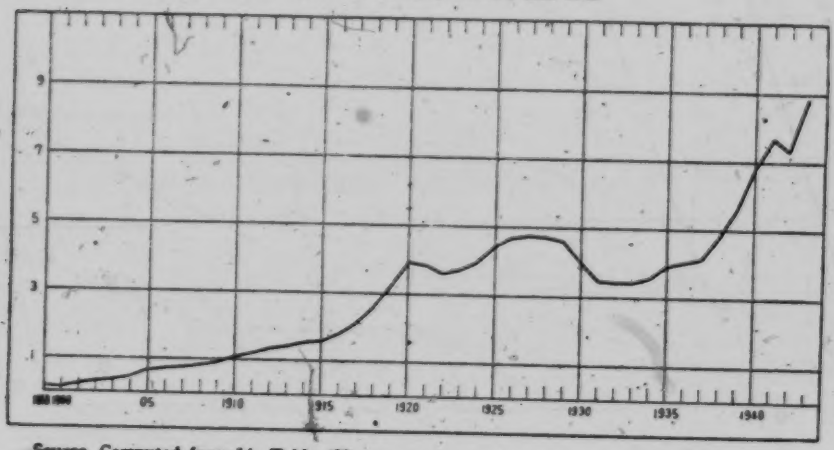
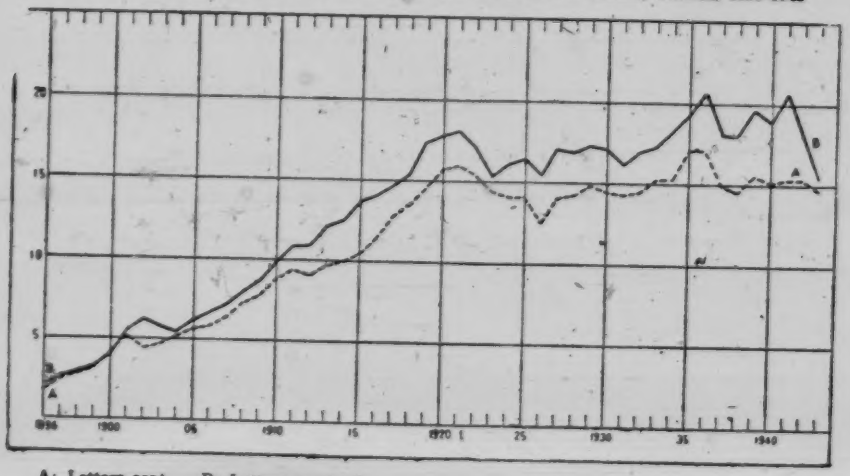
Fig. 7: Number of Times Traveled on Government Owned Railroads Per Capita Per Annum, Taiwan, 1899-1943



Source, Computed from 14: Table 433

Fig. 8: Number of Letters Received and Sent Per Capita Per Annum, Taiwan, 1896-1943



A: Letters sent B: Letters received
Source, Computed from 14: Table 412

48: Chen E-4 (no date) 1955 ADl Formosa ADl

178 traveled by train annually, and how many letters he has received and sent annually
484 may be taken as an index of the mobility. The increase in the frequency of travel and the increase in the number letters received and sent are signs of the wider sphere of activity and higher mobility. The increase since 1920 was particularly remarkable (Fig. 7, Fig. 8).

Figure 7 was the number of times of travel per capita per annum on government owned railroads, and does not include travel on privately owned railroads and bus lines. When the latter is included, the figure rises as indicated in Table 7. During the later ars of Japanese rule the mobility had increased markedly. In 1938, the number of times traveled per capita per anum was 17.19, but it had risen to 23.64 by 1942.

Table 7: Number of Passengers on Train and Bus Lines in Taiwan in Selected Years

	1938	1942
1. Government-owned Railroads	27,179,194	46,342,569
2. Privately-owned Railroads	2,002,456	1,962,017
3. Government-owned Bus Lines	8,207,474	9,413,577
4. Privately-owned Bus Lines	53,644,809	81,536,398
Total	91,033,933	139,254,561
5. Total Population	5,257,005	5,891,848
Average times travelled Per Capita Per Annum	17.19	23.64

Source: 14, 1: Table 433; 2: Table 446; 3: Table 458; 4: Table 459; 5: Table 64.

262 The consumption of food had also increased. Here we will take sugar and pork as an example (Table 8).

Table 8: Per Capita Per Annum Consumption of Sugar, Taiwan[11]

Year	Per Capita Per Annum Consumption
1903-1909	2.79 kilograms
1910-1920	5.26 kilograms
1921-1925	6.13 kilograms
1926-1938	8.87 kilograms
1939-1943	14.41 kilograms

In later years of World War II the transportation between Taiwan and Japan was hampered by the allied forces, and no doubt, the jump in the amount of consumption in the last period (1939-1943) of the table 8 includes some sugar which was actually stocked in warehouses in Taiwan. For comparision, the per capita per annumn consumption of sugar in other parts of the world in 1939 was as follows. Netherlands was the highest consumer: 81 kilograms. Denmark and Australia came to next, more than 50 kilograms. Britain, U.S.A., and Canada were nearly 50 kilograms, Italy and Portugal were about 9.5 kilograms. India was 6.7 kilograms, Java: 4.6 kilogram, China mainland; 1.8 kilograms. The average of 1939-43 in Tawian was 14.4 kilograms[12].

Note 11: Taiwan Sugar Yearbook, 1947, Taipei, Table 55.
Note 12: op. cit., Table 106. cf. 27: Table 144, Table 145.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

The increase in the consumption of pork is given in Figure 9. Beef and mutton are not included in this figure. Increase in the amount of meat consumption is a sign of the improvement of the standard of living. The per capita per annum consumption of meat in France was 20 kilograms in 1840, it increased to 35 kilograms by 1892, and to 40 kilograms by 1939[13]. The consumption of pork in Taiwan was 7.3 kilograms in 1910, it reached a peak of 17.3 kilograms in 1936, and after that decreased as the importation of beans and bean cakes as animal feed became increasingly difficult with the development of the war. For comparision, the per capita per annum consumption of meat in other parts of the world in 1939 was as follows. New Zealand was the highest: 110. kilograms; Australia: 95 kilograms; U. S. A., Canada, and Britain: more than 60 kilograms; Switzerland and France: more than 40 kilograms; Italy: 20 kilograms[14]. The consumption of pork alone in Taiwan was 15 kilograms in 1939.

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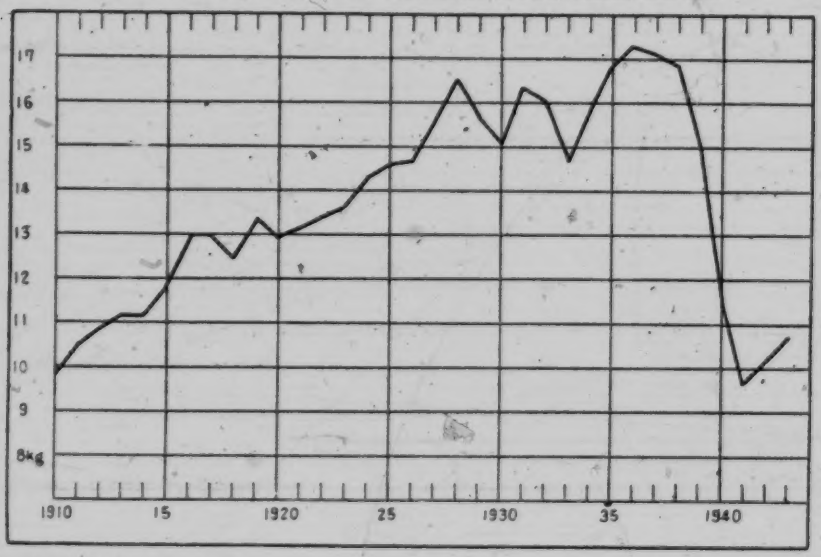
Fig. 9: Per Capita Per Annum Consumption of Pork, Taiwan, 1910-1943



Unit: Kilogram
Source: Animal Resources of Taiwan, pp. 63-64

16. *Change in the Attitude of the People*

People living under many kinds of changes gradually change their attitudes, or the ways of feeling, thinking and behaving. During the early years of Japanese rule, the large part of the Taiwanese were conservative farmers, who persisted in their traditional way of life. They had to face the merciless coercion of Japanese police on

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Note 13: Peyret, H.: La Lutte pour less Dernées Vitaless, 1946, Paris, qu. from Japanese tr. pp. 76-77.

Note 14: op. cit., p. 27. cf. 27: Table 144.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

181 matters of sanitation, and at times on matters of agriculture. With the passage of
178 time, experience lead them to compare their traditional way of life with that imposed by the colonial government. Some of these ways were found to be not too bad, some even adoptable. This kind of change in attitude through hard experience was fairly significant. By this, people realized for the first time that there were another ways of life besides their traditional one, and that some elements were worthy of adoption. Once the people began to adopt the new way of life, change began to speed up. From the following instances we can see that change in the attitude of people became conspicuous after the 1920's. We have discussed the influence of war and peace, the prevalence of epidemics, and the development of transportation on the attitude of the people (§ 7, 8, 12). Here the change of attitude concerning medical treatment and agriculture will be discussed.

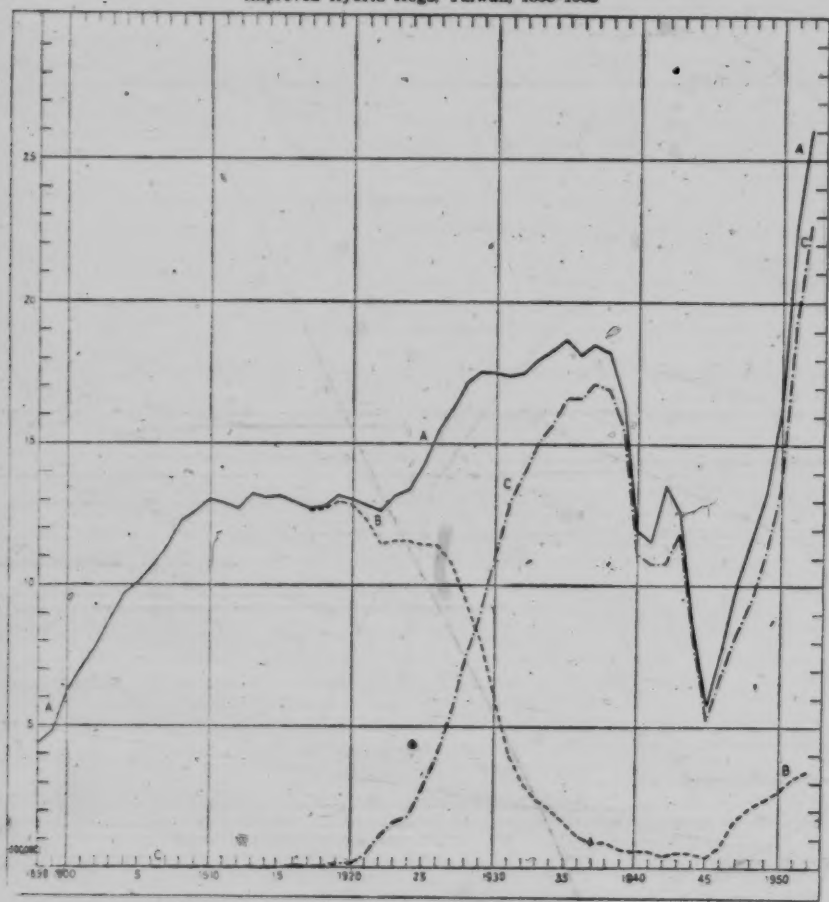
178 Since treatment of illness touches the innermost part of life, it is only natural that
744 conservative people do not dare to allow an unfamiliar doctor with strange ways of
156 treatment to approach them. For Taiwanese, who had been accustomed to the traditional Chinese medicine and folk medicine, doctors of western medicine, particularly with their injections and operations, were dreaded. During the early years of the Japanese rule there was a prevalence of cholera. Colonial officers compelled the people to take the preventive injection. Great consternation arose among the people, and many of them, particularly young girls, escaped and hid, in order not to have the dreaded injection. In the old city of Tainan a young girl of a wealthy family was escaping in a palanquin, but unfortunately she was caught by a Japanese police on the way, and forced to take the injection. Perhaps because the shock was too great, she died in a short time. Another young girl who took the injection killed herself after she went home, because it was a dreadful shame for a young girl of high standing to expose a part of her body to the public gaze. When a person died, his family had to have a medical certificate in order to get permission for burial. In 1906 90% of the medical certificates were issued by doctors of Chinese medicine, and certificates issued by doctors of western medicine constituted only 10% of the total. The proportion of
[759] the latter increased gradually, attained to 45% by 1917 (11:1917, p. 29). By 1920, the number of doctors of western medicine already exceeded those of Chinese medicine, and by 1935, 90% of medical certificates for the dead were issued by doctors of western medicine. Thirty years after 1906, doctors of Chinese medicine and doctors of western medicine had changed positions completely. By 1935, people did not object to injections and operations any more. On the contrary, they even believed blindly in injections, and asked for an injection when they saw a doctor. This was a remarkable change in attitude.

178 Farmers are tenaciously conservative in their work. In Taiwan, farmers originally
241 used only compost and night-soil, and did not use any commercial fertilizer. When a sugar corporation started to promote the cultivation of sugar cane, they bought commercial fertilizer from Japan, and distributed it free of charge to farmers. Once a

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

farmer received some bean cake for fertilizer. However he was afraid that this new and strange material would hurt his crop, so he threw it away in a grove of bamboo. Later he found that the bamboo around the bean cake had shot up tremendously, and he realized for the first time that commercial fertilizer was useful, and began to use it on his crops. It is not an easy task for the conservative farmer to depart even a little from his traditional way of life, and experiment with new methods. But when once the experiment is begun, new experiences will lead him farther. The use of commercial

Fig. 10: Total Number of Hogs and the Number of Native Hogs and Improved Hybrid Hogs, Taiwan, 1898-1952



Unit: 100,000 head A: Total Number B: Native Hogs C: Improved Hybrid Hogs
Source, 1898-1950, from Animal Resources of Taiwan, pp. 58-59
1951-1952, from Taiwan Agricultural Yearbook, 1952

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The use of commercial fertilizer spread quickly, and with textiles, became one of the main items of import from Japan.

For the improvement of hog raising, the colonial government had imported Berkshire hogs from Japan in 1896, and Yorkshire hogs from England in 1900. After a series of experiments, it was found that the first generation of hybrids between the native hog and Berkshire hog was most suitable to Taiwan, and the promotion of the hybrid was started in 1907. As in other agricultural practice, the traditional way of hog raising was a complicated procedure. Many religious and magical elements were involved in it, and it was not easy for the conservative farmer to adopt the profitable new hybrid. It took more than ten years of government promotion before people became willing to adopt the new hybrid. After 1920 more and more people adopted it, and the number of native hogs declined sharply (Fig. 10). This is the best instance of change in the attitude of the people. A new strain of rice (Ponlai rice) has been extensively cultivated since 1924, and the output of rice has sharply increased.

The 1920's is the turning point in the social history of Taiwan. Epidemics were wiped out, prevention of malaria had improved, the doctors of western medicine exceeded the doctors of the Chinese medicine, and even the cattle pest was wiped out. Political and social movements began for the first time. Primary education spread wider, the conservative farmer began to adopt new strains and new technics, and increase production. Mobility of the people had increased, more bicycles, automobiles, and trucks were used, and the level of living was raised somewhat. It was amid this social milieu that Taiwan's death rate steadily declined while its already teeming population with equal steadiness rose to new heights.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

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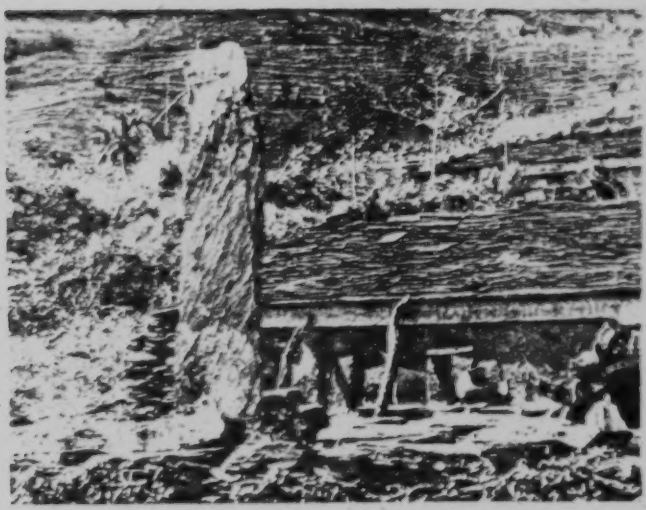
1 來義村 Pinaiwanan 部落之大部份 Chimmon 部落之一角 (何廷瑞攝)
Scene of Chala'abus Village, Pingtung Hsien



2 來義村大頭目之宗祠暨祖先石柱 (何廷瑞攝)
The house of the *ariwanay* and ancestral pillar, Chala'abus Village, Pingtung Hsien

/F. 112 a (facing p. 88, Chinese text)/

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INVESTIGATION OF SOCIAL ORGANIZATION OF THE CHALA'ABUS PAIWAN, PINGTUNG HSIEN

WEI HWEI-LIN
Translated by CHEN CHI-LU

121 70 This is a preliminary report of the field-works among the Chala'abus Paiwan of Pingtung Hsien. Members who participated were Messrs. Ho Ting-jui, Tang Mei-chun, Huang Hsün-ch'eng and the present writer.

Chala'abus village was chosen because: it is one of the important and old tribes of the Central Paiwan, and, is the center of the Chimo racial group of the Paiwan. We [62] have noted after the field-session that the village had other significances: (1) The village consisted of twelve aristocratic households whether of the Chimo or of the Paiwan groups. The village organization was thus rather complicated in structure. [36] (2) The dwelling houses and their arrangement had been well preserved in their original form. (3) Old traits in material culture, such as stone-engraving, wood-carving, [181] designed weaving, and embroidery, had been also well kept. (4) The ethnic character [177] is rather conservative. They have been comparatively less influenced by the Japanese and the Chinese as compared to the other groups of the tribe.

Because of the limitation of time and investigators, we emphasized tribal organization and chieftanship of the village. Our field-work was undertaken from Feb. 1 to 15. Because of the complexity of the culture, the investigation is by no means a complete one.

SETTLEMENT TYPE AND DUAL ORGANIZATION

[131] Chala'abus village is situated on the south-eastern slope of Mt. Nan-ta-wu and stands on the northern bank of the Lai-i River or the Upper Lin-pien River. The 101 population of Chala'abus village was 158 households and 948 persons at the time of 421 our investigation. With the Exception of 12 households who had moved to Chinasan 361 which lies between the village site and the plain below it and formed a separate hamlet by themselves, all the other 146 households were concentrated on the two adjacent fan-shaped slopes which in the present report are referred to as the village site. The village of Chala'abus hence consisted of two parts: the south and the north-parts. Each of them occupied a fan-shaped slope. The south-part was called Chinimoaŋ or "the living land of the Chimo", and the north-part Pinaiwanaŋ or "the living land of the Paiwan". The village site was on a slope of 30 degree to 45 degree inclination, [342] with the width north to south 80 M., and length east to west 100 M. Dwelling houses, including floors and roofs, were built of slate. All these houses had small front yards 361 paved with slate. A continuous row of houses of the same level had their yards adjacent 621 on the same level; but communication between two rows of houses was by means of narrow stair-ways, because the front yards of houses in the rear row were always on a level with the roofs of the front houses. The village is thus in a terrace form. Chinimoaŋ consisted of eight terraces, and Pinaiwanaŋ ten. Each terrace had a row

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of five to twelve houses. Chinimoaŋ had 55 houses and Pinaiwanaŋ 101. The cultivated fields around the village were possessed by the aristocratic households (*usam na mamatsayiran*) of both the Chimo and the Paiwan. By annexing and transition of these fields, their state of possession had become rather complicated. The distribution of aristocratic households had also become rather complicated too. The village had 12 aristocratic households, 9 of them belonged to the Chimo. Among them was the *ruvaniau* household which was of the highest rank. The *ruvaniau* also in charge of the *satsilapan* household which was saved as a village temple in time of our investigation. These two households were both situated on the upper part of Chinimoaŋ. The other 8 Chimo aristocratic households were equally distributed in the two hamlets. The *tʃaluŋi*, the *matsiliat*, the *gumul*, and the *voto* were in Chinimoaŋ, while the south *tʃalas*, the north *tʃalas*, the *tarapatea*, and the *tʃalusayiu* were in Pinaiwanaŋ. Two of the Paiwan aristocratic households, the *lusiguan* and the *alijulan* were in *Pinaiwanan*, and the *atsinajan* was in southeast end of Chinimoaŋ. From the distribution of those households, therefore, we may say that the significance of the distinction of Chinimoaŋ and Pinaiwanaŋ has been lost. But by their possession of hunting grounds (*aluliapan*), the existence of dual organization in the early days has been revealed. The village had 6 localities of hunting grounds, two lay south and east of the village, *pasulaval* and *vuit*, and belonged to the Chimo chiefs, four lay in west and north and belonged to the Paiwan chiefs. At the time of investigation, *alulialiav* and *pasulaots* belonged to the *lusiguan* household; *patsavatsavan*, south *tʃalas*; *pasupaots*, north *tʃalas*. The latter two may have been annexed by the Chimo. The fishing grounds were similar in condition to hunting grounds. The Lai-i River (or the *pasulaval* river as it is called by the natives) was the fishing grounds of the Chimo. Most of the lower part belonged to the *atsinajan*, *lusiguan*, north *tʃalas*, *gumul*, *tara'atea* and the south *tʃalas* respectively. The tributary of the Lai-i River, which is called *pasuivelin* by the natives, was originally the fishing grounds of the Paiwan but it was then divided into two parts and is owned by the *atsinajan* and the north *tʃalas*. The Chimo though they predominated over the Paiwan in hunting grounds, and equalled the Paiwan in fishing grounds, had less influence on aspects of religious and ritual. *Para'aree*, the priest of the most important religion rite *malɔvo*, the five-years-feast, was a member of the *atsinajan* household of the Paiwan. The ceremonies of *malɔvo* was initiated in the *lusigunan* and *atsinajan* of the Paiwan and then performed in Chimo households. Two of the three *puliŋao* or priestesses who sang songs for inviting gods were Paiwan. But the *pusao* or the six-years-feast was performed by the Chimo priest and priestesses. The *para'aree* and *puliŋao* of these two groups have acquired their techniques from their own group. This teaching had been kept secret from each other.

By the above mentioned facts, we may assume that the Paiwan are the natives and the Chimo came later. The Chimo though predominated over the Paiwan in economic and political power, but the Paiwan have maintained their position in religious life.

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ARISTOCRACY AND LINEAGE SYSTEM

621 The political system of Chala'abus village is aristocratic and resembles that of
565 the feudalism of the Chou Dynasty. It is established on two foundations: (1) The first is the tax and tributary system based on the ownership of land. (2) The second is the class system based on lineage rule.

565 The class system of Chala'abus differs with that of the North Paiwan. The North
423 Paiwan system has three grades: (1) the *mamatsayiran*, (2) the *maluvtsivtsik*, and (3)
427 the *pualu*. The Chala'abus system lacks the third grade *pualu*. The aristocratic class is generally called *mamatsayiran*, and is divided into two subclasses: (1) the upper
622 grade is called *avusamay*, (2) the lower grade is again subdivided into the *maluvtsivtsik* or consanguineous, and the *naitsu a nʔnmax* or affinal. The big chief *ruvaniau* belongs to the Chimo group. Three *maluvtsivtsik* of the *ruvaniau* are the south *tʃalas*, the north *tʃalas*, and the *tʃaluŋi*. Among the *naitsu a numax* are the *voto*, the *taraʔatea*, the *gumul*, the *mātsiliat*, and the *tʃalusayiu* of the Chimo, and the *atsinajay*, the *lusiguay* and the *aliolay* of the Paiwan. The big chief *ruvaniau* possesses one third of the cultivated land of the village. The north and the south *tʃalas* possess another one third. And the remainder is in the hands of other chiefs of both the Chimo and the Paiwan. These chiefs rent their lands to commoners of the villages, so commoners are serfs (*unutel*) and nobles landlords. Each chief has a vassal household (*utsiputsipoŋ*) to take care of the rental business. The office of the vassal is hereditary, but he is a commoner and owns no land by himself.

566 The above mentioned aristocratic system is established on the basis of the lineage
613 system. One who first established his household in the village is regarded as the grand
428 lineage. The elder offspring, regardless of sex, is the heir or *usam* to succeed the household. Offspring other than the heir will leave the household and establish a new one when he is married and is regarded as the lesser lineage or *muluvtsivtsik*. The succession of the lesser lineage is similar to that of grand lineage. But offspring other than the heir of the lesser lineage will be degraded as commoner when he departs the household. The *utsiputsipoŋ* is a commoner who is chosen by a aristocratic household
582 to be their vassal. The heir of the *utsiputsipoŋ* household succeeds his father's office. It is worth to note that members of the grand lineage of the *utsiputsipoŋ* are prohibited to intermarry with members of the grand lineage of their aristocratic household.

LINEAGE RULE AND MARRIAGE RULE

A. Lineage rule

613 The kinship organization is a lineage group with a family as its nucleus. Each family has its own *umax* or house. The *umax* or house has a special significance to the Chala'abus family system. Each house has its *ŋatay a numax* or house name. One who is born in the house is named after the name of the house. Members live in the house include a married couple, the heir or heiress and sometimes his or her spouse and other unmarried offspring of this married couple. The elder son or daughter succeeds his or her parents as the head of lineage group and remains to live in the house. Other offsprings are either married to the heir or heiress of another household

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or establish a new house if not married to an heir or heiress. There is, thus, a lineal relation between these households. One which has a further relationship with the household from which it derived is lower in rank. Their lineage rules may be summarized as follows: 613

a) A household is the nucleus of this lineage system.

b) The lineage who first established their house in the village is regarded as the grand lineage or *mamatsayiran*.

c) The house and the name of the house are succeeded too by primogeniture regardless of sex. The heir or *usam* must remain in the house and succeed to the name.

d) Each offspring other than the heir who is married to the heir of another household or establish a new household and take a new house name if married to one who is not the heir, is called the lesser lineage or *maluwtsivtsik*.

e) The rule of succession of a lesser lineage is similar to that of a grand lineage. The son of a lesser lineage is degraded to become commoner or *tala?alalak*.

f) Offspring of a vassal household other than the heir are degraded as commoners.

g) If the household has no heir, it is succeeded by the second son or daughter, even he or she is married out. This second son or daughter who has established a lesser lineage of his own, will give his own lineage up, and return to his prime house to succeed to the lineage. If a lesser lineage has no heir, it may be succeeded to by members from the grand lineage. The vassal will take care of the grand lineage when the heir to succeed the lineage is not yet decided.

B. Marriage rules

a) Residence 582 +28 611

1. The heir of a household must remain in the house, and have his spouse come to live with him.

2. Family members other than the heir may marry a heir of another household and goes to his spouse's house.

3. When both the husband and the wife are no heir or heiress, they will establish a new house and have a neolocal residence.

4. If a heir marries with a heiress, this new couple will succeed to both households.

b) Class

1. One who marries one of his own rank is called *metsevoŋ*. Their offsprings belong to the same rank. 582

2. One who marries one of a higher rank is called *sluŋua*. He himself and his offsprings will have a higher rank too. 565

3. One who marries one of a lower rank is called *sluŋoja*. He and his offsprings will have a lower rank too. 556

The Paiwan practise endogamy but not in a strict sense. It may be estimated by the quantity of the bride price. A certain quantity of bride price is set for a certain 582 565 583

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582 class. A man of the lower class must pay as much as or more than that of a upper
565 class member if he wants to marry one above himself. The lower class member does
556 not marry one above him because he can not afford to do so.
583 **C. Incest prohibition**

601 The kindred group of the Paiwan is bilateral. The present writer has assigned it
835 as occasional bi-sexual lineage. No emphasis upon either the paternal or the maternal consanguinities is made. No distinction between lineal and collateral is made in addressed terms, but it is made in indirect and collective terms. Those who have the same parents are called *maluvluŋuluŋa*, those who have the same grand parents, *malusiatsətsəl*, those have the same grand-grand parents, *malusiatsalaitaita*, and those have the same grand-grand-grand parents, *malusiapatsətsəv*. *malusiatsəlsəl* are prohibited to marry. *malusiatsalaitsata* are also called *naŋaʔaŋa putsəl*, they are allowed to marry. *malusiapatsetsev* are also called *naŋaʔaŋa lavatsə putsəl*, they are the most prefered mates. Relative beyond the *malusiapatsətsəv* are called *aolav*. *aolav* are allowed to marry with each other, but they are not as preferable as the *malusiapatsətsəv*, and even the *malusiatsalaitaita*. It is noteworthy that these marriage prohibitions are not to supplement the rule of exogamy but serve as the limitations of the rule of endogamy.

TRIBAL CHIEFTAINSHIP

643 The tribal chieftainship of Chala'abus village differs with the dual chieftainship of the North-Paiwan, and may be regarded as a kind of mutual independence of the three powers: political, religious, and military. The political and economic powers are in the hands of the Chimo chiefs. The religious powers are equally distributed over the chiefs of both the Chimo and the Paiwan. The nomination of a *paraʔare* or priest is determined by a kind of divination called *paiwata*. The military powers fall in hands of the commoners. The office of the priest of the headhunting ritual (*paraʔare na ara*) is held hereditary by the *tsivulaŋaŋ* household of commoner. The tribal chiefs and their offices are listed as follows:

A. Political and economic chiefs:

a) *avusamaŋ* (big chief)·····*ruvaniau*
maluvtsivtsik (consanguineous chiefs)·····*tsaluŋi*, *tʃalas* (south), *tʃalas* (north)
naitsu anumax (affinal chiefs)·····*lusiguaŋ*, *atsinajaŋ*, *alijulaŋ*, *taraʔatea*, *gumul*, *matsiliat*, *voto*, *tʃalusaŋiu*.

b) *pinairaratsə* (representatives of the big chief of other villages)·····*tʃalas* (north) a representative of the *tsulivuaŋ*, the big chief of Kunanao village.
tavalaŋ a representative of the *haraŋiraŋ*, the big chief of Kulalus village.

c) *utsiʃ utsipoŋ* (vassals of the chiefs)·····*ruvaniau*, *tsapalai*, *tavalaŋ*, *suajoŋ*,

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tsuvulavaŋ, lusaliaŋ, suli'i, laluriaŋ. 643

d) *sasaolaŋ* (servants of the *avusamaŋ* household)..... ..... two households of commoner, they are not hereditary.

B. Religious chiefs:

a) *para'are a malova* (a priest of the five-years-feast)..... ..... *atsinajaŋ* (Paiwan)

para'are a pusav (priest of the six-years-feast and priest of agricultural rituals) ..... *tsivuluvaŋ giligilao* (Chimo)

para'are na ara (priest of head-hunting ceremony)..... ..... *tsipulaŋaŋ* (Chimo)

b) *paraiŋaŋ* (priest of the hunting grounds, one for each ground) ..... determined by divination

c) *puliŋao* (priestess) ..... two Paiwan, two Chimo.

C. Military chiefs:

rara'atsaŋ (chivalry chief)..... *tsavalit*

rara'atsaŋ tsalala (lesser chivelry chiefs)..... number of person are not fixed, promoted by military achievements.

D. Tribal councils:

a) *malaval a maluvtsivtsik*—Members of *malaval a maluvtsivtsik*, the administrative council or aristocratic council consist of all aristocratic household-heads. *utsiputsipoŋ*, vassals of the chiefs may attain the council but they have no voice in the council. The administative council is headed by the big chief *ruvaniau*. 623

b) *malaval tsalala'alaŋ*—The villagers' meeting consists of all household-heads of the village. It is also assembled by the big chief *ruvaniau*.

c) *malaval ta palisilisiaŋ*—Ritual day assembly it is assembled by the big chief *ruvaniau*, but *para'are*, the priest is the chief speaker.

d) *malaval na rara'atsaŋ* or chavalry meeting—The meeting is held everynight. In occasions of head-hunting expedition or war, it is assembled and headed by *rara'atsaŋ*.

FEUDALISM AND TRIBUTARY SYSTEM

A. Feudalism

The feudalism of Chala'abus village which resembles that of the ancient Chinese system is called *moli-umax*. The representative of a feudal lord is called *pinairaratsə*. The big chief *ruvaniau* had nine (possibly more than nine) *atunaŋaŋ* or dominions in other villages. They are shown as follows: 631 621

atunaŋaŋ village	*pinairaratsə* household
pailus "	*tsamatsiaŋ* "
vuŋalit "	*taluvuŋaŋ* "
butsuŋnok "	*tsaododo* "
tsuvutsa'ataŋ "	*tsulimodo* "

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631
621

pulti	"	*talialup*	"
aviaŋaŋ	"	*tsiŋulol*	"
tsaovarul	"	*ruvaniau*	"
ralide	"	?	
atsa'atsaraŋ	"	?	

B. Tax and labour

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All dwelling lands (*imaraŋ*), hunting grounds (*aliupaŋ*), fishing grounds (*pana*), cultivating lands (*atunaŋaŋ*) and things above the land were owned by aristocratic households. A commoner in order to have some lands to till, some grounds for hunting and fishing, and stones and fuel to be collected in the valleys or on the mountains, must submit himself to some aristocratic household as a serf (*umutal*), and is obliged to pay taxes to render feudal labours to his feudal lord. Taxes are of the following kinds:

a) *wadis na satsəmul*—tax for hunting animal
b) *wadis na pana*—tax for fishing
c) *wadis na atsaŋ*—tax for domesticating animal
d) *itsivoŋ*—wine tax
e) *iluplup*—tax for collecting fuel
f) *pa'a*—tax for trading
g) *pa'a lura ta putsel*—tax for marriage

Feudal labours of a serf to his feudal lord are of the following kinds:

a) Land tillage (*pata'alaŋ*): Each aristocratic household has preserved a portion of tilling land for its own. This portion of land is called *vavutəloŋ*. The *vavutəloŋ* of the *ruvaniau* household was tilled by all commoners of the village. Other *vavutəloŋ* were respectively tilled by serfs of those households. All products of these *vavutəloŋ* belong to the aristocratic households. This land-tillage system has been employed in Chala'abus village to substitute the land-tax.

b) House-building and house repairing (*jirayuts*): The commoners have the obligation to build or repair houses for chiefs. All commoners are obliged to render this kind of service to the *ruvaniau* and *sadilapaŋ* households.

c) Miscellaneous duties (*painuma a tsəvatsəvuŋ*): Commoners must render services to chiefs' households in their marriage, funeral or other occasions of the same kind.

d) Travelling service (*putsatsalaŋ*): A chief may require certain commoner to accompany him when travelling.

C. Tributary and audience

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The representative of the big chief in other villages must pay visits and tributes to his overlord the *ruvaniau* household after the harvests of millet and taro. Tributes presented by a *pinairaratse* to his overlord include 20 bundles of millet ears, a bottle of wine, a pig, 10 bunches of betel nut, a bag of groundnuts. In time of the five-years-feast, the chiefs of Chala'abus will be invited to visit villages where they have their representatives. At the death of the *pinairaratsə*, the overlord must condole the family of the dead and at the same time appoints the *usam* or heir of the family to succeed

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his father's office. If the *pinairaratsə* has no heir or if his works were not regarded as satisfactory, the overlord may appoint another household to the office. Taxes collected by the *pinairaratse* need not be forward to their overlords, they may be consumed by the *pinairaratsə* himself. 651

CLASS AND PRIVILEGE

A. Naming system

A name indicates one's social status. They are of three grades: 565

a) Names of the big chiefs:

men's names: *arutsaŋal, tfanupak, tsivuluaŋ, giligilao, palilas, ləŋuŋai, trotsə.*

women's names: *rumurumaŋ, moni, vonum, slup, lutsium, tsipulaŋ.*

b) Names of the second grade chiefs:

men's names: *apitsuaŋ, ulili, pulalujaŋ, tsimuluŋai, tsama, gulagul, raŋaraŋ, apaŋ, tsumul.*

women's names: *tsiankim, lavlav, kalskus, tsoʔo, rere, ateves, kumara, moakai.*

c) Names of the commoners:

men's names: *maitsəl, guluts, tsuvi* and others.

women's names: *saolalui, alalu, vais, kai* and others.

The *utsiputsipoŋ* have the same names as commoners. The name of an aristocrat is decided in a kins' meeting. To acquire a name above his class he must get a permission from the big chief. The name of a commoner is given by his parents or determined by a divination.

B. Tattooing (*voŋtsik*)

Tattooing is one of the privileges enjoyed by the aristocratic class. A commoner may have tattoo if he has military achievements and is so permitted by the chief. Men tattoo their breasts, backs, arms, and legs; women only tattoo their forearms and backs of hand. The designs indicate their social status, only the big chiefs may have human figures (*pinarutsautsauaŋ*) and snake designs (*pinavulvuluaŋ*). 565 304

C. House decoration

Houses are distinguished by two kinds. The houses of the big chief or the second grade chiefs are always larger in size and more decorative. In front of these houses, there are larger front yards (*assasauaŋ*) and platforms (*aluvuluvaŋ*) which serve as the meeting places of the villagers. On the platform a stone pillar is erected to represent their ancestor which is called *saotsaolai*. House posts, beams, walls, and storage boxes may be decorated with human figure or snake designs. The houses of the commoners, include houses of *utsiputsipoŋ*, are always smaller in size and can not be decorated. 565 531 341

D. Clothing and ornaments

Clothing and ornaments also indicate one's social status. The aristocratic class wear clothes of dark colours—dark blue, dark purple, or black colour. The clothes of the aristocratic class are always embroidered or design-weaved, while the commoners are prohibited to wear such. Several kinds of clothe—*tsapo aliulao* (clothe made of leopard's skin), *vajal a tsinuŋuaŋ* (shoulder cloth), *katin a voŋtsiaŋ* (a kind of trousers) 565 291

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565 are only allowed to be worn by chiefs; and embroidered *lionpao* (long clothe), *koŋ na*
591 *kinimaʔaŋ* (long skirt) and *kasuja tsino at səvanaŋ* (trousers) by chiefess.

[301] Ornaments, especially *lailai* (feather ornaments), *patal na paŋaŋiliŋ* (hat-ornament made of leopard's teeth), *taʼata* (shoulder ornament made of a kind of shell), *tsalaral* (silver shoulder ornament), *aliatpula* (glass bead necklace) are only allowed to be used by nobles.

565 **E. Right to perform ceremonies**

554 a) Felicitation on having an elder offspring is only performed by the nobles. A gun and some iron ware must be sent to the maternal relatives on this occasion. This is called *ləmiçi*.

565 b) A bride price is called *çiniliçi*. According to the social status, it is divided into
583 three classes: *mamatsaŋiraŋ*, *maluntsivtsik* and *talaʔalalak*. *mamatsaŋiran* consists of a piece of cultivated land (*atunaŋaŋ*) a household of serf (*wadis*), five kinds of iron articles; *maluvtsivtsik* only two or three kinds of iron article; and *talaʔalalak* only two or three iron articles. The marriage ceremony also differs between nobles and commoners.

764 c) Funeral rites: At the death of a chief, the whole village wears mourning
565 dresses for five days, *maluvtsivtsik* and *utsiputsipoŋ* a month. At the death of a *matuvtsivtsik*, his relatives and *utsiputsipoŋ* wear mourning dresses for a month, and his *unutel* five days. At the death of a commoner, his relatives wear weeds for a month.

565 **F. Privilege from criminal trial**

[687] a) A commoner will be fined a penalty of a pig, a bottle of wine, several iron articles by his lese-majesty (*napanuŋatsə*) to a chief. A noble commits no lese-majesty.

[534] b) If a commoner's house is carved, his body tattooed, and his clothes decorated, he is regarded as having committes a crime of arrogation (*napatsəra*). He will be fined a penalty of the same as that of a lese-majesty.

[685] c) The nobles commit no crime of robbery (*ləmav*).

[682] d) A murderer must pay the equivalence of the price of the murdered which differs according to one's social status. If a commoner murdered a noble, all properties of his own as well as his brothers will be confiscated, and he himself will be exiled from the village.

[684] e) The nobles commit no crime of adultery, but a noble may ask penalty from one who commits adultery with his or her spouse. A commoner who ravishes a chiefess will be heavily punished and exiled from the village.

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ETHNOGRAPHICAL INVESTIGATION OF SOME ASPECTS OF THE ATAYAL, CHIN-SHUI TS'UN, MIAOLI HSIEN

RUEY YIH-FU, HO TING-JUI,
T'AO SHU-HSÜEH, HSÜ SHIH-CHEN and
CH'IU CH'I-CH'IEN
Translated by CHEN CHI-LU

I. THE ATAYAL OF CHIN-SHUI TS'UN

101 Chin-shui Ts'un is situated on the banks of both the Wen-shui River [*lalisʔoŋ lilax*] or the Upper Hou-lung River and its tributary the Pa-kua-li River [*ŋaʔoŋ toanoq*], while Tung-hsi-shui Mountain rises to the south and Heng-lung Mountain to the north of it. The Chin-shui Atayal was originally a branch of the *Tseoʔleʔ* Tribe, and was formerly called the Wen-shui Fan or Wen-shui Tribe. According to Y. Sayama, the Wen-shui Fan originally included eight villages; but at the time of his investigation, there were only four villages: *paqali* (included a part of *xalo*), *tapilas* (included a part of *seqaʔon*, or *taojan*), *maʔao*, and *saxeʔan* (included *saβulok*, *saŋata*, and a part of *seqaʔan*). Approximately at the same time, U. Mori also recorded only four village-names of the "six-villages of Ta-hu Fan, which were *paqali*, *tapilas*, *taojan* (*seqaʔan*) and *saxeʔan*. Later on, at the time of N. Utsurikawa's investigation (about 25 years ago) it was reported that there were only *paqali* and *tapilas*, and *saxeʔan* known merely by name. [161] The *Takasagozoku-chosasho* (*The Investigation Report on Formosan Aborigines*) published in 1937 by the Japanese Government accorded with Utsurikawa's statement and stated that *paqali* had a population of 29 households, 133 persons, and *tapilas* 41 households, 217 persons. In the present investigation, we discovered that besides *tapilas* which is situated on the southern bank of the Wen-shui River, and *paqali* on both banks of the Pa-kua-li River, there is Ho-ti Village which is situated on the northern bank of the Wen-shui River. This Ho-ti Village is also called *saxeʔan* by the Atayal, but the dwellers are no longer the *Tseoʔleʔ*, they are mostly the *ʃiaqalo* of the *Seqoleq* Tribe, or the people of the *loxkax* Village. A part of them are the *pasqalan*, or the people of *məʃiŋo* Village. *qaino-βotox*, one of our informants, related that: "The *ʃiaqalo* originated in the place called *xabun-totonan*. In time of 166 the Chief *βota-momots*, they had moved to *jaβaŋan* and *loxqax*, and settled there for about three or four generations. They moved again to *wanpala* in 1925, because they had found that the lands of *jaβaŋan* and *loxqax* were not arable. In 1936, those who lived in *loxqax* had been coerced by the Japanese government to move to the northern bank of the Wen-shui River and there they formed the present Ho-ti Village; and those who lived in *jaβaŋan* to *laqus* of Nan-chuang Hsiang. The latter had moved again (between 1947-1949) to Heng-lung-shan and formed the present *jaβaŋan* or

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166 *maqalaqa* Village." On the slope north of Ho-ti Village there is a village of 10 households, 62 persons, which is generally referred to as *saβulok* or *tsaβulok*. According to Y. Sayama, *saβulok* was originally one of the "eight villages of the Wen-shui Fan", and was formed by joining the village of *sayata*, later on it was annexed by *saxeʔan*; but we found that the inhabitants of *saβulok* today belong to the village of *paqali*. On the slope east of Ho-ti Village there are 5 households, generally called *taojan*, this name has been found in Mori's book, and today, the people form a part of *tapilas*. Sayama stated that *taojan* was originally one of the "eight-villages of the Wen-shui Fan" but was annexed early by *tapilas*. Mori stated that *tapilas* had subordinated *maqao*, which Sayama called *maʔao*, another one of the "eight villages of the Wen-shui Fan". *The Investigation Report on Formosan Aborigines* records that *maʔoa* was annexed by *tapilas* in 1928. In the present investigation, the following account had been given by the vice-chief of *tapilas*: The people of *maqao* originally lived around *ulai*, but now none of them can be found there." The present *tapilas* consists of two *gamil* (the term *gamil* will be explained later). One is *tapilas*, its meaning is not known; the other is *meililax*, it is the native name of the Wen-shui River. The *tapilas* originally lived in the valley 10 km. west to Hu-shan. In time when the informant's grandfather *taimo-laʔon* was the chief, the Japanese government had coerced the *tapilas* to move to Hu-shan which is situated on the bank of the Wen-shui River, and appointed *qaino-βawan*, the grandfather of Chief *βujoŋ-tolai*, to be the chief, and *taimo-laʔoŋ* to be the vice-chief." So, the present Chin-shui Ts'un consists of the people from *tapilas*, *paqali*, *loxqax* or *saxeʔan*, as well as *jaβayan* or *maqalaqa*.

101 [14]

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II. KIN GROUPS

592 The Kin group forms the nucleus of all kinds of Atayal social organization. The *tapilas* Atayal have four kinds of kin groups. The following description is summarized from the information which was given by *joqex-etex* and *βujoŋ-tolai*:

1. *βaβuʔan*

It is the fundamental unit to found an *alaŋ* or a *qalaŋ* (village). *βaβuʔan* may be defined as family. A "family" comes into being with the marriage of a mating pair. Atayal marriage is strictly monogamous. One always leaves one's "family of orientation" and erects a new house and forms one's "family of procreation" which is called *otox* or *qotox βaβuʔan* by the Atayal, after he is married. Therefore, a "family" generally includes a married couple and their offsprings. But Atayal *βaβuʔan* is different from that of the so called nuclear family of the western civilization which consists of only kins of two generations. In the Atayal, the only son or the youngest son of the family always remains in his parent's family even after he is married. So, it may consist of kins of three generations, and may be an extended family. In some occasions, if the condition of the house is favourable, the eldest or second son may also remain in the house after he is married. If the only son or the youngest son is disliked by

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his parents, or if the daughter-in-law does not live harmoniously and affably with her parent-in-laws, the newly married couple may move out and live by themselves. In some cases, the parents may choose to live with their eldest or second son and not necessarily with the youngest, though this may be an exception. Therefore *βaβuʔan* is a kind of limited extended family or "compromise family". 592

If a family has only a daughter and no son, or though it has a son who is disliked by the parents, the daughter may remain in her parents's family and the residential system will be matrilocal, that is, her husband will come to live with her and her parents. [591]

After the deaths of the parents, the elder brother has to take up the responsibility for taking care of his unmarried younger siblings, so they may come to live with their elder brother. A widowed sister, widowed sister-in-law, parentless nephew or niece may also depend upon the *otox βaβuʔan*. Divorce and remarriage are frequent. The family with remarried spouse may have half-siblings.

2. *saliʔ*

saliʔ is a kin group larger than a *βaβuʔan*. *saliʔ* originally also means "family". In *tapilas*, *saliʔ* refers to two kinds of organization: in its narrow sense, *saliʔ* means "family", in its broader sense, "consanguinity".

(1) *saliʔ* in its narrow sense: A man, as stated above, usually establishes a new *βaβuʔan* after he is married. But his new house is always erected close to or sometimes adjacent to his parents'. Thus it may be regarded as an extension of the parents' house. This kind of kin group, which includes par ts' and their offsprings' households, is called *otox* or *qotox saliʔ*. It is clear then that a *saliʔ*, though it resembles a family, is not always merely one "family", it may be defined as "kindred", as the term has been employed by W. H. R. Rivers. 596 612

(2) *saliʔ* in its broader sense: On paternal side, *saliʔ* consists of lineal ascendants up to third generation and collaterals including tertiary relatives. In other words, it is a group of agnates who share a common grand-grand-father, this group thus includes the brothers and sisters of the grand-father and their offsprings. The Atayal term for this group of kinsmen is *otox* or *qotox jaβa naqo jotas ta*, which literally means "of the same grandfather of father". On maternal side, *saliʔ* consists of mother's father, mother's brother, and one's maternal cousins. In other words, it is a group of maternal agnates who share a common mother's father, this group thus includes mother's brothers, sisters, and their offsprings. The Atayal term for this group is *otox* or *qotox jaβa naqo jaja miam*, which literally means "of the same mother's father". Members of the same *saliʔ* are cognates to each other, so *saliʔ* may be translated as "consanguinities". Marriage is prohibited between members of the same generation within the *saliʔ*. Therefore a *saliʔ* is also a patrilineal bilateral type exogamous group. 613

3. *cəlo* and *caca*

A consanguineous group larger than a *saliʔ* is called a *cəlo* or *caca*. *cəlo* means 621

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621 "companions". In the Atayal, a hunting group is organized by men each of whom comes from each family of the village. This group of people hunt together, and divide the game they have gotten. If a villager commits a crime, such as one who is going to marry another member of the same ***pinsaqaʔan***, or one who is proposing to divorce his spouse, etc., the person concerned must offer a sacrifice, a pig or a chicken, and holds a ***xalion*** or a ceremony of breaking taboo for atonement. This ceremony will be attended by all household-heads of the group which hunt together. When the ceremony is over, the sacrifice will be divided among the attendants and will be eaten by them to avert evil influence. Of the above mentioned organizations, the former is a hunting group, and the latter a group for consuming sacrifice together. The ***Seqoleq*** Atayal call the former ***litan***, and the latter ***neqan***, but the ***tapilas*** is rather ignorant of these two terms, they refer to all participants as ***otox*** or ***qotox*** ***gəlo***, which means "of the same ***gəlo***".

gaga means "tradition". In time of land clearing, seed-sowing, crop-harvesting, and ritual-hunting, all household-heads participate in the ritual to make offerings to their ancestors. After the ritual is over, the feast starts. The participants are called ***otox*** or ***qotox*** ***gaga*** which means "of the same ***gaga***" or "of the same tradition". In ***tapilas***, a ***gaga*** is also a hunting group and a group for consuming sacrifice together as stated above, therefore, there is no distinction between a "***gaga***" and a ***gəlo***".

4. ***gamil***

613 There is another kind of unilateral type of kin group called ***gamil***. ***gamil*** means "root". Those who descend from the same ancestor are called ***otox*** or ***qotox*** ***gamil*** or "of the same ***gamil***". So ***gamil*** has a similar meaning to the Chinese term "tsung" (lineage). A "tsung" is a unilateral kin group. The descent rule of the Atayal is patrilineal, therefore a ***gamil*** is a patrilineal kin group which resembles a lineage of the clannish society. Utsurikawa has translated ***gamil*** as ***shizoku*** or clan, but, as the present author has noticed, it differs from a clan, because it is not an exogamous unit and is not organized into a certain form of group. People who have the same grand-grand-father can not intermarry with each other. A woman is excluded from the ***gamil*** of her parents and joins her husband's after she is married. A man who has married into his wife's family belongs to his wife's ***gamil***. In the wedding ceremony, when a bride is sent to bridegroom's house, the go-between always intiates his address to the bride with the following words: "You were belonging to the ***gamil*** so-and-so, but now you have become a member of the ***gamil*** so-and-so". As stated in the foregoing section, ***tapilas*** has two principal ***gamils***: One is the ***gamil tapilas***, which the Chief ***βujoŋ-tolai*** belongs to. The first ancestor of the ***gamil*** within their memory is called ***ijo***. ***βujoŋ-tolai***'s grandson is a member in the seventh generation descended from ***ijo***. Another is the ***gamil məlilax***, which the vice-chief ***joqex-etex*** belongs to. The vicechief's son is in his descendants of the seventh generation counting from the first ancestor. Still another is called ***gamil majaʔan***, which is the ***gamil*** of our first guide ***βaʔai-qaino***. Their first ancestor is called ***uʃi***. ***βaʔai-qaino***'s son is in his

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descendants of the sixth generation counting from him. It is said that about 80 years ago, *ʃi* lived originally in Shih-t'an Hsiang. It was his son *layao-ʃi* that moved to Hu-shan. *layao-ʃi* had a daughter *qojo-layao* and a son *βaitso-layao*. *qojo-layao* married *taimo-layao*, the grandfather of *joqex-etex*. *βaitso-layao*, the younger brother of *qojo-layao*, had entered *camil maililax* because he was brought up in his sister's husband's family which belonged to *camil maililax*. This case indicates that a *camil* member may not be cansanguinity, A *camil* may include members from other *camil* Thus *tapilas* is a local social group which is interwoven by the above mentioned groups.

III. HEAD-HUNTING

Though the Atayal has been famous for their old custom of headhunting, the *Tseoʔleʔ* Tribe which inhabits the regions closer to the plains occupied by the Han people, abandoned the custom earlier than other tribes. In *tapilas* and *paqali*, only a few persons have had experience of head-hunting. The *ʃiaqalo* Atayal kept the custom until more recent time because they had lived formerly in a more remote regions known as *jaβayan* and *loxqax*. They were coerced by the Japanese to move into this region. The following accounts were given by *joqex-etex* and *taqun-nomin* (70 years of age, he had moved from *loxqax* of *ʃiaqalo*). In the following descriptions when the custom of these two villages do not accord with each other, (m) indicates that of the former, and (s) that of the latter.

1. Reasons for undertaking a head-hunting expedition

Head-hunting in Atayal is called *mə-qaqa*. It means "to observe the old tradition". According to the motive of the expedition, it may be divided into the following three kinds: (1) for blood vengeance; (2) for military achievement; and (3) for settling dispute. The former two are called *məqetsβo*(m) or *məʃiβo*(s), which means "hunting"; the last one is called *məqulaqam*(m) or *ʔəmalas no qoaq*(s), which means "settling dispute". The former two kinds are employed to venge oneself against the member of another tribe or sometimes one's own tribe; the latter kind undertaken to settle a quarrel between kinsmen. The result of the headhunting expedition, whether it has succeeded or failed, is regarded as the judgement on the case shown by the wishes of their ancestral spirits; therefore the quarrel could be thus settled. It is for this reason that they must carry with them a *tsineto*(s) or *tenato*(m) or a guardian bag.

2. The organization of a hunting expedition

To organize a head-hunting expedition permission must be securred from the Chief. An expedition may consist of two or three or as many as seventy persons. In *tapilas*, participants, as a rule, are enlisted from the same *camil*, though sometimes members of a friendly *camil* may also join them. The participants elect their own *pəqa-lain* or leader. The leader is to hold ceremonies and to command attacks.

3. Oath and New fire

After the expedition has been organized, all participants assemble in a certain

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descendants of the sixth generation counting from him. It is said that about 80 years ago, *uʃi* lived originally in Shih-t'an Hsiang. It was his son *laŋao-uʃi* that moved to Hu-shan. *laŋao-uʃi* had a daughter *qojo-laŋao* and a son *βaitso-laŋao*. *qojo-laŋao* married *taimo-laŋao*, the grandfather of *joqex-etex*. *βaitso-laŋao*, the younger brother of *qojo-laŋao*, had entered *camil maililax* because he was brought up in his sister's husband's family which belonged to *camil məililax*. This case indicates that a *camil* member may not be cansanguinity, A *camil* may include members from other *camil* Thus *tapilas* is a local social group which is interwoven by the above mentioned k groups. 613

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721 place to take an oath for starting their hunting trip. *joqex-etex* said that on this
782 occasion, the leader stood in front of all participants, with a wooden-spoon [*sasowai*] in his right hand and with a torch made of palm-fibre in his left hand, he prayed to their ancestor-spirits: "I hold this ceremony according to the old tradition of our tribe. This spoon and torch have been transmitted to us from our ancestors because they represent good fortune. Drinking this water in the spoon and lighted by this torch, we shall have good luck." After this, each participant moistened his right hand in the spoon and sucked it with his lips. Then, the torch was lighted. The ignition was by flint and steel. This fire had to be divided among the participants to light a new fire in their own houses. *taqun-nomin* said that the condition of the ignition revealed omens of the expedition.

4. Taboo after the new fire

721 After the new fire had been lighted, many kinds of taboo had to be observed.
784 The more important ones were: (1) prohibition from extinguishing the kitchen fire; (2) prohibition from weaving (this taboo must be observed by all families of the same
792 *qotox litan*(s) or hunting group. Other hunting groups though may be released from this taboo, but the warp beam must be filled up with cloth fragments to prevent its making a sound when weaving.); (3) prohibition from intercourse and exchange of gift with the family which is quarrelling with the other family; (4) prohibition for holding a ceremony; (5) prohibition to make a noise; (6) prohibition to steal; (7) prohibition to commit adultery (this is applied to families of the same hunting group).

5. Costumes and foods

721 The leader and other participants of the expedition dressed according to their regulation, and brought weapons, bags for transporting the hunted heads, and ear-
[262] ornaments to be used in time of returning in triumph with them. Foods prepared to be consumed for the expedition were salt, millet-cakes, ginger, etc.

721 6. Dream divination

In the evening before the expedition is to start, they seek for dream omens which
787 are called *mital sapijil*(n or *mata spi*(s). If most of the participants have bad dream, the expedition will be postponed or cancelled.

7. Bird divination

If a good omen is gotten from the dream, two or three members of the expedition will be sent out early in the morning to hear the chirping of a kind of bird called *siljeq*. If an evil omen is gotten, the expedition must stay over night at the place where the bird divination had taken place, and will have another divination the following morning. If again an evil omen is gotten, they will cancel the trip.

721 8. Calling the souls of the enemy

If a good omen is revealed by the bird divination, the expedition will start on its
788 way. The first thing they must do after they have reached the destination is to hold a ceremony for calling the souls of their enemies to come, which is called *somilai*. In the ceremony the leader has camphor leaves in his hands, he points these in the direction

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of their enemies and says: "I have camphor leaves in my hands. One who has these leaves in his hands will acquire his enemies' heads." After this spell has been recited, all members in the expedition will come forward to touch the leaves with their hands. It is said that camphor leaves are used in this ceremony because the Han people often come to the mountain region to collect camphor leaves to make camphor, and therefore they think that the camphor leaves might have the power to attract the Han people to come for them to hunt.

9. Attacking

721

The object of attack may be travellers, or may be a whole homestead which is near to their living section. They will attack the homestead when it does not guard against them.

10. Triumph

If the head have been gotten, they will put it in the bag [*taoqan*] and hurry back to their village. When they come to a place which their enemies can not reach, they will take out the head from the bag, and cut down its hair. This hair will be divided into two parts: a part of it will be kept in the headhunting guardian bag, and another part of it will be equally divided among those who have aided in securing this head. After the hair has been divided up, the whole troop will proceed on their way toward their home village again. When they come near the village, they will sing *qoas palis* or the triumphal songs. Then they will proceed again. As they reach the place where their village can be seen, they will stop and fire guns according to the number of heads they have gotten to be *xamaʔao palis* or triumphal signals. They will shout "wao-si……" after each firing. When hearing these signals the villagers will come out in full dress to welcome the triumphant returners.

11. Celebration

After the expedition troop has come back to their village, the victim's head will be hung on the *laoŋ* or the wooden hook in the hunter's house. All members of the troop will be fully dressed and assembled there. When the celebration is begun, the head is removed from the hook and is put on a wooden mortar which is put up side down. Wine is poured into the mouth of the victim's head. Every two members will go forward in pairs to drink of this blood-wine which flows out from the victim's neck. This is called *palamo*(s). When they are exhilarated from drinking, they will start to dance and sing. The dancers hand in hand will circle the head. Flutes will be played to accompany the dance and singing. The dance and singing will continue the whole night until the dawn of the next day. This celebration is called *mas-liβu*(s).

12. Sacrificial rites for the head

On the next day, the head will be removed from the mortar and put into the middle of the *sasaqulatsan*(m) or *paca*(s) or a skull rack in front of the chief's house. A twig with some leaves on its end and with many carved grooves in its stem will be stuck on the center of the rack to be *lajan*(s) or "signal for calling souls." A bamboo stick tied with four bundles of grasses (miscanthus tinctorious) is stuck to each end of

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721 the rack, which is called *ui*(s). Another signal which is made of a kind of plant (aralia papyrifera) will be hung high on the tree to boast to the other villages, which is called *wawaja*(m) or *peila*(s). In *tapilas*, the sacrificial rite is directed by the chief. The chief will put sediment and stick a tobacco pipe into the mouth of the victim's head and pray to it" You have enjoyed our offerings of wine and tobacco. To let your campanions have the same kind of enjoyment, please ask them to join you." The villagers will do the same thing one by one. Women who have young sons will take out a small amount of the sediment from the mouth of the head to feed their sons. They believe that by eating this the young boys will become brave.

13. Ritual hunting and rattan pulling

The next day, all participants of the expedition will go out again to hunt beasts on the mountain. After they have returned, they first offer the game to the head, and then divide it in the feast among their relatives and friends. That day, the *tapilas* also hold a *pifiax-goani* or rattan pulling game. Each end of a piece of rattan about nine meters in length is tied to a piece of wood about four meters in length; this makes the whole thing I-shaped. The villagers divide themselves into two groups. Each group holds one end or one piece of wood of this I-shaped thing. When the game is started, they begin to sing, dance and jump. And then, they pull the rattan until it is broken. The group which has the longer piece of broken rattan will be considered as the winners. They believe that by doing this they will have good fortunes.

721 766 14. Defeated

If they got no head in the expedition, or if somebody of the expedition was killed or injured, the expedition will be regarded as a failure. It is believed that members who are killed in the expedition will be transferred into evil spirits. Their corpses will be deserted in woods or caves and cannot be brought back to the village. On this occasion, the head they have gotten will be deserted too. No sacrificial ritual will be held though sometimes the head has been brought into the village. The members must leave all their clothes and personal effects outside the village and return back to their own homes with naked bodies at night. Evils must be removed from those thing left outside the village by their shamans. The *fiaqalo*, in this case, always demolish the house of the dead and build a new one for the family of the deseased because they are afraid of the evil spirits.

IV. FOOD

[224] Most of the Atayal are agriculturists, though sometimes Atayal men chase game. The most important crop in their former days was millet, but today they depend 262 mostly on sweet potatoes and rice.

241 1. The following kinds of plants and animals are used for food by the villagers:

Cereals—rice, millet, maize, etc.

Rhizomes—sweet potato, taro, radish, etc.

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Vegetables—eggplant, cabbage, onion, garlic, wild tomato, pumpkins, gourd, beans (Pisum sativum, L.), etc. 241 262

Fruits—peach, pear, orange, persimmon, longan fruit, banana, (sugar cane), etc.

Eggs, meats, and fish—hen-eggs, duck-eggs, pork, beef, chicken, duck, turkey, meat of wild boar, monkey, and fox, and many kinds of birds and fishes. [231] [224]

Others—mushrooms, and other kinds of edible fungus.

Among the above list, rice, millet, sweet potato, and taro are staples; and the others are subsidiary articles to diet. They are generally prohibited from eating snakes, cats, dogs, rats, and frogs.

2. Preservation and storage of food

Methods of preserving food are (1) salting [*sintemoay*]; (2) drying [*mapci*]; and (3) baking [*aqaqay*]. Cabbage and radishes may be dried first and then salted, or may be salted first and then dried; they are stored in wooden baskets or pots. The salting method of monkey's meat is as follows: The monkey is killed by a wooden club, and then roasted at a fire to burn off the hair. After the hair has been burned off, the entrails will be viscerated and the whole monkey will be cut into small pieces. Then they will be stored with rice and salt in a pot. Pork is always roasted. Sometimes they roast or salt the meat while they are still on the expedition when game is plenty. 251

Cereals are stored in the grain-storage house. The grain storage house is a kind of pile-building constructed of bamboo (see IV House). Rhizomes are stored in their kitchens.

3. Preparation of food

Their methods of preparing food are mostly very simple. Every morning they pound the amount of rice they need for the day. Rice is pounded in the wooden mortar with a wooden pestle. Winnows are used to hold grains which overflow from the mortar and to winnow away the husks. 252

Their oven is constructed by sticking three knives or laying three pieces of stone on the earth like a tripod. In the former days, fire was made by drilling a piece of wood on another piece of wood. The strike-a-light method of making fire was introduced into the Atayal more lately, and today most of them use matches.

Meat is mostly boiled with water. Fish and small animals may be roasted.

Rice-cake and millet-cake are made by the same processes. Glutinous rice [*naisaini*] or glutinous millet [*tulaqis*] is used. It is washed, steamed, and then pounded.

Bananas are smoked on the fire or stored in a pit, which is covered by tree leaves and clay, to become ripe. To take away the acrid taste of the persimmons, they are stored inside a pot with water which has been boiled with longan leaves and unripe persimmons.

4. Condiments

Salty (of salt), pungent or hot (of ginger or cayenne pepper) is called *qomtox*. Sweet (of sugar), is called *sisiβin*. Acrid (of a unripe persimmon) is called *mapayu*. 263

They use only a few kinds of seasoning: salt, ginger, and oil. Salt is gotten by

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363 trading with the Han people. The ginger they raise by themselves. Most of the cooking oils they use are derived from animal fat.

5. Drinks and stimulants.

271 They drink water when thirsty. Their favourite drink is made by mixing ginger
272 juice with water. This may be used as a medicine. They sometimes drink animal
[262] blood while they hunt on the high mountain where no water can be gotten.

[733] They like wine very much. When one gets drunk, he will not be punished even
if he commits a crime. In time of a festival, they will drink up all the wine which
the host has provided. A man with a good capacity can drink five or six catties of
273 wine. Two persons drink from one cup of wine at the same moment to show their friendship. No taboo need be observed in time of drinking.

Wine is mostly made of glutinous millet, though today glutinous rice may be used too. *qaocao-seto* reported that she brews wine with millet and rice mixed together. After the material is washed and steamed, it is put on a bamboo tray to be cooled [*maβasao*]. Then, it is transferred to another tray which is laid with taro leaves. It is then sprinkled with some water, and some *tamolo* or yeast is added. After two (in summar) or three (in winter) days it is transferred again to a *matapa* or wine-pot. Some water is added. After another seven days this will become wine.

In the former days, they produced their own yeast. Yeast made of glutinous millet is called *pinixeloŋ*, and of glutinous rice *patinani saixo*. It is made by putting steamed millet or rice into a tray which is laid with taro leaves and also covered by taro leaves for two or three days and then drying.

Another kind of stimulant used is tobacco. Tobacco is smoked with a bamboo pipe [*totox*]. In the fomer days, everybody had a bag for keeping the pipe and tobacco, but today, most of the young people smoke cigarettes. They plant tobacco. Tobacco leaves are dried under the sun in the day time and pressed under a stone at night for two or three days. The tobacco will be consumed when it is not too dry. They are not fond of the completely dried leaves because they are easilly broken and the taste is bad.

6. Consumption of food

2 4 They consume food as a necessity to maintain their lives, therefore vegetables, meats, and eggs are of very little importance, because their staples are rice, millet, sweet potato and taro. They always eat only these kinds of staples without anything to take with, not even salt. No refreshment is taken besides their meals.

Formerly, they ate twice a day, now, they eat three times. Breakfast [*qumuniama*] is taken in the early morning, lunch [*qumuliax*] at noon, and supper [*qumucaβiaŋ*] after dark. A family of twelve persons (the family of the Chief: four adults, eight children) consume four pints of rice each meal. Men and woman, old or young, eat together. Food is contained in a dish [*supiax*] which is put on the floor. The family members squat around it and eat with their hands. Soup, if any, is eaten with a wooden or bamboo spoon. Today, most of them use tables, chairs, and chopsticks,

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but no table etiquette and taboo in eating need be followed or observed. Though they hunted human heads formerly, they were not cannibals. 264

V. CLOTHING AND ORNAMENTS

The Atayal are famous for their wampum clothes. In the Department collections, there are many specimens. Mr. Chang Kwang-chih has given a description of twelve of them (*v.* No. 2 of the bulletin, pp. 32–34). The clothes and ornaments are of many kinds. One of the present authors (Ho) has given a description of twenty-seven specimens of Atayal clothes in the Department Collections (*v.* No. 2 of this bulletin, pp. 22–29). In this investigation, we saw eight pieces of clothes and ornaments owned by the chief's wife. they are; head band [*qaqusop*], necklace [*nili*], breast cloth [*taojax*], long gown [*sipiliaŋ*], short gown [*atan*], waist-cloth [*toxawaq*], wrist-ornament [*pao'i*], and three kinds of leg ornament (the upper, *qinulaja*; the middle, *qaqi*, and the lower, *qinuoax*). Other kinds of ornaments possessed by her have been lost. 292

Today, only people over fifty years of age wear thier original kinds of clothes; young people usually dress in modern style. 291

Body deformation such as tooth chipping, ear-lobe piercing, and tattooing have been abolished in recent years. The following descriptions are chiefly based on the narratives of *ali-jopas* (chief's wife) and *jajot-palie* (female, 73 years od age, see frontispiece) of *tapilas* and *pisei-taxos* (female, 66 years of age) of *saβulok*. 304

1. Clothes

Gowns are long or short. Long gowns are always long enough to cover the knees. Everyday clothes [*tiwajan*] have no collars and no buttons, and are with or without sleeves and single-breasted. Full dress [*sipaliaŋ*] has no collar, no buttons, and is without sleeves and single-breasted, but is always design-woven or wampum decorated. Full dress is worn in festival time. Only chiefs or head-hunters are allowed to wear clothes decorated with copper bells. Short gowns [*atan*] only cover the chest and are always above the navel. They have no collar, no buttons, and are without sleeves and single-breasted. *tajo* or toga is made of a single piece of cloth about one meter square, it is used to protect one from cold weather, and may also be used as a blanket to cover one's body at night. The other kinds of clothing are: head bands [*qajapis*], turbans [*qaqusop*], breast-cloths [*taojax*], leggings [*saolox*], the breechclouts [*pula*] of men, and the waist-cloths [*toxawoq*] of women. Rattan hats [*paβoβin na quani*] are only worn by men. A rattan hat covered with bearskin is called *qaβoβin na ŋalox*, and is worn only at festival times. 291

Women, on the ordinary days, wear togas, breast-cloths, waist-cloths, and leggings, and long or short gowns are added under the togas on cold days. Men wear togas and breechclouts, and long gowns are added under the togas on cold days. Children wear long gowns with or without sleeves and togas. Most of their everyday clothes bear no designs. Clothes worn in festival times mostly elaborately design-woven or wampum decorated; and instead of wearing leggings, they wear leg-ornaments. Except [292]

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291 for the hat and breechclout of men and the comb and waist-cloth of women, men and women wear the same kind of clothes. At the time of a funeral, they wear old clothes, for according to their old tradition, all clothes which are worn at a funeral must be cast away.

[292] A deer-hide rain-coat [*xanqu na βaqanox*] is employed to protect them from the rain.

Clothes and ornaments are made by women. If a woman cannot make clothes, it is difficult for her to get married. Their cloth is made of hemp. After contact with the Han people, the Atayal have bought cloth from them and do not weave industriously as in former days.

They seldom wash their clothes. The fruit called *mawarsa* of a kind of plant called *mawalo* is used to soap their clothes.

301 2. Ornaments

Ornaments include ear-ornaments [*pintalaŋ*], neck ornaments [*nili*] (made of shell), [*nqalo*] (made of glass-beads), arm-ornaments [*pafi tonaŋ*] (those used by men have hair of the hunted head attached to them), wrist-ornaments [*pao'i*], finger ornaments [*qaqamut*], waist-belts [*xaxaβok*], leg-ornaments [*qinulaja, qaqj, qinuwax*], etc. All these ornements, except the finger ornaments, are worn at festival times. Finger ornaments or a finger ring are ordinarily worn on the middle finger [*poaqaŋ*] or ring finger [*so'ai*]; a woman of talent may wear a ring on her forefinger [*qomi iao*] or little finger [*so'ai tsuβalai*]. One may wear ornaments from his or her early teen-age.

Atayal women wear a kind of comb [*qaqalu* or *xaxeilugu*] when attending a feast, but this is never used to comb their hair.

3. Hair dressing

302 Young children let their hair grow, this kind of hair dressing is called *mqaino*. After five of six years, the hair is bound up with strings and is wound from left to right on the head, this is called *tuβuβa'aŋ*. Oil derived from animal fat is used to dress their hair. If the hair grows too long, it may be cut with a knife. The fine hair on the face is pulled out by twisting two pieces of string. This string-twisting method which resembles the Chinese one, is also employed to shape their eye-brows. The beard is shaved by a small knife. They never wear a beard or a mustache. Today the young girls mostly get permanent waves.

304 4. Ear-lobe piercing [*pulaxan papaq*]

They pierce their ear-lobes between the ages of five to ten years. There is no specialist for piercing the ear-lobe. Earlobe piercing mostly takes place on a frosty winter day. The ear-lobe is first rubbed with frost and then pierced with a bamboo needle. A piece of sweet potato is put behind the lobe of the ear to be the anvil when the operation is in process. After four days the bamboo needle is removed, and a grass stem is stuck into the hole instead of it. Grass stems will gradually be increased in number until the hole is large enough for the ear-ornaments. The larger hole on the lobe is considered the more beautiful. Men and women have the same

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kind of ear-ornaments. Ear-ornaments are mostly worn on festival days. The Atayal start to wear ear-ornaments from about fourteen years of age. Ear-ornaments are especially important for the participants of a head-hunting expedition as stated above.

5. Tooth-chipping [*ʃinpaŋ*]

The two upper incisors are chipped away at about thirteen years of age. Tooth chipping is done by a man with special technique. At the time of the chipping, the elder brother or cousin of the one who is going to recieve the operation holds the head and covers the eyes of the operatee to release him from fear. A piece of iron [*βali*] and an iron axe [*paʔalu*] are employed for chipping away the teeth. If the tooth is not chipped off at once, it will be removed by a knife. Blood will continue to flow for about three days, and it is washed away with water. Within these three days, he is excused from work.

6. Tattooing

According to the position of the tattoo on the body, the tattooing of the Atayal may be divided into the following five kinds: (1) forehead-tattoo [*pinterxowan*], (2) cheek-tattoo [*pintergaβoyan*], (3) chin-tattoo [*pinterqayeʔan*], (4) breast-tattoo [*pintergaβoyan*], and (5) leg-tattoo [*pintersayaβa*]. The following descriptions are chiefly based on the narratives of *jajot-palie*, who is the only woman with breast tatoo ever seen among the whole Atayal.

(1) Forehead tattoo—A man who attains the age of fourteen and a woman who attains the age of eleven, can have the forehead tattoo (*v.* pls. III and IV). *joqex-etex* reported that "in the ancient time, only men with military achievements (head-hunters) were allowed to have forehead-tattoo, but later, this rule had been loosened, so those who had participated in the head-hunting trip and had carried the victim's head might also be allowed to have forehead tattoo. In the old days, without a forehead tattoo and chin-tattoo (man) or cheek-tattoo (woman), it would be very difficult for one to find a mate. The forehead-tattoo is a line of about one centimeter in width and three or four centimeters in length, running vertically on the forehead.

(2) Cheek-tattoo—The cheek tattoo is confined to women only. A girl may have a cheek-tattoo (*v.* pl. IV: 1) at her first menstruation. A cheek tattoo is a mark that cover both ckeeks. Each ckeek has a band four centimeters in width. These bands on both cheeks join at the mouth and forms a V-shaped design. The band on each cheek consists of a design of three tattooed strips and two blanks. In the blank-strip, there are a row of cross marks.

(3) Chin-tattoo—The chin-tattoo is confined to men only. It is tattooed at the same time with the forehead-tattoo (*v.* pl. IV). A chin-tattoo is a vertical line of one centimeter in width leading from the lower lip to the end of the chin.

(4) Breast-tattoo—Though no limitation of sex is imposed, the breast-tattoo is only confined to men with military achievement and women with chastity and skillful weaving technigues. The tattoo mark is *a* vertical line of one centimeter in width and three centimeters in length (*v.* frontispiece). According to *βonai-tolao* of *paqali*, his

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304 grandfather's breast mark was different from what we described above. That is, beside the vertical line, each side of it had three horizontal short lines. It is said that each of these short lines represented five heads which had been hunted by him.

(5) Leg-tattoo—The leg-tattoo is confined to women only. No qualifictaion has been ordained. The leg-tattoo of *jajot-palie* is a straight line with barbs about two centimeters in width and three centimeters in length. That of the wife of *joqex-etex* is a square mark of about three centimeters on each side with a pair of diagonal lines inside of it.

The tattooer [*papatas*] has special training; all the tattooers are women. There is no tattooer in *tapilas* today. Tattoo operations are mostly performed in winter time to avoid suppuration. The instruments employed consisted of a small knife [*βuli*], a wooden hammer [*tatutfin*], needles [*lao*], an instrument for wiping blood [*qaquwar*] and soot from the bottom of a pot [*ilox*]. Tattooing was done under a shaded place. A mat was laid for the one who was going to recieve the operation to lie upon. After a prayer had been offered, the operator sat close to the head of one who lay on the mat. She used a small knife to draw lines on the face of the operatee, and then with needles in her left hand, and a wooden hammer in her right hand, she started the operation. Blood was wiped away with a bamboo instrument. After each section of the desigh had been done, she rubbed the soot on it. A man's forehead and chin tattooes needed about two hours, and a woman's cheek tattoo needed ten hours. The operator was rewarded with cloth and food.

VI. HOUSING

342 Atayal houses were originally of the semi-subteranean type, but these are not found in Chin-shui Ts'un. Houses, except granaries are all built on the ground level.

1. Processes of building a house

342 764 A house may be built in any season of the year. In former days, if anyone (who is more than three months old) of the family dies, he will be buried inside the house and the house will then be abandoned. The chief of the village related that the custom had been given up in 1929. From 1929 they buried their dead in the grave yards, so today they do not change their houses as frequently as before. But even today they do not build a new house on the old site, this custom may be regarded as the survival of the old tradition.

342 Their process of building a new house is as follows:

(1) Collecting materials—The materials for building a house are: wood, bamboo, and rattan. Tree trunks are used to be ridge pole, beams, rafters, and other kinds of posts. Bamboos are used to make the walls and roof. Rattan is used for tying together the posts or other parts of the house. Materials are collected one month before the house is to be built. They are transported to the site by both man and woman, though house-building is mainly the man's work.

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(2) Starting to build—After the site has been chosen, the owner digs the ground one time with a hoe, then goes back to his old house to seek for a dream omen. If he sees a wounded or sick person in the dream, it is considered as an evil omen. If he sees many animals and crops, it is considered as a good omen. When a good dream is secured, he will start to build his new house the next day. 342

(3) Erecting the posts and making the frame of the house—When the site is cleared, he starts to erect the posts. To built a house of only one room, six posts will be erected; to build a house of three rooms, twelve. The upper end of the post is cut into a ㅂ-shape for resting the ridge or beams. The lower part of the post is to be buried in the earth. After the posts have been erected, the ridge pole and beams are rested on them and tied to them. This makes the frame of the house.

(4) Covering the roof—Atayal houses are mostly topped with a gable-roof. Most of the roofs are made of bamboo, though a few of them are made of tin-plates.

(5) Making the walls—Walls may be made of bamboo, or may be of wicker-work pasted over with mud which is tempered with grass. Some of the latter kind are whitewashed.

The entrance is an opening of one meter in width and less then two meters in height. The leaf of the door is a piece of wooden plank or bamboo wickerwork. Most of the doors have only one leaf. Mostly the orientation of the door is facing the valley, because the house is built on the slope.

The window is an opening 40–50 centimeters in width and 60–70 in length. The leaf of the window is a wooden plank or a piece of wickerwork which is the same as the door. Glass is very seldom used.

After the above memtioned processes are completed, a fire place and one or two beds will be added, these complete the house building.

2. Types of house

The author has dividied the houses of these villages into the following types according to the material used: 341

(1) Houses with bamboo roofs and bamboo walls;

(2) Houses with bamboo roofs and mud-wickerwork walls;

(3) Houses with bamboo roofs and partly bamboo walls and partly mud-wickerwork walls.

3. Annexes

Other kinds of buildings besides dwelling house are: 349

(1) Farm-huts;
(2) Hunting-huts;
(3) Granaries;
(4) Chicken huts;
(5) Pigsties;
(6) Cow-huts;
(7) Compost house
(8) Privies;
(9) Bee hives;
(10) Drying frames.

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苗栗縣泰安鄉錦水村文臉及胸的泰雅族老婦 (何廷瑞攝)
An Atayal old woman showing tattooed face and breast, Chin-shui Ts'un, Miaoli Hsien

/P. 127a (frontispiece, Chinese text)/

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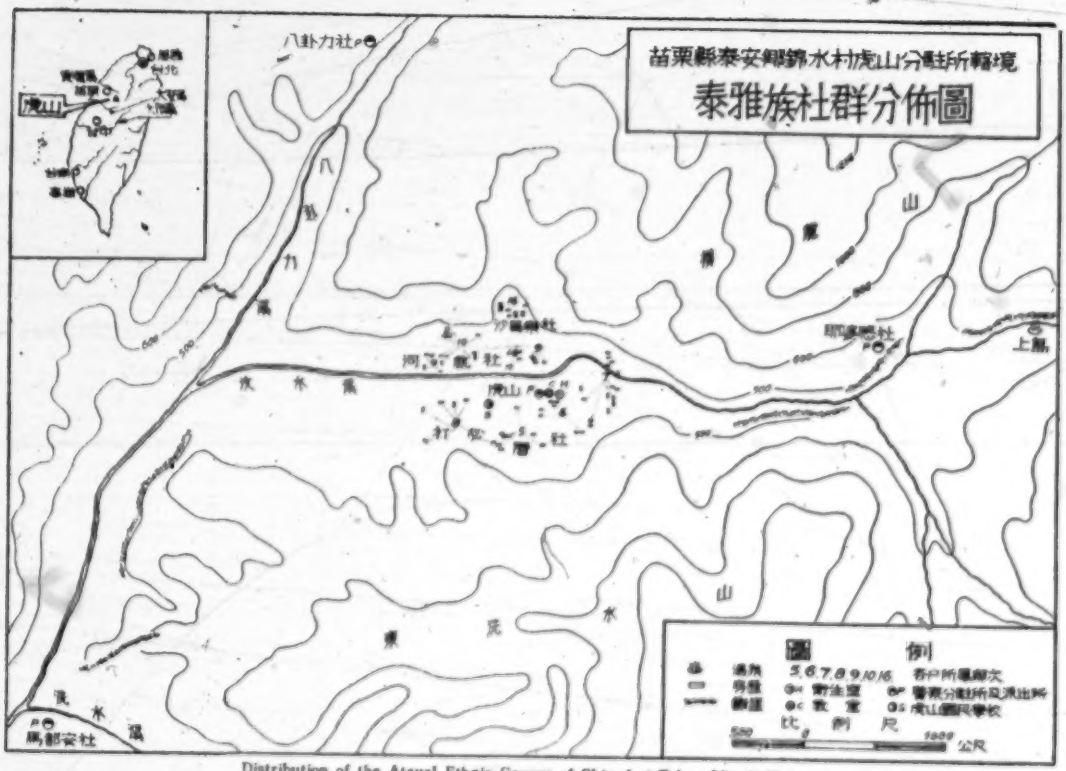

Distribution of the Atayal Ethnic Groups of Chin-shui Ts'un, Miaoli Hsien

/P. 127 b (facing p. 30, Chinese text)/

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圖版 III

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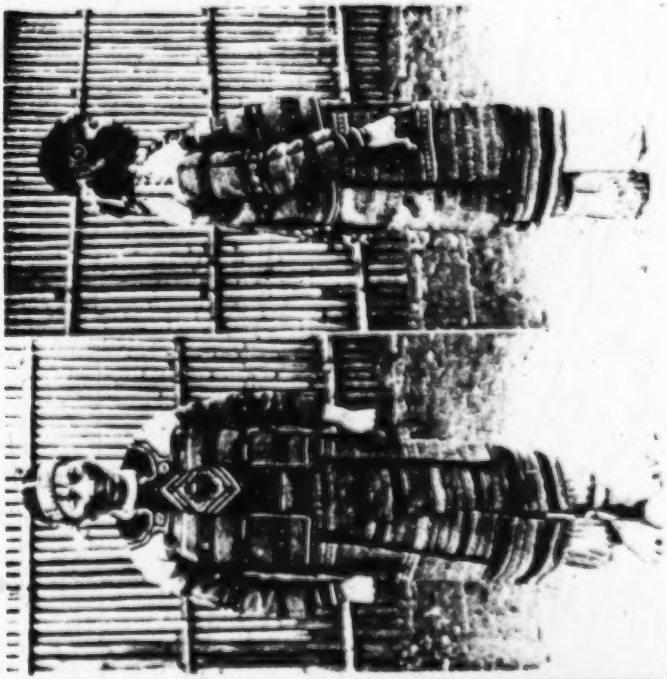

2. 泰雅族婦女盛裝 (Atayal woman in full costume)
An Atayal woman in full costume

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1. 泰雅族男女裝束
Atayal man and woman in everyday clothes

/P. 127 c (facing p. 40, Chinese text)/

50: Ruey E-5 (1955) 1955 AD1 Formosa
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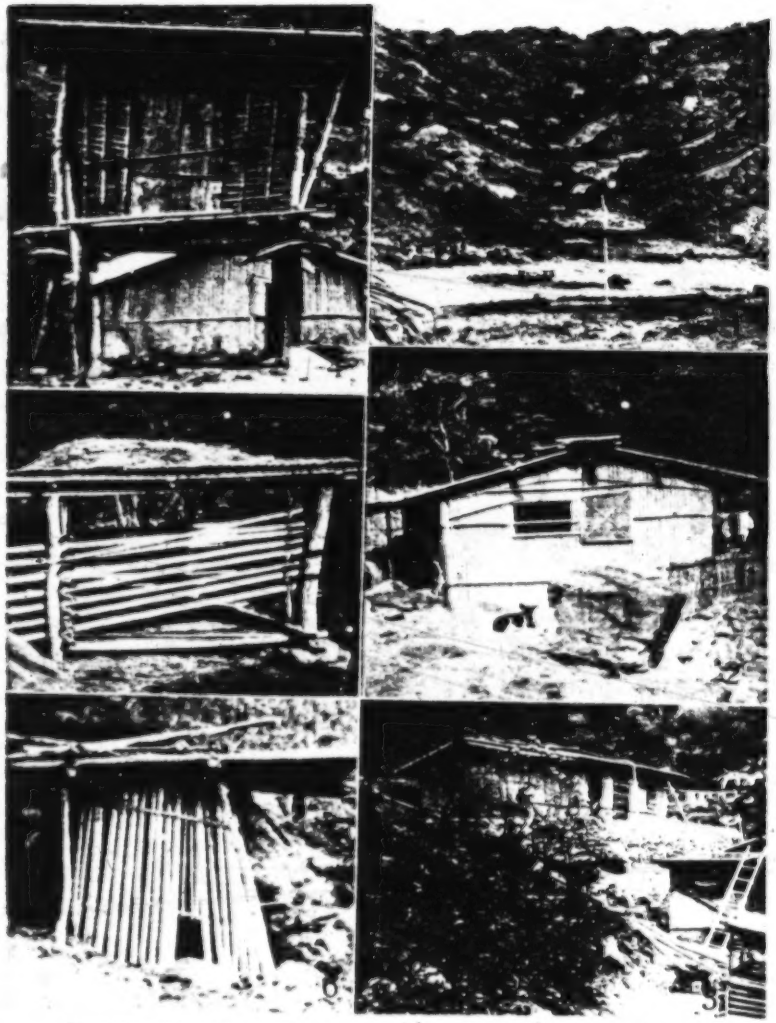
苗栗縣泰安鄉泰安村泰雅族調查隊攝



1. 泰安溪兩岸的泰雅族聚落；2. 第一式家房；3. 第五式家房；4. 倉庫；5. 豬圈；6. 雞舍。
1. Villages on both banks of the Wen-shui River; 2. Atayal house, type 1; 3. Atayal house, type 5; 4. Rice granary; 5. Pigsty; 6. Chicken hut.

/P. 127 d (facing p. 42, Chinese text)/

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An Investigation of Ami-Religion

by

CHI-LU CHEN and MICHAEL D. COE

Introduction

114 In the outskirts of the aborigine town of Tavarong on the east coast of Formosa is the last surviving ceremonial house of the Ami tribe, a representative of the type of religious edifice that once pervaded the Ami culture area. This building was well-known to Japanese ethnographers and was a cultural anachronism even in their day. The present writers undertook a four-day field trip in late November 1953 for the purpose of examining this house and its relation to the Ami life of
121 the past. For this investigation into Ami religion we relied on the memory of these informants, whose early manhood was spent in Tavarong before the Japanese authorities brought pressure to bear on some of the more important Ami institutions: Maran-Namo? [54], Vudai-Kate [49], Rata-Namo? [53], and Vuei-Mayau [58]. All informants reported directly in Japanese except Vuei-Mayau, whose information was translated from Ami into Japanese by Vudai-Kate. We sincerely thank these informants for the help which they rendered.

For readers unfamiliar with the background and present distribution of the Formosan aborigines, a few paragraphs will deal with this subject and the place of the Ami in Formosan ethnography, before Ami religion is treated in detail.

The Formosan Native Tribes

105 The aboriginal inhabitants of Formosa number over 200,000. This is in contrast with the descendents of the Fukien and Kwangtung Chinese who immigrated as early as the 16th century; these, together with more recent arrivals from the mainland, total over 8,000,000. One fourth of the aborigines live in the western plains and have been absorbed by the Chinese; they have in many cases lost their original customs and languages. The rest of the native tribes occupy the great central mountains, the Taitung Rift Valley and coastal area on the east, and Botel Tobago Island, to the southeast of Formosa. The relatively unacculturated Formosan aborigines are grouped under the following nine tribal names: Atayal, Saisiat, Bunun, Tsou, Rukai, Paiwan, Puyuma [or Panapanayan], Ami [or Pangtsah], and Yami. All these tribes are physically, linguistically, and culturally Indonesian or Proto-Malayan. They immigrated into the island at different times and into

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105 different localities, so that their cultures, though similar, are not uniform. The native tribes also differ considerably in the degree to which they have been acculturated and in the type of culture change that has taken place.

The Ami

10 The Ami live in the Taitung Rift Valley, which runs in approximately a north-
[13] south direction for 150 kilometres along the east coast of Formosa. Some Ami live
[16] on the east coast proper. The Ami tribe is the largest on Formosa. They are divided into five groups by dialect and cultural differences. The number of households and population of each group, based on the census of 1937, are as follows:

Group	No. of households	Population
Pei-nan	859	9546
Heng-ch'un	461	4403
Hai-an	1159	11760
Hsiu-ku-luan	2008	15861
Nan-shih	1713	8436
Total	6200	50006

[24] The chief traits of the Ami are intensive agriculture and fishing; pile dwell-
[22] ings; paddle-and-anvil pottery; long wooden shields; feather headdresses; clans[1];
[34] matrilineal descent and matrilocal residence; classificatory or Malayan kinship
[61] terminology; parent-child nymic linkage; and age-grades.
[59] Tavarong is a town of 5,000 population situated in the central part of the Taitung Rift Valley, in Hualien Hsien. It belongs to the Hsiu-ku-luan group and is regarded by the Ami themselves as the oldest settlement in the whole Ami area. About one per cent of the Tavarong townsmen are Christians; the rest hold to
361 their native religion.

Gods, spirits, and souls

776 The Ami term for gods, which include also spirits and souls, is *kawas*. The Tavarong Ami believe in two kinds of *kawas*. The first kind, which may be considered natural gods, include *maratau*, *tšidar*, *borar]*, and others. *maratau* is a male tutolary deity who resides in heaven. According to informant Maran-Namo?, *maratau* is the god of "politics and strength". In former days, when the Ami were at war with their neighbors, the Atayal, they prayed to *maratau* for protection[2]. *tšidar* is the female sun goddess, and *borar]* the male moon god. The sun goddess is held to be more powerful than the moon god. Maran-Namo? while explaining the designs on the houseposts of the house of the *kakita:n* (priest), stated that *tšidar* is the almighty deity and holds the supreme position over

1. Utsurikawa (1935) reported about 55 clan names for the Ami, but he gave no clan names north of the Vataan, Tavarong, and Karuran areas.
2. According to Furuno (1954:3-42), *maratau* is connected with headhunting and is the god of crops and game, as well as being the war god.

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the other gods; both he and other informants failed to indicate any practice of sun-worship[3]. The second type of *kawas* are ancestral gods, called *tatakusan*. The Tavarong Ami worship their ancestors, especially the first ancestors *lotšɛ* and *rarakan*; these latter live among the Ami, although they are invisible. *šikawasai* (shamans) have their special gods[4]. It is clear, therefore, that the Ami have a well-developed theogony, a trait not found among the other aboriginal tribes of Formosa[5]. 776 769

One who dies an unnatural death will become a *karia* or evil spirit. A person can contract an illness on encountering a *karia*. 774 753

Each individual possesses a soul, called *doŋɛ*.[6] If one's *doŋɛ* weakens, one will become sick; and if one's *doŋ* should escape from the body, one will die. In this connection, Furuno (1942: 19-23) reported that among the Ami, each human being has two souls, one on the left and one on the right shoulder. The one on the right shoulder is the good soul, and the one on the left the bad. The *karia*, or evil spirits, are the souls on the left shoulders of those who died an unnatural death.[7]

Shamanism

Religious activities are carried out by *šikawasai*, or shamans, and *kakita:n*, or priests. The functions of both are well-defined. A *šikawasai* is consulted mainly to strengthen or call back the *doŋɛ* of a sick person. In this sense, the *šikawasai* may be defined as medicine-men. The *kakita:n* manage the Ami religious ceremonies, most of which are agricultural in nature. A *šikawasai* is believed to have been chosen by a dead *šikawasai* or by the *šikawasai* gods. When a young boy or girl contracts a chronic illness, he (or she) is regarded as having been chosen, and it is believed that that individual be cured by becoming a *šikawasai*. This child will then be taught the techniques by an older *šikawasai*. In the first year of his apprenticeship, until the next *irisiŋ* (the Ami New Year), a taboo on the eating of fish and vegetables must be observed. He is also required to pursue hard labor and to abstain from washing the body. A primary qualification for a *šikawasai* is the ability to achieve a state of delirium. 756 [793]

There are today approximately ten *šikawasai* in Tavarong, seven men and three women. Oikawa's contention that there are more female than male *šikawasai*

3. Furuno [1945:20] recorded the following belief from the Hsiu-ku-luan Ami: "*tšidar*" the sun, gave life to human beings, animals, and plants. We think that she is a *kawas*, too. Rituals cannot be carried on without *tšidar*. The *kakita:n* call on *tšidar* in the *irisiŋ*. At harvest time we gave thanks to this goddess."
4. Sayama [1914] listed the names of two *šikawasai* gods, *saoriŋa* and *sararaiol*.
5. Mabuchi [1934-35] discusses this theogony.
6. Furuno [1940:19-21] and Mabuchi [1934-35] recorded the *doŋɛ* as a goddess.
7. This belief is found among other Formosan tribes. For a Bunun example, see Mabuchi [1951:55].

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756 due to the fact that men have more difficulty in attaining a state of delirium (Oikawa 1935) obviously does not apply in Tavarong.

755 When a *šikawasai* is at his devotions, he wears special clothing and dances and prays. Sometimes wine, pigs, and rice cakes are offered to the gods. The *šikawasai* often uses banana and ginger leaves to rub over the affected part of the patient. The patient fasts while under treatment, and his family observes a taboo on eating fish and vegetables and on sexual intercourse.

There are seven kinds of rituals used by the *šikawasai* to cure disease. The prefix *pa* in the following ritual names means "to do anything connected with a ritual".

1) *miriwai*. This is a five-day ritual in which the *šikawasai* prays to *maratau*.
2) *pamaratau*. This ritual is shorter than *miriwai* and, according to the informants "less serious". The *šikawasai* dances and prays to the *tatakusan*, the ancestors.
3) *pasaer*. A simpler ritual than the above two and which lasts for one or two hours. It is used to cure sickness brought on by the god of millet (formerly the staple crop) as a punishment for wrongdoing.
4) *pakawas*. On the death of a *šikawasai*, the *šikawasai* god may tell a man with a chronically ill offspring that that child should be shaman. This ritual is held to determine whether that course is correct. In it, the *šikawasai* consulted by the father prays to the *šikawasai* god.
5) *pasasidoi*. A simple spell to drive away the *karia* and to bring back and strengthen a person's *doge*.
6) *padoge*. A prayer to one's *doge*.
7) *mianʔan*. The *doge* of small children are not stable and are often lost. This ritual is performed to stabilize them.

787 The choice of the ritual to be used for curing a disease is determined by the result of *miłʔao* divination. Utsurikawa provides a detailed description of the Ami *miłʔao* (Utsurikawa 1938), translated as follows:

The divinatory instrument is called *miʔłao* and consists of two parts. One is termed *łao*. A *łao* is a strip of bamboo, about 35cm in length, with a bamboo-joint at one end and the inside face whittled with a knife. The whittling starts from the end with the bamboo-joint, so that mane-like whittled fibres remain attached to the other end. The remaining unwhittled part of the bamboo strip thus becomes thin and string-like. The process for making a *łao* is rather complex. The bamboo must be cut at a definite period of the year. With rice, wine, and betel nuts as offerings, they pray to their ancestral gods. The bamboo is then smeared with cow's blood and must be kept away from women. During the next few nights, the maker must seek for dream-omens. The bamboo, the material for making a *łao*, is called *łagas* in Tavarong and Kiwit. About five or six bamboos are bound into a bundle and hung above the fireplace for drying. The method of preparing a *łao* differs in other villages.

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The other part of the *mi?ɭao* divinatory instrument is called *tsohak*. This is a piece of hardwood about 18cm in length. It is held under one foot of the diviner when in use. The end held under the foot is often somewhat thinner than the other end. The other end is about 4cm thick and has two or three grooves transversely carved on one side. These grooves are called *ŋakto*. 787

During divination, the *tsohak* is placed on the ground with the grooved side facing downward. The end without grooves is held under one foot of the diviner. The central portion of the inner face of the *ɭao* is breathed upon and smeared with ashes before it is used. Then, with the end with the mane-like fibres in his left hand, and with the end with the bamboo-joint in his right hand, the diviner saws the *ɭao* in the *ŋakto* of the *tsohak*. The *ɭao* will be severed by this heavy sawing, and the result of the divination can be read from the shape of the severed end of the part without the bamboo-joint, with the bamboo exterior facing the diviner.

By comparative study, Utsurikawa found that *mi?ɭao* divination has affinities in southeast Asia, particularly with the Kenyah and the Kayan of Borneo and with the Nagas of Assam. He therefore considered this technique as an Indonesian culture trait. 771

Priesthood

Among the Tavarong Ami, priests were called *kakita:n*. The office of *kakita:n* was hereditary: succession was by primogeniture through the female line. Formerly there were five or six *kakita:n* families in Tavarong, but only one, that of the late Saumah-Kuriu, remains in existence today, and will be described later. The cause of the decrease in *kikita:n* families was, according to one informant, due to the prohibition placed on native rituals by the Japanese authorities. The priestly families consequently declined because they had lost their function. The Saumah-Kuriu family retained its standing as it owned a ceremonial house with carved wooden posts; this house was designated an historical monument in 1935 by the Japanese colonial administration. 793 346

This same ceremonial house was reported by Utsurikawa (1936) and Tsijiiwa 1944). The present house keeps its original form today although it has been rebuilt in recent years and now is only one half the size of the original house described by the above two authors. Its present plan and a side-view are shown in the accompanying illustration Figure 1). According to Utsurikawa, the original house was abandoned in May 1930 on the death of the family head Saumah-Kuriu, a decision reached at that time by the family members on account of frequent misfortune. The house itself is unique: it is the only one in the entire Ami area having carved wooden posts. The designs on these posts are human and animal figures, curved lines, and sawtooth patterns. The geometrical designs are always symmetrical in arrangement. In the changing culture of the Ami, a new type of house has been adopted by the tribesmen. This ceremonial house remains as the only surviving example of their original type of dwelling. [531] 342

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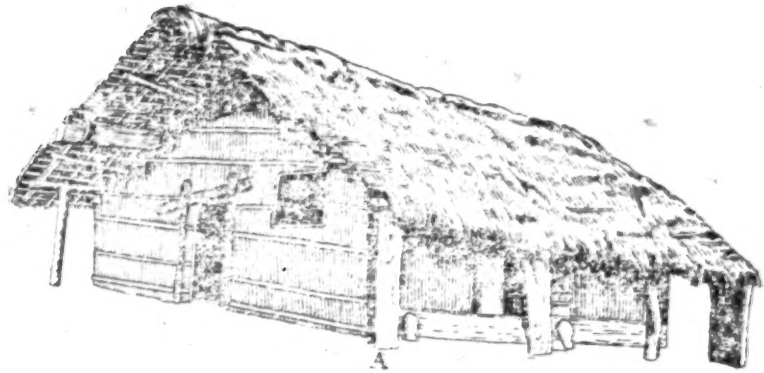

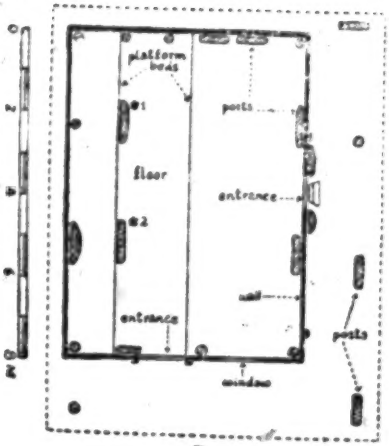

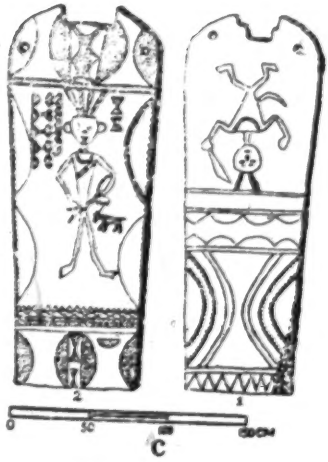

Figure 1: the *kakitaw* house of Tavarong.
A. front view; B. plan, with asterisks are posts with carving shown in C; C. carved posts.

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surviving example of their original type of dwelling.

The *kikita:n* managed the religious ceremonies which were entirely concerned with the staple crops, millet and rice. The following were the more important agricultural rituals:

misauma	millet-sowing
mikolas	millet-weeding
mihavai	millet-harvest
misapanai	rice-sowing
mi?ot?ot	rice-weeding
mibanai	rice-harvest
irisiŋ	New Year, following termination of *mihavai* in mid-September

We will describe the *irisiŋ* and the function of the *kakita:n* during this rite in a later section.

Age-grades

We will describe the Tavarong Ami age-grading system in detail for two reasons, firstly, because some inaccuracies about this system have appeared in the literature, and secondly, because age-grading is at the heart of the Ami social structure.

The Ami age-grade system has been discussed by Ino (1910 and 1912), Koizumi (1928), Okada (1932a and 1932b), Kamura (1939:259–277), Furuno (1945:285–320), and others. Okada describes Ami age-grading as follows:

> The age-grade systems of the tribe may be separated into two forms: those consisting of three class divisions—childhood, youth, and manhood with old age (found among the Nan-shih, Hsiu-ku-luan, and Hai-an groups); and those consisting of four class divisions—childhood, youth in the prepartory stage, youth, and manhood with old age (found among the Pei-nan and Heng-ch'un groups). The Ami age-grade systems may also be classified according to names above the youth class into three types: 1) those having a limited group of names which are cyclically used, 2) those in which names are assigned to all new grades, and 3) those which combine the previous two types. (Okada 1939: 14).

Okada has pointed out that the Nan-shih group and Vataan of the Hsiu-ku-luan group belong to the first classification; the Pei-nan, Hai-an, and Heng-ch'un groups and Tavarong of the Hsiu-ku-luan group to the second; and Kiwit of the Hsiu-ku-luan group to the third classification.

Wei in a recent article (1953) only recorded two types based on the assignment of names to age-grades. He names the first type of Okada as the "Nan-shih type" and the second as the "Ma-lan type". Okada's third type which is represented by Kiwit is classified by Wei under the "Nan-shih type". Wei also stated that

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561 the age-grade system of Tavarong belongs to the "Nan-shih type". By comparing grade names collected in Tavarong by ourselves with those recorded by Sayama 1914:133 and Furuno 1945:300-1, we find that we are in agreement with Okada that the Tavarong age-grade system belongs to Wei's "Ma-lan type" instead of the "Nan-shih type". In other words, in Tavarong new names are assigned to all new grades. A reconstructed name list compiled by us for this paper giving grade names covering a period of 110 years will clarify this point:

GRADE NAMES COLLECTED BY CHEN AND COE IN 1953	GEADE NAMES RECORDED BY FURUNO IN 1938	GRADE NAMES RECORDED BY SAYAMA IN 1914	EQUIVALENT AGES OF GRADE MEMBERS IN 1953
Ratavok			16–20
Rariwas			21–25
Ratodo			26–30
Ratoron	Uratorun		31–35
Ravuvok	Uraboak		36–40
Rati?ol	Uratior		41–45
Ratomai	Uratomai		46–50
Mawai	Umaowai		51–55
Rati?an	Uraowau	Uradewas	56–60
Ratsogau	Uratsogau	Uratsugau	61–65
Gaku?a	Urakoa		66–70
Rapara	Uraparo	Urarabe	71–75
Rao?ets	Uraoets	Uraoits	76–80
Ratoto	Uratodo	Uratodo	81–85
Ratavok	Uratabok	Uratabok	86–90
	Uratsiyan	Urateam	91–95
	Umaorad	Umaorad	96–100
	Urawau	Urawau	101–105
		Urakoha	106–110
		Urateo	111–115
		Uratomai	116–120
		Urasadok	121–125

Furuno and Sayama recorded the grade names shown in the second and third columns in Japanese *kana* characters. Therefore, in the romanization, some minute differences in the names have been unavoidable. It will be noted that some changes of names have taken place; for instance Furuno (1945:301) reported that the age-grade name Uradewas was changed to Uraowau. One can also see from the table that although new names are assigned to new grades, there is a tendency to re-use names of former grades, although this is by no means done cyclically.

The age-grades are open only to males. At the age of 15 or 16 years[8], a boy

8. Our informant Vudai-Katt said that 18 years was the usual age at initiation.

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participates in the *misuḷar*, the initiation rite, and becomes a member of the first grade. Since the initiation rite is held only once every five years in the *saḷuratan*, the assembly hall, two or three days before the *irisiŋ*, there is some range of ages at which boys are initiated. On the day of the *misuḷar* all the old grades are promoted, although their grade names remain unchanged. A member of the Rariwas grade, for instance, remains so throughout life. Vudai-Katɛ reported that the interval between initiation rites was longer in the ancient days, and that it was reduced because of the increasing village population which has resulted in the increase of members in each grade.[9] Each grade has its monitor, callad *komol no surar*. Persons showing abilities for leadership will become monitors by common assent. Wei (1953) states:

> Leadership within each grade is determined by seniority as well as by ability. When a grade is formed, one of them will be chosen to be the nominal leader on the basis of seniority. At the same time, two or three others can establish their leadership by their abilities, achievements, and wealth. They participate in the activities of the organization when the grade itself is still in the preparatory stage, to show their capacities and win support from their fellow grade-members.

Our information, however, indicates that in Tavarong there is only one leader in each grade, and he is chosen for his abilities.

The irisiŋ

We have already referred to the *irisiŋ* as one of the great Ami agricultural rituals. Furuno (1945:101–103) has described the *irisiŋ*, which was the Ami New Year. After the millet-harvesting rite, there was a lull in the life of Tavarong. Since there was little to do, the townsmen repaired their houses. On the first full moon following the house repairs, the *irisiŋ* commenced. It was the most important ritual of the year. The *irisiŋ* was managed by the *kakita:n* family. One female and one male member of the family were leaders of the ritual. The female member was always the head of the family, and the male was her brother.

Saumah-Kuriu, the head of the remaining *kakita:n* family of Tavarong, had three siblings; Namoʔ-Kuraŋ[10] (male), ŋadai-Kuriu (female), and Riŋa-Kuriu (female). In the Tavarong *irisiŋ*, Saumah and her brother Namoʔ were the leaders. The ceremonial procedures followed about thirty years ago were described by informants Vuei-Mayau, Rata-Namoʔ (Saumah's husband), and Vudai-Katɛ, and are given in the paragraphs which follow.

One week before the start of the ritual, all the siblings of Saumah returned to the family house and began the observation of the taboo on eating fish and

9. The period of years between initiation rites varies in different Ami villages. Nataoran, Pokpok, and Ridau hold a *misuḷar* every seven years, Kiwit and Malan every three years.
10. This name is given as Namoʔ-Kuriu in *Taihoku Teikoku Daigaku, Jinshugaku Kenkyushitsu* [1:35:chart 275].

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vegetables. On the evening of the sixth day of the fast, Saumah ascended the roof of her own house and shouted "auuuu ··· !" to inform the villagers to start preparations for the ritual. This act is termed ***misamsam***. In the evening of the following day, Saumah repeated this performance, but in this case it was to inform her several related families. This phase is termed ***misatamuru***. The evening of the eighth day of the fast, Saumah again ascended her roof and shouted "patanam kita····· !" Then, following this, Namoʔ went out to visit the related families.

The next day was the first day of the ***irisiŋ***. That morning, all the chiefs (***saparaŋau***) of Tavarong gathered in the ***kakita:n*** ceremonial house. Members of the senior grades who had performed unusual services for the tribesmen could be chiefs if they were recognized by other chiefs and by the monitors of all grades. In those days, there were about ten chiefs in the town. Wine, rice-cakes, chickens, and a pig were then offered to the gods in the ceremonial house. About twenty youths of the town were called to the ***kakita:n*** house and then dispatched to the neighboring villages to spread the word that the ***irisiŋ*** had begun. Each youth took with him a bottle of wine which he presented to the ***saparaŋau*** of the village he visited. The chief who received the wine gave back a bottle in return; the youth brought this back to Tavarong and presented it to his ***saparaŋau*** and to the gods. The wine was then divided between the ***saparaŋau*** and the youths. Then, the youths left the house and danced in the courtyard; the chiefs remained inside the ceremonial house the whole night.

On the second day of the ritual, the youths of the town gathered and danced in front of the ***kakita:n*** house. The ***saparaŋau*** addressed the monitors of all fifteen grades inside the ***kakita:n*** house, the contents of their speeches being a survey of the results of the past year and abmonitions to work hard and behave well in the future.

On the third day, age-grade members assembled in the houses of their own grade monitors and danced in the courtyards. The monitors repeated the addresses of the ***saparaŋau*** and urged the grade members to respect their elders and be on good behavior in the coming year.

The fourth day, representatives were sent by each age grade to the monitors of the elder grades to hear precepts from them. They retold these precepts to their own grade members on their return.

About two o'clock in the afternoon of the fifth day, all fifteen grades gathered in front of the ***kakita:n*** house. They first danced in the courtyard, then gath red before the ***saparaŋau***; there they washed their hands in wine brought in by Namoʔ-Kuras this action removing evil and providing blessings. Saumah-Kuriu then entered the ceremonial house with two or three pecks of betel nuts, which she put on a table. After a blessing was pronounced over them by Saumah, they were distributed to all the attending grade members. The meeting was then dismissed. It was considered a happy omen to have a good dream that night.

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On the sixth day, all grade members gathered once more in front of the *kakita:n* house. At this time all the *likawasai* (shamans) of the town came to the house and performed rites to ward off disease from the attending celebrants. Then, the *likawasai* danced together, while the others went out to their own fields to perform a ceremony of mimical cultivation to guarantee a good harvest in the year to come. 796

The final day of the *irisiŋ*, all the inhabitants of Tavarong went to fish in the streams and rivers. Each individual offered one fish to the gods to inform them that the New Year had commenced. After the celebrants returned to the town, the fish were offered to the *laiakusan*, the ancestral gods; the offering was then divided up among the populace and eaten, thus breaking the taboo on fish and vegetables. This concluded the *irisiŋ*.

Conclusions

In our examination of Ami religion, we found that at least in part Ami society can be considered as a theocracy. The *kakita:n*, the hereditary priests, combined in their persons both temporal and spiritual power. The priestly house served as the ceremonial and political center of the tribesmen and may bear some theoretical importance as a possible prototype of the village-temple. 793 622

Shamans and priests are clearly distinguished among the Ami. The former succeeded by reincarnation, and the latter through inheritance. Ami shamanism [this was still true in 1953] in typically Asiatic, in that its practitioners are emotionally unstable individuals who derive their power from direct contact with the spiritual world; this contact is made at times of the greatest physical strain [chronic illness]. Ami shamanism is also of a non-Arctic type, since the neophyte is indoctrinated with the shamanistic techniques, instead of receiving them through spiritual experiences of a personal, charismatic nature. The shamans practice a complex and typically Indonesian type of divination. 793 756

As with many other peoples of the Indonesian culture area, no sharp distinction is made by the Ami between gods, spirits, and souls, which are all designated by the generic term *kawas*. However, the Ami are atypical among the Formosan tribes in that they possess a relatively highly developed genealogical mythology or theogony. The possible relation between this theogony and Ami social structure is worthy of future study. It may be of significance, for instance, that in this matrilineal society the sun is a female goddess, and the moon male. This spiritual world provides the power and justification for all Ami religious activities, being beseeched with prayers and bribed with offerings. 776

The *irisiŋ*, the great New Year ceremony which was described in detail, is functionally a world renewal ritual, the renewal of the powers of the stream and soil and, in fact, a renewal of the whole society. In this, the population was 796

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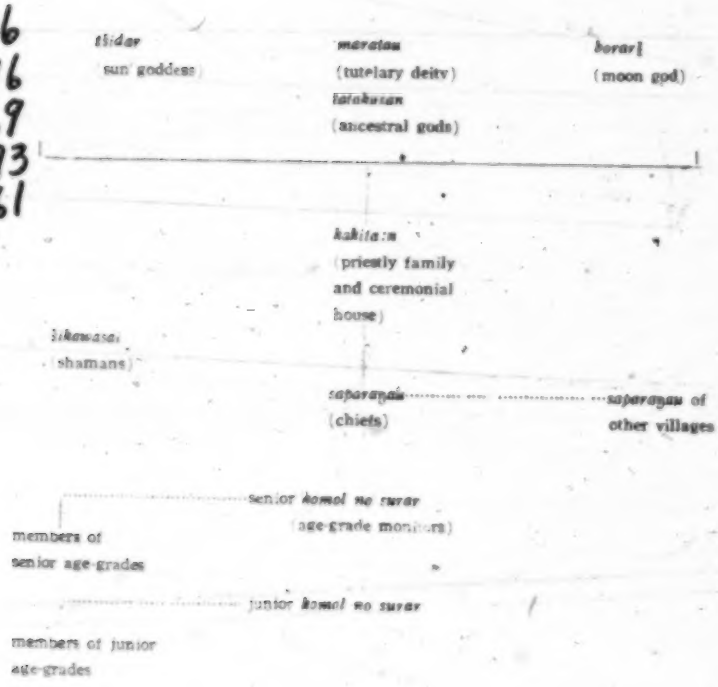

Figure 2: the Ami hierarchy at *vrisin*

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purified through fasting, symbolical washing of hands, and shamanistic expulsion of disease. The structure of the Ami universe is at this time stated as a hierarchy in which each rank of seniority hands down precepts to be obeyed by the next lower rank [see Figure 2]. At the top level, for among the Ami the spiritual world is continuous with the material, are the sun goddess, the moon god, and *maratau*, the tutelary deity who instructed men in the order of things on earth. With them are the *tatalusan*, the ancestral gods who are to be respected as elders and whose way of life is to be followed. Under these were the *kakita:n*, the priestly families who carried out the will of the gods in this world. The rest of the Ami were arranged by seniority into a system of age-grades, each with its chosen monitor, and each harkening to the instructions passed down from the next senior age-grade. Acting as intermediaries between the priests and the laity were the *saparaŋau*, leaders of proven ability selected from the ranks of the elder grades. This structure was annually affirmed symbolically in the *irisiŋ*, and it clear that it was basically gerontocratic in nature, in that the real power was in the hands of old men.

All this is of course now passing away, and element after element of the old Ami way of life is either disappearing or being reinterpreted to meet new conditions. In the realm of social organization, for instance, there is a definite drift in Tavarong and other Ami areas towards patrilineal descent and neolocality, a change fostered by Japanese and Chinese pressure. Ami religion is fast changing, and the *kakita:n* house itself is an unused, half-forgotten relic of interest primarily only to ethnographers. Shamanism for some as yet unexplaind reason has persisted; this is a field for further study.

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Colonial Development and Population in Taiwan

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COLONIAL DEVELOPMENT AND POPULATION IN TAIWAN

BY GEORGE W. BARCLAY

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Preface

To those outside the field of population studies a book on Taiwan's demographic development must seem an example of academic escapism. When even the general reader is becoming aware of the difficult population problems facing Asia's mainland, why should the Office of Population Research devote personnel and resources to the careful study of a few million people on a rather small island in the Far East?

The question is reasonable, but the answers are compelling. Taiwan is the only place where it is possible to study the processes of change of a Chinese population over a substantial period of time on the basis of excellent data. Any information that can be gained about the growth characteristics of one of the world's largest ethnic groups is well worth obtaining. Under Japanese rule an unusually accurate statistical record was maintained in Taiwan from 1905 to 1943, providing an unbroken series of data that is longer, and in some respects richer, than that for Japan proper.

Indeed, the Taiwanese material provides much more than a unique demographic record of Chinese people. It is, if not the only case, then certainly one of the very few cases in the world in which the trends in fertility and mortality can be traced with precision from the initial stages of modernization. In virtually every other case the statistical record begins long after death rates have begun to decline. In Taiwan, the vital record can be traced over almost the whole of the period during which the island was being transformed from one of the least healthy to one of the most healthy places in the Far East.

At a time when much attention is being given to problems of economic development and to discussion of its interrelations with population growth, the Japanese experience in Taiwan is especially appropriate. The Japanese wanted a source of food and a market for the home industries, and their program for the island was directed toward achieving these ends. Here, then, is an opportunity to study the impact of an aggressive program of agricultural development on population growth, and the limitations imposed by the nature of such a program on subsequent economic development when the objectives changed, as they did under the strain of war preparation.

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000 Mr. Barclay's book is not intended to be another regional study. It is designed to trace the demographic record in relation to the record of social and economic change. It is the fourth volume sponsored by the Office which deals with problems of non-industrial regions. The others are: Kingsley Davis, *The Population of India and Pakistan* (Princeton, 1951); T. E. Smith, *Population Growth in Malaya* (Chatham House, 1952); and Paul K. Hatt, *Backgrounds of Human Fertility in Puerto Rico* (Princeton, 1952). A fifth volume by Harvey Leibenstein, *Theory of Economic-Demographic Development*, is being issued by Princeton University Press at about the same time as the present book.

Mr. Barclay's work was made possible by the generous support which the Office receives from the Milbank Memorial Fund and The Rockefeller Foundation, neither of which, however, has the slightest responsibility for the conclusions reached or, indeed, for the specific topic selected for study. For this opportunity to work in complete freedom, my colleagues and I wish to express our gratitude.

Frank W. Notestein
Director
Office of Population Research

November 1953

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Introduction

TAIWAN, or "Formosa," as the island is still widely known to Westerners, has been the scene of international contention as long as it has had a recorded history. From its discovery by curious Chinese and Japanese before 1600 down to the present time, the island has repeatedly been visited, occupied and fought over. No one can claim that Taiwan has failed to receive its full share of attention by the outside world. The people of the island would be the last to make this complaint, for, while opinions may differ as to whether the intrusions have been beneficial to the population, it is certain that they have not been welcome. 177

But for people who have long felt the disadvantages of being small and weak with large and powerful neighbors, the inhabitants of Taiwan have in some respects fared remarkably well. They avoided, through hardly more than chance, the domination by Western nations that has called forth great bitterness and aroused quixotic nationalism in many parts of Asia. They fell under the control of Japan at a time when that country was willing to invest strong efforts in developing Taiwan's productive resources. So far they have emerged from the war that destroyed the Japanese Empire without suffering the mass bloodshed or wide devastation that followed the regular military operations elsewhere in the Far East. And, ironically, during the fifty years of "exploitation" and "oppression" by Japan, they enjoyed more peace and prosperity than their former countrymen on the mainland of China.

As the aftermath of these events Taiwan has acquired a status that is uneasy and insecure, poised again as a prize desired by rival powers. It is not the purpose of this book to trace the sequence of steps leading up to this situation, or to speculate about the future international status of the island. Because prominence has not come to them of their own seeking, the Taiwanese have usually played a passive part in shaping their position in world affairs. Knowledge of the island's external relations therefore does not offer much in understanding the social order of its people, and information about the internal structure of the society fails to contribute anything of great value in appreciating its present international position. 121

For similar reasons, this book will not be concerned with the prospects for the island under the present Chinese Nationalist govern-

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121 ment, since they are likewise closely allied to international developments that have not yet taken place.[1] This present era of Taiwan's history has just begun; discussion of its future in these terms necessarily rests on conjecture and may have little to do with the facts that are known about the population. The half-century of colonial rule, on the other hand, is over, and most of the facts are in. Hence this is the phase that can be investigated to the best purpose, for it can serve as an instructive example of its type in other places.

It is a well-documented case. There is no lack of thoughtful research on the island during this period. While under Japanese rule Taiwan probably had the distinction of being the most thoroughly inventoried colonial area in the world. Huge compilations of statistics and numerous special surveys were made from year to year. The economy, the terrain, the aboriginal tribes, the mineral wealth, the agricultural output, the industrial production and the foreign trade have all been studied and restudied until there is little to be added to this knowledge unless new evidence is uncovered that is not now available.[2]

127 Strangely enough, with all this interest in finding out about the island, there were very few attempts to study the social institutions and cultural patterns of the people, and the attention devoted to these matters has been scanty and perfunctory. Yet the numerical data relating to the population are the best of all, since their collection was most directly linked to the very effective system of control imposed by the Japanese. The largest task required of this investigation has been to test and evaluate these unknown source materials, and to introduce them into the Western literature. They comprise one of the most ample and creditable records for a population of this size that has ever been at the disposal of demographers, and the only systematic set of data for a portion of the Chinese population.

121 This is not to say that the subject of Taiwan's population has been ntirely neglected. Nearly every published work about Taiwan, espe-ially since 1945, has included a section on the people of the island.

[1] There is growing literature on Taiwan dealing with its political status. See, for example, Riggs, F. W. (1952), Ravenholt, A. (1952), Bate, H. M. (1952).

[2] Some of this material has already appeared in the form of special studies. See Yanaihara, Tadao (1929), Grajdanzev, A. J. (1942), Ch'en Cheng-hsiang (1950), Taiwan Keizai Nempo (1941). For a study of the characteristics of Taiwan's population, see Ch'en Cheng-hsiang and Tuan Chi-hsien (1951). The most useful single compilation of statistics is the *Statistical Summary of Taiwan for the Past 51 Years* (Taipei, 1946), which will be referred to hereafter simply as *Statistical Summary*.

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Such discussion is often confined, however, to establishing *how many* of them there are, and frequently begins and ends with the premise that there are "too many." This issue lies afield from the topics that we propose to consider—a population could not attain its present size, flourish or decline, or even remain in existence were it not for the complex societal arrangements that have made these things possible. Population thus could not become a "problem" by itself, but is a fruitful way of viewing problems in these other spheres. These, along with trends in the numbers of people, are the subject matter of this study, and the succeeding pages are an endeavor to discover what Taiwan's demographic data can be made to reveal about the nature of the society. 121

The following plan of procedure has been adopted. We shall first describe how Taiwan came to be settled, and take note of the growth of its population, for these are features which mark it off at the outset as a special type of case and furnish clues as to what else one should expect to find. We shall then turn to examine the aims and policies of Japanese colonial development and their consequences for the population. It is not proposed to dwell on what is commonly treated as the "economic" side of this colonial program, such as the spread of the Japanese banking system, the corporate structure of their industry, the expansion of output, construction of factories, or contribution to the "welfare" of the population. A catalog of these direct achievements gives but a very superficial idea of their most interesting aspect—the form in which these innovations were communicated to the Taiwanese. 128

It will appear that participation in this program on the part of Taiwanese was impeded by barriers at nearly every point, and that they felt its effect on their livelihood and their customs only by indirection. Some of the reasons for the cleavage between these two groups are to be found in the restrictive measures of the Japanese, and some in the stability of Taiwanese social institutions. Evidence of this stability will be shown in the economic activities of the people, their immobility, the persistence of certain mortality patterns, and the organization of marriage and family affairs. These various aspects of Taiwanese life will also be drawn upon to see how and where minor social changes tended to be fitted into this agrarian system. Finally, we shall assess one overshadowing result of this social stability, the steady high fertility of the Taiwanese.

Throughout, of course, much of the interest in the Taiwanese as

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128 a people stems from the fact that almost all of these are of Chinese origin, and that their behavior under Japanese colonial adminstration may be said to represent the reaction of Chinese cultural norms to selective innovations which fail to attain the dimensions of sweeping societal changes. But this is a pattern of change that has not been uncommon elsewhere in the world. Additional significance can be attached to those findings in Taiwan which have counterparts in other agrarian countries, and the following chapters have been organized with considerable care to emphasize these matters of more general interest.

G.W.B.

September 1952

ACKNOWLEDGMENTS

000 For a long and patient investment in the work involved in this study, full recognition and thanks are to be given to the Office of Population Research, Princeton University. Invaluable counsel was received from individual members of this office, in particular from Irene B. Taeuber, Frank W. Notestein, and Wilbert E. Moore, which should be recorded here for want of a more adequate form of acknowledgment. Special thanks are due to Daphne Notestein, for distinctive execution of the maps and diagrams, and to Erna Härm, foremost among several, for her care in the statistical computations on which the study is based. Finally, for contributions of assistance and encouragement at every stage, a debt of a broader kind is owed to Audrey N. Barclay. Of course, responsibility for all statements and conclusions in the book rests with the author.

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Colonial Development and Population in Taiwan

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CHAPTER I

The Growth of Population

101 In the last century and again in modern times, Taiwan has repeatedly become the object of rivalries among some of the most powerful nations of the world. Though its history has been a succession of disruptive incidents resulting from such contacts, by its size alone the island scarcely seems to merit the covetous attention that outsiders have given to it. It is not large—only 250 miles from north to [131] south, and about 90 miles across at the widest point. The area that it covers is only 14,000 square miles, or slightly less than that of the Netherlands. There is little in the way of precious minerals that would arouse the desire of industrial countries. It offers no great area into which other peoples can expand. It has only its significant location in the path of transportation routes off the coast of China, and a territory potentially rich in agricultural output. While the former of these has had the greater attraction to foreign nations, it is the latter that actually yielded—perhaps exceeded—the full measure of wealth that was expected.

132 The topography and climate of Taiwan in the past have combined to make the island inhospitable to settlement. Being at the fringe of the tropics, the climate is hot and rainy, with marked changes of season and variations from one section to another. The greater part of its surface is not readily put to human use. Over half of this area consists of rugged mountains, rising steeply from a plain along the western coast and extending to the Pacific Ocean in the east. Heavy rainfall therefore runs off very quickly, creating torrential floods and occasional droughts in between. Large parts of the island are frequently swept by typhoons and shaken by earthquakes.

175 Within the span of recorded history, the difficulties presented by the physical environment never succeeded in discouraging human habitation. There were vague reports of residents there before A.D. 1000. When Taiwan first came officially to the attention of China, during the Ming dynasty, some tribes of primitives were known to be living near the western coast. Since the 16th century people swarmed to Taiwan from the relatively crowded parts of South China, and prospered there as agriculturists. The Japanese, who ruled the island from 1895 to 1945 and exploited its possibilities

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175 more thoroughly, developed it into a highly profitable colonial enterprise.

There was some solution to each of its principal deterrents to settlement; but the deliberative and organized approach that many of these solutions required was adopted only by the Japanese. Under them production expanded and population increased at a rate that was prodigious, until the very success of these solutions created its own uncertainty—how and when the increase of people would cease.

Early Settlement in Taiwan

Piecing together the history of Taiwan's population before 1895 is a difficult task. It cannot be pursued very far, since relevant information is lacking. There is no reliable record to show even the number of people on the island before the 20th century. The dimensions of population growth, and its nature, must therefore be surmised from the reports of travelers, tradesmen and Western missionaries.

Prior to 1600 Taiwan was sparsely occupied by a few tribes of "savages," of origins that are unknown. The island at this time had attracted very few people from China, though its mountains were actually visible from the mainland, and its coast less than a full day's sail with the tide. Some Chinese and Japanese used it as a base for commerce and piracy against other shipping along the coast. The early tribes of non-Chinese ranged over most of the inhabited area, sometimes repelling visits by curious foreigners, sometimes warring among themselves. These were forebears of the present aborigines of the interior, the "real" Taiwanese.

At about this time the Dutch entered regular and quasi-legitimate trade in the Far East, and became interested in Taiwan as a base for this purpose. In 1622 they established a few fortified outposts on the island, commenced trading across the straits, and formed a limited government to minister to what they took to be the civil and religious needs of the native population. Their rule left nothing of lasting importance in Taiwan except the early chronicles that they faithfully kept of their experiences, which form the safest repository of information about contemporary events.

From such sources we are informed of a growing influx of migrants from the mainland. These were a special category of Chinese, the so-called Hakka people from Kwangtung Province. They were an ethnic minority in China, and as such they occasionally were targets

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of organized abuse. Following an outbreak of such disturbance in Kwangtung a considerable number went to Taiwan for refuge, where they were not easily persuaded to respect Dutch rule, and hence were not eagerly received. But even while Taiwan was nominally in the hands of a Western power, these migrants represented a substantial Chinese settlement there.

The Dutch were not able to remain very long in Taiwan. As an aftermath of a change of dynasties in China, the slow stream of Hakka people became engulfed in an organized movement of a defeated faction from South China. Led by the celebrated personage Cheng Ch'eng-kung, the newcomers drove out all Westerners from Taiwan in 1662, only to succumb after some years to control by the new Manchu regime in China. These events were followed by continuous migration of Chinese. Most of this flow started from Fukien Province, the new base for administration of Taiwan.

These new migrants soon outnumbered by far the previous settlers. Thereafter, the Chinese coming into Taiwan gradually spread out over the flat area most suitable to intensive farming. Little by little they displaced aborigines from the lowlands, and pushed them back into the mountains. Steady movement from the mainland raised the population of Taiwan from a few thousand in 1600 to more than two million by 1895.

The occupied area was enlarged during this period from a few scattered points along the western coast to the entire level portion of the island.[1] More important, in the process of this settlement Taiwan was changed into a land that was thoroughly Chinese, imprinted permanently with the characteristics of Chinese culture. The aboriginal people of Taiwan became a small minority, and remained apart in the interior where they could better hold off further incursions on their territory.[2] Hence the "Taiwanese" that one can speak of at any later date consisted almost entirely of these early migrants from China and their descendants.

By the time Taiwan was ceded to Japan, this population had made it culturally an extension of China. From the sphere of politics and economic activities, as we shall see in later chapters, to matters of

[1] See Ch'en Cheng-hsiang, *Atlas* (1950), Fig. 15.

[2] They made good use of the advantages of rough terrain in protecting themselves. In spite of the fact that the tribes quarreled among themselves and failed to present a united front against conquest, it later took the Japanese over thirty years to subdue this interior part of the island, in a campaign with modern weapons, airplanes, and reportedly even poison gas.

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175 village life and family relationships, the people of Taiwan retained the heritage of tradition and custom that they had brought from the mainland. These cultural institutions did not succeed so well in maintaining order in Taiwan as in China, for there were new situations to be met and resolved. Chief among these, for example, was the constant arrival of new persons for whom the obligations of a particular locality might not be binding. But once established in Taiwan, there is no evidence that these institutions underwent any major change throughout the 200 years while Manchu authorities ruled the island.

Historical accounts of this period are little but repetitions of the same events. They show a sequence of misrule, intrigue by privileged groups or classes, frequent bloody insurrections, and strife with the aborigines. The island gained a continual atmosphere of violence and unrest. By one important circumstance the disorders were prevented from being an invitation to social change—they were not revolutions, but rebellions. They arose from dissatisfaction with particular persons in the social order—landlords, officials, or members of rival clans or villages—rather than dissatisfaction with the social order itself.[3] As a result, the disorders often served in the end to establish tradition more firmly.

Taiwan under the Japanese

648 The most decisive event in the history of Taiwan after being opened to Chinese immigration was its annexation into the Japanese Empire. Japan in the 1890's was newly arrived as a nation to compete in Far Eastern political rivalries, and many of its leaders were eager to find areas for its expansion as a respectable colonial power. They magnified a relatively minor incident in Taiwan, together with other grievances, into a pretext for provoking war with China in 1894.[4] It was a brief war of several quick military victories for the Japanese. When peace was negotiated in 1895, they insisted that Taiwan be ceded to them, and in the same year they took possession of

[3] Rebellions were ultimately settled by reasserting the established order, though often not without the use of force in the form of troops. Many of them, however, were actually organized within its framework from the beginning. Much of the disturbance was apparently created by the type of large clan organization found in South China, and by secret societies that were able to develop rivalries on a large scale between formidable groups.

[4] Japanese forces had as early as 1874 made an exploratory expedition to Taiwan, under a similar pretext, that formed the basis for expansionist designs on the island and provided valuable information about its terrain.

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the island and set out to discover the responsibilities and rewards of colonial administration. 648

Japan embarked on this first colonial venture without having at the outset any very clear idea of what use to make of it. The first few years were taken up in consolidating their control over the population and in deciding what to do with the island. As their experiment progressed, the Japanese began to introduce some profound and subtle changes. Their objectives became clarified, and their policies toward Taiwanese more firm. Gradually they evolved a system of managing affairs in Taiwan that developed into one of the most successful colonial programs in the world. As long as they remained, Taiwan repaid them handsomely for their initial investment of care and expense.

Some of the more important aspects of this program will be discussed in subsequent chapters. Here it is appropriate to establish what were broadly the consequences in terms of population trends, and to discover what sorts of information about Taiwan's people can be gained from the records of this administration. The Japanese rationalized certain parts of Taiwan's agriculture, so that the island produced a substantial surplus of farm commodities each year. They established a strong and efficient government, the first that the island ever had. With a shrewd combination of police force and political guile, they imposed strict public order and penetrated every town and village with a structure of organized control. 648 178

They constructed excellent facilities for transportation and communication where there had been none before, founded modern business institutions and commercial centers, promoted some industrial processing of the island's products, rebuilt the major cities, and stamped out the principal epidemic diseases. In short, they transformed Taiwan from a "backward" and neglected land into a thriving region that could regularly export a large share of its agricultural produce. This was a success that would satisfy most of the countries striving for modernization today.

All these material accomplishments of the Japanese in Taiwan are well known. With some justifiable pride, they publicized this side of their rule and compiled an imposing set of statistics to document it. What we propose here is to examine the human side of these developments and to appraise some of its consequences in the 121

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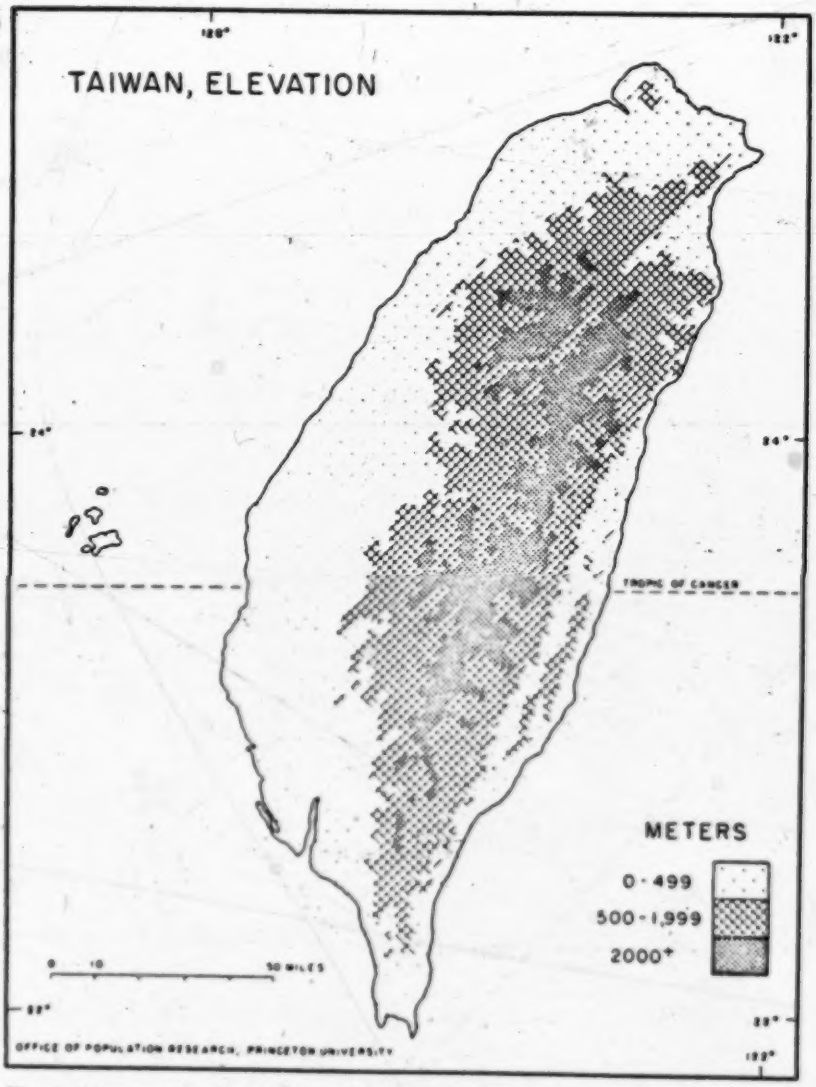

Fig. 1. Topography of Taiwan. (Adapted from Taiwan Provincial Government, Department of Communications, *A Map of the Main Roads of Taiwan*, February, 1950.)

121 lives of the population. This aspect of Taiwan's history, and of "economic development" in general, receives a surprisingly small share of attention as compared with questions of technological advance.

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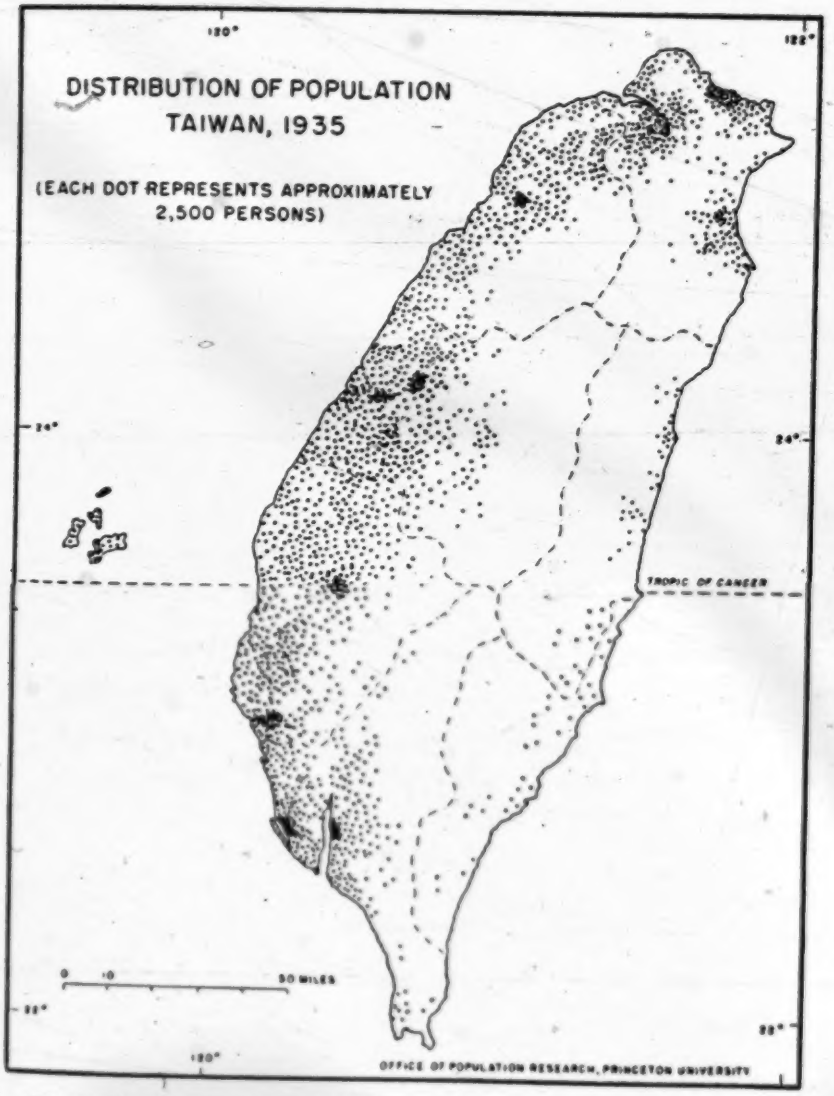

Fig. 2. Distribution of Population in Taiwan, 1935. All nationality groups.

The Japanese and Statistics of the Population

The only trustworthy information that we have about the numbers and kinds of people in Taiwan at any time is the evidence of the censuses taken by the Japanese. They conceived and established

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659 a system of collecting population data, as an integral part of their wider goals in the island. Factual materials of this order have not existed either before or since their occupation.

The complete monument to their enumerative capacities in Taiwan is a series of seven censuses, the first one in 1905, the next in 1915, and one every five years thereafter stopping with 1940. Some were more detailed and are therefore more useful than others. All maintained uniformly high standards in the completeness of reporting, in the consistency of defining ethnic classes, and in the accuracy of information such as age reporting. In these respects they often ranked in quality well above the more advanced censuses of the Western world. The first two censuses, in 1905 and 1915, were carried out before a genuine enumerative census was ever conducted in Japan Proper[5] and probably served as testing-grounds for the initial Japanese census of 1920.

One of the first official acts of the Japanese was to make a register of the population under their control. This was undertaken for purposes of regulation, and not to satisfy disinterested curiosity about the inhabitants. To judge by its published results, the early registry was incomplete, especially in its vital statistics. But the rules regarding nationality were important for later demographic data, because they provided the first basis for distinguishing ethnic groups in the population.

659 641 The authorities began by requiring all persons who acknowledged the legal status of Taiwanese "nationals" to be so documented with the police. The remaining people of Chinese origin were thenceforth classed as aliens, and were given stricter treatment before the law than the rest. This legal concept of "nationality" (*Minseki*) was unchanging for each individual over time.[6] Reflecting as it did an official system of ethnic discrimination, this scheme was maintained with some rigor by the police. The classification was extended into census practice, and the system of control later became the basis for collecting census and vital statistics data. It kept distinct four principal groups of people—"Taiwanese" (or "Islanders," as they were called until 1939 in the statistics), Japanese, Koreans, and Mainland Chinese.

[5] The Russo-Japanese War intervened in 1905, the World War in 1915. See Taeuber, Irene B., and Beal, Edwin G., Jr. (October, 1946), p. 9.

[6] The privilege of adopting Japanese nationality was extended to natives of Taiwan only in later years, and was not widely used.

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By these actions the Japanese set apart from all others those who were descended from the original residents of Taiwan. This segregation in the statistics extended from the most obvious differentiation—that of Japanese nationals—down to fine distinctions within the Taiwanese population itself.[7] It was consistent in both the population censuses and vital statistics, making it possible to amalgamate the two systems of record-keeping continuously as long as they were maintained.

TABLE 1

TAIWANESE BORN OUTSIDE OF TAIWAN, 1920 AND 1930

Proportion of All Persons Who Have Been Born "Abroad," by Age and Sex

	Census of 1920		*Census of 1930*	
	Male	*Female*	*Male*	*Female*
All ages	0.2	0.1	0.1	0.0
0-9	0.0	0.0	0.0	0.0
10-19	0.0	0.0	0.0	0.0
20-29	0.1	0.0	0.0	0.0
30-39	0.1	0.0	0.0	0.0
40-49	0.5	0.1	0.1	0.1
50-59	1.3	0.2	0.3	0.1
60-69	1.9	0.3	0.8	0.1
70 and above	2.6	0.7	1.0	0.3

Sources: *Census of 1920, Descriptive Report with Appendix*, Table 79.
Census of 1930, Statistical Tables, Table 55.

Regulating the conduct of "alien" Chinese nationals in Taiwan was not the sole purpose in establishing the legal status of residents. The authorities also set out to halt the further migration of people from the mainland. In this they were apparently successful. Taiwanese were required to verify their nationality by certain proofs, chief of which was evidence of having been born in Taiwan. Taking this as a criterion, there seems to have been little admixture from the mainland to the category of "Taiwanese." For example, tables showing Taiwanese who were born "abroad" were published with the censuses of 1920 and 1930. If the information was accurate, practically the entire population of Taiwanese born after 1895 was ac-

[7] This fine detail was confined to a slightly different classification, based on "race." It provided categories within the group with Taiwanese nationality—aborigines, Taiwanese of Fukien origin, and Taiwanese of Kwangtung origin. The two classifications were not precisely the same, the one based on "nationality" being the more consistent at different times.

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659 tually born in Taiwan (see Table 1). Almost none under 25 years
167 of age in 1920, or under 35 in 1930, were recorded as having been
born outside. Some who were older at these two dates had been
162 born in China, but they were very few and were probably living in Taiwan at the time of annexation. These figures imply that migration after 1895 was probably confined to people who were appropriately registered by nationality, and counted as *aliens* in census enumerations.[8]

Hence the census category of "Taiwanese" was defined so as to exclude migrants to and from the island. This is significant to know, for it means that Taiwanese counted in any census after 1905 were exactly the survivors of those who had been counted before (plus those who had been born in the meantime). It also means that the population of Taiwanese was for statistical purposes a "closed" population—one which neither gained nor lost people by migration. All change in the size of the Taiwanese population was therefore due to "natural increase," or the balance between births and deaths. One can thus speak precisely of population "growth" in Taiwan, without reference to migration as a complicating factor.

Half a Century of Rapid Growth

161 The total population, and the sub-total of Taiwanese, are shown in Table 2 as counted on October 1 of each census year, along with the annual geometric rates of growth that are implied at each intercensal stage. Every year showed an increase. The only setbacks were between 1915 and 1920, when the island suffered three near-epidemic attacks of disease. Even over this relatively poor span the average yearly rate of increase was close to one per cent. The original population of 1895 was more than doubled by 1945; when the vital statistics were discontinued in 1943, there were nearly six million Taiwanese.

[8] By evasion of the law some Chinese might conceivably have slipped into Taiwan and passed themselves off as Taiwanese. A further acquaintance with the regulatory system in later chapters, however, will make this appear most unlikely.

There is evidence of another sort that the Taiwanese were not diminished by removals to the mainland. Briefly, detailed testing of the validity of birth and death statistics has shown that practically all persons born in Taiwan were later accounted for in a census enumeration, or as registered deaths if they failed to survive. Practically all who were enumerated in one census were similarly accounted for at later dates. During the 1930's, Japanese permitted small numbers of Taiwanese to leave the island for special purposes. The effect of these departures was very small, and raises no difficulty in dealing with the data of earlier years. Thus, if there was emigration, it too was clandestine and very small.

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TABLE 2

GROWTH OF POPULATION IN TAIWAN

Total Population and Taiwanese Enumerated at Successive Census Dates and Average Rates of Growth for Taiwanese

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Year	*Total Population (All Groups)*	*Taiwanese Population*	*Per Cent Annual (Geometric) Rate of Growth*
1905	3,039,751	2,973,280	
			1.12
1915	3,479,922	3,325,755	
			0.83
1920	3,655,308	3,466,507	
			1.71
1925	3,993,408	3,775,288	
			2.22
1930†		4,218,663	
1930‡	4,592,537	4,313,681	
			2.48
1935	5,212,426	4,882,945	
			2.42
1940	5,872,084	5,510,259	
			2.42
1943		5,962,000*	

* This figure represents the Taiwanese enumerated in 1940 plus their registered natural increase from the census of 1940 to the end of 1943.
† Excluding Aborigine Territory.
‡ Including Aborigine Territory.
Sources: *Statistical Summary*, Table 57.
Census of 1930, Statistical Tables, Table 2.

These figures are significant also because of acceleration in the *rate* of growth, for it increased together with the number of people. Over the entire census period growth averaged 1.76 per cent per year. By 1940 Taiwanese were increasing at close to the rate of 2.5 per cent per annum. Compounded continuously, this latter rate would have enabled Taiwanese to increase twofold every 28 years, and twelve times in a full century.

Natural increase of such dimensions is exceptional. Such growth in itself implies that some change has taken place in the organization of human activities. It necessarily reflects a situation that could not have continued long, and that cannot persist forever. In the world

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161 at large, for example, the increase of people that has populated most of the earth's surface has progressed steadily only in a few centuries of sweeping changes. It has maintained an average yearly rate of half of one per cent, only one-fifth that of the Taiwanese. At their more recent rate of increase, they could supply the entire world's present population in less than 250 years.

Growth at this pace, for all its associated virtues in the saving of life and postponement of death, can be a costly way of expanding the membership of a society. It imposes on the adults the burden of supporting more dependent children than would otherwise be required. Consequently, at any particular time growing populations contain large proportions of young children and infants.

162 The increase of Taiwanese left this kind of mark on their age composition. By 1940, they had passed through 50 years of growth almost unbroken by periods of high mortality. The age structure, both of males and of females, was one that expanded steadily at each lower age to a broad base of infants at the bottom (see Fig. 3). The progression was almost smooth, with few irregularities in between.

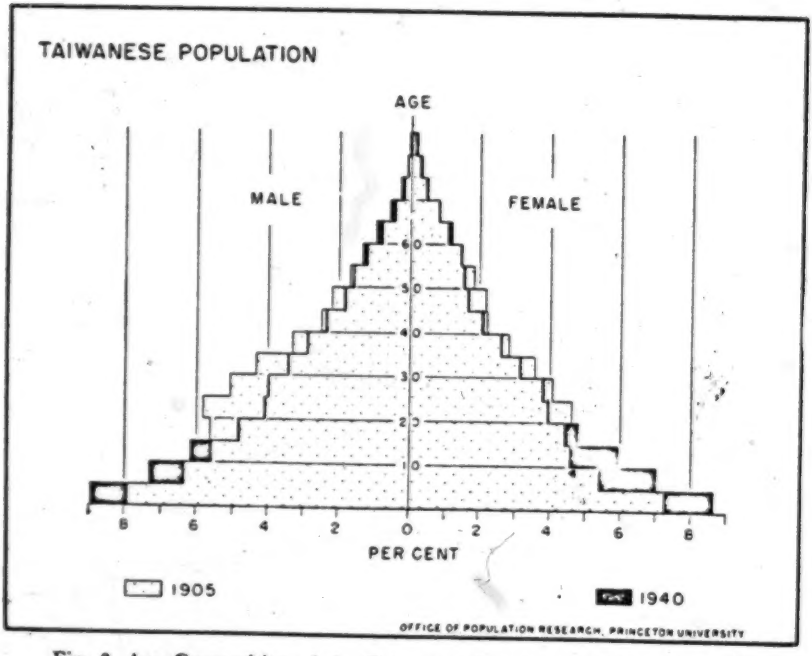

Fig. 3. Age Composition of the Taiwanese Population, 1905 and 1940.

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THE GROWTH OF POPULATION

In 1905 there were only a little more than half as many Taiwanese as in 1940. Their distribution in different ages presumably had not been subject to this past influence of steady growth. It nevertheless had many of the indications of potential expansion. Births were at high levels in relation to the numbers of adults. Through the effects of high and erratic mortality, many never reached maturity. 161

The inroads of past deaths had been far more irregular and generally more severe than in the population of 1940. As reflected in the dearth of persons from 5 to 20, for example, the turbulence that prevailed in Taiwan from 1890 to 1905 must have taken a heavy toll of infants and young children, and possibly prevented many others from being born. Even so, the population of Taiwanese in 1905 was an extremely youthful one. Provided that the supply of new infants each year would continue undiminished, it needed only an energetic set of measures for the control of mortality in order to produce the growth that ensued.

Because in most census tables "nationality" was adopted to classify the population, the Taiwanese must be considered for most purposes as a single group. It was not, however, a completely homogeneous category. It contained the remnants of the aboriginal inhabitants, and people from many different parts of China. Those of Fukien origin were predominant; their ancestors had made up the largest portion of all the migrants to Taiwan. The majority who reported ancestry in Kwangtung were descendants of the earlier Hakka migrants. These two principal classes of Chinese had begun to mix by intermarriage, which explains the lesser gain in those of Fukien origin by 1935. But during the great natural increase of Taiwanese they both grew almost evenly.[9] 162

The aborigines had ceased to be an important part of the population by 1905. No longer able to contest the seizure of their lands and destruction of hunting grounds, they had retreated to the mountains of Taiwan where most succeeded in avoiding Chinese influence. It took many years before they were finally subdued by the Japanese. The statistical information about the aborigines is incomplete and cannot be compared from one date to another, and we must all but ignore them in discussing the rest of the Taiwanese. Paradoxically,

[9] Already by 1905 the boundaries between these two groups were less pronounced than they once had been. Separate tables of the population in that year according to principal language spoken showed a certain amount of mixture between the two. The remarkable fact is that they remained as distinct as they did.

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162 this small and obscure minority have been subjects for an immense amount of anthropological investigation during Japanese rule in Taiwan, while the peoples of Chinese origin (for whom accurate and precise information has been available these many years) have been almost entirely neglected. The increase of aborigines in census enumerations probably signifies nothing in the way of growth; it was not until the 1930's that they were brought fully within the scope of the census.

TABLE 3
ETHNIC COMPOSITION OF THE POPULATION OF TAIWAN
Censuses of 1905 and 1935

	1905			1935		
	Persons	*Per Cent of Total*	*Males per 100 Females*	*Persons*	*Per Cent of Total*	*Males per 100 Females*
Japanese	57,335	1.9	152	270,674	5.2	116
Korean*				1,479	0.0	60
Taiwanese						
Fukien Origin	2,492,784	82.0	112	3,939,966	75.6	103
Kwangtung Origin	397,195	13.1	108	735,334	14.1	103
Other Chinese Origin	506	0.0	218	265	0.0	109
Aborigines	82,795	2.7	96	207,900	4.0	101
"Others"	9,136	0.3	1,757	56,808	1.1	217

* Koreans included with "Others" in 1905.
Source: *Census of 1935, Statistical Tables*, Introduction, p. 32.

162 167 The numerical position of the Japanese community in Taiwan gives no clue to its strong influence in the course of events after 1895. Its growth was not of the same sort as that of Taiwanese. Few if any Japanese regularly lived in the island in 1895.[10] By 1905 a settlement of 57,335 was recorded for the census, increasing to 270,584 in 1935 and 312,386 in 1940, or five times its earlier size.[11] Japanese in Taiwan did not add to their numbers through natural increase alone, especially since their community was a highly masculine one (see Table 3).[12] As a matter of fact, their registered natural increase from

[10] One foreign writer at the time went so far as to assert that prior to 1895 "there was not in the whole island a single Japanese resident." See Davidson, James W. (1903), p. 592.

[11] The military garrison was supposed to be excluded from all of these enumerations.

[12] Marriages with Taiwanese were prohibited until 1932. Offspring of such illicit mixed unions were rarely if ever counted later as Japanese, making the shortage of women a serious restriction on the per capita reproduction of Japanese.

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1906 to 1940 amounted to only 146,597, and if accurate could account for only 57 per cent of the total gain. The numbers of Japanese in Taiwan therefore increased very largely by migration. As we shall see, this was a special type of migration, based on opportunities that did not prevail for others in Taiwan or for Japanese at home, and brought special kinds of migrants. By recruiting new members relatively faster than the natural increase of the Taiwanese, they also raised their proportion in the total population (see Table 3).

The only other non-Taiwanese group, excluding an insignificant number of Koreans, were the Chinese from the mainland. They are shown in Table 3 as "Aliens," mixed with a few other foreign nationalities. Numerically they were even smaller than the Japanese. Being the ones most likely to blur the ethnic boundaries, Chinese nationals were classified and marked out with great care from the rest of the population, as we have indicated. In census enumerations they would have been indistinguishable from Taiwanese, but for the necessity the Japanese felt to control their activities and forestall the development of close ties between Taiwanese and the mainland.[13]

The Taiwanese, however, were the group of major consequence for demographic study. Up to 1945 they comprised practically the whole of the population taken at large. The proportion of non-Taiwanese never reached 7 per cent. Distributed in the total, all these others were minor elements; only when special considerations are introduced do they become important. In the following pages, attention is given to the Taiwanese population almost exclusively, for their development under Japanese rule, which produced this natural increase, is the main problem to be investigated.

[13] [Taiwan.] Government of Formosa. *The Special Population Census of Formosa, 1905.* [English translation] p. 161.

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CHAPTER II

"Economic Development" in Taiwan

648 RULING TAIWAN was a task that the Japanese approached with high
433 hopes. Because their goals were ambitious, the problems were more formidable than they might have been with a more modest and conventional colonial program. Their officials in Taiwan were the first overseas administrators in the Empire, and felt a responsibility to make the colony appear worth while at home.[1] Whatever their wider aims, their strongest aspirations for the island expressed themselves in energetic economic policies—policies pursued with such determination that they profoundly altered many aspects of Taiwan's economic life. In the course of their administration, Japanese nationals came to look upon enhanced production with a two-fold purpose: to secure profits for certain individuals and groups, and to promote the self-sufficiency and military strength of the Empire.

Here we shall examine the techniques of their economic program, survey its operation, and endeavor to make some appraisal of the accomplishments. A closer view of its significance for the everyday affairs of the population is reserved for the next chapters.

241 The situation that the Japanese first encountered in Taiwan was one of long-established tradition, in which a small amount of inno-
433 vation could go a long way. Agriculture was the main source of livelihood for practically all Taiwanese. The particular manner in which farming is organized in Taiwan tends, as it does in most of the Far East, to shield it from the intrusions of the modern world. Under the Manchu regime the Chinese inhabitants of Taiwan had developed farming along the familiar lines of their forebears on the China coast. Farms existed on a local village scale and were operated
[65] for local subsistence. Most of any exportable surplus of production was removed from the villages in the form of taxes or rent. What was
[427] left became absorbed in the costs of civil disturbance, misgovernment, and expansion of settlement, rather than going toward broadening commercial or other opportunities of the cultivators themselves.
433 W[illegible]er may bring about such a situation, it is one that tends to

[1] Most of the later Japanese publications about Taiwan's future also stressed the island's potentialities as a base for southward expansion of the Empire. The grandeur of these proposals suggests that some of them may have been invented in search of favor for their authors more than in serious expectancy of being carried out.

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discourage innovation in agricultural technique, and to keep at low 433
levels the output per person working in agriculture. An economy in this condition requires important modifications when "economic development" is desired. Farming must be made more productive, and radical progress is necessary in other pursuits. Barring some curtailment of consumption, such a change always implies expanding production faster than what is immediately consumed.

One of the keys to the Japanese colonial program in Taiwan, and 471
to its demographic consequences, was how they set out to induce this 433
saving. They chose the course of concentrating the additions to income from production in a few corporate business structures, instead 439
of relying on the savings of individuals in Taiwan. Presumably this has been a goal in the management of most colonies, since indigenous sources have rarely been relied upon for large-scale investments. Its corollary—policies to suppress gains in individual native incomes—has been the chief source of hostility against colonial powers. But while most other nations have had only moderate luck in pursuing this objective, with the Japanese it was an outstanding success.

They took care that the formation of capital proceeded rapidly and from internal savings alone. Even in Japan, which in some respects is closely comparable, the whole pattern and purpose were different. While the Japanese were leading their own economy toward self-sufficiency in manufactured commodities, economic change in Taiwan was being contrived with a still surer hand to move in an opposite direction, toward complementarity with Japan. The output of the island was gradually shaped so as to furnish a net contribution of agricultural and semi-processed food and related commodities every year to Japan. These were items which Japanese felt to be essential for their more ambitious plans at home, and which for various reasons they wished to avoid purchasing outside Japan in ordinary world markets.

All the while, they mounted an impressive program of building up physical equipment in the island itself. Thus earnings were being reinvested on a large scale at the same time that they were also being drained off at a considerable pace by exports to Japan. This feat had to be accomplished in only one way—by raising the output of the island sharply while not greatly changing the levels of consumption for the population at large.[2] In this respect the Japanese managed

[2] The alternative—of gains by depressing popular consumption—should probably be ruled out. It cannot be conclusively demonstrated either that levels of living rose or

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471 the process of capital formation in Taiwan in basically the same way as at home, by prodding the economy at critical points with innova-
433 tions and developing special social policies to divert the gains from consumption to investment. The success of domestic saving in Tai-
439 wan is simply accentuated by the steady flow of commodity shipments to Japan, whereby Taiwan as an enterprise did more than pay its own way.

This success is best summed up in the yearly figures of trade with the outside world. From 1909 on, with the sole exception of 1913, there was an export balance every year in the value of Taiwan's external trade. Most of its entire trade was carried on with Japan—over 90 per cent after 1930 if Manchuria and Korea are included.[3] Related to the total value of exports, the balance amounted to a steady share of about 30 to 40 per cent of all exports to Japan, 25 to 30 per cent of all exports to the entire world, that were not paid for in the form of imports of commodities (see Table 4). It is not proper to infer from these figures that Taiwan occupied a "favorable" position, since apparently the balance was merely carried on the books of a few companies with home offices in Japan. This being the case, such figures probably even understate the amounts taken out.[4]

The Role of Government Policy

648 By implication, the foregoing account reveals that colonial rule
471 yielded quick and gratifying results in Taiwan. These were not

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that they fell for Taiwanese. It does seem certain that on the average they must have risen somewhat, but that they did not move very far one way or the other. Undoubtedly some Taiwanese who took part in the new developments became richer, and many who did not became poorer. Agricultural output per farmer definitely increased, as the next chapter will show. There are figures (see Ch'en Cheng-hsiang, 1950, p. 151) that suggest a slight falling off of rice consumption per person, but they must be computed in a way that weakens their reliability. However, the large additions to Taiwan's economy under the Japanese were the new productive facilities, fixed equipment and market organization, which it is the purpose of this chapter to document. There is no way of showing how these improvements were shared by the Taiwanese, though we know that the Japanese took steps to keep the major shares to themselves.

[3] It is fairer to consolidate the "Yen Bloc" as a whole in computing these balances. To some extent imports from Manchuria and Korea were used to offset the account with Japan; this combined account shows a smaller balance than the account with Japan alone in most years. Separate data for Manchuria were not available in preparing Table 4. Aside from their monetary value on a balance sheet, the articles imported from Manchuria and Korea had a special importance, for they consisted mainly of fertilizers that were indispensable to Taiwanese agriculture.

[4] Grajdanzev (1942), p. 157, claims that the export balance cannot be materially reduced by taking account of hidden items; many of these, such as cash remittances to Japan, would actually increase it.

439

TABLE 4

VALUE OF EXPORTS FROM TAIWAN, BY PLACE OF DESTINATION, 1899 TO 1942*
(Thousands of Yen)

Years	Total Exports	Exports to Japan and Korea	Per Cent of All Exports Going to Japan and Korea	Balance of All Exports over All Imports	
				Amount	Per Cent of Balance to Total Exports
1899-1909	24,659	13,932	56.5	—1,574†	—6.4†
1910-1914	59,936	46,727	78.0	4,212	7.0
1915-1919	130,192	98,929	76.0	36,943	28.4
1920-1924	195,767	163,566	83.6	62,039	31.7
1925-1929	256,326	214,533	83.7	65,862	25.7
1930-1934	251,476	230,579	91.7	75,720	30.1
1935-1939	445,653	402,641	90.3	115,005	25.8
1940-1942	527,699	419,570	79.5	97,419	18.5

* Figures are yearly averages over each period.
† (—)indicates an import balance.
Source: *Statistical Summary*, Table 321.

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648 achieved through the efforts of private individuals in a free investment market. The Government-General of Taiwan was given a free
471 hand by Tokyo in most internal affairs, and displayed great interest and vigor in regulating all areas of business activity that it could effectively control. A large part in the formation of capital in Taiwan can be attributed to official steps deliberately adopted with this end in view.

471 On the one hand, these measures consisted of widespread rationalizations in agriculture and large investments providing technical
654 economies to individual farmers; on the other, there were various devices to centralize the heavy investments in large blocs and thereby keep control over the entire venture. The former consisted mainly of improvements that could be initiated and carried out by Japanese without full participation by Taiwanese, and the latter of ways to guide the process and garner the returns. The one served to raise the average productivity of working Taiwanese without depending on them for inception; the other to avoid dissipating the earnings of the colonial enterprise as higher incomes among the Taiwanese, by confining them in the charge of a few Japanese.[5]

Although the Japanese treated their domestic agriculture in much the same way, they made use of their own farmers' earnings in furthering the growth of industry. The fiscal role of rural Taiwan corresponded to that of rural Japan, but in Japan the several lines developed together and were complementary. Fewer opportunities of this nature were exploited in Taiwan, for the complementarities were all external. This is shown in the other side of the picture of trade with Japan—that of imports and their composition. More than half of the value of imports from Japan during later years represented items that were clearly for current consumption.[6] There was surely nothing like the emphasis on heavy capital goods among the remainder that is found in the imports of Japan itself.[7]

Problems of Pacification

471 This study is concerned as much with broader aspects of organiza-
433 tion in economic life as with the economic activities themselves. Thus

[5] One of the organizational devices for diverting this income away from consumption was, as in Japan, to make it flow into corporate rather than individual hands, where its disposition was more easily regulated.

[6] I.e., articles such as food, clothing, paper, beverages, textiles, manufactured consumer commodities, and the like. One suspects that a large part of these went to maintain the comforts of the Japanese living in Taiwan.

[7] For example, see Reubens, Edwin P. (1950), pp. 109-112.

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it is pertinent to examine the stages by which the Japanese spread their influence over business affairs. Before the Japanese occupation, Taiwan was a busy farm area producing chiefly rice and other foodstuffs for itself and neighboring countries. It still held virgin lands that yielded well to the cultivation of Chinese farmers, and was known among Mainland Chinese as one of the few places where fortunes could be made or lost quickly. It was known elsewhere for other features not unrelated to these—foreigners established some renown for the island's production of marketable crops like tea and camphor, as well as for its beautiful scenery and adventure. Some early Taiwanese had always enjoyed years of prosperity, subject to the vicissitudes of weather,[8] warfare among powerful families or with the aborigines, and to the unpredictable greed of officials.

Although agriculture was the mainstay of livelihood, there were the subsidiary pursuits commonly found from place to place in China. Additional opportunities arose in connection with commerce, which was the most flourishing sphere of enterprise. The export trade in the few products shipped abroad was the only spot affected by foreign influence. A small number of Western traders had stayed in Taiwan, arranging for the sale and delivery of the island's produce to the outside world, but the scope of their business operations was limited to buying and shipping. Even tea-growing, which an Englishman had begun, was left entirely to the local population and Chinese middlemen, up to the stage of packing and sending the tea abroad.

The settled portion of the island, often down to the actual appearance of its villages, was a close replica of conditions on the mainland of South China, 100 miles away. The Manchu government adopted policies calculated to restrict rather than encourage any growth or diversification of economic activities. It abhorred the prospect of having the profits of any sponsored enterprise go to foreign merchants, and suffered an incapacity for such sponsorship inherent in its organization.[9] Observers of the period saw little likelihood of change.

Hence Taiwan when the Japanese acquired it was already a granary ready to function as a going concern, but with some impediments to being operated as such. In contrast to both China and Japan, it

[8] These hazards were many and frequent. Lack of systematic attention to irrigation had placed farmers at the mercy of floods, local droughts and destructive hurricanes, and severe earthquakes were common.

[9] This aspect of early political and business affairs in Taiwan is described at great length in Davidson, James W. (1903), Chs. 14, 15, and 17.

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471 was a newly settled land whose surface still showed little strain of intensive clearing and cultivation, and whose manifest possibilities 433 for wider exploitation in agriculture and other lines had scarcely 648 been tapped. Merely imposing public order and effective political administration could hardly have failed to ensure general prosperity, and the Occidental community at the time contemplated the experiment with great interest.

The new authorities did not leave much room for doubt about their intentions for the economy. Even while engaged in some dissension and maneuver for power between their own civil and military officers, they quickly set about constructing railroads as a state enterprise, reinstituting an official monopoly of camphor (amounting to a world monopoly since Taiwan with Japan was the sole important world producer), nurturing one large company for practical research and experiment in sugar production, reviving the former domestic monopoly of salt, and executing a complete and accurate land survey—Taiwan's first—in order to regulate some of the discordant relations of tenancy among farmers and landlords.

Most of the administrative changes were based on a notorious need for reform of pre-existing practices. But all of these reforms were two-edged. Besides regularizing commercial practices and "correcting abuses," the official monopolies and export associations slowly made it impossible for foreign concerns to remain in operation. The revenues from key lines of business soon became centralized in either the Government-General or corporations explicitly controlled by it. Those relations began to appear between state and business that determined the future course of the fields involved. The land survey [651] furnished a basis for levying a stiff land tax which brought forth a gratifying and dependable flow of revenue into the public treasury and helped to finance later development schemes.

648 If the overall design of economic expansion had been fixed in the minds of influential Japanese even before they took possession of Taiwan, and to some extent this seems likely, its timetable was not. They did not foresee, for example, that almost ten years of costly and arduous military campaign would be needed to subdue the aborigines and thousands of Taiwanese in the lowlands and foothills who had reverted to banditry. And it became apparent only after many Japanese lives had been forfeited to sickness that this "pacification" of the island had to be accompanied by full-fledged warfare against disease and a general sanitation program, in order that enough

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Japanese government officers could be stationed over the island to 648
establish political order firmly.

This delay in extending their mastery over the whole of Taiwan 648
was a disappointment to the Japanese. It spurred them to concen- 631
trate their efforts at organization on measures other than force to bring the inhabitants under control. Once set in motion after some three years' experiment and delay, their methods brought swift results. They encircled and isolated the aboriginal tribes in the hills, and introduced a refinement of old Chinese forms of keeping local order—the so-called *pao-chia* system.[10]

Private Corporations and Japanese Investment

Other measures followed to make the Japanese rule more effec- 648
tive. As the exercise of authority became more a matter of routine, the policy turned more and more to exploring improvements and enlargements of production. This progress in government can be traced in the annals of specific achievements, like the drive to raise
rice yields[11] and the public health program. By 1905 the Govern- 659
ment-General felt itself well enough established to take a detailed census of the population; the descriptive report of its procedures is the best evidence of a firm degree of control and competence in performing complicated administrative tasks in Taiwan.

For the next 25 years or more, until they began to shift their 654
energies to preparation for World War II, the Japanese proceeded to work out their policies for Taiwan (outside of the Aborigine Territory) with scarcely a serious check.[12] This long interlude between two periods of tight regulation is sometimes known as one of official "liberalism" or laissez-faire toward business affairs. It can be so designated, however, only in contrast to the strictness that preceded and followed. In steady succession the government completed several major projects. It finished the land survey of the entire island, essential to all their later engineering works as well as to the desired

[10] The *pao-chia* system was a scheme for assigning joint responsibility to village and familial groups for the conduct of their members. Its operation and the reasons for its effectiveness are taken up in the following chapter.

[11] Mendiola, N. B. (1949), p. 76 ff.

[12] The Taiwanese efforts at insurrection, as for example recounted in OPNAV, Civil Affairs Handbook (1944), pp. 173-177, tended to be exaggerated by their instigators. Due to their own clumsiness, these were quickly put down by the Japanese, though not without some local disruption. Inside the Aborigine Territory, on the other hand, the Japanese devoted many years of hard fighting and frustration to "pacification," and did not hold the entire island securely until the mid-1920's, nor peacefully until almost 1940.

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654 supervision of agriculture. Through its own revenues the government became independent of the annual subsidy from Tokyo with which it had been launched.

By direct action and through state-owned companies, it enlarged communications facilities into a thorough public network of roads, bridges, railway lines, telegraph and telephone installations, tunnels and mountain trails; constructed harbor equipment to accommodate an ever-growing volume of shipping: expended a tremendous effort (if not large sums) on sanitation and disease control; relieved much of the uncertainty of weather for crops by an irrigation system which also reduced the destruction of floods. Finally, and in some respects the central note of the entire program, the authorities gave continual attention to ways of rationalizing agricultural production.

It must be admitted that most of their techniques of agrarian improvement were relatively well known even at the beginning. These were already part of the world accumulation of knowledge by the time the program was well under way. The Japanese did not discover new principles of agronomy in Taiwan, but drew upon this fund of information with alert but minor adaptations to fit the case at hand. The rice yields from the land, for example, were increased spectacularly through the spread of a new strain of seed, introduced in 1922 and cultivated thereafter under supervision by Japanese.[13]

Practices like breeding suitable varieties of seed, using fertilizer systematically to replace elements removed from the soil, rotating crops, and matching irrigation schedules to the growth cycles of plants have for many years been commonplace in the world. But they do not by magical properties overcome the handicaps of unenlightened farming practices. Japanese characteristically did not pin all their faith on the ability of these methods to work out improvement in yields unaided. They painstakingly supervised the application of techniques, and coordinated the use of new procedures with judicious—never extravagant—mixtures of capital.

The most crucial capital input of the Japanese in agriculture was the administrative framework through which these technical changes were introduced. It was a channel of influence that they turned to good account with a cheap outlay of resources. Japanese themselves were not cultivators. They operated experimental farms at many places to study means of improving agriculture, always from the standpoint of what was practical in a land of peasant farmers. They

[13] Mendiola (1949), p. 76 ff.

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also maintained a zealous staff of workers to put new findings into effect. Taiwanese villagers were mobilized into compulsory associations to utilize the information, and the program was carried on with close cooperation by local authorities.

In addition to these measures, certain of the large Japanese expenditures on outright heavy investment helped to modify agricultural productivity of Taiwanese. The building of railroads, large-scale facilities for irrigation and flood control, and in later years factories for processing agricultural produce all worked some radical changes in the relations between the farms and the markets abroad. But these reached down only occasionally to disturb the operation of individual peasant farming. What one Japanese writer has called the process of "capitalist development in Taiwanese agriculture" was not so much a matter of developing investment in agriculture itself as of surrounding agriculture with capital improvements.[14]

Many improvements were introduced directly by the Government-General. Usually a charge was levied on their use or the expense was defrayed by heavy taxation. The government matched each of these steps of its own by prompting the large private firms to carry on parallel works inside their corporate domains. This sort of extra-curricular investment was widely undertaken by Japanese companies, and led to the growth of giant integrated concerns, some larger than their counterparts in Japan.[15]

A remarkable set of inducements existed for engaging in this sort of corporate expansion. Taiwan in the first place had the reputation of being the most profitable locale for investment in the Empire.[16] In addition to this, the Government-General frequently offered subsidies, partial subscription of funds by itself, special legal privileges, a trifling burden of taxation, and in general more cordial relations with the state than were available elsewhere. The response to these terms was apparently more enthusiastic than had been anticipated. It rose at times to feverish speculation, followed by short depressions among Japanese financial circles,[17] and led the Government-General to impose restrictive schemes for fixing prices and output.

[14] Yanaihara, Tadao (1929), p. 140 ff. He points out that most Japanese held land as landlords, like the Taiwanese, not as capitalists. The exception to this rule—and it is a large exception—was the management of sugar-growing plantations by a few of the large sugar-processing companies.

[15] Grajdanzev, A. J. (1942), p. 96.

[16] Yanaihara (1929), p. 146.

[17] Price movements of rice and sugar in Japan intensified some of these effects, especially in the late 1920's and for several years after 1930. See Grajdanzev (1942), pp. 99-101.

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471 There was still another category, a somewhat subtler one, by which
454 Japanese investment was injected into Taiwan's economy. This con-
438 sists of what might be called organizational changes, like banking facilities and the formation of stable domestic markets for disposing of produce. Many such features had been notably absent before 1895, when most commodity markets were no more than local in scope, prices fluctuated widely, interest rates were usurious, and speculation was the principal business activity. This channel of influence was often not actually separate from others; some efficiencies of this sort appeared even as by-products of other more deliberate innovations. These advantages tended to flow from relations among the modern types of business organization. Hence such benefits went to Japanese businessmen, though they often opened up subsidiary avenues to wealth for a number of Taiwanese in commerce and in service enterprises.[18]

With no significant exceptions, the growth and spread of Japanese business activity in Taiwan served primarily to introduce capital into agriculture without greatly changing the operation of individual farms. It furnished a pattern of services between the fields and the markets in Japan through which to reap the economies of modern organization, and yet ensured that most of the proceeds were reinvested on the island in a pattern determined by official decision.

The Preparations for War

656 During the early or middle 1930's the Japanese Empire began to turn toward preparations for war. The colonies were called upon to increase the measure of their contribution in other lines of production besides Empire self-sufficiency in food. Taiwan was not abundantly endowed with the heavy stuff with which the war was to be made—metallic ores were lacking, and coal deposits were not plentiful—and so it was permitted to assume some of the burden of processing materials formerly supplied to Japan as agricultural and other primary produce. This decision did not issue entirely from military or strategic considerations, since in many cases it amounted to no

[18] Chartered banks were an exception. They harnessed funds for industrial investment, and were all owned and operated by Japanese. ". . . modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese [Taiwanese] have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay." Grajdanzev (1942), p. 126.

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more than following advantages which had been obscured by the official emphasis on foodstuffs.[19] 656

A general survey of Taiwan's part in the Japanese war program is impossible to undertake here. It is nonetheless pertinent to indicate what were some of the implications of this shift for the internal administration and economic affairs of the island. The turning point cannot be dated exactly, for the decisions behind it were probably not made at any one point of time. They rather reflected a gradual reorientation of official opinion regarding the course of development that was desirable. 654

From the early years of its existence, the Government-General of Taiwan had sponsored many special corporations to finance and help to organize a limited modification of agriculture. It made more intensive use of them during the 1930's to enlarge new industries that it wanted to foster. Bank credit was made available for new investments at low fixed interest rates. Subsidies were granted widely to induce old firms to enter new fields. Corporations were spared the burden of taxes, government revenue being made up through an ingenious set of other devices.[20] Under exclusive privileges, Japanese companies were attracted to exploit rapidly many of the virgin mineral and forest resources of the island owned by the government. Business activity was hedged about with countless regulations intended to invite mergers and reduce rivalries between firms.[21]

The sugar industry was the outstanding example of government indulgence toward private corporations and its effects. A few Japanese sugar companies had made an early start, before World War I. These were favored with direct subsidies, marketing advantages in Japan and imported equipment far superior to that traditionally used by Taiwanese.[22] By keeping and improving this initial advantage, Japanese producers all but drove Taiwanese competitors out of the field. Some of them grew so quickly that they were under some compulsion to branch out into providing transportation and related

[19] Special advances were made in starting hydro-electric power output and aluminum and chemical production, however, which would probably not have progressed in any such manner except by dictation from high places.

[20] For sources of government revenue, see Grajdanzev (1942), pp. 133-137, and *Statistical Summary*, Tables 335-345.

[21] Stock dividends of corporations, for example, were limited by law. Since profits were high, large sums were forced into business expansion.

[22] An even greater prop to the industry as a whole was tariff protection in the Japanese market, whereby Japanese consumers supplied the greatest subsidy of all. Here also Japanese companies were enabled to reap the major share of the benefit, for reasons given above.

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654 services for themselves, in order to keep output in pace with their own milling capacities.[23] The industry had expanded, in fact, too 435 rapidly for its own good. It had suffered several crises, brought on by fluctuations in the demand for sugar in Japan, where its tariff preference led it to sell.[24] To "stabilize production," the important producers organized a cartel (under the Japan Sugar Association) with government permission and guidance.

Buying of cane from farmers had from the start been controlled by agreements among processing firms; the cartel opened a concerted effort to prevent cane prices from rising. The need for this step arose from the fact that sugar cane and rice both were grown in the same soils and more or less during the same seasons. In effect, the two crops competed for land. Japanese had always complained that the Taiwanese had a perverse tendency to cultivate rice when it was more profitable. Under the cartel agreements, sugar firms avoided competitive buying by strict agreements to allocate areas of cane purchase. Owing to their size and diversity, they were able to persuade many farmers to grow sugar instead of rice by withholding irrigation water from rice fields, and by making conditional cash advances to individual families.

By such means the sugar cartel accomplished what the government could never have done unaided: it ensured a steady output of sugar at fixed prices for which it would have been irrational for individual 654 farmers to produce cane.[25] Sugar acquired a place of high wartime priority as a source for industrial alcohol, and beginning in 1939 the Government-General assisted sugar concerns to construct distilleries and make alcohol on the island. Under these circumstances it is not surprising that the sugar processing industry tended to pass into fewer and fewer hands. After a merger in 1940 more than 95 per cent of the sugar in Taiwan was milled by five giant companies. Though more extreme, the history of the sugar industry was essentially that of all large-scale Japanese enterprise in Taiwan.

655 The Government-General itself began to promote industrial ex- 471 pansion during the 1930's by further participation in economic life.

[23] Privately owned and operated railroads attained a length of over half as great as the entire state system. Not all were built by sugar concerns; the largest belonged to lumber companies. Most were of narrower gauge than the main rail lines. See *Statistical Summary*, Tables 440-442.

[24] Costs were higher than in Java throughout the period, putting Taiwanese sugar at a serious handicap in markets outside Japan.

[25] The Government-General did its part to encourage sugar cultivation by putting rice paddies in a higher tax category than comparable sugar fields. And in 1939 it simply took over the entire cartel by issuing a set of detailed regulations to dictate its affairs.

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First, it controlled certain key sources of income and authority, as before, through the legal monopolies. Net receipts from these enterprises (including salt, alcohol, camphor, tobacco and opium) made up one of the largest classes of revenue. Public railroads, irrigation and generation of electricity were also government monopolies—unofficial but nonetheless actual—which were operated more for the sake of the power that could be wielded through their services than for profit. They were developed so as to assert what amounted to administrative control over the private sphere of production.

These were really little more than refinements of earlier devices. One of the important departures from previous government policy was to partake directly in more business activity. No data were ever published to show the extent of government investment side by side with that of private firms. It was thought to be at a level nearly as great as the whole private sector, but was mixed too thoroughly to be separated in any reliable fashion from the whole.[26]

Outright government holdings in corporations went beyond scattered blocs of shares in individual companies. Many of these official firms were diversified and enlarged so as to absorb parts of related fields. For example, the larger electric power companies, owned or dominated by the Government-General, helped to build the nucleus of Taiwan's metallurgy industry. Most of the wartime aluminum production was carried out by such integrated concerns. The government itself formed the Taiwan Development Company, in 1936, as a super-corporation to promote interrelated ventures of this nature. It speedily promoted a host of subsidiaries strategic for the war program.[27] Besides all of these extraordinary activities, the regular budgetary expenditures of the Government-General leaned increasingly toward injecting new state services into the economy, and probably contributed thereby to the inflation later in the war.[28]

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[26] Certain tables have been quoted many times that purport to show the amounts of these investments (see OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement*, 1944, pp. 97-98). We shall not reproduce them here, for none of the published data on corporate investment are very trustworthy. The publications never stated what criteria were imposed in their collection, and so it is impossible to know exactly what they represent in any given instance. They conceal the weight of government as opposed to private corporate holdings, and do not differentiate between large holding companies and their subsidiaries.

[27] Incomplete data on some of the known holdings of this and other of the larger firms are given in the OPNAV Civil Affairs Handbook, *Taiwan—Economic Supplement*, Appendix, p. 86 ff. Through omissions, these figures are known to understate grossly the extent of corporate concentration.

[28] These services stretched from research grants to larger funds allocated directly for new subsidies of business. *Ibid.*, p. 59.

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"ECONOMIC DEVELOPMENT" IN TAIWAN

Industrial Growth during the War

722 After setting the stage for limited industrialization by their treatment of large business in Taiwan, Japanese leaders after 1940 began actively to move the players. The centralized corporate structure had been expected to be adequate preparation for most of the demands of war. The Government-General made frantic last-minute attempts to expand specific fields in which Japan itself was short, particularly aluminum and coal. But before long the subordination of Taiwan's economy to heavy industry in Japan, which had seemed so satisfactory, turned out to be a source of weakness. Naval losses started to interfere with shipping between Japan and Taiwan. Many of the small but essential items supplied from the home islands (special equipment, replacement parts, fuels, and skills) became unobtainable. Certain large imports such as fertilizer were cut off.

None of these shortages was fundamentally important for the island itself, since food was sufficient for its population and little else had previously been imported. Lack of articles of the first sort did play havoc with some of the new industrial output, and caused much of the equipment to deteriorate. Exports of aluminum and coal slowed down to a trickle by 1944, and practically all shipping to Japan—even rice and sugar—was discontinued early in 1945.[29] By the time of Japan's surrender much of the highly organized economic life had come to a stop, but Taiwan suffered no devastating damage as a result of the war. Agriculture was still conducted as usual, except that without fertilizer and other accustomed capital the yields had fallen off substantially.

Accomplishments of Japanese Colonial Policies

648 659 Having described the workings of colonial administration in Taiwan, one should have some idea of its accomplishments before going on to discuss in later chapters its consequences in the lives of the Taiwanese. For this purpose, the abundance of records kept by the Japanese is often a hindrance rather than a help. In general the economic statistics are not up to the standards of the population data. Numerical tables are plentiful, but explanations of what the numbers mean are not. They disagree from source to source, seldom with any reason given for the discrepancies. One must therefore look for summarizing measures, and not for fine detail.

[29] See Cohen, J. (1949), pp. 154-156.

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The most efficient view of total changes in the island's economy is by reference to its statistics of trade. As indicated above (Table 4), 1 Japan succeeded in securing practically all of Taiwan's external trade to itself, if exports to Korea are counted. During the 1930's even traffic with China, just across the Straits, was almost eliminated.

Compared with a wide range of other Far Eastern countries, Taiwan under the Japanese came to hold a surprisingly high rank in the value of trade per person. At its peak shortly before 1940, the total per capita value of its trade was well above even that of Japan (see Table 5). Since this rank was attained under peculiar conditions,

TABLE 5
ESTIMATED PER CAPITA VALUE OF FOREIGN TRADE
OF FAR EASTERN COUNTRIES
CIRCA 1939*
(Expressed in U.S. Dollar Equivalents)

Country	*Year*	*Imports*	*Exports*	*Total*
New Zealand	1939	109	127	236
British Malaya	1939	61	72	133
Australia	1938–39	67	64	131
TAIWAN	1937	16	23	39
Korea	1939	15	11	26
Japan Proper	1939	10	13	23
Philippine Islands	1939	8	10	18
Burma	1938–39	5	12	17
Netherlands East Indies	1939	4	6	10
Thailand	1938–39	4	5	9
French Indo-China	1937	3	4	7
China	1939	0.85	0.25	1

* As reproduced in OPNAV, Civil Affairs Handbook. *Taiwan—Economic Supplement* (1944), p. 73.
Source: Far Eastern Unit, Bureau of Foreign and Domestic Commerce, U.S. Department of Commerce.

however, it does not mark Taiwan as an especially "advanced" area (in the sense of supporting bountiful levels of living) except by reference to the Japanese residents in the island.

Taiwan's position in trade with the outside world was created by heavy and increasing exports of a few products, mainly crops sent abroad in only slightly processed state. Compared with what took place in Taiwan's business and financial communities, there was remarkably little shift in the composition of its agricultural output 241 433

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241 433 (see Fig. 4). Together sugar and rice never lost their dominant position in the value of all crops produced. Despite some greater emphasis on finished sugar as a source of alcohol, the cane harvests gained very little in value over rice, even when the expansion of manufactures after 1935 would seem to have made this likely. In these terms sweet potatoes, which were always prominent in the Taiwanese diet, kept nearly a constant share of the total.

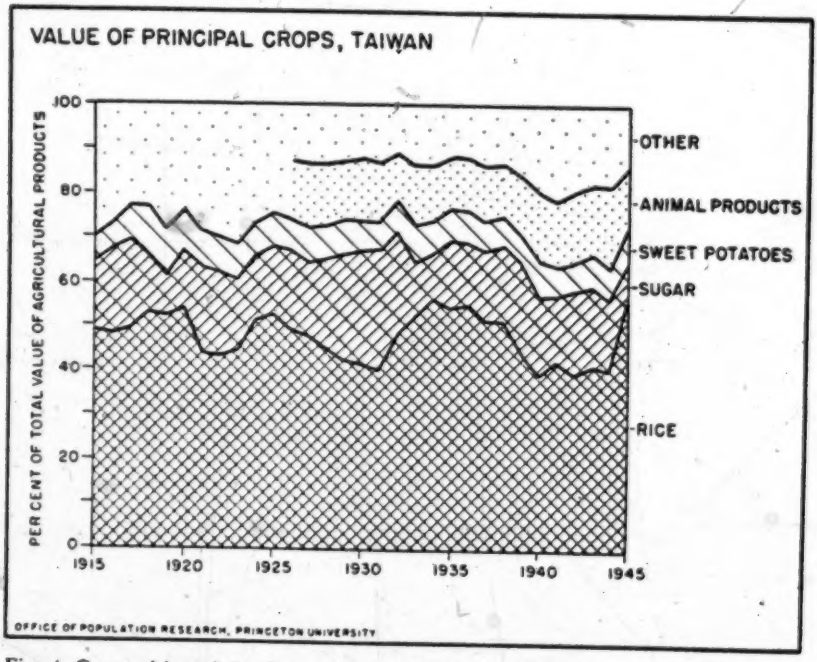

Fig. 4. Composition of the Gross Value of Total Agricultural Production, Principal Crops of Taiwan, 1915-1945.

Japanese promoted certain specialty crops, such as bananas and pineapples. These never occupied a large share in the total output of agriculture, but they more than kept pace with trends in the major crops (accounting for some of the change in the proportion of "other" products in Fig. 4). Together with tea, these crops made use of land not suitable for rice or sugar, and became important supplements to the total agricultural output. The Japanese encouraged such products by providing assured markets and technical supervision in their cultivation, and built canneries to process pineapples for export.

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The various staple and other crops that made up the bulk of Taiwan's agriculture eventually became distributed in a stable spatial pattern over the island. Sugar predominated over a large area in the Southwest, where it displaced rice in most of the land within the major public irrigation system. Tea in the North, and other specialty crops in the center, occupied some of the inland and foothill sections.[30] But it is important to note that rice culture, particularly in small paddy fields, overlapped with all other crops that were raised on the broad plain of Taiwan, and the labor-intensive and traditional farming practices associated with it have continued to be spread throughout Taiwanese agriculture down to the present.[31]

The exports of staple crops would not have risen as they did unless the yields of crops did the same. Gains in rice yields from the land did not come at once. They followed almost 20 years of painstaking experiment, starting in 1906, to find a strain of seed that could thrive under conditions in Taiwan. Almost no improvement was made until the so-called *horai* variety was successfully adapted from Japan. Following its introduction the average yields per hectare for all varieties gradually rose as much as one-fourth, primarily by growth of the area devoted to *horai* rice and the special techniques used in its cultivation. Neither the *horai* nor the native strains were greatly improved in yield thereafter; in fact, it appears that *horai* declined slightly from its high performance at the start as it spread to land less favorable than the experimental farms where it was first grown (see Table 6).

Systematic irrigation was one of the measures that raised the yields of land. Between 1930 and 1936 a few projects were carried out, by the government and by private companies, to introduce controlled amounts of water into lands that previously had been cultivated as dry fields. To illustrate approximately the trend of these events, Fig. 5 shows the changes in the area of land in paddy cultivation and that in dry fields. (Paddy land does not correspond exactly with the land that is irrigated on a large scale, for there were many paddy fields not included in these projects.) Since the total area cultivated was increased over these years, it is possible that the irrigation projects brought some land into cultivation that was formerly idle. More, however, was merely converted from dry to wet cultivation (see Fig. 5).

[30] See Ch'en Cheng-hsiang, *Atlas* (1950), Fig. 161.
[31] *Ibid.*, Fig. 70.

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TABLE 6

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IMPROVEMENT IN THE YIELDS OF RICE IN TAIWAN, 1916 TO 1945

Average Yields of Different Strains in Each Year, First and Second Crops Combined (Hectoliters of Rice per Hectare)*

Years	*All Rice*	*Horai Rice*	*Other Strains*	*Per Cent of Rice Land Devoted to Horai*
1916-20	17.8	—	20.1	—
1921-25	19.3	28.5	19.3	4.6
1926-30	20.9	22.7	20.4	19.9
1931-35	23.0	27.2	21.3	33.7
1936-40	25.5	28.2	23.2	47.3
1941-45	21.6	22.7	19.7	59.8

* Crop statistics in Taiwan were not kept in metric units. Figures in the *Statistical Summary of Taiwan* were all converted before publication.
Source: *Statistical Summary*, Table 203.

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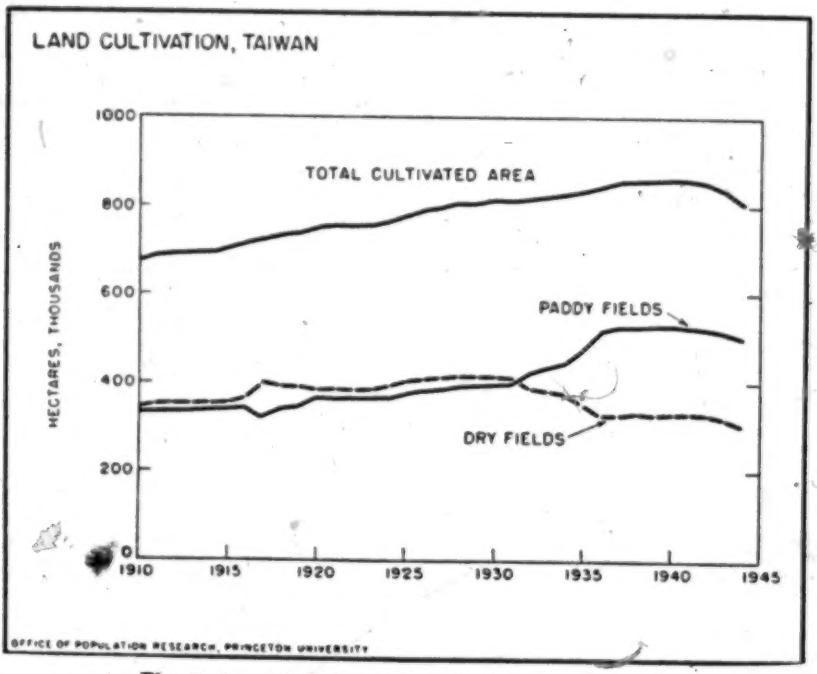

Fig. 5. Area of Cultivated Land, Taiwan, 1910-1944.

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Land that was improved in this manner not only yielded more at each harvest: over a third of the paddy land yielded more than one harvest each year. Under schemes for rotation and inter-cropping devised by the Japanese, it was not unusual to take three separate harvests from many of these fields in a year. 244 433

The labor of preparing the land, of weeding, and of harvesting was not saved by these changes. They may have involved some net additions—irrigation became a more complicated process in some cases, and the aqueducts for transporting the water required special maintenance. Japanese were aware that the soil could not be farmed more intensively without losing some of its fertility, and encouraged the use of commercial fertilizers, much of which they required to be prepared on the island. The remainder comprised the largest single category of Taiwan's capital imports, greater in value than the iron and steel and machinery which are sometimes identified with the needs of agrarian countries. Importing fertilizers for sale in Taiwan proved to be a profitable line of business; it was reported to be firmly in the hands of a few large Japanese concerns, a fact which should occasion no surprise. It was shortage of fertilizers that brought on declines in average yields of crops after 1940 (see Table 6, above). [427] [471]

The shift in official plans for Taiwan after 1930 leads one to look for some indication of results in the composition of Taiwan's products. The search is not very rewarding. In terms of gross value of product, agriculture did not lose its place as the foremost line of production until 1940 and later. Then it exchanged ranks with "Industry"—because farm produce fell off momentarily rather than because of any sharp rise in manufacturing (see Table 7).[32] The steady but slow decline in the share of agricultural production in earlier years had indicated a tendency to submit more of the agricultural produce to processing before it left the island, and not a shift from farming to manufacturing. 433

It is when the category of "industrial" production is examined in detail that some of the more recent trends emerge. In Table 8, evidently industry in Taiwan had always been centered around food products. Until the mid-'thirties these had amounted to three-quarters of the value of all manufactures. Only from then on did the effects of new economic goals begin to appear. The largest advances were made in some of the fields that had been smallest, espe-

[32] The sharp rise in the numbers of Table 7 was largely a matter of currency inflation.

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TABLE 7

GROSS RECORDED VALUE OF ALL PRINCIPAL TYPES OF PRODUCTION, 1915-1942

(Yearly Average for Each Period)

Years	*Total*	*Agriculture*	*Mining*	*Fishing and Forestry*	*Industry*
A. Millions of Yen:					
1915-19	262.7	144.5	7.2	9.1	101.9
1920-24	411.5	207.0	12.0	23.0	169.5
1925-29	559.0	293.6	16.8	31.8	216.8
1930-34	525.5	255.8	15.5	26.5	227.7
1935-39	901.0	432.9	39.6	41.5	387.0
1940-42	1388.4	576.4	62.8	91.8	657.4
B. Percentages of Total:					
1915-19	100.0	55.0	2.8	3.4	38.8
1920-24	100.0	50.3	2.9	5.6	41.2
1925-29	100.0	52.5	3.0	5.7	38.8
1930-34	100.0	48.7	3.0	5.0	43.3
1935-39	100.0	48.0	4.4	4.6	43.0
1940-42	100.0	41.5	4.5	6.6	47.4

Source: *Statistical Summary*, Tables 225-229.

TABLE 8

GROSS VALUE OF PRODUCTION RECORDED FOR "INDUSTRY" IN TAIWAN, BY LINE OF PRODUCT, 1921-1942

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(Yearly Average for Each Period)

Years	*Total*	*Textiles*	*Metal Products*	*Machinery & Equip.*	*Misc.**	*Chemical Products*	*Food Products*
A. Millions of Yen:							
1921-24	165	3	3	4	20	13	122
1925-29	217	3	4	5	32	20	153
1930-34	228	3	6	5	29	18	167
1935-39	387	6	17	12	45	38	269
1940-42	664	11	46	30	91	80	406
B. Percentages of Total:							
1921-24	100.0	1.7	1.9	2.1	11.9	7.9	74.6
1925-29	100.0	1.5	2.0	2.2	14.7	9.3	70.3
1930-34	100.0	1.1	2.5	2.3	12.9	7.8	73.3
1935-39	100.0	1.5	4.5	3.1	11.6	9.9	69.4
1940-42	100.0	1.7	7.0	4.5	13.7	12.1	61.0

* Includes Printing, Wood Products, Ceramics, and Other.
Source: *Statistical Summary*, Table 269 and Table 270.

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cially in chemical and metal manufacturing; their expansion did not have an appreciable effect in the production of all the island. 433

In other words, in spite of its expansion, industrial production had only begun to make headway in relation to agricultural output. Before 1940, manufactured commodities were still subordinate to Taiwan's farm products (and did not amount to much beyond processed sugar). Afterwards the Japanese did not have enough time to marshal the island's resources effectively in industry. We know this was not because they failed to make an effort—it was because they started too late.

Certain types of heavy investment had received their close attention ever since earlier years. Railway construction, for example, was pushed forward with enthusiasm from the very first. The time schedule of progress in expanding the public railroads was far ahead of their actual utilization (see Fig. 6). This was an investment which 655 499

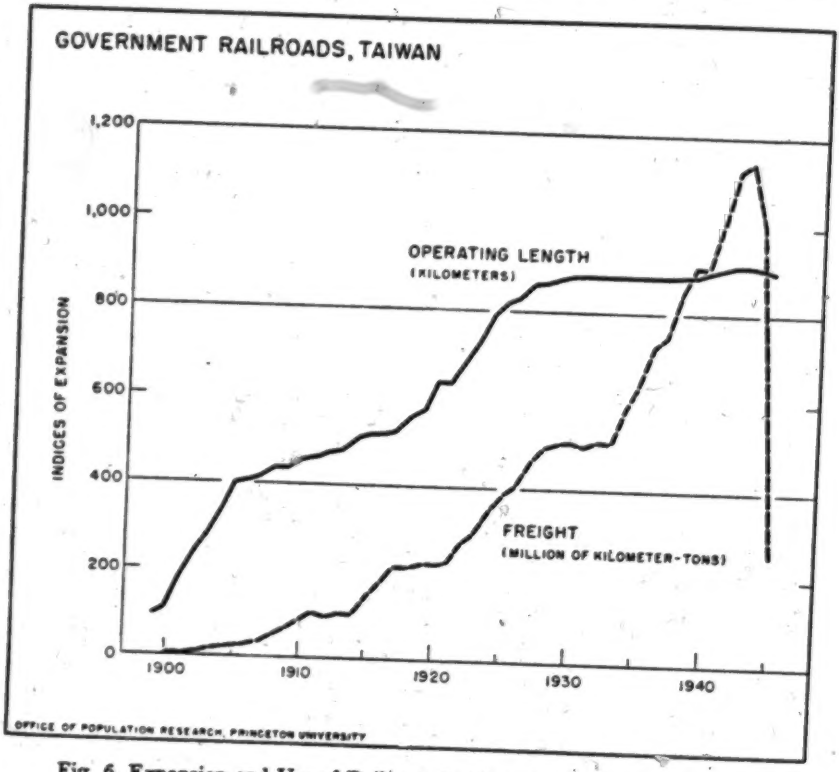

Fig. 6. Expansion and Use of Railroad Facilities in Taiwan, 1900-1945.

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the Japanese undertook primarily in anticipation of long-term benefit, without being able to justify its initial cost for many years. In terms of kilometer-tons of freight carried, the railroad made only partial use of its physical facilities until late in the colony's existence.[33] This sort of schedule was also followed in establishing a system of improved roads and trails over the island. In both cases, Japanese had to bear the burden of ambitious engineering projects when they could least afford it, for basic transportation networks are more valuable as networks than they are piecemeal.

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Public irrigation was a project closely tied to agriculture, and followed a different timetable (see Fig. 7). After 1895 there was no large

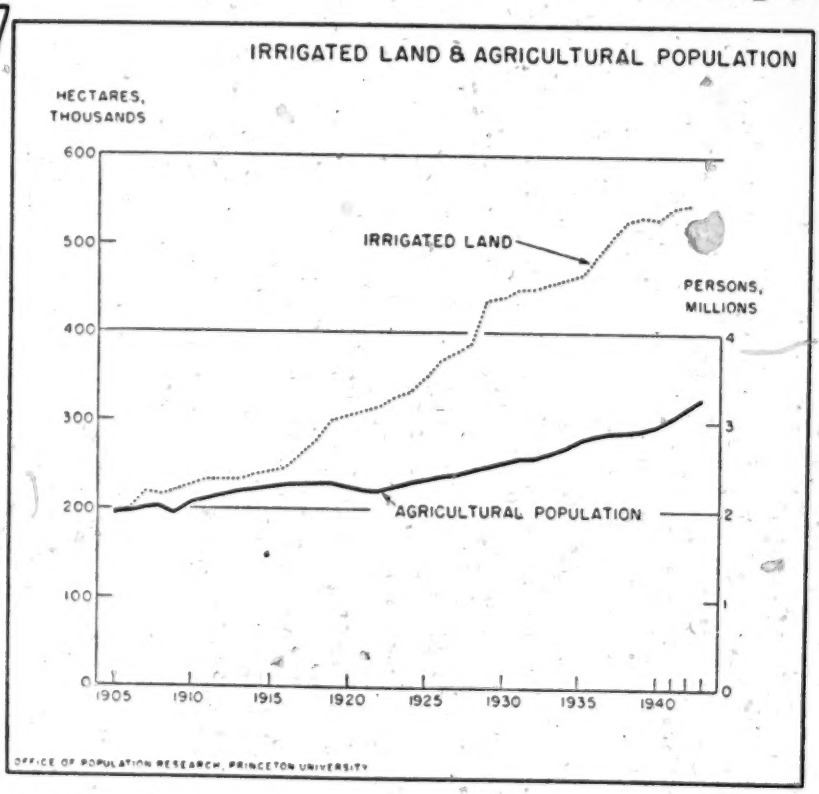

Fig. 7. Expansion of Irrigation and Agricultural Population in Taiwan, 1905-1943.

[33] Then it suddenly became overtaxed with cargo connected with the war, stemming from industrial growth and from Taiwan's role as a military base. See OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement* (1944), p. 60.

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supply of unoccupied land in Taiwan that could be drawn into cultivation, and so the needs of an expanding farming population and growing export demand had to be met by other means. The Japanese turned again to large investment to improve the effectiveness of the land that there was. The manner of constructing and upkeep of irrigation canals in Taiwan depended on mass labor. They were turned into an investment of labor, employed so as to produce an important form of capital equipment. The extent of irrigation more than kept pace with rural population growth while the Japanese were in control. Water for this purpose became indispensable in maintaining the output of farms. It was a hidden element in the improvement of rice and sugar yields, for the new varieties of seed that were developed were types that needed to be carefully irrigated.

Finally, the development of electric power was so closely related to the growth of Taiwan's newer industries that it should not be passed over without mention. Generation of electricity was one of the specialized heavy investments that formed the nucleus of the "industrial" progress after 1930. This is evident in a circumstantial way from the trends of capacity in generating power and the spread of factory employment (see Fig. 8). Factories in Taiwan came to depend on the cheap electricity that was developed at state instigation from water power. Judged from the size of their employment, the most important of the mechanized factories in the island were "food" (i.e., sugar) and metallurgical plants, which were the heaviest users of electricity.

As the next chapter will indicate, the Japanese broadened their objectives in Taiwan too late to put its human resources to best use in the new effort. Drawing the developed wealth of the island together into centralized control had turned out to be singularly advantageous. It had erected an entire structure of corporate organization from specialized financial services down to the coordinating of actual physical production of commodities. The Government-General had retained a close supervision over this structure, by licensing, regulation, and participation as a shareholder. As a program, it quickly marshalled the production of Taiwan's farms into a profitable colonial enterprise.

When it came to pressing this development further, however, the Japanese made no real progress, for they had frustrated these aims in advance. Under agrarian conditions, industrial skills and experience in management are slower and more difficult to accumulate

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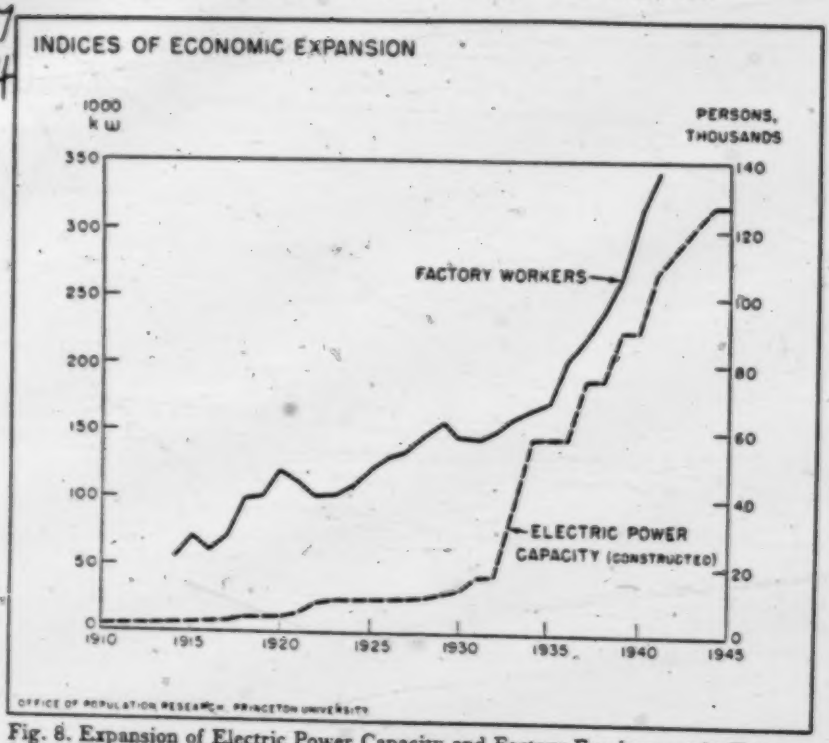

Fig. 8. Expansion of Electric Power Capacity and Factory Employment in Taiwan, 1910-1945.

471 than material forms of capital. Japanese in the past had never cul-
433 tivated an adequate fund of these among the Taiwanese. The same mechanisms which had served so well in channeling a large part of the total product each year toward desired uses had suppressed any opportunities for industrial employment that might attract Taiwanese who had administrative skills. What the Japanese themselves referred to as the "industrialization of Taiwan" was nothing but a corporate superstructure placed on an agrarian base. This was not capable of diffusing an industrial culture thoroughly among the general population, because it had been devised to prevent this very thing.

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CHAPTER III

Economic Activities and Social Change

THE activities, interests, and aspirations of the Japanese community in Taiwan were things that existed apart from the indigenous population. These elements were never effectively communicated to the Taiwanese—partly through a design to withhold them, and partly through reluctance among the people of Taiwan to accept them. Consequently the conduct of Japanese residents is not of much help in understanding the accustomed modes of life among the island's people. It is the latter problem that has the more interest for demography, and makes it essential to consider the background of social order in Taiwan and the changes under colonial rule.

The Early Agrarian Order in Taiwan

The importance of agricultural pursuits in imposing a predominantly agrarian character on a society is not a thing that can be precisely measured. Short of perfect exactitude, a great deal can be learned with lesser devices, by describing the cultural setting of agriculture in Taiwan, and pointing out how it influenced the participation by Taiwanese in the island's economy. The basis of this setting lay in the conditions that prevailed before Taiwan became a colony of Japan.

By the mid-19th century, the lowland region of Taiwan was rapidly becoming fully settled. Piracy, which had made Taiwan a scourge to sea traffic along the China coast, gradually subsided into sedentary agriculture. Most of the Chinese population was already supporting itself by farming and the marketing of farm products. Since 1700 immigration had brought in a steady stream of Chinese from the mainland. In spite of sporadic prohibitions, hundreds of thousands of peasant farmers came to seek refuge from rural poverty in South China. Once arrived, they often reverted to this same condition, by reaching unfavorable terms with some of their countrymen already entrenched there as land speculators.

Poverty tended to reproduce itself among those who reached Taiwan, though there was also great wealth open to the few who rose from cultivation to commerce. Each settled family held an advantage over newcomers. This superior position placed new migrants in

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167 some competition for the more desirable lands near the coast. In order to maintain their accustomed manner of farming, many were 563 forced to move inland, where they gradually dispossessed aborigines and the earlier Hakka settlers and pushed eventually to the foothills 423 of the interior. These many-sided conflicts of interest gave rise to land tenures more complicated than those usually found in China. The result was a set of property customs that was to become confused and encumbering in later years.[1]

With agrarian land tenures, however, it is all too easy to mistake form for substance. The system of land tenures in Taiwan gained several features that are distinctive to itself, arising to incorporate new parties into an old system—the aborigines who first occupied the area, and Chinese who acquired land titles to profit from the arrival of immigrants. But, since these landed property relationships are of little interest to us from an antiquarian point of view, their lasting effects are more important: they contributed to a form of village organization that survived through the entire Japanese occupation down to the present.

(3) The flow of migrants is remarkable in that it populated Taiwan, with little variation over the years, closely after the model of the South China coastal area.[2] The resemblance to the mainland went beyond forms of settlement and land utilization. Politically, under Manchu control the island was supposed to be assimilated into the administration of the rest of China. It was governed as a regular political division—first as a prefecture of Fukien and later as a province itself—by officials appointed directly from Peking.

177 Taiwan inevitably presented special problems of control. In the first place, it could be separated from easy communication with the continent; eventually it grew almost as accessible to the Western powers as to Peking. The device most relied upon to tie the area to China was a weak one. The authorities tried, futilely, to isolate it from all external contact. From time to time, they went as far as to restrict the entry of Chinese from across the Straits, though even this had little success.

[1] See Ch'en Cheng-hsiang (1950), pp. 41-43, and Kawada, Shiro (1928).

[2] The instances of alleged "radical transformation" of land tenures (Kawada, Shiro [December 1928], p. 88) were primarily fiscal measures to reassert the central government's share in revenues from the land. Such reforms often are superficial from the standpoint of village organization. By way of illustration, one of the early official acts of the Japanese in Taiwan was to sweep away a whole section of these archaic land titles. While these reforms cleared the way to regulate rural areas from outside, they scarcely made an impression on property relations within the villages.

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Furthermore, higher officials were themselves aliens, responsible ultimately to the Manchu court. Their tenure depended on their standing in Peking. Special competence or energy in office was not an advantage—it could even be dangerous, by making them targets of rumor and innuendo. Careers were sometimes ruined on the suspicion that certain officials had separatist leanings or were friendly to foreigners. Personnel were transferred regularly, as in China, to remove them from temptations of familiarity with their offices. Their only safe path to success was to maintain stability in local affairs, and somehow to prevent civil discontent from turning into civil disturbance. 631

This system was calculated to engross its key officers in their personal relations with Peking. It proved to be more effective in ensuring loyalty than in promoting careful government or preventing corruption. There were few deterrents to peculation in office, which was respectable if prudently pursued, and surrounded by many opportunities—such as legal monopolies and illicit export trade—not present in China itself.

These limited and negative objectives of government invited continual lapses of internal rule. Being unfamiliar with local conditions, officials simply did not govern in rural villages. Throughout the countryside they kept the peace by intrigue with powerful families rather than through actual administration—families that relied heavily on property obligations among the peasantry to uphold their influence. The situation put a strain on the administration's own underpinnings, and led to severity in abuses and civil strife to which the mainland itself was unaccustomed. It is a testimony to the serviceability of traditional Chinese institutions that they survived this test. 631 621

Whatever its internal shortcomings, this scheme of political order was well suited to rebuff foreigners, at least foreigners whose advances were not backed by force. Acute frustration among the Western commercial agents in Taiwan stands as evidence that it was accomplishing this part of its purpose. They complained bitterly that officials had connived at Taiwanese violence against Europeans and had even incited such incidents.[8] 439 177

The best information available about Taiwan's external contacts is contained in the published reminiscences and travel accounts of foreign trading representatives. The literary interests of these men throw light on the main preoccupation of their trading activities.

[8] For example, see Pickering, W. A. (1898), Ch. 17.

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439 Though their books have a wealth of illuminating anecdotes about
177 the export trade, they provide almost no observations of any value about the ordinary affairs of the population. One might imagine from reading such sources that everyone in Taiwan was engaged in foreign commerce or some form of government service.[4]

These informants were, up to a point, honest men. They were not trying to mislead, and deserve credit for considerable acuteness and sincerity. The most likely reason for their failure to inform us about the Taiwanese is that they never had a chance to find out for themselves. Western merchants simply had no occasion to form more than special business associations with Taiwanese. Practically all of their transactions were conducted by contract merchants ("compradors") as middlemen. Foreigners not infrequently made efforts to interfere in internal affairs, but these all arose over specific issues. They were attempts to make the social order more nearly serve their ends, not to alter it.

As in China, trading relations carried on in this manner did not further the exchange of ideas along with commodities. They were contrived so as to minimize such interchange. This mutual aloofness worked both ways: it enabled outsiders to get along in ignorance of conditions prevailing in the island, and at the same time shielded the general population from contact with the outside world. Foreign commerce, the foremost potential channel for innovation until the conquest by Japan, was severely circumscribed by seclusiveness of the parties on both sides.

177 The reasons for this isolation are not all to be found in the hos-
438 tility of officials or in the provincialism of Westerners. The foreigners were eager to obtrude their presence further into foreign trade, even if only on their own terms. Government officers were too inept as administrators, their conduct too deeply undermined by directives from above, to succeed in stifling any positive tendencies toward change if such had arisen. The real bulwark of conservatism behind

[4] These authors made better traders than ethnographers. They often did not go beyond expressing impatience that Taiwanese should not follow 19th century English trading conventions. The best and most comprehensive of these works (Davidson, James W. [1903]), out of a total of 34 chapters, devoted only a single superficial one to "The Inhabitants of Formosa," where the author did little more than describe the aborigines. The apparent exceptions prove the rule. If good material about those Taiwanese of Chinese origin is scarce, books about the aborigines of the interior (of varying quality) are not. Few Westerners penetrated to the dangerous mountain regions of Taiwan, but all of them developed immense curiosity about the customs of these "savages," which was not held toward the Chinese. See, for example, the titles in Takekoshi, Yosaburo (1907), pp. 321-342.

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this nominal government policy existed within Taiwan's rural villages. The bulk of the population was made up of peasant farmers and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands.

The rural population led a settled existence. Taiwan being a small area, travel between places was not uncommon, but it was rare for families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island.

Local stability fostered local solidarities. The inconvenience of communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6]

Property institutions helped to buttress the stability in these small communities. In Taiwan, as in China, land ownership was the only durable form that substantial wealth could take. It was durable

[5] Takekoshi, Yosaburo (1907), pp. [illegible] and [illegible].

[6] The turbulent history of Taiwan has been carelessly represented as one of indiscriminate civil disorder, its early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

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423 against climate and short-term deterioration in use, against destruction through violence, and against decline in the income that it pro-
556 duced. Since the farming population was increasing within a fairly
631 definite area, it had additional value in speculation. Land was also relatively safe against confiscation by the government; not only could its ownership be hidden from casual inspection, but the government itself depended on the obligations owed to landlords by tenants to uphold its authority. Under agrarian conditions of farming on a small scale it is impossible to cultivate large holdings of land under a single management. Hence, the only way to amass large wealth is to become a landlord—beyond some point, necessarily an absentee landlord. In early Taiwan, considerable concentration of landholdings was reported. Ownership tended to gravitate into the control of large and powerful families, whose influence was the only recourse of government officials in asserting their rule.[7]

565 On the economic side, this concentration of wealth was not given
426 a chance to develop into industrial-type investment. The landed gentry, often landed on considerable scale, were the only group of
427 persons who had access to sufficient income to become capitalists.[8] Practically, however, it proved more secure and profitable to let out their lands to tenant farmers. When they branched out into different enterprises, it was as an adjunct to their status as gentry. In South Taiwan, for example,

> ". . . sugar was manufactured from the cane grown upon the owners' plantations, or from that brought from elsewhere. The cane was grown by the tenants, or by those who through being heavily indebted to the landowner stood in the same relation as retainers . . . under it [this system] the master of the sugar factory secures a threefold profit.
>
> 1. As landlord, he claims from his tenants from 15 per cent. to 20 per cent. of the cane as rent.

[7] One might suspect that, as in China, members of these families *were* the officials at lower levels of administration. But there is no direct evidence on this point, aside from frequent references to the fact that *clan* solidarity, imported to Taiwan by the migrants from South China, was one of the few bases for organizing any kind of joint action by Taiwanese on a large scale.

[8] The government was unable to fill such a role itself for reasons already noted. Officials, who were not permanent fixtures in Taiwan, confined their acquisitive energies to foreign commerce, where returns were quicker and they did not need to make long-term commitments. For example, it is significant that the government almost never operated its own monopolies, but let them out to many private agents and taxed the products as they were exported.

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2. As capitalist, he secures 14 per cent. to 24 per cent. interest on all the money he may have loaned to his tenant. 565
3. In order to cover the running expenses of the sugar factory he, as master, appropriates half the cane brought in by his tenants. 426 427

"These vast profits leave very little for the poor tenants, who have therefore no means of improving the soil, but fall deeper into debt, until at length they become mere slaves of the sugar factor. This system has proved the greatest hindrance to the growth of the business."[9]

Establishment of Japanese Authority

Japan's objectives in enlarging its Empire required a more energetic administration. With the background of past failures, it is understandable that the Japanese who first arrived in Taiwan met difficulty in trying to impose this kind of rule. It quickly became evident that neither profit nor political dominion was assured to them without some extraordinary measures. 177 631

Japanese first installed themselves in economic life exactly where outsiders had done so in the past—at the periphery of traditional marketing and property relations. They remained most active, as we have seen, outside the realm of agriculture proper. Through their steps in gaining access to the old agrarian institutions, we can now begin to see how far these changes impinged on agriculture itself. The Japanese did not proceed by sheer force, nor simply in a form of "economic penetration." The control was made effective by wedding the two channels—business and government—and by manipulating the pre-existing situation from a few vantage points at the outside. To make a success of this endeavor, the Japanese found it expedient to leave much of this rural social structure almost intact, and turn its basic features to their own account.

Histories of Taiwan over this period usually emphasize only the opposition to the new government that was overt and armed. But it was not by military conquest that the Japanese eventually secured the lowland area of the island. The military aspect was over quickly. Organized resistance collapsed by the end of 1895. Within a year or so after formally taking possession, Japanese became aware that direct attempts to alter the old rural state of affairs were too costly and slow, and were ineffectual against guerrilla bands that had wide-

[9] Takekoshi, Yosaburo (1907), p. 243.

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spread local support. Their program to govern the countryside directly was a recognized failure as early as 1898.[10]

Starting with the issuance of *pao-chia* regulations in that year, the policy was revised with a view to getting less ambitious results, but more quickly. These were rules of conduct imposed on inhabitants of villages and smaller towns, under the threat of punitive action against the whole community. Virtually all Taiwanese outside the Aborigine Territory (with special provisions applying to certain cities) were assigned to household groups (*chia*), which were in turn grouped into village units (*pao*) for supervision. Responsibility for law observance and public order was allotted jointly among the households of each village. Positions of authority, carrying explicitly defined duties, were conferred on heads of prominent (i.e., wealthy and influential) families.

The system was based on a shrewd practical knowledge of those customary obligations that were most binding among Taiwanese. It was a move toward fitting the treatment of opposition to its roots instead of to its symptoms. By making the regulation of villages follow lines of kinship and property, these measures in effect were insinuated into the indigenous social structure of the population.

The rules placed a multitude of specific duties upon each *chia* as a group. The *chia*, through its head, was responsible for reporting all events such as births and deaths occurring within it, for reporting and controlling all movements of persons in and out of its area along with the conduct of the permanent residents; it put into effect the earnest health and sanitation rules that were often promulgated; it mobilized labor from its ranks for road-building and irrigation projects as directed from above; it was required to disseminate instructions for crop improvement and soil maintenance, bearing its own expenses; it supplied men for auxiliary police service, supported its own school facilities, assessed fines among its members, collected many taxes, and could be called upon to enforce additional rules decreed by prefectural governors.[11] These latter features in fact proved so attractive in avoiding the costs of more formal administration that the Japanese kept the regulations in full force throughout the entire span of their rule.

[10] Yanaihara, Tadao (1929), pp. 220-223.

[11] See OPNAV, Civil Affairs Handbook, *Takao Province* (1944), pp. 49-51; also Hsü Tzu-wei (1946), p. 160 ff. This latter author calls the *pao-chia* system "the most effective instrument for destroying organized Chinese resistance to the Japanese."

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The arrangement had more than savings in the expenses of civil government to recommend it. It gave the new regime a channel of authority reaching into every village, however small. Perceiving the value of this, the Japanese took care not to let the system lapse through neglect. They kept a close watch over its functioning by means of a large and reliable force of their own police. More important, by insisting on rigorous enforcement of the regulations, they launched the *pao-chia* organization into full-scale and sustained operation from the beginning.[12] With the supervision of a trusted constabulary, it functioned through the medium of prior obligations and loyalties that were already present in every community, without the need to nurture affection for the central regime among the population.

Such a system—when it works—is a most efficient way of maintaining peace and order in a society already strongly bound by local custom. The Japanese originally adopted it as an improvement over the use of force, but never abandoned coercion in its operation. They merely utilized the structure of *pao* and *chia* to apply sanctions against wrongdoing more selectively and less frequently. Penalties fell on those persons in positions to exercise a deterrent influence on others.

As a further by-product, the refined coercive aspect helped to lessen the rewards that had to be granted for Taiwanese collaboration. This was important, for in rural areas such a form of control lends itself readily to keeping the avenues to individual betterment within an accustomed scope.[13] The impressive agricultural improve-

[12] A system like this one can function only where there are strong local solidarities. It turns communities into separate compartments for administration. This fact may be responsible for some of its success in maintaining order, for it inhibits organized opposition to established government from growing to any large scale. But the considerable success of the *pao-chia* system in Japanese hands cannot be accounted for by these divisive effects. They were also present in Nationalist and Imperial China, and there only helped to divide the society so far that no central administration was possible.

The essential difference was that in Taiwan the Japanese adopted it as an opportunity not for avoiding local government, but for effectuating central control over local affairs. Besides using it to enforce a minimum degree of legal conformity, they intermixed a host of other functions already alluded to. In addition, the Japanese incorporated a regular scheme of favors to be bestowed on active collaborators, in the nature of education, business opportunity, and appointment to government posts, and thus by-passed the usual effect of family connections in filling lower positions of authority.

[13] In later years many educated Taiwanese protested, and correctly so, that it worked as a levelling mechanism to impede all of them from rising very far above the status of peasants. In order to serve a central government at all, and not be merely a loose alliance of towns and villages, such a system must offer inducements to a gentry class for cooperation: this complaint by frustrated persons with schooling should properly be

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632 621 ments, health program, and construction for public works all depended on generous amounts of labor. Without such cheap incentives to mobilize this labor, these projects could not have been pursued so effectively.

As obvious as these advantages of "indirect rule" may be, it should be as clear that it is a poor vehicle for introducing social change. The more it is used to wield authority, the stronger and more resistant to change it can become; the more it is undermined by altering local relationships that sustain it, the less remains of its usefulness. Hence, from adoption of this scheme initially as an expedient to "pacify" the island, Japanese authorities acquired a positive interest in preserving the same set of agrarian institutions that had existed in Taiwan before their arrival.

Thus they abandoned the idea of reorganizing the rural society—primarily because they tried and failed, but also because as it stood it gave them the best access to regulation of the agricultural population and farming practices. It was in some respects a ready-made instrument for exerting the necessary control with the least disturbance of customary affairs, having in the past enabled the various parties to the export trade to prosper at the expense of farmers. For better coordination of their policies, Japanese gradually did erect a more formal type of government administration, but the basis of the system in rural areas was not greatly affected by this modification.

The Impact of Improvements in Agriculture

185 The Japanese who were charged with remodeling Taiwan's economy gave first priority to long-range investments around the fringes of agriculture. The rural economy was already geared to exchange food and related products for special capital services. Certain of these services were soon altered under Japanese influence. Positions that provided them, or that could usurp them, gradually began to be occupied by Japanese nationals—official, private, and always an indistinct class in between that wielded quasi-official sanctions.

Those innovations that worked their way into agriculture were 311 directed chiefly to raising crop yields per unit of tilled land. Another 242 avenue of increasing the total agricultural product was by extending

construed as a lament that there were few opportunities for advancement outside the rural villages and towns dominated by petty gentry. Discontent from this source bore few signs of being the awakening of a popular movement for independence among the Taiwanese, as it is sometimes represented. See Hsu Tze-wei (1946), p. 161 ff.

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the land area that yielded crops. From 34.2 per cent of all "level" land (under 500 meters elevation) in 1910, this area cultivated was raised to 43.7 per cent by 1940. The *effective* crop area was extended still further by irrigation, terracing and careful crop rotation. Irrigation converted many dry fields into paddy fields, as we found in the previous chapter. Improvement in irrigation made more of the paddy fields yield two or more crops each year (see Table 9). Evidently

TABLE 9

SPREAD OF DOUBLE-CROPPING IN IRRIGATED FIELDS, 1917 TO 1945
Area of Paddy Fields That Was Double-Cropped in Taiwan
(Thousands of Hectares)
Yearly Average in Each Period

Years	Total Cultivated Area	Area in Paddy Fields	Area of Double-Cropped Paddy Fields	Per Cent Double-Cropped: of Total Cultivated Area	Per Cent Double-Cropped: of Total Paddy Area
1917-1919	730	336	217	29.7	64.5
1920-1924	753	366	252	33.4	68.7
1925-1929	795	386	274	34.4	71.0
1930-1934	816	422	300	36.8	71.2
1935-1939	850	516	320	37.6	61.9
1940-1944	844	520	314	37.2	60.4

Sources: *Statistical Summary*, Table 196.
Ch'en Cheng-hsiang, *Land Utilization in Taiwan*, Appendix, Table 2.

much of the advance in crop production took the form of increasing the number of harvests from land already cultivated, which in Taiwan was already the "highest in the [Japanese] Empire."[14]

Land was not the only element of agriculture that was put to harder use. With a few exceptions,[15] cultivation continued to be carried on with little difference in ways of applying human labor to the land. Agricultural implements were improved, but remained similar in design; irrigation facilities opened new land, but their construction was itself labor-intensive; transplanting of rice became generally practised to save land, but it is inherently a very laborious process. One of the major problems of farmers in the Far East has long been that their work is distributed unevenly throughout the

[14] Nasu, Shiroshi (1941), p. 96.
[15] A few large-scale plantations experimented with the use of tractors in raising sugar cane.

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241 year.[16] Double cropping fields not only uses land more intensively, but does the same for labor by spreading the intervals of greatest effort over a longer part of the year[17] (see Table 10).

TABLE 10

LABOR REQUIREMENTS FOR RICE CULTIVATION IN TAIWAN

Average Man-Hours Worked for One *Chia* of Rice*

Type of Work	*First Crop*		*Second Crop*	
	Man	*Man with Animal*	*Man*	*Man with Animal*
Seed Bed	6.3	0.8	1.9	1.4
Preparing Land	22.6	18.1	15.1	11.9
Transplanting	11.1	0.1	10.1	0.1
Fertilizing	7.1	0.9	4.0	0.1
Weeding	29.6	0.4	23.9	0.2
Irrigating	9.6	0.0	6.8	0.0
Pest & Disease Control	1.0	0.0	1.6	0.0
Making Windbreaks	0.1	0.0	1.8	0.0
Harvesting & Threshing	25.9	0.2	27.5	0.5
Total	113.2	20.5	92.7	13.1†

* Women's time was counted as 60-70 per cent of that of men, children's as 30 per cent. Figures represent averages from 36 farms, having a mean size of 1.6 *chia*. (1 *chia* = .96992 hectare) Table has no date.

† Published total does not check with sum of column.

Source: Mendiola, N. B. (1949), p. 72.

433 The data drawn upon thus far give no indication as to whether
241 harder work and better techniques meant higher yields to farmers as well as to land. Fig. 9 helps in a rough way to settle the question. The number of farmers increased relatively more than the land area devoted to farms. It follows that the average gains in crop yields per person fell short of the gains in the yield of land. Fig. 9 also shows crudely the trends in the productivity of farmers, taking into account the major crops of Taiwan. They were unmistakably upward until

[16] If small-scale household farms are subject to two or three peak periods of work each year, shortages of labor tend to appear seasonally. When the seasons coincide for all or many farms, the shortages become general and cannot be met by hiring workers, since other available manpower is also in great demand. To maintain a household large enough to cope satisfactorily with this problem, the goal cherished by most peasant families is usually to bear the burden of supporting members who may not be fully occupied for the rest of the year.

[17] The net effect of double-cropping may even be to *increase* the amount of labor that goes into a given amount of output. However, some of the steps required to produce two crops where only one had been grown before are labor saving, i.e., involve the use of capital. The question of precise trends is too complicated to deal with here in these terms.

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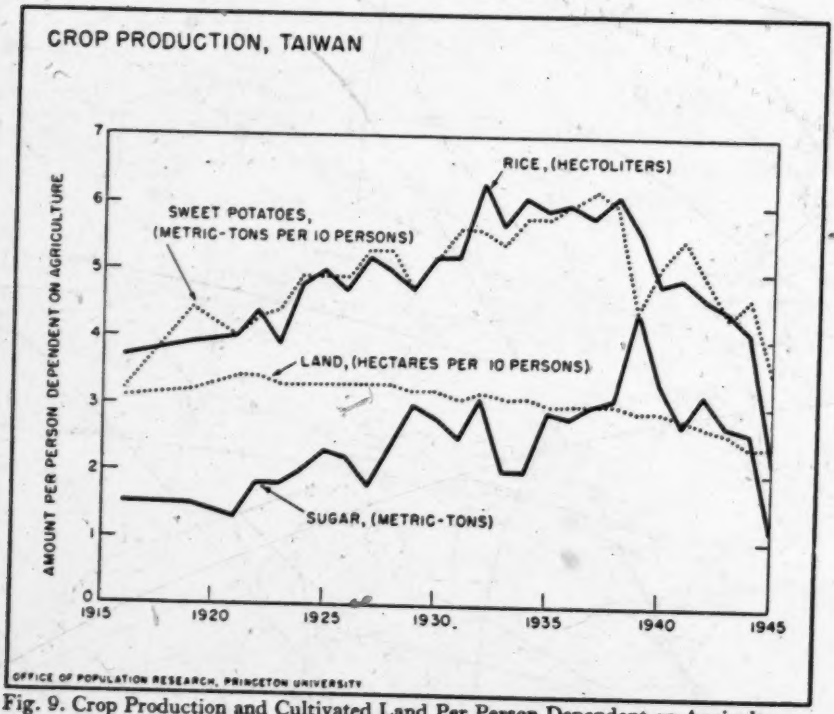

Fig. 9. Crop Production and Cultivated Land Per Person Dependent on Agriculture, Taiwan, 1916-1945.

the time of the war. But, considering the steady rise in the population dependent on agriculture, it is clear that the increased effectiveness of land use (discussed in Chapter II) did not owe so much to their colonial program as the Japanese themselves liked to believe. In part, it was merely a matter of more people working on the land.

Fig. 9 is based only on rice, sugar and sweet potatoes, and makes no allowance for the spread of some other crops during the late 1930's. In actual volume of crops produced, the product per person in agriculture therefore must have risen slightly more than the data imply. Diversification of this sort was of small benefit to most Taiwanese. Specialty crops like bananas and pineapples held a significance for the economy as a whole (they were export crops) greater than for individual farmers. Pineapples, for example, were grown entirely in plantations, and not by peasants as supplemental crops.

Trends in rice and sugar output were the trends for the rural economy as a whole; sweet potatoes are worthy of note because they

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433 have always supplied a large part of the Taiwanese diet. How well
241 these three basic crops represent the whole of Taiwanese agriculture may be seen from their share in the total recorded value of farm produce (see Fig. 4).[18]

241 The spatial arrangement of crops discussed in the previous chap-
621 ter has an important bearing on the question of persistence in organization of agriculture. Rice fields were found throughout the flat lowland area, overlapping in every civil division with the other types of farming. In its import for the nature of the rural society, this fact overshadows most effects of diversification and rationalization of farming. The types of social system that can give rise to paddy cultivation of rice seem to be uncommonly well equipped to resist change. They are centered around settled family relationships that provide for uninterrupted use of suitable fields over many generations. This is the case throughout most of the paddy-rice areas of Asia, where these conditions resemble what is to be found in Taiwan.[19] Hence, from this stability within farming itself, one should not expect to find that its social setting was greatly different as a result of Japanese occupation.

Changes in Pattern of Employment

463 Farming is so important to Taiwan that it has first been treated separately, with very little reference to its place among other activities. By viewing it in relation to the pursuits of the entire working population, we can take into account the nature of alternative opportunities outside of agriculture.

There would not be much point in looking for possibilities of non-agricultural employment if the economy could not have supported a larger proportion of people in other activities. This is where many agrarian countries have felt the effect of poverty to stand in the way of their industrial progress. From the start of its modern era, Taiwan's peculiar status as a food exporter suggests that food supply was no barrier. Since that time, special diligence in the matter made land and human effort more effective in producing crops. Advancing both of these aspects of productivity implied that at least some movement of people to pursuits outside of agriculture was economically feasible.

[18] These trends, of course, indicate nothing about "well-being" of farmers, since large capital charges (for irrigation, fertilizer, and government administration) were being made against farm incomes.

[19] See Taeuber, Irene B. (1947), pp. 21-43.

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ECONOMIC ACTIVITIES AND SOCIAL CHANGE

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It is certain that Taiwan underwent some social changes under the Japanese. The colonial program itself was one, with consequences that were far-reaching. Moreover, the expansion of population and production could not have occurred without further adjustments in social institutions, for in the so-called natural environment men rarely succeed (under the most favorable conditions) in enlarging their works in exact scale. But to have left so much of the old society intact, these changes must have been distributed unevenly through the population; some portions must have been influenced more than others.

In ascertaining the facts of the case, the first step is to see how the working population became involved in new activities. The work of peasant farmers was least affected. Hence one should look for the largest results in alternative fields. The only way for specialization to have progressed very far, in view of what is known of the agricultural economy, was through the spread of employment other than farming.

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Fortunately, there is reliable information to show who performed the principal economic activities at certain times. Five census enumerations were conducted with great concern for determining the occupational composition of the population. In four of these, up to 1930, tables were published classifying the people in detail according to occupation and other characteristics, using categories that are nearly if not exactly comparable from year to year.[20] The proportions of all working persons found among various classes of occupations have been assembled from these sources in Table 11. In 1940, the same information was collected and tabulated, but not published with full explanation of procedures; only the one table reproduced here has become available outside of Taiwan.*

Even as early as 1905 not everyone in the island was restricted to agriculture as a means of support. Slightly more than two-thirds of all persons with occupation were so engaged, with a group half as large remaining to be accounted for in other pursuits. These data

[20] Where the classification departed from previous practice, continuity can be preserved in broad groups of occupations by re-allocating occupations in the smaller groupings. *Where such re-grouping has been possible, it will be appropriately noted in the text.* Later, in cross-tabulations with other characteristics, the broadest categories often must be used as they stand.

* While this book was in press, a collection of tables from the census of 1940 was published in Taiwan. See *Results of the Seventh Population Census of Taiwan, 1940* (Taipei, Provincial Government of Taiwan, Bureau of Accounting and Statistics, March 1953).

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TABLE 11

OCCUPATIONAL COMPOSITION, TOTAL POPULATION OF TAIWAN

Per Cents of All Occupied Persons Reported in Each Occupation,* 1905, 1930, and 1940. All Ethnic Groups, Both Sexes

Occupation†	*1905*	*1930*	*1940*
Agriculture‡	71.2	68.2	64.6
Fishing	2.2	1.8	5.4
Mining	0.5	1.4	1.9
Manufacturing	6.2	8.5	7.6
Commerce	6.7	12.0	10.0
Transportation	2.1	3.0	2.7
Gov't. and Prof.	2.3	4.9	5.1
Other	8.8	0.2	2.7
Total Occupied	100.0	100.0	100.0
Per Cent Occupied	45.8	38.8	37.6

* Persons classified as Domestic Servants have been removed.

† The data used in this table to represent the years 1930 and 1940 are not of precisely the same sort as those showing the occupational distribution of the population in other tables. The scheme for classifying occupations was greatly changed between the censuses of 1930 and 1940; as a result, the only basis for comparison between these two dates is the classification according to "Industry," of which the main categories remained the same. Hence the figures in Column 2 and Column 3 of this table represent the distribution of occupied persons by the "Industries" in which they worked, and not by their "Occupations."

‡ In all of these tables of employed persons, unless specified to the contrary, the category "Agriculture" includes "Forestry."

Sources: *Census of 1905, General Volume*, Table 45.
Census of 1930, Statistical Tables, Table 28.
Ch'en Cheng-hsiang, *Land Utilization in Taiwan* (1950), p. 62.

bear out the evidence of history during Manchu times, to the effect that a good many people had already been occupied in services connected with exporting and marketing primary produce.

Observations in [illegible] cannot, of course, perfectly represent conditions ten years earlier—some Japanese were present in the statistics, and their influence in the economy was beginning to be felt. But these early census materials offer the closest approach to the pre-Japanese period that is possible. They depict a situation that must have been very similar to that of the final years of Chinese rule in Taiwan.

Table 11 summarizes the effects of major shifts in occupation throughout the entire working population, reaching to the eve of World War II. Though only an abbreviated picture, it belies any

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suggestion that the organization of livelihood in general had been profoundly altered under the Japanese. But any discussion of the problem very soon outruns crude data like these. Though Table 11 is comprehensive, covering all groups in the population, it lumps together people of too many kinds, and thereby hides many significant types of variation. The same material can be used more efficiently when refined by some of the controls at our disposal.

In the first place, not everyone in the population was equally well reported as to occupation. Asia being even more than the West a man's world, occupational data do not mean the same thing for males and females. Women are barred from many occupations and, whatever their duties, are not readily regarded in society as having regular employment. Whether a woman in Taiwan reported herself as being employed or not often depended on other attributes of her social position more than on the actual tasks performed—for example, whether she had yet been married, whether widowed or divorced, what work was followed by other members of her family, or simply local custom governing attitudes toward the work of women. For reasons that will be elaborated in the following chapter, we shall henceforth separate females from males in all occupational tables, under the assumption that the working activities of males more accurately reflect the composition of employment in the economy.

Omitting females from Table 12 has the effect of correcting the inflated appearance that they give to agriculture, especially in the earlier years. With this more meaningful series of observations, it is striking not merely that activities were so diversified in the beginning, but that they changed so little. In the 35 years that followed this first general census the structure of occupations among men remained about the same. By this more adequate criterion, agriculture lost almost no ground as a field of employment after 1905. Still nearly two-thirds of all working men were farmers as late as 1930, the terminal date for these figures. From Table 11 it is clear that the same thing must have been true in 1940.

And so, even including the Japanese, those who were caught up in the "industrialization" made up a minor part of all males in Taiwan. Demographically, this cardinal aspect of "economic development" was never anything but a small-scale operation.

Obviously, Table 11 and Table 12 cannot bring to light the full extent of trends accompanying events over this period. These figures indicate only shifts from one broad type of activity to another. They

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TABLE 12

OCCUPATIONAL COMPOSITION OF WORKING MALES IN TAIWAN TOTAL, ALL ETHNIC GROUPS

Per Cents of Occupied Males Reported in Each Occupation, 1905, 1920, and 1930*

Occupation	*1905*	*1920*	*1930*
Agriculture	67.7	64.3	63.1
Fishing	2.7	2.2	2.0
Mining	.6	1.5	1.3
Manufacturing	6.2	9.5	8.9
Commerce	7.8	8.3	10.9
Transportation	2.7	3.9	4.5
Gov't. & Prof.	2.8	4.1	5.1
Other	9.5	6.2	4.2
Total Occupied	100.0	100.0	100.0
Percent of Males Occupied	67.2	62.4	58.2

* Domestic servants have been excluded.
Source: Data of Table 16.

make no allowance for a more subtle kind of change—differences evolving within these groups of occupations.

These variations may take two forms. One consists of movement among the positions that comprise each broader group. This disturbance in the framework of positions can be taken as a result of innovations that actually altered the organization of work. It was noteworthy only in those lines where Japanese took a direct hand (see Table 13, below). Where it involved changes across the boundaries of the occupational groups tabulated in Table 12, the effects appear as occupational shifts from one census to the next. These one would expect to arise from such sources as the drawing of sugar workers from old into modern mills; from the wider shift toward factory work within the generic scope of "manufacturing"; the adjustment of commerce to the newer export industries; or the replacing of archaic transport or banking enterprises with wage-earning employees of Japanese concerns—though only a portion can be detected through the broad categories that we have used.

These differences also took a second form that cannot be conveyed in terms of the distribution of working activities. Many new skills were introduced within the existing arrangement or organization of work. The agricultural program was achieved primarily through this

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unobtrusive path, along with many of the spectacular improvements in productivity in other fields.[21] This form is the more elusive one to deal with, for it did not of itself produce shifts in employment. At the same time, the dimensions of economic achievement in Taiwan were too large to have been confined to the limits of occupational change shown in Table 12, unless they depended heavily on this second channel.

TABLE 13

RELATIVE GROWTH OF EMPLOYMENT IN DIFFERENT LINES
TOTAL POPULATION, ALL ETHNIC GROUPS

Occupation	*Ratios of Males Employed in 1930 to Those in 1905, by Occupation*
Agriculture	1.18
Fishing	.94
Mining	2.68
Manufacturing	1.81
Commerce	1.78
Gov't. & Prof.	2.28
Transportation, etc.	2.26
Other	.56
Total, All Occupations	1.27
Total Males	1.46

Sources: *Census of 1905, General Volume*, Table 45.
Census of 1930, Statistical Tables, Table 28.

Comparing the occupational structure at successive points of time is not the best measure of change. In some respects a better one is to indicate how the different lines of employment shared in the outstanding demographic trend, the growth of population. With 1905 as a base, the relative increase for each occupational stratum expresses more clearly the strides that were being made outside of agriculture (see Table 13).

These results would have been far different if none of the social changes under colonial rule had occurred—if, for example, the original situation had been fully stable, in the sense of being able to reproduce itself indefinitely, with no interference from outside or within save the single effect of population growth. (It is, of course,

[21] The two approaches were not independent. For example, introducing the use of fertilizers on a wide scale did not appreciably interfere with the management of peasant farms; but it did stimulate a lively business in supplying commercial fertilizer materials. The important point is that the two types of effect often fell in different places—in this case, the fertilizer trade went chiefly to Japanese importers.

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nothing more than a hypothetical exercise to assume this course of events, since population growth itself presupposes some conditions that had not been present before.) Under these assumptions, presumably each occupational stratum would have received an equal share of the increase, and the ratios of expansion for all would have been identical. The fact that they grew so unevenly illustrates that the actual events departed considerably from this imaginary sequence.

Several conditions would be required in order to maintain this hypothetical stability. People would need to follow well-accepted rules in adopting occupations, customs that would impede any widespread transfers by individuals from one kind of work to another. Chinese have for centuries come close to this result by passing many types of work down from fathers to sons. In Taiwan, keeping the various lines of work in balance would have implied a close adherence to such traditions by most of the population, as it did in the past. In effect, the unequal ratios of increase between occupations meant that many men who would have become farmers did not, but entered some alternative employment instead.[22]

Table 13 also indicates which occupations were most affected. Employment expanded rapidly in some of the fields where Japanese capital was prominent. These were also the fields that employed technical specialists and made the least use of the traditional fund of skills existing among the Taiwanese. Growth in these lines did not necessarily broaden employment opportunities for Taiwanese. There were in all 26.6 per cent more occupied males in Taiwan in 1930 than in 1905,[23] but 2.3 times as many in professional and administrative positions and in occupations connected with transportation, 81 per cent and 78 per cent more in manufacturing and commerce respectively. The farming segment in the population lagged slightly behind the total of employed men; but it was so large initially that it could relinquish large numbers of actual or potential members to other occupations before showing signs of the loss.[24]

[22] This aspect of occupational transfers will be taken up in some detail in the next chapter.

[23] This ratio is less than the increase in the general population, because changes in the age composition over this period raised the proportions of children and aged persons in the total. The proportions of men occupied in the prime working ages—15 to 64—remained practically the same.

[24] Losses from agriculture did not supply all of the additional employment in the expanding fields. The group "Other Occupations" was the source of almost the same portion of the inequalities in these figures. Being a catch-all, this category is always a weak spot in occupational statistics. In Taiwan it was made up chiefly of "day laborers,"

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These ratios measure how far each occupation increased irrespective of its size in relation to others at the start. Table 13 therefore expresses the force of events on each occupation, and not the force of occupational changes in the economy. This being the case, they should not all be given equal weight. The development of mining, by this criterion, exceeded any of the other fields. Though truly a creation of Japanese exploration and investment, the mining industry in Taiwan never reached any substantial size, and does not merit special attention as a field of employment.

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Lacking detailed evidence for the period following 1930, some conjecture is needed. Official sources and more recent descriptive materials in English are unreliable, since they invariably exaggerate the extent of Japanese achievement. We have certain data, however, to suggest the dimensions of expansion in demographic terms. While Japanese planners tried to raise production in all lines, they concentrated on a few specific items that were especially important to Japan. They paid most attention to enlarging factory facilities for the processing of primary products. Hence, it should be possible to detect some of this flurry of new activity in the numbers of people working in factories.

Statistics of factory employment in Taiwan were begun in 1914, and published each year ending in 1941. They fell far short of being perfect indicators, being subject to many kinds of inaccuracy that a census enumeration can easily avoid.[25] Nevertheless as a series of observations they furnish very useful results. The rise of factory employment may be compared with growth in the total population in Fig. 10, where the numbers of persons employed in "factories" from year to year are plotted on a logarithmic scale. The growth in total population and in agricultural population is also shown, in hundreds of persons.

Factory employment rose steadily from the beginning to the end

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not otherwise classified. Its decline represented some actual movement of workers and new recruits into new jobs, and in part merely assigning of new names to the same work. This circumstance tends to magnify the difference between agriculture and other occupations, but does not otherwise distort the picture shown in Table 13.

[25] They apparently paralleled the corresponding figures for Japan in covering all factories with more than five workers. They were published without explanation of standards or procedures, which were less rigorous than those used in the censuses. It is not specified whether factory workers were full or part-time workers; they are not shown separately by ethnic affiliation; their numbers must have increased (independently of any change in actual employment) by the adding of new enterprises to the reporting system; and their actual duties are not given.

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463 162 of this period. There were only two departures from this growth—the prosperous days of 1920 and 1929 and their aftermaths. Overlooking these brief deviations from the trend, the average rate of growth from 1918 until 1935 was *no greater than that of the total population*. Only in 1936 did the force of economic expansion reach the population to the extent of diffusing factory work more widely through it.

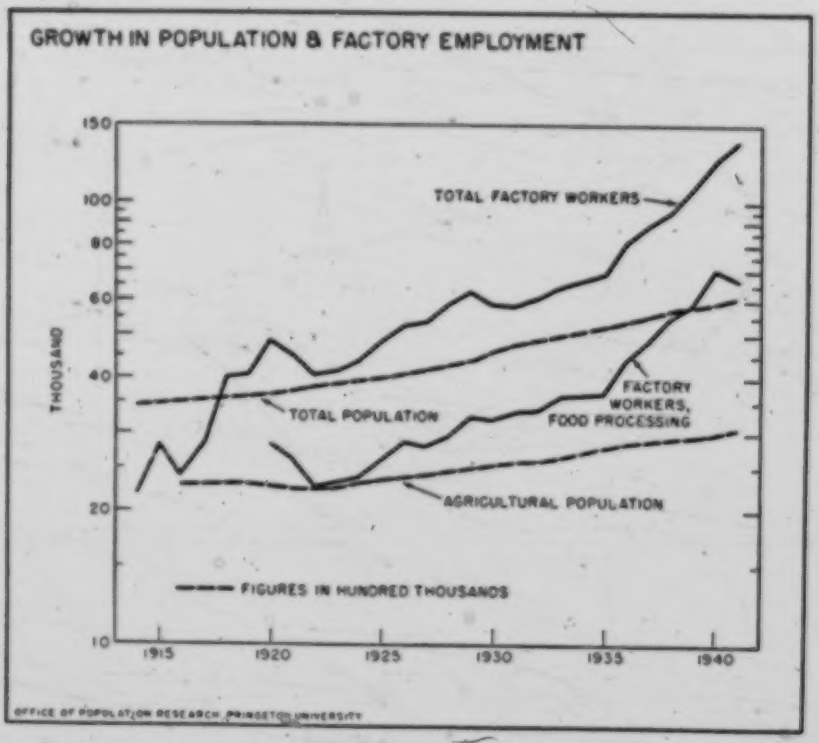

Fig. 10. Increase of Factory Employment and of Population in Taiwan, 1914-1941.

The largest part of the total (about 55 per cent) was made up of workers in sugar mills (see Fig. 10). The sugar industry kept its priority in the later economic planning. It serves as a reminder that the expansion of production continued to be dominated by this single industry, systematically nurtured and expanded as a source of alcohol for Japan.

The evidence for the spread of factory work can be supplemented

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by the annual registry of agricultural population (i.e., members of families dependent on agriculture).[26] The two major spurts in factory employment occurred during the first World War and just preceding the second. These were the only two periods of substantial slackening in gradual increments of farm population to the point of actual decline in the early 1920's. After 1940 this portion of the population resumed its usual rate of growth, suggesting that the opportunities for shifting the balance of employment had begun to disappear.

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Occupational Shifts: Taiwanese and Japanese

The data up to this point illustrate some of the redeployment of manpower in the economy. They give no basis for considering the social changes that were responsible, for they do not disclose who were the participants. To understand how manpower responds to altered environmental conditions, one must know some of the affiliations that have shaped its members' decisions. Moreover, "economic development" is of no great interest here for its own sake, but rather for the nature of its reception and use by peoples not yet under its full influence. Therefore the Taiwanese are the important group to observe, and in a different sense the Japanese in their role of aliens on the scene.

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Most of the apparent diversification in economic activities shown in Table 12 did not consist of movements in the Taiwanese population at all. It reflected primarily the special characteristics of Japanese in Taiwan. Though never more than one-twentieth of the total population, their nationals were so concentrated in certain special positions that they often outnumbered Taiwanese. Once this special group is removed (Table 14), Taiwanese appear to have contributed only a small amount to the total occupational shifts up to 1930. Separated from the presence of Japanese in these key posts, the part of Taiwanese in the modernized sectors of the economy was indeed a modest one.

[26] The total population and agricultural population have been reduced to one-hundredth of their size to fit into Fig. 10. They can consequently be used to show more than merely relative trends. Where either one intersects a trend line for factory employees, the ratio of the latter to the former is 1:100, or 1 per cent. (Of course, the scale being logarithmic, the same relation does not hold between points separated by larger intervals.) This circumstance helps to point out how small the total amount of work in factories was in relation to the entire population. At its peak, judged by these figures, it occupied less than 3 per cent of the population. It remained under 2 per cent for most of this period.

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TABLE 14

OCCUPATIONAL COMPOSITION OF TAIWANESE
Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	69.9	68.9	68.0
Fishing	2.8	2.2	2.1
Mining	0.5	1.4	1.3
Manufacturing	5.6	7.9	7.6
Commerce	7.4	7.6	10.2
Transportation, etc.	2.2	3.2	3.9
Gov't. & Prof.	1.8	2.2	2.7
Other	9.8	6.6	4.2
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	66.7	61.8	57.7

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.
Source: Data of Table 16.

As for the Japanese, most who were old enough to work had been born in the Home Islands. All of these had arrived in Taiwan as a result of some decision to move, and presumably had some purpose in being there. Theirs was a highly selective migration. It brought in the promoters and technicians, the industrialists and clerical personnel, the officials and minor functionaries to operate this first colonial venture. As in most colonies, they enjoyed facilities and perquisites of a superior type—better, if not to conditions generally prevailing in the home country, at least to the standards that they as individuals could have expected at home.[27]

Much of the migration was coordinated with economic policy.[28]

[27] On top of better vocational opportunities, Japanese commonly received special bonuses for service in Taiwan. Rates of pay for comparable wage labor in Taiwan were consistently higher for Japanese (see *Statistical Summary*, Tables 301-303).

[28] This had not always been the case. For most of the first decade after 1895, Japanese were permitted to go to Taiwan with little restriction. The freedom attracted an "undesirable" element to the island, whose business activities were so unbridled and uncoordinated as to call forth a stricter government policy to deal with incoming personnel. Japanese looked back from the later ordered development on this early chaotic period with horror. The unsatisfactory results of laissez-faire may also have contributed to the decision to centralize the most profitable opportunities in state hands. Through official monopolies in the major export lines, it was possible to regulate continuously the conduct of Japanese businessmen as well as to make substantial levies in these enterprises for revenue.

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Japanese drew lessons from the colonial experience of European powers in supplying the special skills and competencies that their program required. Government and private industry recruited their personnel from Japan, according to needs which they determined in advance. In one respect they learned the lessons of staffing their technical positions better than their teachers: they paid more attention to procuring lower levels of skills from their own ranks along with filling the top functions. Important implemental positions, like police, railroad technicians, and maintenance men, were heavily staffed with Japanese.

All Japanese nationals, regardless of whether specially recruited or not, were favored over Taiwanese when employed by Japanese concerns.[29] The best openings were in professional and official positions, as administrators in government and finance. Less coveted, but still bearing prestige over Taiwanese counterparts, were the jobs of technical and skilled workers in transportation and industry, and petty officials in the government bureaucracy. In every census Japanese appeared consistently in these occupations (see Table 15).

As a group, they were conspicuous in staying out of agriculture,

TABLE 15

OCCUPATIONAL COMPOSITION OF JAPANESE IN TAIWAN

Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	1.0	4.4	4.6
Fishing	0.6	2.0	2.1
Mining	5.0	1.9	0.5
Manufacturing	20.6	27.4	18.2
Commerce	16.5	15.0	14.6
Transportation, etc.	13.9	11.7	11.0
Gov't. & Prof.	41.3	37.2	45.6
Other	1.1	0.4	3.4
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	80.4	69.0	60.8

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.
Source: Data of Table 16.

[29] Notwithstanding, the colony had its failures. The census reports list a scattering of Japanese as day laborers, ricksha pullers, longshoremen, and in similar occupations.

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despite the fact that most were engaged in some capacity in helping the passage of farm products to Japan. Japan made almost no use of Taiwan as an outlet for its own growing agricultural population. From time to time the authorities announced projects for settling farmers from the Home Islands. These plans may have been designed to make a favorable impression among government circles in Japan itself; none ever proved feasible in Taiwan. Only a few thousand "colonists" of this type came to Taiwan and made a start in farming. In spite of manifold blessings of official support, subsidies, and special privileges, the settlements never managed to prosper. The families often left the countryside for better employment in towns and cities, and during the 1930's the whole idea was abandoned.[20]

Taiwan's economy was thus organized not only to export its narrow range of commodities to Japan, but to import its basic specialized skills in the persons of Japanese migrants. For the authorities this was an easy answer to the problem of staffing essential functions with people of appropriate training and experience. It avoided, among other things, the need to devise means for securing them from the human resources at hand in Taiwan. From the standpoint of Japan it was not an efficient solution. It drew upon types of manpower that the Japanese at home could not well afford to lose, and at the same time failed to make the best use of talents existing among the Taiwanese.[21] This anomaly in distribution of skills between the two areas is illustrated in Fig. 11. Japanese residents in Taiwan were a highly selected group even for Japan itself, where technical abilities were also scarce.

Possession of an external source of supply for specialized skills had

[20] Yanaihara, Tadao (1929), pp. 174-175, notes that it was already a failure before 1930.

[21] The founding of Taihoku Imperial University was an outstanding example of this policy. It was an institution of high caliber, well equipped and operated by men of repute in Japan. The University notably did *not* engage in training any considerable number of technical personnel among Taiwanese. It was organized to promote research rather than teaching, its classes were small, and Taiwanese students were not readily admitted. See Kerr, George H. (1952), p. 53 ff.

On a more practical plane, several technical schools were later established for limited training of Taiwanese. These, to use the common expression of educators in this country, were "vocational" rather than "professional" in that they taught manual instead of liberal skills. Enlargement of educational facilities came too late to provide the technical training needed for the war effort, though it did serve to advance literacy (in the Japanese language) among Taiwanese youth (see *Census of 1930, Statistical Tables*, Table 81). Once started, the spread of educational facilities made considerable headway. By 1945, 70 per cent of Taiwanese children of legal school age were attending some sort of school. In time this more liberal turn of policy might have paved the way for admitting Taiwanese into more responsible positions in the island's new industrial program.

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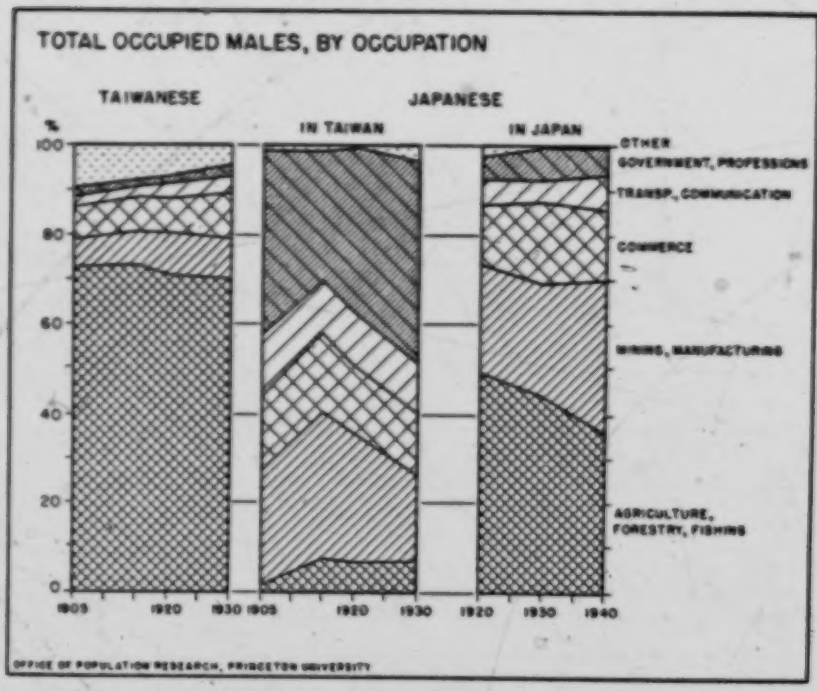

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Fig. 11. Trends in Occupations in Taiwan and Japan, 1905-1940.

certain cogent advantages. The alien status of Japanese nationals was useful in keeping high standards of responsibility and performance among members of the public and private bureaucracies. This personnel could be interposed to administer Taiwanese affairs without becoming susceptible to local pressures. Though the Japanese had gained access to the rural society by manipulating its traditional institutions, they had to guard against subversion of their administration by influence from the Taiwanese side.

They did not succeed, as no large organization has, in making their officials completely disinterested and honest. There were scandals and reports of self-enrichment on the part of several of their highly-placed nationals. When it came to collusion with Taiwanese, however, they were all but incorruptible. The instances of improbity that achieved publicity in Taiwan were mostly between government and business interests. Irregularities of this sort did not threaten the objectives of the regime, for these parties had more at stake together than at issue in the economic expansion. Much of what was lost in

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563 this wasteful scheme of recruiting from abroad therefore must have been regained in the form of security against the conservative influence of tradition from within.

In one respect, however, this policy proved to be an unqualified loss to the Japanese. They established a caste-like status for their own nationals, hedged about with favoritism in employment, education, and business opportunity. This widened the gulf that the general severity of their rule had made between themselves and the Taiwanese. The enmity that they had earned among the population left them unprepared to bring it effectively into the last-minute industrial effort called forth by the war.[22]

We know from the Japanese themselves that the latter 1930's were for them years of exceptional new decisions and vigorous efforts at expansion. Official policy began to assert itself more strongly in matters of industrial planning and investment. The previous success in aiding farm production, which had given official circles some occasion for complacency, suddenly became inadequate. The government began at a strenuous pace to mobilize Taiwan's economy for serving the broader purposes of the Empire.

563 463 162 On very short notice they sought to transform Taiwan into a quasi-industrial appendage of Japan. The attempts to encourage new aptitudes and incentives among Taiwanese are as interesting to contemplate, in terms of their implications for manpower, as were the attempts to prevent this very development. The two objectives are of course incompatible, but they were fostered side by side by the Japanese under the stress of preparing for war. Yet by 1940, at the peak of all this energy, the portion of the working population employed outside of agriculture was scarcely greater than at earlier census dates—still only one-third, and this figure includes an undetermined number of Japanese residents (see Table 11). Only a tiny fraction of the people in Taiwan had taken up factory employment, and many of these were also Japanese. We are left with the conclusion that Japanese colonial policies and indigenous tradition had combined to restrict social change within a small segment of the population. Japanese comprised most of this segment. New activities were spread thinly among Taiwanese, and left the remainder engaged in the same pursuits as their ancestors for countless generations.

[22] During the quickened prewar mobilization of their resources in Taiwan, despite the crowded condition of agriculture, Japanese businessmen actually complained of a shortage of labor in industry.

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TABLE 16

Taiwan: Total Males, and Males with Occupation Distributed by Occupation, at Census Dates, 1905 to 1930. Total All Groups, Taiwanese, Japanese, and Others*

Occupation	*1930*	*1920*	*1915*	*1905*
TOTAL MALES				
Occupied	1,369,877	1,180,842	1,155,777	1,081,667
Agr. and Forestry	864,884	761,047	776,181	731,479
Fishing (Excl. Salt)	27,709	25,858	26,911	29,465
Mining	18,345	17,240	9,741	6,843
Manufacturing	122,066	112,063	94,338	67,526
Commerce	148,847	97,726	93,171	83,815
Transportation	61,323	45,645	38,901	29,138
Gov't. and Prof.	69,644	48,018	34,737	30,568
Other	57,059	73,245	81,797	102,839
TAIWANESE MALES				
Occupied	1,265,185	1,100,297	1,088,199	1,045,667
Agr. and Forestry	860,613	757,917	772,437	731,102
Fishing (Excl. Salt)	25,916	24,261	26,150	29,260
Mining	16,970	15,629	8,319	5,203
Manufacturing	95,832	87,314	72,444	58,833
Commerce	129,372	83,600	79,823	77,060
Transportation	48,677	35,428	29,505	23,186
Gov't. and Prof.	34,260	23,811	19,177	18,923
Other	53,545	72,337	80,344	102,100
JAPANESE MALES				
Occupied	75,812	63,853	53,403	27,835
Agr. and Forestry	3,474	2,815	3,430	285
Fishing (Excl. Salt)	1,617	1,310	611	170
Mining	411	1,187	1,113	1,380
Manufacturing	13,796	17,530	16,482	5,739
Commerce	11,043	9,567	9,498	4,592
Transportation	8,360	7,466	6,273	3,871
Gov't. and Prof.	34,511	23,751	15,328	11,502
Other	2,600	227	668	296
OTHER MALES				
Occupied	28,880	16,629	14,169	8,165
Agr. and Forestry	797	315	312	86
Fishing (Excl. Salt)	176	280	150	35
Mining	964	424	309	260

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TABLE 16 (continued)

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Occupation	1930	1920	1915	1905
Manufacturing	12,438	7,209	5,410	2,954
Commerce	8,432	4,538	3,849	2,163
Transportation	4,286	2,727	3,122	2,081
Gov't. and Prof.	873	455	232	143
Other	914	681	785	443

* For comparability, Domestic servants are excluded at all dates; Ceramics workers are assigned to Manufacturing in 1905 and 1915; Salt workers are assigned to Manufacturing from Fishing in 1905, 1915, and 1920.

Sources: *Census of 1905, General Volume*, Table 25.
Census of 1915, Statistical Tables, Table 66.
Census of 1920, Descriptive Report, Appendix, Tables 51 and 52.
Census of 1930, Statistical Tables, Total Island, Tables 45 and 46.

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CHAPTER IV

The Disposition of Manpower

THE human side of livelihood in the countries of Asia understandably attracts serious attention. For many years both Westerners and Asians have displayed increasing interest in the tedium of work in this portion of the world. Human labor under these conditions has variously been held the object of pity for its drudgery, praise for its industriousness, impatience for its low productivity, and admiration for the contentment it sometimes fosters and for its integration with cultural traditions.

Such impressions are not always a help in gaining a disinterested and factual grasp of the problem. They often are based on sentiment or feeling more than on actuality. Few of the commentators on the lot of the Asian peasant have ever come into contact with it at first hand, which may help to account for the diversity of views on the subject. Yet underlying all of them is a certain foundation of fact. No one will deny that work in these parts of the world is normally toilsome and arduous. It is, by our standards, conducted with such a lack of advantage from effective instruments that prodigious amounts of labor must be expended simply to keep alive. In addition, as compared with industrial societies, a person's usual work is more firmly imbedded in the social position that he occupies, which in turn may bear less relation to the income that he gains or the commodity that he produces.

No single project could properly cover all of these aspects of livelihood. For Taiwan the advantages of the data that exist lie in adopting a demographic view of work and discovering how laboring activities are distributed through the population. This approach does not enable us to answer all of the questions that usually arise about economic activities and their setting, but we can move from it to a more adequate conception of the connections between livelihood and the social structure. This point of view was introduced in the previous chapter in order to fill out the one-sided picture that resulted from taking Japanese policy at face value and surveying the economy through its specialized corporate structures. Since the body of facts to be covered was large, the evidence of the occupational statistics has up to this point been treated cursorily.

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THE DISPOSITION OF MANPOWER

121 Economic activity is usually approached in demographic analysis by drawing attention first to the portion of a population that is involved. This group may be designated as manpower, or, more ambitiously, as the "labor force." It consists of those persons whom the influence of customary rules, the demand for labor in the economy, and expectations of others have induced to work for a living. In this chapter we shall take up some problems of determining the nature and size of this group in a population such as that of Taiwan, and to discover in greater detail some of the patterns that existed in its composition. Since this inquiry is also a means to observe the institutional environment of work, we shall be concerned only with the people whose society is reflected in these patterns, the Taiwanese.

The Nature of the Labor Force

By itself, the statement that the labor force is supposed to include people who work as distinct from others is not very useful. It is like knowing that humankind is composed of good- and bad-tempered persons—neither proposition gives any basis for assigning people to one class or the other. To classify a universe of individuals by any such principle requires a set of criteria for judging what activities should count as "work," and what degree of performance is necessary to qualify a person as being fully employed.

The first problem in specifying these criteria is a conceptual one: what purpose is the distinction intended to serve? This purpose may be to ascertain the usual state of affairs in a society where conditions of livelihood are relatively stable. One can expect that most of the population holds some employment status that is recognized in well-established usage. In this class the census procedure most likely to succeed is one that elicits a statement of the activities most commonly engaged in, according to this usage. Placing many arbitrary barriers in the way of such a response, like special rules for weighing levels of wages or exact units of working time, probably does not make the answers more precise. Such considerations may even obstruct the purpose by calling for facts that are irrelevant to the situation.[1]

On the other hand, the classification may be designed as a basis for estimating the volume of employment at a particular time (or of "unemployment," in the sense of people not working who would if they could), mobility between different types of labor, or short-term

[1] cf. United Nations, Population Division and Statistical Office. *Studies of Census Methods*, No. 4 (1948), pp. 14-38.

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fluctuations in employment. If employment is to be regarded in this way, it needs a set of criteria that are more complex, more sensitive to particular circumstances, and better oriented to the activities of people at a given moment.

Census Procedures in Taiwan for Determining the Working Population

Even if the conceptual questions can be settled, there remains a group of procedural ones. Since information which might be used to measure the size of the labor force must cover the entire population, it is ordinarily secured as part of a general census enumeration. Consequently most of the issues in collecting such materials are encountered in connection with census administration, and they have usually been dealt with by official organs charged with managing a census. Until very recently, it has been in this procedural realm that most attention has been given to labor force measurement—how to establish definitions, etc.

In actual experience, some of these criteria of working status have always been incorporated into census data that are already collected and published. They are beyond the control of the persons who make use of the materials, who are as a rule not the same ones who gathered and compiled them. Most of them must be accepted as they are, save for slight alterations (like shifting or combining certain categories) which may or may not aid in comparing data from different sources. Often the best that can be done is to scrutinize carefully the standards that were used in any given instance, and to make whatever allowance is possible for peculiarities that may exist from case to case.

In Taiwan, where census practices in Japan were followed,[2] the first of the two concepts of employment was used with little variation from census to census. Some specific entry as to "principal occupation" or customary activity was required of each individual. This left it up to each person or household head to decide whether he held an occupation; if so, he was supposed to specify the usual activities that he actually performed, as distinct from the part of the economy in which the work was carried on.[3] The information was compiled

[2] The enumerations of 1905 and 1915 in Taiwan had been planned likewise to synchronize with Japan in every major respect, but were carried out actually without the intended counterparts in Japan Proper.

[3] That is, in the current census usage of the terms, the enumerations were "occupational" rather than "industrial." The compilation of occupational titles before 1930,

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in detail, and transmitted to the central office, where it was reduced to groups of occupations by clerks. Here strict instructions were issued to ensure that the procedure of classification was uniform and consistent.[4]

The authorities were anxious to impress the outside world and their own superiors in Tokyo with their efficiency as a colonial government, and spared little trouble to prepare census reports that were documents of their competence. Thanks to elaborate and often exaggerated care in these matters, there is some possibility of checking on the modes of allocating people among groups of occupations. Every occupational census was published with at least one detailed tabulation showing the separate occupations of which the broader categories were composed. In 1905, for example, the census recognized 178 specific occupations. The number rose in the revised lists that appeared in later censuses, until some 376 were taken into account by 1930.[5] In fact, the zeal to gain stature for their work alongside the most modern Western enumerations carried Japanese census authorities still further. They prepared comprehensive glossaries of occupational titles to standardize the content of all categories that were tabulated. These translations contained up to several thousand names of occupations current in different dialects, and reconciled local usages with each other and with their conventional equivalents in Japanese.

It is not so clear how persons who had occupations were distin-

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while designed to classify occupational roles as such, tended to group together many persons with different functions who worked in certain lines. For example, workers in retail stores selling a particular article, regardless of whether they were owners, hired sales persons, peddlers, or simply helpers, were often placed in a single group. The census of 1930 included a stricter classification of occupations, and introduced for the first time in Taiwan a separate "industrial" tabulation of occupied persons. With one or two exceptions explicitly noted, the former of these will be used throughout this study. It is the most nearly comparable from one time to another, and provides a more useful type of information for our purposes.

[4] For a short account of the administration of these measures in Japan in 1920 and 1930, see Taeuber, Irene B., and Beal, Edwin G., Jr. (1946), pp. 9-15. The execution of the census of 1905 is described in more detail in a descriptive report translated into English as *The Special Population Census of Formosa, 1905* ([Taiwan], Government of Formosa, Tokyo, 1909).

[5] The number of occupations included in any of these lists is in itself an important detail. Very likely the systems of classification were developed beyond the degree of specialization in the economy itself. This is especially true in the later years, for the occupational scheme was devised for use in Japan and transported bodily to Taiwan as part of the policy of coordinating their census practices. While useful in locating certain specific types of activities, these minutiae are relevant chiefly as evidence of the meticulous attention to detail in the compilation of the materials.

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guished from those who did not. There were few rules covering this point. Once a person reported some employment on his census schedule, he could be assigned to an occupational class very simply by the central coding staff. But it was not easy, in terms of a "customary occupation," to control the basis on which a person might decide whether he was employed at all. The criteria for making this distinction ultimately rested on prevailing social standards of what constituted employment.

No society is lacking in definition of its own of what is useful and what is not, though the particular objects of such evaluations may vary widely from place to place. But as surely as standards of usefulness are universal among different peoples, census agencies likewise will inevitably tamper with them in the course of their duties. There is some practical necessity for this. These cultural definitions are not often explicitly formulated, nor are they consistent for all individuals in a society. Both clarity and uniformity need to be stressed in an occupational census, and so certain conventional rules are always established. The virtue of a notion such as "customary" occupation in use—and its greatest weakness—is that it serves well with little overt supervision. Hence, while an occupational inventory along these lines can be a simple matter, some of its basic categories are necessarily indistinct.

This type of inexactitude creates "fringes" of employment, especially among groups of people who are just entering or retiring from the labor force. Here are found the individuals whose exact occupational status would have to be decided on more explicit standards if all entries were to be made consistent. Customary occupations are generally suspected of being *inflated*, of retaining people who are temporarily out of work or who have retired from active work.[6]

The only procedure that census officials in Taiwan adopted to control this tendency was to specify carefully the circumstances for reporting *no occupation*, in order to settle the doubtful cases from this side. The "no-occupation" category thus had the most positive definition of all. All persons not reporting a regular occupation were required to state in detail their means of support.[7]

[6] Against this can possibly be set an honorific value, unusually strong in a Chinese society, that accrues to *leisure* activities, which may tend in the opposite direction.

[7] If living on income, the type of income was to be stated; if a family worker, the type and family status was to be included; for "dependents"—those for whom no separate source of income could be found—it was to be noted whether students, family

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659 In publication, except for some special tables on households, this information was usually lumped into one single class ("no-occupation"). The census of 1930 was the one exception, when the census authorities tried to be more precise about all occupations than before. In that year the following separate types of status were tabulated as sub-classes of the major group "without occupation": those living on securities, living on tenant fees, living on house and land rents; students, "dependents," inmates of special institutions, persons on relief, prisoners, others and those whose occupations were not reported, and domestic servants.[8]

This policy towards the listing of all non-employed statuses should be kept in mind when interpreting occupational figures for Taiwan. It furnishes the only definite clue that we have of the boundary that was drawn to set off the labor force as a whole. The precautions taken to prevent the "no-occupation" category from being a repository for borderline cases may even have helped in exaggerating the amount of actual employment. Hence, while census data may give good evidence on the kinds and patterns of employment in Taiwan, they are not free from bias in indicating the total amount.[9]

Variation by Age and Sex

There is no way to clarify the meaning of data on occupations without investigating the purposes and problems of census-taking. But there are limitations. The outcome of these compilations depends also on how well the planning and execution of the censuses were adapted to the circumstances they were supposed to describe.

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members, or other relationship to the household, and the occupation of the head of the supporting household.

[8] It has been necessary to reassign domestic servants arbitrarily to the "no-occupation" class. So few were enumerated that the category is meaningless, especially with reference to males.

[9] On conceptual grounds, there is not much reason to endow the "amount" of employment with much importance, for in demographic data one has to deal with units of persons and not of work. It is well known that a certain amount of temporary or partial unemployment is chronic in agrarian societies; it is taken for granted, expected, and institutionalized in some "hidden" form. Properly speaking, this is not unemployment at all: the persons involved would not necessarily work if work were available. In these circumstances the indistinct line separating these cases from the working force is not primarily a defect of the concept of "customary occupation," but reflects the facts of the real situation.

Other uses of such data are not necessarily impaired by this circumstance. The bias toward over-stating the number of working persons did not vary greatly in Taiwan over time, and therefore will not affect comparisons of the same population at different dates, such as those used in this chapter and in Chapter III.

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In general, activities having to do primarily with livelihood are so important in human societies that they are always subjected to some special forms of coordination. Never are they treated casually in a society, as minor points of etiquette or personal friendship may be. Much of their importance arises from the fact that the same persons who engage in them also occupy other positions of social significance. This coordination, therefore, cannot be primarily a matter of regulation within the realm of economic behavior,[10] but consists of keeping such behavior consistent with the social order. Demographically, the problem is found wherever occupational functions overlap with other roles in the same individuals.

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Two of the commonest regions of overlap in a population are with sex and age. Most of Asia, for example, is beset by such hazards to human existence that its peoples have maintained their numbers only by bringing forth abundant offspring. High fertility, which until recent centuries had been the universal offset to high mortality, has always necessitated a distinct kind of social position for women. Being the only ones capable of parturition, females in these societies come under the influence of family institutions that attach high priority and emphasis to the bearing and rearing of progeny.[11]

This circumstance has profoundly affected the part of women in economic activity. Most of the ways thought proper for an adult woman to have contact with the people beyond her family circle are in a married status. Few women escape marriage. Indeed, it is so normal an event that to pass the age of 25 unwed is considered a serious misfortune. To covet matrimony in vain does not carry with it any of the other possibilities (such as occupational careers) that exist in Western societies, and becomes a matter of anxiety if not humiliation for an entire family.

All this does not mean that women under these conditions do not work. The lot of a "home-maker" is a more laborious one in agrarian than in industrial countries, and may encompass more different sorts of particular activities from case to case. A wide range of tasks, including production of many physical commodities, is conducted as

[10] If it were, it would cease to present any problem, for it could be reduced simply to bureaucratic patterns of large-scale organizations.

[11] This does not mean that the particular family institutions are everywhere the same: such societies have long been renowned for the variety in such matters as marriage ceremonies, types of education of children, adolescent behavior and the division of labor in specific household tasks. We are not here concerned with superficial variation, but with the general features which are shared.

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659 a matter of course within the households that finally make use of
462 them—items which in industrial societies are ordinarily purchased in the market. In these activities women are occupied often from childhood to old age, and sometimes more vigorously than men. It is this economy of the household, and not real inactivity, that utilizes the efforts of females in useful pursuits but provides against their holding extra-familial occupations.

We can be certain that a goodly portion of the work done in Taiwan was concealed in the activities of women. When such is the case, estimates of manpower based on occupational data are necessarily distorted, especially when these data have been compiled without overt care to this problem. Here the only feasible procedure in measuring manpower is to exclude altogether this important segment—womanpower—and to concentrate only on the "male labor force" as representing the dominant working patterns of the population.

659 Even within the male population, however, not all of its members are eligible or able for permanent employment. Close to half of all males in Taiwan—practically all those without occupations—were consistently of ages in which employment was not customary. Age always has a great deal to do with whether a person follows an occupation or not, and often with the sort of work he may perform. Tasks that are looked upon as useful are commonly ones that infants and the aged, for example, lack the capacity for doing. In between these extremes, some males of certain ages are excluded from the labor force when sufficient value is attached to other activities such as school attendance, acquisition of special skills, patriarchy, or infirmity—either due to priority of the competing activities themselves (regardless of who performs them) or due to the kinds of persons involved.

These various factors determining employment are so closely associated with age that at any one time almost all of the men of young and middle adulthood in a population have some occupation. The exclusions are concentrated in the years of childhood and old age. For this reason it is meaningful to speak of the "population of working ages," and often more information is available about them as a whole than about the labor force itself.

The Labor Force in Taiwan

162 Let us continue this line of inquiry by inspecting the portions of
464 the population that are employed in relation to sex and age. With

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some idea by this time of what the census standards of employment purported to be in Taiwan, one should then see how they are performed in practice. As a first step it is interesting to compare the occupied portion of the population with a corresponding group elsewhere. To judge from the proportions of men occupied by age in various countries—and under varied kinds of census administration—the extent of employment is approximately the same among the recorded populations of the world.[12]

In 1930, for example, these proportions in Taiwan closely resembled in most ages those for the United States, when a similar standard ("gainful occupation") was used in this country to assign status in the labor force. In Table 17 the figures for these two countries were nearly alike among all men above age 25, though they were markedly higher in Taiwan at younger ages. The parallel does not imply that "work" amounted to the same thing among men in both populations. Nor does their divergent use of young men suggest that Americans were necessarily more prone to idleness than Taiwanese. The chief significance of Table 17 comes rather from showing that work as defined for census purposes commands the energies of practically all of the young adult men in both populations,[13] despite the wide differences in economic organization between the two countries.

Granted the basic similarity, the principal difference in Table 17 deserves comment. In the first place men in Taiwan evidently begin to do regular work much earlier in life than in the Western world. Extension of general education into the years of later adolescence, as everyone is aware, is a recent and modern phenomenon and confined to a few countries, for it has just recently been felt to be indispensable to the skills that this new world requires. The luxury of being able to maintain these services is not readily appreciated without contrasting it with less fortunate areas. In Taiwan, as in most of Asia, practically everyone destined to have an occupation was already employed before age 20. Many, not shown here, even entered a permanent occupation, in which they remained, before reaching age 15.[14]

[12] Notestein, Frank W., et al. (1944), p. 118.

[13] It is interesting to note that the differences made by different criteria—i.e., more refined labor force measures—are slight, if not trivial, for our purposes. Cf. Durand, John D. (1948), Appendix A, pp. 197-200.

[14] The census data showing dependency of childhood up to 1930 do not tell the whole story. In the latter 1930's the Japanese made concessions toward the extension of schooling, until by 1940 Taiwan was perhaps better in this regard than most Asiatic countries

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TABLE 17

162 THE LABOR FORCE IN THE TOTAL POPULATION, TAIWAN AND THE UNITED STATES

462 Proportions of All Persons in Each Age Group Who Had an Occupation, Male and Female, 1930

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Age Groups	Taiwan (Taiwanese Only*) All Occupations	Taiwan (Taiwanese Only*) Occupied outside Agriculture	United States (All Groups) All Occupations
	Males		
15–19	85.4	24.4	47.8
20–24	96.4	33.6	89.9
25–34	97.5	35.9	97.3
35–44	97.3	33.9	97.6
45–54	93.8	29.0	96.5
55–64	81.8	21.6	90.2
65+	54.7	11.9	58.3
	Females		
15–19	38.0	5.6	26.6
20–24	32.0	4.6	42.4
25–34	31.2	5.2	27.8
35–44	31.2	5.7	22.6
45–54	23.3	4.4	20.4
55–64	13.4	3.0	16.1
65+	4.3	1.3	8.0

* Domestic servants among the Taiwanese, male and female, have been excluded.
Sources: U. S. Dept. of Commerce, Bureau of the Census, *15th Census of the United States, 1930, Population*, Volume V, *General Report on Occupations*. Chap. 4, Table 2.
Taiwan—Census of 1930, Prefectural Volumes, Table 15.

162 For reasons advanced above, data on occupations for women are
462 less satisfactory. In Table 17, roughly one-third of the women in most ages up to 45 reported some occupation in 1930; but practically all stated that they were "farmers."[15] While superficially these figures appear to make a good showing against the data for the United States, the resemblance is misleading. In fact, on the basis of this information

besides Japan itself. But these events occurred too late to have much effect on the ages of starting work.

[15] Even for the few women who acknowledged occupations outside of agriculture, the specific kinds of work that occupied the bulk of this group are, suspiciously, the very ones that are usually conducted in households. For example, most of the "industrially employed" women were engaged in handicraft production (wood and bamboo articles, food processing, Panama hats) typically conducted on a household scale.

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one can really say next to nothing about the employment of Taiwanese women. Henceforth, except for special purposes, we shall confine ourselves to using occupational data for men only.

Occupational Composition of the Male Labor Force

With the outline of total employment among males of different ages now established, it is only a matter of course to follow up by showing the occupational composition of the same group. This amounts to a close view of the data in Chapter III, considered for the moment apart from the differences in age structure and differences in the extent of employment in various ages.

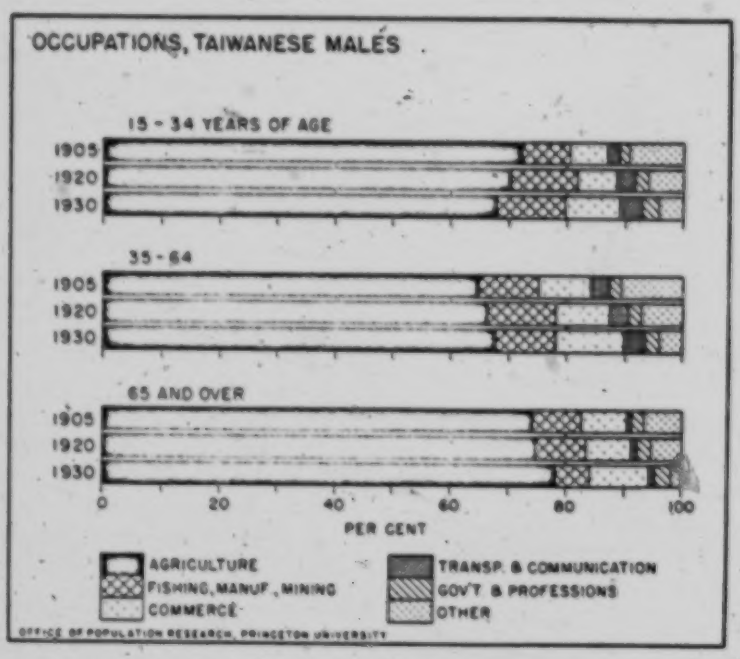

Fig. 12. Occupational Composition of Taiwanese, by Age, 1905-1930.

Even taken by separate age groups, Taiwanese men were performing the same types of work after 25 years of colonial rule as at the beginning. The situation can be efficiently summarized in Fig. 12, which bears out in some detail the evidence of the last chapter. As regards the whole of the male working population, the stability existing from one time to another was not exaggerated in Chapter III.

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162 Broad features like these were reduplicated in a degree that over-
463 shadows all accompanying trends—in this case down to the disposition of manpower at all working ages at successive dates. Fig. 12 shows clearly that this society had, up to 1930, put new generations to work along lines very similar to those of the old.

That these proportions should remain almost constant through time implies great stability of the agrarian social order. But this evidence is of a nature that best illustrates the more prominent relationships, and does not give much weight to the shifts that did occur. Farming activities again appear predominant—as in fact they were—to the point of eclipsing the trends in growth of other types of employment. These can be brought out only through the use of more responsive measures.

Moreover, even this degree of stability does not mean that individuals could not have moved from one occupation to another. A circulatory movement of individuals is fully consistent with the data of Fig. 12, provided that the avenues remained unchanging. It is not only possible but implied by the data themselves. In Fig. 12 the swelling and contracting of employment among different occupations from lower to higher age strata of course represent only the positions of people in these ages at one time; but a pattern that is repeated so closely in three successive censuses can hardly reflect just the events of a short period. Over such a long span of time, unless the various occupations lost their members through widely different rates of death and retirement, this pattern could come about only from losing them through movement to other occupations.

If part of this movement is a matter of such circulation, it demonstrates all the more strongly the part of traditional institutions in maintaining the society against the forces of change. Movement of this type will not be readily distinguished from shifts as a result of actual change, when the two are later analyzed apart from the composition of the labor force. It is therefore important to make clear at this point that whatever the extent of such shifts (as yet undisclosed by these techniques), there must always have been a prominent element of circulation involved.

Movement between Occupations

463 The data of Fig. 12 are poorly adapted to illustrate the nature of occupational movements in the population. Agricultural employment is preponderant, and masks the shifts that individuals actually

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made between the classes of occupations that are listed. All movements in other lines of work hence appear small because they were absorbed in the numbers of all occupied persons, instead of being compared with the numbers that had been in each line before.

Some moves of occupation always occur in conformity with traditional usages—like entry into the labor force itself, moving from one position to another with gradual acquisition of skill, the advancement of successful men and the decline of failures, and eventual retirement from active work. Shifts such as these are found even among the peoples who are the most bound by custom, and do not depend on the existence of new social conditions. The problem in this section is to develop a more sensitive procedure to detect some of these transfers.

A more direct approach to this "hidden" movement is to locate persons in their later occupational careers after they once have started. Comparing the population in the *same* interval of age at two successive points of time meant that we were dealing with different people each time. Their selection of occupations might have been the same at both dates, since one of the functions of tradition is to perpetuate a given system of choice in new generations; but this type of comparison might not reveal what happened to any of them after the first observation was made. Uncovering this subsequent behavior rests on finding the same persons at a later date, which means also at different ages.

Age, as regarded by demographers, is one of the few characteristics carried by people that are predictable indefinitely into the future. Those who were in age 20 in 1920 will be exactly age 30 at the same time of the year in 1930. Accordingly, those persons who reported an occupation in 1920, and survived, can be located in an age interval exactly ten years higher in 1930. By the simple device of assembling the appropriate pair of figures and removing those who died during the interval, occupied persons in any age group can easily be compared with their survivors at the later date. One can then find whether, as a group, they still remained occupied, and to what extent.

The same basic reasoning applies as between one type of employment and another; the survivors of a group of farmers at one time, for example, can be compared with the number actually found at another. The difference in this instance would represent the net gain or loss to these farmers in relation to the remainder of the economy,

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463 including entries, retirements, and transfers to other classes of occupations.

As in all formal problems in which one seeks to determine the influence of some factors while removing others, this procedure requires that certain conditions be met. First of all, the population should be one in which some significance may be attached to "net movement" between occupations. In an industrial society, occupational transfers are frequent: over a period of several years an individual may make multiple moves, or certain occupations may be subject to many entries and exits among members of a given age group. If widespread, either of these types of event would make an estimate of net change meaningless, because they would distort it as an indicator of the true number of moves. In Taiwan, with foreknowledge that few people changed occupations after first adopting one, it is safe to assume that net movement is a good approximation to total movement across broad classes of occupations.

Second, it should almost go without saying that occupational categories used in this comparison should be comparable, if not identical, at the two points of time. This condition is moderately well satisfied among the different occupations as they are arranged here.[16]

Next, the risks of death at each age should, for perfect accuracy, be equal from one occupational group to another. It is unlikely that this condition could be strictly fulfilled in any population. In Taiwan, many of the pursuits that were conducted in cities, for example, were probably more healthful than farming, for the hazards of city life were not greater than those in the countryside. Here, the mortality estimates that are used must be derived from the average experience among all Taiwanese males. Since no allowance can be made for variations between different occupations, some unknown biases probably enter the computations from this source.

Age reporting must be very accurate in order to give assurance that the persons being compared are the same. By defining age in terms of the date of birth, the censuses of Taiwan developed age reporting that was more accurate and consistent than in most Western countries. While between 1920 and 1930 there was a slight change in

[16] With one exception, which will be pointed out below. There must also be reason to believe that the activities comprising a given occupation have themselves not greatly changed over the period. This is one condition over which the investigator has no control whatever. We can simply assume for Taiwan that it is met reasonably well for the period in question.

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the technique of assigning age, it was systematic through all ages and cannot create bias either by age or by occupation.

Finally, because mortality estimates are usually applied to a population in the form of survival ratios, persons should be distributed evenly within the intervals of age that are used. When these intervals are broad, there is greater chance of introducing some inaccuracy due to uneven grouping within them, since mortality is known to vary with age. The intervals used for this manipulation all spanned 5 years of age, and some element of control is therefore lacking. This is especially true for occupied persons aged 15 to 19, the only group that departed greatly in internal composition from the general population.[17] There is no reason to believe that the imprecision arising from this source should create any appreciable bias by occupation. Even where certain occupations may have distinctive age patterns of recruitment or retirement that give them age groups with unusual internal structure (e.g., farmers aged 15 to 19), the bias is very small.[18]

These conditions would have to be met in order to apply the procedure we have outlined to make estimates that are precise in number. But the procedure itself is only an approximation. Nonfulfillment of any one of the conditions would not necessarily be serious, and could be foreseen and minimized by some arbitrary correction. No allowance can be made for the interaction of all of them, and for this reason some caution is appropriate in interpreting the following results.

With these qualifications, the way is clear to construct a set of comparisons between 1920 and 1930 according to the outline above. We shall estimate the balance of men entering and leaving ("retiring" from) the working force by subtracting the survivors of those who were already at work in 1920 from those who were found with employment in 1930. (The survivors from 1920 are advanced ten years of age: all ages given in the following tables represent ages achieved by 1930.) In the same way, we shall estimate the balance of

[17] The mortality estimates were formed by life table ratios of L_{x+10}/L_x. For convenience, and because it made no perceptible difference in the results, values were used for only the middle year of age in each 5-year interval. The values employed were taken from tables for actual cohorts, developed in connection with a later part of this study. They thus represent the actual mortality experience of the middle age cohort in each 5-year interval.

[18] Actually, to avoid *bias* by occupation from this source, the condition may be relaxed from that of *even* internal age-distributions that are the same among occupations within a given five-year interval. This problem is therefore less serious than it would first appear to be.

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movement into or exits from a given occupational class by subtracting the survivors of those at work in that occupation in 1920 from those found at work in that occupation in 1930. The results of these operations can be designated as "gain" or "loss"; the ratios of these numbers to the calculated survivors as "per cent gained" or "per cent lost."[19]

Drawing upon the range of ages from 15 to 64 carries the comparison through the span of greatest employment. The figures furnish in cross-section a picture of occupational movement in any selected categories with respect to all the remainder. While a cross-section, it is not an instantaneous view. Each entry in the table is based on the experience over a 10-year period for the given age group. Hence the number of age groups that can be usefully included is restricted by the length of this period. Older men have been dropped at age 70, which means that this last group was aged 55-59 in 1920. Similarly, the youngest age group is that of men 25-29, since in 1920 they were only 15-19, and too few of the boys under age 15 claimed occupations in 1920 for them to be of great interest.[20]

The *differences* between survivors and actual workers in 1930, and the ratios in which they stand to the numbers of survivors, are the most useful forms for interpreting these estimates. In Fig. 13 these are shown graphically in the arbitrary categories of "gain" or "loss," as explained above. The bar diagram in Fig. 13 shows the actual numbers of net entries and withdrawals, during the decade 1920-1930, of all occupations taken together. It is of some special interest in establishing the shape of these movements at different ages throughout the male labor force, and as a standard against which to compare the patterns for separate occupational groups.

More important here is the second part of Fig. 13, giving the *percentages* of the survivors of 1920 workers who had changed their occupational status between 1920 and 1930. Along the middle segment of the age scale, these percentages are practically zero (ages 30-44, covering the actual age span of 20-44). The working force as a whole was almost stationary over this entire interval, consisting of those persons who were already employed, with few entrants and few withdrawals in relation to the numbers who were already there. Over this span it is not likely that many entries and exits occurred

[19] Where entries are still taking place, these are not true proportions: the numerator is not included in the denominator.

[20] By a special arrangement, it will be possible somewhat later to deal more adequately with the males 15-19 and to include the group 10-14.

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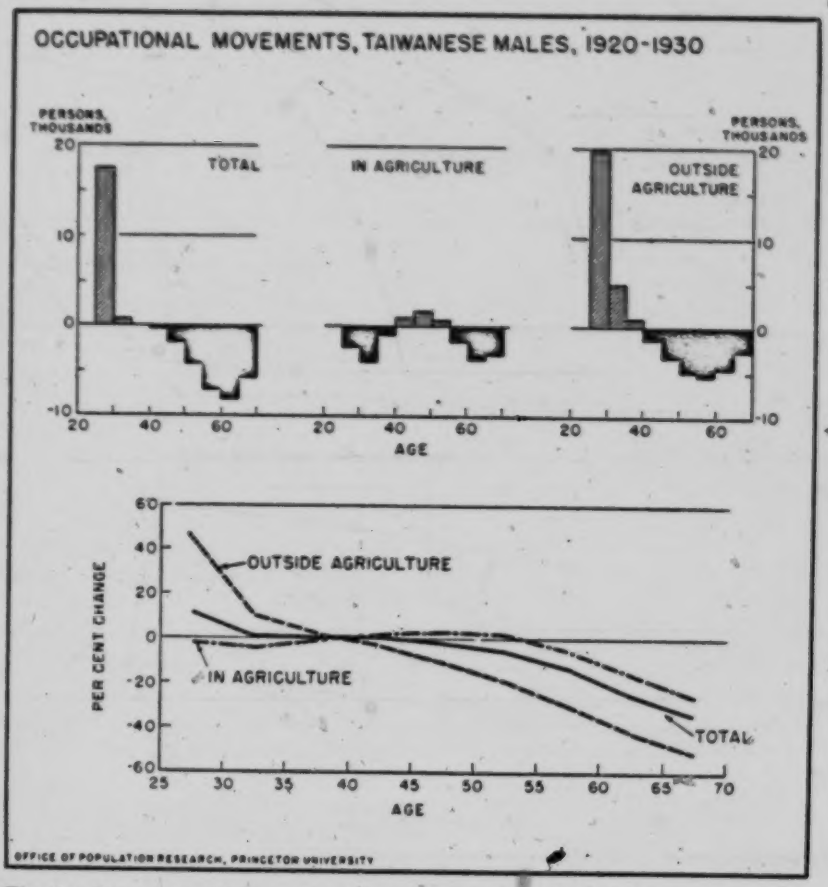

Fig. 13. Occupational Movement of Taiwanese Males, 1920-1930. Net "Gain" or "Loss" Inside and Outside of Agriculture, and in the Total Labor Force.

so as to balance each other; clearly few men began or left off work completely (except through death) in these ages, and what movement there was must have been limited to transfers from one occupation to another.

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It was established above (Table 17) that the maximum degree of employment was reached by age 30. It follows from these data that in this decade almost everyone who was likely in his life-time to acquire an occupation had already done so at age 20.[21] By similar

[21] A small part of this pattern may possibly be a peculiarity of the unusual decade involved. The census of 1930 was taken during a world depression, which had a brief but severe effect in Taiwan. There are hints that this was reflected slightly in the pro-

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464 reasoning, 90 per cent of all men who were going to become employed by 1930 must have held occupations already between ages 15-19 in 1920: since only 10 per cent of the employed survivors to this group had begun their employment later than 1920, though by 1930, at ages 25-29, the ones with occupations already accounted for almost all the population in that age.

One takes for granted that the boundary lines between being occupied or not were somewhat indistinct among young men entering and old men leaving the labor force. Even so, Fig. 13 gives a picture of the age incidence of retirement just as interesting as its evidence for the stability of employment through earlier adult ages. Starting with the men who reached ages 45-49 in 1930, the rate of exits from occupations over the preceding 10 years rose sharply with advancing age. Of the Taiwanese aged 55-59 in 1920, more than half the survivors had retired before age 70. Earlier ages exhibit what appears to be a gradual progression toward this rate of retirement. This would hold true even if we assume that the world depression in 1930 forced older men out of the labor force more rapidly than in normal times. The pattern would remain the same; only its age spacing would change.

These findings tend to conform to what the earlier chapters would lead one to expect. They do not provide much new information (except by way of verification of the procedure that is being used). Of greater significance are the patterns that hold among the occupations that make up the labor force. This is shown in Fig. 13 where the bars also represent the numbers of Taiwanese males "gained" or "lost" in 1930 as compared with 1920.

463 Agriculture is the most striking of these. There was an actual loss of several thousand young adult men who had been farmers between the ages of 15 and 30 in 1920. This does not imply that agriculture was failing to recruit new farmers. The losses in part reflect the fact that males undertook occupations at younger ages (at least in their census returns) in farming than in other pursuits. Agriculture gained many of its entrants *before* age 25 (the youngest age shown in these charts); by age 25 it may or may not have continued to re-

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portions of older men claiming some occupation in 1930. Despite the tendency of the "customary occupation" census concept to resist inroads of short-term unemployment, these proportions are slightly lower in advanced ages than those in previous censuses. Even so, the "true" figure might make the proposition above even stronger, by revealing "normal" retirement to have been slower than Fig. 13 suggests.

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cruit new workers—something that this procedure can never reveal—but was in any case exporting enough young men to the rest of the economy to outweigh these and create a net loss of workers.

Though substantial in the total number of workers involved in net movements among other occupations,[22] this rural exodus fades into insignificance when related to the number of men in these lower ages who remained in agriculture (Fig. 12). Obviously the standard against which to measure these events has much to do with assessing their importance. Losses of young men from agriculture supplied a fair share of all the entrants to other occupations in these ages. But this movement was not enough to make more than a slight inroad in the store of manpower for farming—and was more than offset by recruitments with agriculture between the ages 10-14 and 20-24. In this age interval, agriculture absorbed more than half of the total entrants to all occupations from 1920 to 1930.

If among the survivors of, let us say, all males 15-19 agriculture had merely matched its own recruitment to the scale of the total labor force (i.e., that of Fig. 12, above), two-thirds of the total entrants to the labor force in this age would have become farmers instead of entering other occupations as in fact they did.

No less important is the stream of older men—40 to 54 in 1930—who were entering agriculture. Though numerically not a large group, they reveal a degree of movement at least as great as that of the persons who abandoned farming at younger ages.[23] These were the ages in which "retirements" from other occupations were beginning. If we assume that the exodus of young farmers was a "normal" occurrence (and some of the earlier census data suggest this is so), it is almost certain that these older recruits to agriculture were reentrants or "returnees" who had previously left.

The figures again reveal only *net* movement; if some farmers of these ages were "retiring" from agriculture, then returnees must have been more numerous than the actual figures here indicate. Evidently agriculture not only supplied young men to other parts of the economy, but reclaimed older workers that other occupations

[22] It needs to be emphasized frequently that the procedure we are following does not give an exact estimate of the total number of men who left agriculture for other work, even in the decade in question. Some of the actual exits were probably balanced by new recruits, though the number at these ages was undoubtedly smaller for agriculture than any other occupation.

[23] I.e., in view of the fact that not many men were alive in these ages, these entrants bear a larger proportion to the total number of farmers of the same age. Their significance in this respect can be read from Fig. 13.

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463 had discarded. Re-entry to agriculture was thus for some men an alternative to ceasing work altogether.

The data for other occupational groups can best be examined in Fig. 14. The bar diagrams show the amounts of net gain or loss, which should be compared with the total amount in Fig. 13. The chart of percentages gain or loss gives the corresponding view of movement for each, taking into account at each age the number of persons who were already there. The first indicates the numbers of people involved; the second abstracts from this.

Due to changes in census practice, certain of the chief occupational classes must be lumped together so as to be comparable between 1920 and 1930. These consolidations make it impossible to say very much about activities in the non-agricultural portion of the economy that is not already implied by the relation of agricultural employment to all of them. This sector can be split into three main parts to compare their uses of manpower: industry and commerce (also including fishing and mining), professional positions and public administration, and transport and communications. Though not of the same size, all three of these classes absorbed and released workers in a similar age pattern, and all were distinct from agriculture and from the total labor force (see Fig. 12 and Fig. 13). All were most conspicuously users of youth, and taken together they obviously depended on people already working in agriculture for recruits. To some extent all, but especially transport and communications, tended to cast off older workers sooner than agriculture.

Evidently workers in transportation and in professional fields or the administrative bureaucracy were recruited more exclusively while very young. This is not surprising, in view of the fact that most Taiwanese held only junior positions in these fields, and frequently positions where some specific technical training put youth at a premium (for example, drivers of motor vehicles, railroad trainmen, school teachers, telegraph workers, clerks).[24]

Finally, a few words are required about the group of "other occupations." The steady "loss" of persons from this category is a fixed feature of Taiwan's whole succession of occupational censuses. Under the assumptions applied in the rest of the occupations, Fig. 14 would appear to indicate a flood of departures, in all ages, from these mis-

[24] However, transportation workers also included a number of pullers of rickshas and other carts, who would likewise tend to enter this employment while young, but for different reasons.

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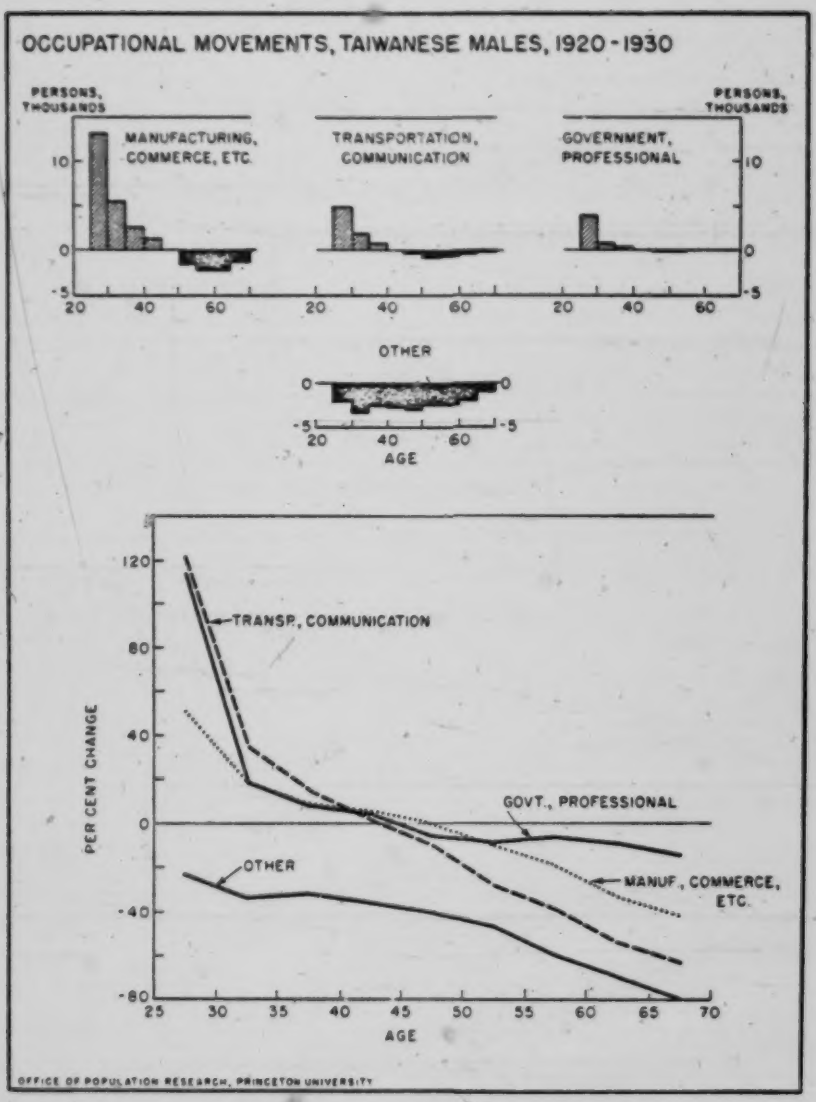

Fig. 14. Occupational Movement of Taiwanese Males, 1920-1930. Net "Gain" or "Loss" in the Occupations Outside of Agriculture.

cellaneous activities. More reasonably, it implies that most of these workers were shifted to more specific occupations merely by refinements of classification in 1930. Accordingly, these reclassified per-

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sons must have "entered" the remaining occupations. The data for "other occupations" are by themselves useless. Here they serve as an additional reminder that the estimates of occupational movement in this section are inexact, and deserve to be treated with caution.[23]

Using only the figures for males who held occupations, it has not been worth while to carry out these procedures with those who fell below age 25 in 1930 (age 15 in 1920). It is formally possible to estimate the survivors after a decade to employed boys aged 10-14 in 1920, probably to a fine degree of accuracy. But so few had acquired occupations by that age, outside of agriculture, that the results would have been meaningless as a basis for deducing any kinds of movements.

Yet this neglected age span—between age 10 and age 24—is highly significant. It is here that most males initially entered the labor force. At some point between these limits most Taiwanese undertook their first regular adult employment, exercising whatever choice was available to them. The nature of a person's work for many years in the future tended to be fixed by this initial occupation. This stage in the occupational careers of most males has a special import in an agrarian society. Most of the attitudes and skills pertinent to livelihood are imparted during childhood in the household—occupations, in effect, tend to be inherited. Knowing the sorts of households where boys spend their childhood, it should be a test of whether they were adopted in accordance with tradition if we are able to predict their subsequent occupations.

Taiwan's population statistics are not without resources pertinent to this question. In the census of 1920, following the practice of previous years, the census authorities did more than classify by their type of work just the persons who claimed an occupation. Each census schedule included a space for everyone not reporting an occupation to be entered as "dependent" or "without occupation." The "dependents" made up practically all of this residual group. They were taken to be those who performed minor household work,

[23] One can almost rule out the possibility that errors from this source have spuriously created the patterns derived from the data. In the first place, the men who have been reclassified from "other occupations" were not concentrated in any special age range, but rather spread more or less evenly over the whole span of working ages. Secondly, it is most likely that these persons were re-allocated to the *non-agricultural* sector of the labor force, and not within farming itself. They could in that case not affect the most important comparison of all—the differences between agriculture and the rest of the economy.

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excluding ordinary domestic servants. Tables were published assigning all persons in this group to the occupation on which they depended—in most cases, that of the household head.

One such table, with this material cross-tabulated with age, can be used to supplement the data for men with full-fledged occupations. Here the "dependent" category amounts to a table of almost all the population outside those actually reporting occupations, classified by the type of work that they performed in the household. Virtually all of them (99.6 per cent) were members of the family of the household head. In other words, for young boys this table represents a division roughly along the lines of economic activity that supported their families.

All except a small fraction of Taiwanese males attained some occupation sooner or later during adulthood. Most of those who were recorded as dependents at the pre-adult ages of 10-14 and 15-19 would soon pass into some regular occupational group, and so were not far from such a transition at the time they were enumerated. This peculiarity makes it possible to treat the data as an approximate distribution of pre-labor force males according to the source of livelihood of their families. From this information we can count virtually all the males in these ages who would ever enter an occupation in the sense we ascribe to the term here, classified by the type of pre-occupational work they performed.

The same operations that were applied earlier in this section can be repeated with the male population thus tabulated (occupied and dependents combined), arranged by age. The results are plotted in Fig. 15 for the decade 1920-1930. No comparable tables of dependents were published after 1920. Hence, the survivors to occupied males plus dependent males of 1920, in each age interval beginning this time with 10-14, have been compared simply with men who had an occupation in 1930.

Fig. 15 supplements the findings of Figs. 13 and 14 by incorporating the group of males that reached ages 20-24 in 1930. It adds nothing new to the results at older ages. In fact, a small number of "dependents" are found among males even in adult age groups—a few men always remained in this status. In the "working ages," their proportion to all males was very slight—as low as two per cent. The survivors to workers and dependents taken together, therefore, were slightly more than the workers found in 1930. Fig. 15 is subject to

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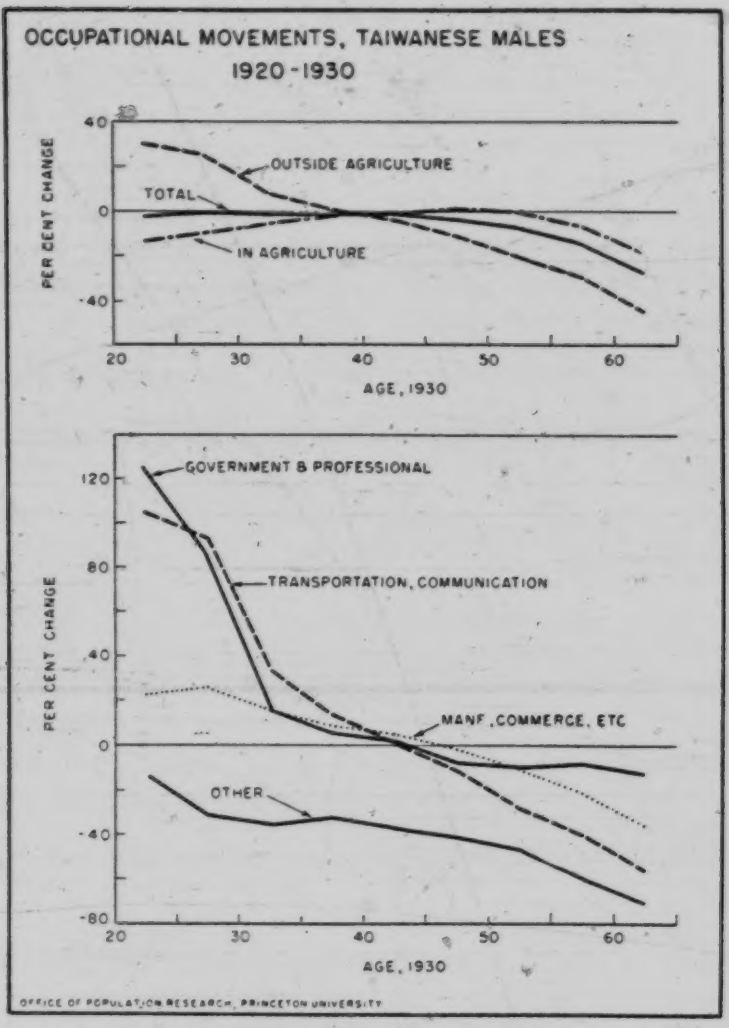

Fig. 15. Occupational Movement and "Inheritance" of Occupations by Taiwanese, 1920-1930. Net Movement between Occupations, and Movement into Occupations by Pre-Labor Force Males.

a small amount of exaggeration in the "loss" at all adult ages from this source.

For the total male labor force, the ratios of gain and loss over the decade 1920-1930 to survivors from 1920—by age in 1930—are connected in Fig. 15 by one continuous line. These ratios take into

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account the survivors of prospective as well as actual members of the labor force, starting with age 10 in 1920. This provision depicts a total occupational system that was self-sufficient with respect to the supply of young entrants during the decade 1920-1930. In the present set of data, next to no one was recruited into employment from outside. Therefore, deviations from this self-sufficiency in any occupational class implies some shifting—some failure to "inherit" occupations—and should also reveal the direction of the movement.

If the assumptions are correct, farming households apparently supplied a greater proportion of their males in these earlier ages to the rest of the labor force than did agricultural employment at later ages according to Fig. 13. Since boys in young ages were more numerous than men in their twenties, the *numbers* involved were much larger. Industry and commerce (also including fishing and mining) must have absorbed most of the young males who left agricultural households for other work. But they seem to have supplied an even greater number of their young workers over this period from their own families.

As in Fig. 13, the fields of transport and communications, and professional occupations and public administration, stand out as borrowers of youth from other families. Extending this test to younger ages only accentuates their debtor position in gaining manpower. This gain is evidence that these fields were expanding, but expanding by a very distinctive mode of recruitment. As before, "other occupations" indicate merely that the classification was inconsistent through time. But since the effect of this shortcoming is less among the ages specially discussed here, it need be of less concern than before.

Census data in this form have thus given a comprehensive picture of the principal flows of persons moving from one occupation to another in this decade. Even though the permanent result of the movement (in terms of changing the age-specific occupational structure of the population) was very small, these materials show that changes of occupation were actually more numerous and followed well-defined patterns. In particular, agriculture had a double role. It was the outstanding source of supply of young men in other occupations; and it was a pursuit to which many men returned when they were no longer youthful. From this we may draw the inference that some diversification of livelihood can be absorbed by an agrarian society with a minimum of lasting effect: rural agriculture "lends" workers

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463 to the rest of the economy in their young adulthood, and takes them back after their years of greatest contribution are past.

Manpower and Age Composition of the Population

464 Unfortunately for the conclusions of this chapter and the previous one, no population data on employment of any consequence have been published for Taiwan since the census of 1930. All that exist for the very interesting period leading up to World War II are the economic statistics reviewed in Chapter II (of quality far inferior to census figures), undisciplined travel accounts of a few foreigners, and the quasi-official reports of the Japanese themselves—half secretive and half boastful.

For this reason there is special value in observing the size of the population of working ages, from which the labor force is drawn, and its development as a component of the total population of Taiwanese. Requiring only detailed information by age and sex, this important measure can be derived from more recent census materials which were not published with elaborate occupational tables. It can be carried up to 1940 with exact figures, and extended beyond this date by the use of special assumptions.

All of the foregoing tables in this chapter have been arranged so as to represent occupational behavior of Taiwanese within certain age strata. This was a device for excluding temporarily two closely related aspects of labor force study: the age structure of the population at any one time, and trends in the size of different age strata. Insofar as these factors help to fix the supply of labor and the amount of dependency in a society, they exert a profound and subtle influence on economic activities.

At a given moment, among male Taiwanese some form of occupation was almost universal in most of the span between ages 15 and 60. Narrowing attention to the men between ages 15 and 64, as the "population of working ages"—to follow a common convention—will obviously include all ages of extensive employment. Not many boys younger than age 15 held occupations, and few people survived at all after age 65 (not all of these remaining occupied). Therefore, the group of men aged 15-64 also contained practically all working males.

Viewed as representing their region in the world, the Taiwanese are not one of the "major" populations of Asia. Consequently, we are free to analyze their composition without introducing the idea

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of vast numbers, and the global problems that these tend to raise. Compared with some of these more familiar examples, in Asia and

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TABLE 18

AGE COMPOSITION OF TAIWAN AND SELECTED OTHER COUNTRIES, *CIRCA* 1930

Both Sexes

	Percentages of Total Population in Each Age Interval						
Age	*Taiwan**	*Japan*	*British India*	*U.S.S.R. (incl. Ukraine)*	*United States*	*England & Wales*	*Sweden*
0–14	41.0	36.6	39.9	37.2	29.4	23.8	22.1
15–39	39.0	38.3	41.1	41.3	41.2	40.4	41.7
40–64	17.5	20.3	16.8	17.5	24.0	28.4	27.0
65+	2.5	4.8	2.2	4.0	5.4	7.4	9.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Taiwanese only.

Source: Institut International de Statistique, *Aperçu de la Démographie, 1929-1936.* The Hague, 1939. Table 7.
Statistical Summary of Taiwan, Table 58.

the West, Taiwan ranked with India, a land of proverbial "population problems." Together these two areas illustrate an ironic historical circumstance: those areas that for other reasons are most handicapped by poverty are also the ones with the greatest burdens of dependency, and with the smallest proportions of their people in working ages. The differences are outstanding in the ages of maturity, near the range between age 40 and age 65, when Western nations have been in a position to make far better use of the accumulated training and experience among their people (see Table 18). While next to nothing is directly known of its earlier demographic history, Taiwan was already in this situation when it entered its census era, and was placed still more at a disadvantage as time went on.

Through time, the population of these various ages in Taiwan has not shifted so signally as it has grown. From 1905 to 1940, each of these age strata almost doubled in size. In the same period, the important span 15-64 underwent slow but steady changes in relation to the rest of the population, older and younger. Its share in the total was reduced, though its numbers grew by more than one-half. On the other hand, the proportion of aged (always small) did not greatly change, though their numbers doubled. But most signifi-

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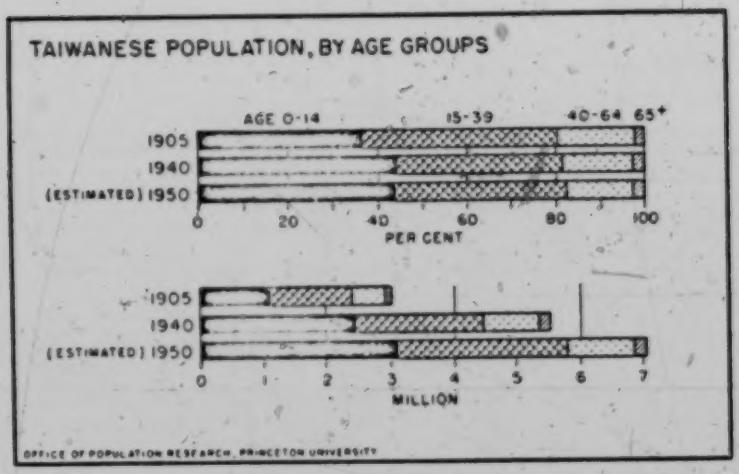

Fig. 16. Taiwanese Population in Working and Dependent Ages, 1905, 1940 and Projected to 1950.

cantly, infants and children, represented by all persons under 15 years of age, expanded into an ever larger part of the total population (see Fig. 16).[26] This young and dependent segment did not advance its share in rapid strides; only by 1940 did it reach 44 per cent of all Taiwanese. A glance at Table 18 will show how extremely this departs from the composition of populations in industrial countries. There is little reason to suppose that the trend would have continued much further, even with the large numbers of births that contributed to it each year and the efforts at health control already sponsored by the Japanese.

On the purely hypothetical assumption of continuance of mortality and fertility through the 1940's as in the period 1936-1940, a bar has been added to Fig. 16 for 1950. It gives an indication of what these same circumstances might have produced in ten more years. As an actual estimate it is of no value, since conditions did not in fact remain so favorable after the end of Japanese rule. The resulting figures are nevertheless of interest, for they suggest that without new improvements in longevity this trend might have progressed already as far as it could go.[27]

[26] Fig. 16 is based on data for males and females combined, since when it comes to dependency of childhood and old age both required support. It is implicitly assumed that women in prime adult ages are not dependent in this same sense.

[27] It is interesting to note that the age composition of Taiwanese in 1940 was almost identical with that of the "stable population"—i.e., the age composition that would

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With continuance of these demographic conditions—and infinite resources for their support—the Taiwanese could probably have expanded in this same scale forever. But, while the pattern of occupational movement that we have observed was also a stable one that did not contain many elements of change, it could not have perpetuated current conditions indefinitely, any more than the actual growth has been allowed to continue without setback. The phenomenon of growth itself was an underlying factor of instability for the society. If the Japanese had remained in control, they would have been forced to recognize the problem sooner or later, and either provide additional opportunities for livelihood or risk disruption of their program from other sources. Their efforts toward industrialization were too small and too selfish to have made any difference in the result.

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have resulted from indefinite persistence of the fertility and mortality rates of the same period, 1936-1940. The rate of increase implied by the structure of this hypothetical stable population is somewhat higher than that which was actually recorded at the time.

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CHAPTER V

Migration and the Growth of Cities

177 DEPENDING on the way one looks at it, the history of colonial rule in Taiwan can give the appearance either of having brought great transformations to the island or of having left the indigenous social structure virtually intact. This apparent contrast comes from shifting attention between the two principal groups of people that were involved—from the Japanese, who had little to do with the archaic customs and usages of the population, to the Taiwanese, who had only small acquaintance with the modern changes that were being introduced. Here we shall be concerned with those of the latter who came into contact with the new elements.

Though the full force of these developments passed them by as a group, the Taiwanese were not all uninfluenced. The organization of farming, to be sure, continued as before with little modification. The activities most affected were those outside of agriculture. Hence the people must have moved to the new conditions, since the innovations did not move to them.

The Territorial Frame of Migration

659 Taiwan is a small island, and recording the migration of its people should not be a task of great magnitude or difficulty. Japanese regarded such a record as essential in keeping a close watch over the population. It was so important that they inaugurated continuous population registers for every village, every group of households. These reports were compiled in fine detail by the authorities and published in a single volume each year.[1] A certain amount of adaptation is needed to make these registers answer questions that are germane to our interests.

167 Japanese conquest began to provide not only the first reliable data for assessing movement in the population, but also a new type of control over it. It put an end to the historic influx of people from China that had been responsible for populating most of the island.

[1] The data proved to be more efficient for their purpose than for ours. The system faithfully counted the arrival of new persons in a community (the most important information from the standpoint of regulation) but did not expunge the records of all persons who left. The result was a more or less consistent bias toward *over*-estimating the number of people living in a given locality, and of course a somewhat distorted view of total migration.

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On a much smaller scale, Japanese replaced Chinese as immigrants. 167
Chinese arriving from the mainland were given a distinct legal status as aliens. Their activities were restricted, and they were no longer allowed to merge with permanent Taiwanese residents. Practically all movement by Taiwanese thenceforth consisted of internal migration, redistributing the population that was already there.

Only a part of the island is level enough to have encouraged heavy 659
agricultural settlement; almost half of the total area is more than 631
500 meters above sea level. For administration, and therefore for the census, Taiwan was separated from 1920 on into seven main divisions. Two of them, plus an eighth for P'enghu (the Pescadores Islands) off the West coast, were technically under a different sort of political organization; but for convenience we shall refer to all eight as *Prefectures*.[2] Most types of census and registration statistics were tabulated for each of these political units as well as for the total island.

Beneath the level of Prefectures, local administration was organized around a set of Districts and a smaller number of Municipalities. In the population statistics, these formed two parallel units: no District contained a Municipality, and both were subordinate to Prefectures.[3] There were seven Municipalities at the census date in 1930, raised to nine before 1935, and 53 Districts in both years; in comparisons of different years, all will be standardized to the arrangement in 1935. Inside each District were towns and villages. Few materials are available for these individually; for most purposes the smallest divisions that can be studied are the Districts.[4]

Finally, the mountainous interior region—the Aborigine Terri-

[2] If not literally accurate, the term is appropriate in that authority below the Government-General was highly centralized in the subordinate governors of these divisions. How they are designated here is a matter of no consequence, as it made little difference in the actual administration. P'enghu, scarcely known to Westerners except as the Pescadores Islands, was in 1926 made a separate division under the Government-General. Prior to this it had shifted between separate status and a subdivision of Kaohsiung Prefecture. Hence there is no unbroken series of data for it.

[3] Again, the details of political organization were not uniform, but that need not concern us here. Both terms are arbitrary: "District" for the term *chün* (in its Chinese reading), and "Municipality" for *shih*. It was the practice to form new municipalities by removing some important town of sufficient size as a unit from its surrounding District, sometimes adding some former villages, also intact. This practice gives a basis for identifying the population of cities for comparison over a period when such administrative changes were taking place.

[4] The area of towns and villages exhausted the entire area of Districts, leaving no space between their boundaries. Therefore they do not always refer to meaningful units of settlement, and the terms are not consistent.

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659 631 tory—was put under special control (though it nominally fell inside some part of each prefecture). This area must be considered as a separate division of the island. Its actual conditions and the quality of its population data are distinct from the remainder. Japanese were secretive about their treatment of the Aborigine Territory, and we have little information about it that is dependable.

These civil divisions were the outcome of some experimentation in government administration. The scheme just described was put into essentially its final form in 1920. Accordingly, most comparisons involving internal boundaries cannot be carried back beyond that year.

161 *The Distribution of Total Population and of Migrants*

In 1930, the population of Taiwanese was divided among the Prefectures as indicated in Table 19. Data in this form do not readily

TABLE 19

TOTAL POPULATION OF TAIWAN, 1930

By Prefecture, Inside and Outside the Aborigine Territory

(All Ethnic Groups)

	Area of Regular Administration			*Aborigine Territory*		
Prefecture	*Population*	*Density: Persons Per Sq. Km.*	*Density As % of Average For Total Island*	*Population*	*Density: Persons Per Sq. Km.*	*Per Cent*
Taipei	896,380	328.0	141	17,151	9.4	4
Hsinchu	641,479	243.9	105	23,232	11.8	5
Taichung	990,571	279.3	120	24,975	6.5	3
Tainan	1,155,287	233.9	100	4,359	9.0	4
Kaohsiung	601,547	210.5	90	31,772	11.1	5
Taitung	46,182	46.2	20	12,619	5.0	2
Hualien	72,555	53.7	23	14,304	4.4	2
P'enghu	60,124	473.9	204	—	—	-
Total Island	4,464,125	232.7	100	128,412	7.6	3

Source: *Census of 1930, Statistical Tables*, Table 11.

reveal relative concentration and dispersion of people. The real centers of population, if we disregard for a moment the dense settlement in the largest cities, were in portions of Taichung and Tainan

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Prefectures, and in Taipei. A thin belt of level land along the east coast was only freshly settled; people were extremely sparse in the interior region (see also Fig. 2). Separating the Aborigine Territory removes the greatest variation in terrain and land use. On this basis the more populous sections of the island can be roughly distinguished, though only in terms of Prefectures (which were not evenly settled throughout). To facilitate this comparison, the density of total population (per square kilometer) in each Prefecture is expressed in the final columns of Table 19 as a percentage of the density over the entire island with the Aborigine Territory excluded.

One can get a quick glance at the total effects of migration by examining the disposition of people among the smallest civil divisions at two separate dates. This information is prepared, for the years 1920 and 1935, in Table 20. The intervening period covers

TABLE 20

TAIWAN. TOTAL POPULATION BY SIZE OF CIVIL DIVISION, 1920 AND 1935

Excluding the Aborigine Territory

Size of Civil Division	*1920*		*1935*	
	Population	*Civil Divisions*	*Population*	*Civil Divisions*
	A. Numbers			
Under 10,000	765,772	116	1,244,749	130
10,000-20,000	1,980,510	141	2,262,691	118
20,000-30,000	409,149	19	606,831	22
30,000-40,000	166,543	5	119,785	3
40,000-50,000	47,921	1	469,151	7
Over 50,000	239,342	2	384,973	2
Total Island	3,609,237	284	5,088,180	282
	B. Per Cents			
Under 10,000	21.2	40.8	24.5	46.1
10,000-20,000	54.9	49.6	44.5	41.8
20,000-30,000	11.4	6.7	11.9	7.8
30,000-40,000	4.6	1.8	2.3	1.1
40,000-50,000	1.3	0.4	9.2	2.5
Over 50,000	6.6	0.7	7.6	0.7
Total Island	100.0	100.0	100.0	100.0

Sources: *Census of 1920, Descriptive Report*, Appendix, Table 8.
Census of 1935, Statistical Tables, Table 3.

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fifteen years of uninterrupted growth in the island's population. This is a short span, but it is the longest one for which appropriate figures exist. Before 1920 the territorial divisions were not the same, and for the census of 1940 no full reports have been published.

Apparently, from Table 20, the fact that there were more people in 1935 made little difference in their mode of settlement. At both dates more than two-thirds of all people (here including Taiwanese and all other groups) were living in places of less than 20,000 in size. Some of the larger civil divisions shifted upward from one group to a higher one; this is to be expected from the mere fact of general population increase. What is surprising is that the biggest cities—and as late as 1940 Taiwan boasted only three larger than 100,000—failed to advance substantially over the rest of the island. Subsidiary centers of less than 50,000 population made the most headway in relation to other places. A certain amount of administrative reorganization enters into these figures, since evidently a few of the minor units were split up into still smaller ones. But these changes were confined to units of the smallest size, and did not encompass many people. Viewed in entirety, migration therefore did not have a marked effect in redistributing the population growth that was in progress among the Taiwanese.[5]

Economic activities had changed so little, however, that migratory movements could hardly have been large. Besides, no large areas of new lands were available to farmers after 1900. Most of the additional space brought under cultivation since that time was converted to agricultural use within the settled area. Expansion of agriculture along these lines did not open opportunities of wider settlement.[6] In the absence of empty lands, there was little for peasant farmers to gain in changing residence unless they also changed their livelihood. In general, if they remained agriculturists it was advantageous also to remain in localities where they were well known, where their families were well established, and where they did not suffer the invidious treatment commonly accorded to strangers.

[5] Differences in natural increase, which might have hidden the effects of some migration in these figures, bore almost no relation to the differences in actual population growth between civil divisions.

[6] The exception to this rule was the rugged east coast of Taiwan. There the authorities brought in "colonists," first Japanese and later Taiwanese, to establish special settlements in the limited plains area for cultivation of sugar and other crops. Though making up a large part of the population later found in this region, this migration was small and of a very special nature.

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MIGRATION AND THE GROWTH OF CITIES

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On the basis of the previous chapters we should know in advance some of the reasons why people moved. If movement was difficult and uncommon within agriculture, then permanent migration was presumably a matter of going to new jobs. Occupational movement and spatial movement were two interconnected parts of the same process. This meant, for the society, a shift in its economic base; for individuals, it amounted to a change in status, together with exit from rural life and activities.

Bearing in mind that the migrant population was small, we can try to discover where these people went and who they were. For the aggregate of those who crossed local boundaries, both origins and destinations can be found by estimating the balance of persons who moved into or out of each civil division.

This measure is suited to detecting various types of migration. In its results much depends on the types of areas and the period of time chosen for making the estimates. Districts and Municipalities are the places that will be used here; they are small enough not to hide very many moves of more than ten or twenty miles. The smallest time interval is set by the fact that census data give the best indication of total population change by place (i.e., the difference in the people counted from one census to the next in each unit of enumeration). This fixes the period to be used at five years. It is probably sufficient to cancel out some short-term migration and give a certain amount of weight to permanent shifts of residence.

But intercensal population change represents the effects of both net migration and the net amounts gained by births and lost by deaths or natural increase. Since only a tiny fraction of births or deaths went unregistered, they give a good basis for taking out the component of natural increase. The residual term that remains from intercensal population change can therefore be regarded as "net internal migration" in any given civil division.[7]

From 1925 to 1930, net migration viewed in this fashion did not vary greatly among Districts. It is interesting, however, to see the regional groupings of Districts, in terms of per cents of their Tai-

[7] That is, it is practically zero for the island as a whole. Discrepancies are possible for local areas if the chances of dying have been affected by whether or not some of their people were migrants, or if deaths were registered in a previous place of residence. There is no direct evidence available as to the error from those sources. Because Taiwan's population records were of high standard, and because migration was not heavy, it seems safe to assume that these distortions are minor in any particular place. The procedure used for estimating net migration may, however, increase the amplitude of errors in the residual values.

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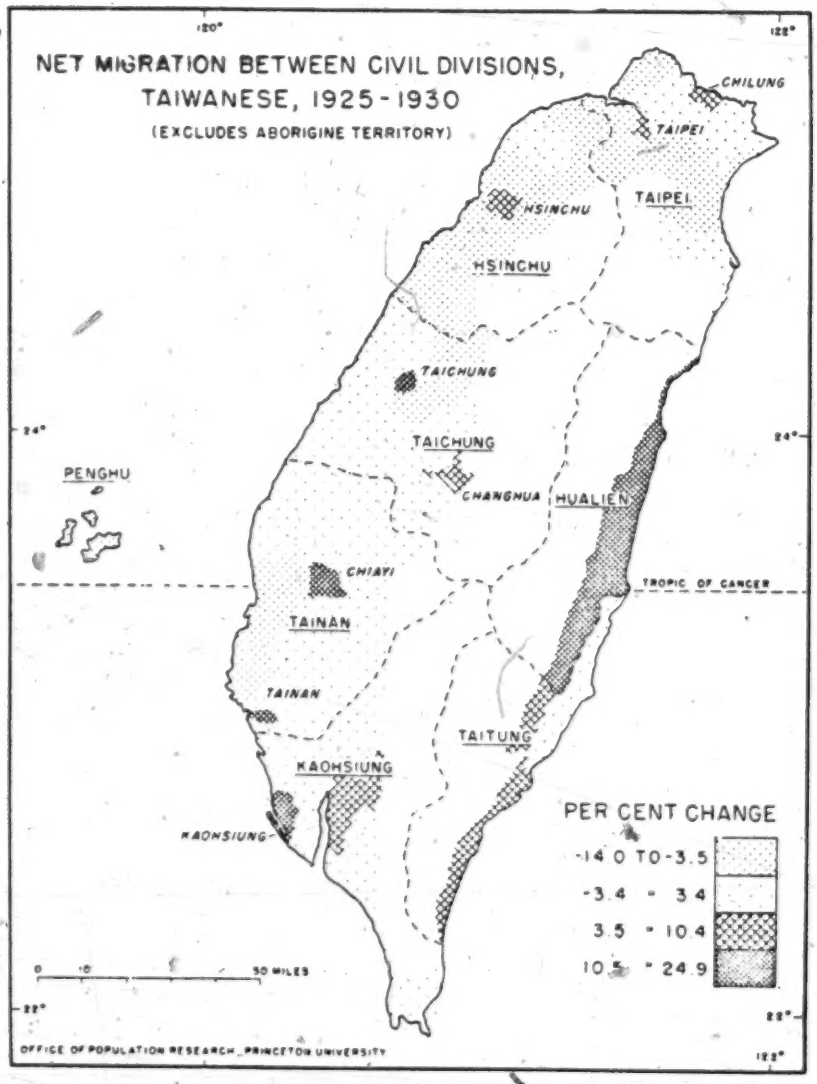

Fig. 17. Net Migration of Taiwanese between Civil Divisions, 1925-1930.

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wanese inhabitants received or lost in this way from 1925 to 1930 (see Fig. 17).[8] These groupings divided the rural areas into two parts—a zone of out-migrant Districts in the north, and a more or less neutral region having almost no increase or loss through migration. A process of rapid settlement was beginning in the habitable parts of the eastern coast, where the authorities and a few private companies encouraged people from other Districts to go. This settlement was carried on partly through government design, and was not entirely spontaneous. It grew rapidly from a small start, but did not shift large numbers of people.

These transfers of people were extraordinary. The only other noteworthy exceptions to near-immobility over the rest of the island were cities. On the map these appear as the several isolated points with relatively high gain in migrants.[9] They were interspersed in rural areas of migration deficit, suggesting that much of the movement covered only the short distance from one civil division to the next.

The same data used for Fig. 17 yield more information in terms of the relation of intercensal change with natural increase and net migration. Fig. 18 illustrates the pattern of association that holds in either case, taking each District and Municipality simply as a unit, equally weighted. Against total population change as the standard of comparison, the percentage of natural increase varied from District to District more or less at random, and within a narrow range. Net migration, on the other hand, contributed most of the variation in population change from one civil division to another. The gist of Fig. 18 is summarized in Table 21, this time with each civil division weighted by the number of persons. In a somewhat different way, Table 21 reinforces what we have just learned about the components of population change: natural increase was nearly the same in all quartile groupings of places according to total population growth. Only net migration varied consistently with total change.

[8] Strictly speaking, ratios of estimated migrants to 1925 population. The Aborigine Territory has been excluded in these data, as it was only in the process of being "pacified" at this time; the ratios therefore show the total area illustrated in Fig. 17 to have a net out-migration, presumably because some people moved into the fringes of the interior area as it was gradually subjugated.

[9] In addition, part of one of the Districts was marked by exceptional growth among its neighbors due to the influence of a city that it contained. This was P'ingtung City, slightly to the east of Kaohsiung. It was elevated to a Municipality in 1932 and separated from the surrounding District.

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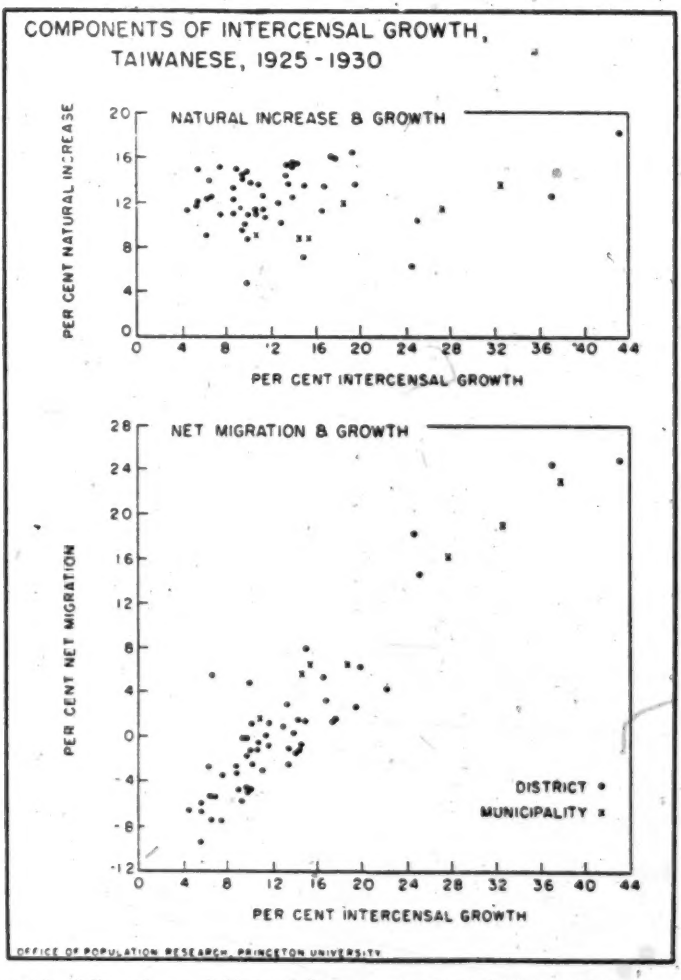

Fig. 18. Net Migration and Natural Increase by Civil Division, Related to Intercensal Growth of Population, 1925-1930.

The residual estimates of net migration above indicate that city populations gained the most from migration. This fact does not of itself imply that they gained the largest numbers of migrants, for we have not yet established that the cities were large enough next to the rural population to have such weight. All that these data reveal about the migrants is, in an aggregate sense, the places of origin and destination. For some idea of the numbers of people involved,

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TABLE 21

NET INTERNAL MIGRATION OF TAIWANESE, 1925-1930

By Districts, Grouped in Quartiles According to Total Intercensal Change. With Municipalities Shown Separately*

	Per Cent Intercensal Change	*Per Cent Natural Increase*	*Per Cent Net Migration*
First Quartile	6.2	12.4	—6.2
Second Quartile	9.5	12.1	—2.6
Third Quartile	12.7	13.1	— .5
Fourth Quartile	17.3	13.9	3.3
Municipalities	19.1	10.3	8.9

* Percentages are ratios based on population of 1925 in each civil division.
Sources: *Census of 1925, Statistical Tables*, Table 1.
Census of 1930, Statistical Tables, Tables 1 and 2.
Vital Statistics, yearly volumes, 1926-1930.

and of the proportion of migrants who went to cities, we should rather deal directly with those who migrated.

The census reports for 1930 contain a special table showing persons born in a Prefecture other than the one in which they were enumerated—i.e., who had travelled across a prefectural boundary at some time after birth. This material is not in sufficient detail to establish the broad pattern of migration illustrated above,[10] but forms a valuable supplement to our estimates. In particular, it supplies a fuller answer to the question of relative drawing power between country and city.

Very few Taiwanese shifted residence across prefectural boundaries—obviously fewer than those who moved across District boundaries. The ones who did are a specially selected sampling of all people who moved. Most changes of residence in an agrarian society may be expected to be over short distances. These involve the least break with the past and exposure to unfamiliar conditions. They contain much "normal" movement of people having nothing to do with social change, for they are often bound closely to stable local

[10] It is, for example, an independent source of corroboration for the general spatial pattern of migration shown above. With it we can locate those migrants whose travels happened to cross prefectural boundaries (and who survived to the census date) according to their place of destination. By this criterion, the places of highest immigration are mostly the same as those shown by the measure of "net migration" above in the text. These census data lack, however, any information about the District of origin of the migrant population, which is just as essential to know.

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166 customs.[11] Since the Prefecture in Taiwan was a fair-sized geographical unit, much of this short-distance movement regularly occurred within these boundaries and would never come to light in such coarse tabulations. The rural Districts receiving most migrants from other Prefectures were, not unnaturally, those which lay on the border of an adjoining Prefecture.

The growth of each Prefecture through migration was therefore strongly conditioned by this fact. Cities were not so affected. Unless they were located near the edge of their Prefectures—and none was situated at a boundary—they had less chance of receiving short-distance migration from another Prefecture than did their rural hinterland.

Every Municipality in 1930, however, had a larger proportion of inter-prefectural migrants in its population than the remainder of its own Prefecture (see Table 22). These migrants, of course, were not necessarily people who had entered within a definite period of time, but those who had ever migrated. The east-coast Prefectures (Taitung and Hualien), which were non-urban, had the largest proportion of people from other Prefectures; but we have already seen that they were exceptional cases.[12] Significantly, the attraction of cities for people of other Prefectures tended to favor males more than that of their surrounding areas. In Hsinchu Prefecture (which on balance steadily lost migrants), the difference is greatest of all: the sex ratio of migrants to Hsinchu City was 167, to outside the city 72 (see Table 22).

These facts are put into better focus in Table 23. When migration data of this type cover a complete area, they have the special virtue of enabling one to count the migrants by place of origin as well as place of destination. Part A in Table 23 more nearly corresponds to the residual approach that was adopted above. The column next to the number of in-migrants shows their proportion among all residents; the final column gives the proportion of all in-migrants who went to cities. At the same time when 23.5 per cent of all inter-prefectural migrants had gone to cities, the cities themselves held only 10 per cent of all Taiwanese. A more appropriate comparison than over the entire island is to examine the cities of each Prefecture

[11] As, e.g., the "marriage migration" in certain countries. Cf. Davis, K. (1951), pp. 111-114.

[12] And Hualien contained a growing city of moderate size, which was made a Municipality in 1940.

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TABLE 22

INTER-PREFECTURAL MIGRANTS IN TAIWAN, 1930

Taiwanese Residing in Prefecture Other Than That of Birth, Enumerated in Rural Districts and Cities

	A. Rural Districts				B. Principal Cities (Municipalities in 1930)				
		Migrants from Another Prefecture (i.e., Born in Other Prefecture)				Migrants from Another Prefecture (i.e., Born in Other Prefecture)			
Prefecture	*Total Taiwanese Residents*	*Number*	*% of All Residents*	*Sex Ratio*	*Total Taiwanese Residents*	*Number*	*% of All Residents*	*Sex Ratio*	*Name of City*
Taipei	588,165	18,443	3.1	95	147,620	8,395	5.7	124	Taipei
					51,337	3,353	6.5	145	Chilung
Hsinchu	611,145	6,989	1.1	72	39,361	928	2.4	167	Hsinchu
Taichung	943,314	36,247	3.8	111	39,431	5,040	12.8	106	Taichung
Tainan	989,591	21,678	2.2	100	76,073	5,101	6.7	110	Tainan
					47,615	5,114	10.7	103	Chiayi
Kaohsiung	552,243	24,985	4.5	121	45,288	15,698	34.7	127	Kaohsiung
Taitung	53,684	7,411	13.8	140					
Hualien	72,103	25,670	35.6	136					
P'enghu	55,936	554	1.0	—					
Total Island	3,866,181	141,967	3.7	—					

Source: *Census of 1930, Prefectural Volumes*, Table 30 in each.

separately, where their drawing power stands in clearer contrast to that of their surrounding rural area.

Part B of Table 23 is an interesting supplement to the information already at hand. The deficit standing of Hsinchu is more conspicuous here than in Fig. 17, for the other Prefectures retained most of their own migrants inside their boundaries. P'enghu Islands, in addition, had lost relatively more people to other parts of Taiwan than any other Prefecture. These islands experienced disastrous storms and rural poverty for many years, and had no adequate economic base for many people to follow pursuits other than farming. Through the years P'enghu supplied an unbroken stream of people to Taiwan proper, most of them going to Kaohsiung City.

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TABLE 23

TOTAL SURVIVING MIGRANTS BETWEEN PREFECTURES, AND THOSE WHO WENT TO CITIES*

Taiwanese Enumerated in 1930 Whose Place of Residence Was Different from Place of Birth

	A. By Prefecture of Destination Resident in Prefecture, Born Elsewhere			*B. By Prefecture of Origin Born in Prefecture, Resident Elsewhere*		
Prefecture	*Number Who Migrated*	*% In-Migrant of All Persons Resident in Each Prefecture*	*% of the In-Migrant Who Went to Cities*	*Number Who Migrated*	*% Out-Migrant of All Persons Born in Each Prefecture*	*% of the Out-Migrant Who Went to Cities*
Taipei	30,191	3.9	38.9	28,665	3.6	19.2
Hsinchu	7,917	1.2	11.7	91,360	12.4	16.3
Taichung	41,287	4.2	12.2	16,569	1.7	20.6
Tainan	31,893	2.9	32.0	19,950	1.8	27.4
Kaohsiung	40,683	6.8	38.6	9,719	1.7	26.0
Taitung	7,415	13.8	—	2,066	4.3	3.4
Hualien	25,650	35.6	—	1,681	3.5	6.1
P'enghu	544	1.0	—	15,570	21.9	74.7
Total Island	185,580	4.3	23.5	185,580	4.3	23.5

* People living in boats are excluded.
Source: *Census of 1930, Prefectural Volumes*, Table 30 in each.

Movement to Cities: The Rate of Growth

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These census materials above all emphasize one important fact: cities were the outstanding recipients of people from the rest of the island. The data regrettably can be used to demonstrate the case in only a limited way. The limitations are, however, of a nature that make this testimony an understatement—the total number of migrants to cities was much larger than merely those who had crossed the borders of a Prefecture. Lacking further data directly for the people who moved, we may find out more about them at their destinations as members of the urban population in Taiwan.

Since these several cities took such a large share of all migrants, they must have grown more rapidly in population than the rest of the island. The Municipalities were only a part of all the cities and towns in Taiwan, for the distinction was one of administrative convenience. Not all had equally developed economic services. They are

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a makeshift way of distinguishing urban places from rural Districts. Many subsidiary market towns, for example, must be overlooked for lack of data.

But in a population that was predominantly rural, these cities were the most "urban," the farthest removed from traditional peasant agriculture. Under the watchfulness of the Japanese, a town could not enlarge its economic importance for the rest of the island very far before it was given regular municipal administration. Hence we may treat them as representing the most extreme departures from rural conditions to be found in Taiwan, and can proceed to find out how far they deviated from the rest.

In 1932, two more cities were raised to municipal rank. The earlier and later population figures for all nine that were Municipalities in 1935 have been sorted out from the respective census reports, and appear in Table 24. It is clear that the cities of Taiwan were not great metropoleis. These nine were the largest, and many Westerners would regard only the foremost among them (Taipei) as being urban. One cannot gainsay their importance to Taiwan: they differed consistently enough from the rest of the island not to be lightly dismissed.

One distinction that is obvious in Table 24 is in the rate of growth. Though the cities varied considerably among themselves, every one increased its Taiwanese inhabitants more than the entire island did. Most cities maintained steady rates of growth, and therefore tended to keep their differences with the others.

The data are condensed and plotted on a logarithmic scale in Fig. 19, so as to contrast the rates of increase of city and non-city Taiwanese and Japanese. The inequalities in growth stand out clearly. Those cities that were expanding more slowly are likewise the ones that had relatively fewer migrants in the data above. They did not outgrow the non-city population by much of a margin, either in Taiwanese or Japanese. The differences in increase persisted over the entire recorded period, and carried over into the later years of accelerated economic growth. Indeed, from these data on population redistribution one could scarcely guess that the tempo of economic life had changed after 1935. Whereas these same cities had held 10 per cent of all Taiwanese in 1920, they contained only 14.7 per cent as late as 1940. For all their growth, cities did not greatly surpass the increase of all Taiwanese.

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TABLE 24

POPULATION OF TAIWANESE AND JAPANESE IN NINE MAJOR CITIES AT SUCCESSIVE CENSUS DATES, 1915-1940*

	1915	*1920*	*1930*	*1940*	*Ratio: 1940/1920*
TAIWANESE					
Taipei	98,495	108,107	147,620	221,602	2.0
Chilung		33,692	51,337	69,578	2.1
Hsinchu		28,951	39,361	51,060	1.8
Taichung	18,444	22,250	39,431	64,884	2.9
Changhua		32,810	40,747	54,741	1.7
Tainan	56,297	62,115	76,073	122,173	2.0
Chiayi		31,392	47,615	80,828	2.6
Kaohsiung		27,153	45,288	96,588	3.6
P'ingtung		18,420	28,917	46,961	2.6
Total, All Cities		364,890	516,389	808,415	2.2
Total Taiwanese		3,466,507	4,313,681	5,510,259	1.6
JAPANESE					
Taipei	37,974	45,211	67,687	91,550	2.0
Chilung		11,898	18,541	24,815	2.1
Hsinchu		2,649	5,102	7,504	2.8
Taichung	6,817	8,817	13,214	16,300	1.8
Changhua		786	1,977	2,977	3.8
Tainan	9,708	12,140	14,955	16,654	1.4
Chiayi		5,445	8,575	9,960	1.8
Kaohsiung		8,840	15,437	28,336	3.2
P'ingtung		3,112	4,814	6,747	2.2
Total, All Cities		98,898	150,302	204,843	2.1
Total Japanese		164,266	228,281	312,386	1.9

* Cities not yet formed before 1935 have been reconstituted for previous years according to their 1935 boundaries from the detailed census tables. Cities changed after 1935 have been adjusted to 1935 boundaries.

Sources: *1915 Population Register* } (Both of these volumes contain the census figures for minor civil divisions.)
1920 Population Register }
Census of 1930, Statistical Tables, Tables 1 and 2.
Census of 1940. (Figures secured from the Gazette of the Taiwan Government-General, April 22, 1941.)

Japanese on the whole had stronger preferences for the same cities as did Taiwanese. But the functions of urban growth were not the same in the two groups. Taiwanese moved to cities as the most promising alternative to farming. Japanese, coming from outside to city and countryside alike, held technical and professional positions in

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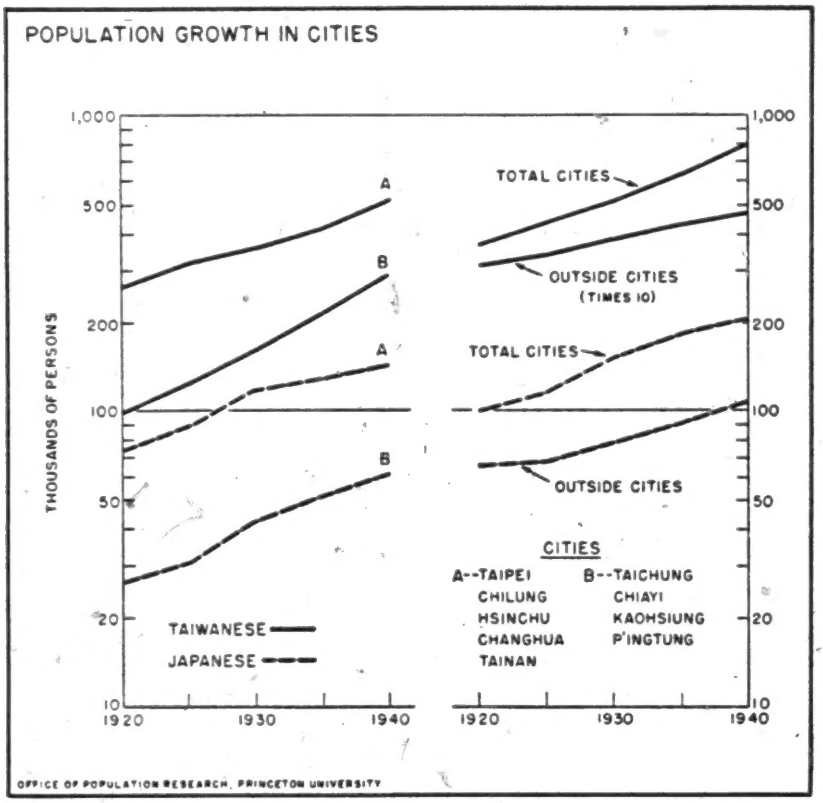

Fig. 19. Growth of Population in Major Cities of Taiwan, 1920-1940. Taiwanese and Japanese.

both places. They certainly esteemed urban more than rustic life; but work of a similar nature was also available to them outside the cities. For them the place of residence had less influence on their type of livelihood.

Ethnic Composition of Cities

The growth of cities depended on only a small part of all Taiwanese to supply the necessary migrants. It was not so with the Japanese. In a sense, the majority of them were migrants, having been born outside of Taiwan. More important, however, nearly two-thirds of all Japanese took up residence in cities and presumably stayed there (see Table 25). They found an urban setting most advanta- 563 162

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TABLE 25

PROPORTIONS OF TAIWAN'S POPULATION OF EACH ETHNIC GROUP Living Inside the Nine Major Cities in Taiwan, and in Taipei City

	1920		1940	
	Per Cent of Total Population	*Sex Ratios*	*Per Cent of Total Population*	*Sex Ratios*
Nine Cities Combined				
Taiwanese	10.5	106	14.7	104
Japanese	60.2	119	65.6	105
Other	68.4	345	59.8	175
Taipei City Alone				
Taiwanese	3.1	102	4.0	99
Japanese	27.5	117	29.3	100
Other	38.6	364	26.8	166

Source: *Census of 1930, Statistical Tables*, Table 1.

geous for conducting the new activities that they brought with them to Taiwan. Japanese proceeded to develop Taiwan's cities to provide an appropriate environment of modern banking facilities, centers of government administration, reservoirs of professional skills, and headquarters of private business.

Personal comforts, too, were not neglected. Running water, systems of sewage disposal, gas, electricity, and cinemas first appeared in these cities, and did not spread far beyond them. For those who could afford the time and expense, life in Taipei was graced by a nearby golf course and several fashionable vacation resorts. Japanese were energetic in constructing large public buildings conspicuously of Western architectural styles, thoroughfares and parks for their gratification and diversion. The section of Taichung City that was occupied by Japanese was referred to fondly as "little Kyoto."[13] Cities understandably were attractive places for Japanese to reside.

The Japanese affinity for urban life was exceeded only among the mainland Chinese that were found in Taiwan.[14] The explanation in their case is somewhat different. These people were admitted to the island as small merchants or as laborers in many of the modern enter-

[13] OPNAV, Civil Affairs Handbook (1944), *Taichu Province*, p. 149 ff.

[14] These made up almost all of the category "Other Nationalities" in Table 25 and in published census tables.

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prises that flourished wherever there were Japanese. In this respect they were distinct from Taiwanese, as their occupational composition indicates (see Table 16). Otherwise they merged in language, customs, and sympathies most closely with the urban population of Taiwanese.

The Chinese tended to remain in cities or commercial towns. The authorities held them under suspicion and close scrutiny, and often confined them by labor contract to menial positions. On the whole they did not become permanent residents of Taiwan; by their sex ratios they appear as a relatively transient group (though some of them intermarried with Taiwanese). Many were merely seasonal workers who remained in Taiwan for only part of the year.

The ethnic composition of the urban population was, like its increase, a product of migration from outside cities rather than growth from within. Different cities did not all exert the same attraction for people according to ethnic background. Variations between cities in ethnic composition (see Table 26) were scarcely a matter of *Taiwanese* being drawn less into some cities than into others, for they comprised the broad population base in every one. These differ-

TABLE 26

ETHNIC COMPOSITION OF MAJOR CITIES IN TAIWAN

Per Cent of Total Population in Each Ethnic Group
1920, 1930 and 1940

	Taiwanese			*Japanese*			*Others*		
*Cities**	*1920*	*1930*	*1940*	*1920*	*1930*	*1940*	*1920*	*1930*	*1940*
Taipei	66.4	64.1	67.9	27.8	29.4	28.1	5.8	6.6	4.1
Chilung	70.3	68.4	69.5	24.8	24.7	24.8	4.9	6.9	5.7
Hsinchu	90.7	87.4	86.3	8.3	11.3	12.7	1.1	1.2	1.0
Taichung	70.5	72.8	78.9	28.0	24.4	19.8	1.5	2.8	1.3
Changhua	97.0	93.6	94.0	2.3	4.5	5.1	.7	1.9	.9
Tainan	81.1	80.5	86.0	15.9	15.8	11.7	3.0	3.7	2.3
Chiayi	83.8	82.3	87.4	14.5	14.8	10.8	1.7	2.9	1.8
Kaohsiung	74.1	72.2	79.8	24.1	24.6	18.6	1.8	3.2	1.6
P'ingtung	84.2	82.8	85.8	14.2	13.8	12.3	1.6	3.4	1.9
Total	75.9	73.9	78.0	20.6	21.5	19.2	3.5	4.5	2.8

* Boundaries of all cities have been adjusted to those of 1935.
Sources: *1920 Population Register*, Table 2.
Census of 1930, Statistical Tables, Tables 1 and 2.
Census of 1935, Statistical Tables, Table 1.

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ences are to be explained primarily by the preferences of Japanese for certain cities as opposed to others.[15]

We may thus regard the proportion of Japanese in the population as the major element in the variation between cities. The ethnic composition of each city was remarkably stable from 1920 to 1940, though almost all doubled in population. Taipei, Chilung, Taichung, and Kaohsiung were all more than one-fifth Japanese at each census date. This is least surprising in the case of Taipei, for it was the administrative hub of the entire island, and a thriving center of foreign trade as well. Chilung because of its natural harbor became established early as the principal port of access to and from Japan. It kept this position even after the harbor no longer handled heavy traffic, by possessing some of the key industries intended to complement Japan's war effort. Taichung was in the fertile middle section of the island, and prospered enormously from the collecting, processing, and marketing of agricultural produce. Kaohsiung was the center from which the Japanese mounted their most extensive efforts at modernization: in the city itself and its immediate environs were concentrated the major processing industries of the island. Large sums were spent in improving its harbor to facilitate the passage of this new production out of the island.[16]

The remaining five Municipalities were more typically Chinese in atmosphere, with the alien features of Japanese presence kept more in the background. Whatever their types, these cities of Taiwan were the most important places where Japanese residents mingled with Taiwanese. Japanese nationals were scattered over the rest of the island in administrative and technical posts, public and private, but only in these cities did they associate regularly with Taiwanese. Only there did many Taiwanese who were non-farmers come into frequent contact with Japanese. Consequently, one would expect that the urban environment was the principal channel of modern influence.

Even in these cities there were certain obstacles in the way of such contact. The barrier was not entirely one of language, for Taiwanese soon acquired the rudiments of the Japanese tongue through school-

[15] Mainland Chinese varied almost as much as their share in the total population by city. But they were so few, and their stay in Taiwan so impermanent, that they cannot be considered a very important part of even the urban population.

[16] Kaohsiung City was also built up as a base for southward expansion in the Pacific Ocean, but did not have the opportunity to fulfill the promise of this investment.

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ing and practice. Japanese did many things to discourage free intercourse between the two groups, and raised exaggerated fears of animosity from the Taiwanese among their own kind.[17]

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The Japanese maintained high levels of living in Taiwan. Their wealth did not create the separation between the two groups, but helped to enlarge it. The opulence of Japanese was more than simply a matter of superior income (which the Taiwanese might have emulated); it was also founded on privilege.

For example, wherever possible they lived apart in special portions of each city. These sections were arranged so as to provide the facilities that they were in a position to command—Japanese shops, entertainment, and cleanliness, one of the greatest of all luxuries in Asia. Influential Japanese strove to put themselves in such surroundings, whereupon they allowed poorer sections to develop as Taiwanese residents could best afford. Owing to this combination of jealous care and neglect, the central districts of most cities were elaborately laid out with efficient street patterns and handsome landscapes—but with residential finery and modern public buildings concentrated in a few blocks and the indescribable slums that Asia often produces spread over the remainder.[18]

It is easy to see the nature of residential segregation in Taipei City, where it was carried farthest (see Fig. 20, based on 1935 census data). There were two large concentrations of Taiwanese, at the north and the southeast corners. These were the sites of the original pair of settlements that grew into the present city. The space in between had been gradually built up before 1895 as the seat of Manchu administration for the island. It was razed and replaced by the Japanese (following a destructive typhoon in 1912) to make way for new construction that they planned. The Japanese built this central area themselves, and therefore to their own design. It had a core in which almost none but Japanese eventually lived, surrounded by a

[17] One can say that these fears were exaggerated without implying that they were without foundation. By their repressive administration, Japanese invited widespread ill-will in the population. Much of this might have been allayed if they had not on the one hand advertised the benefits of their rule and, on the other, systematically cut off any opportunities for Taiwanese to compete with Japanese on equal footing. This ambivalent policy even undermined some of their foremost objectives by impeding their use of the local labor supply in the most effective ways for war production.

[18] The enforcement of health and sanitary regulations held the two groups in complete equality before the law. In looking back at the severity of these measures, Chinese have remembered them as instances of oppression by the Japanese. But by such means the authorities were able to avoid the unhealthful conditions usually associated with urban crowding in Asia. See Hsü Tze-wei (1946), p. 444 ff.

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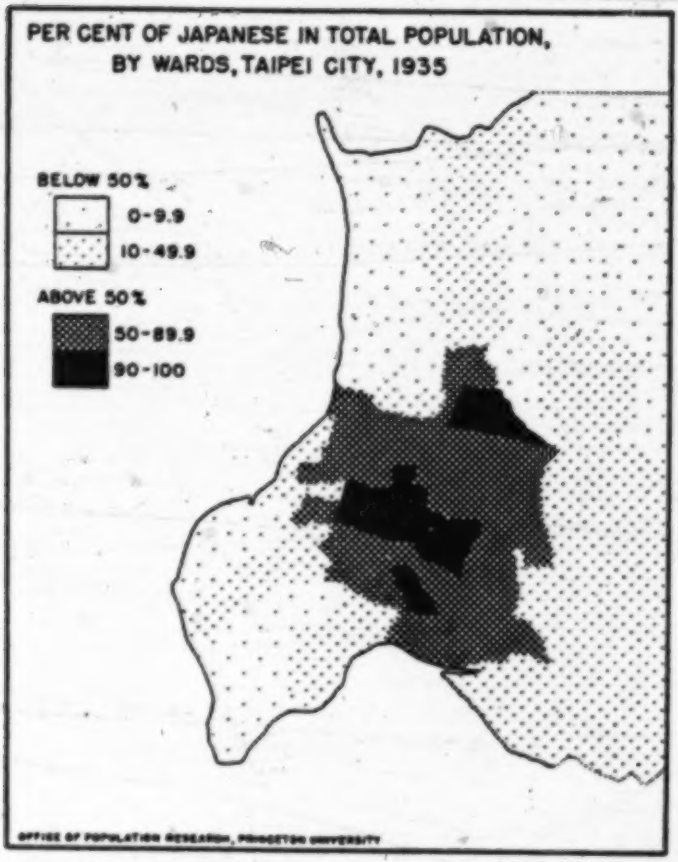

Fig. 20. Residential Segregation of Japanese in Taipei City.

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substantial area where Japanese residents predominated. Around the fringes of this modern district, other Japanese (reportedly those of lower income and social status[19]) lived more thinly mixed with Taiwanese. Almost one-half of the city's surface was taken up by poorer districts composed entirely of Taiwanese dwellings, shops, and open markets.

There is also another way to see how the separation of living quarters kept the two groups apart—in terms of persons rather than the space involved. Table 27 illustrates this aspect of segregation for

[19] OPNAV, Civil Affairs Handbook (1944), *Taihoku Province*, p. 193. A more comprehensive account of the growth of Taipei City, in relation to the surrounding region, is given in Ch'en Cheng-hsiang (1952).

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TABLE 27

RESIDENTIAL SEGREGATION IN TAIPEI CITY, 1925 AND 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese in Each "Ward"

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Per Cent Japanese in Each Ward	1925		1935	
	Number	Per Cent of Total	Number	Per Cent of Total
		Taiwanese		
0– 9.9	94,551	73.4	109,309	62.5
10.0– 49.9	25,681	19.9	48,815	27.9
50.0– 89.9	7,964	6.2	16,508	9.4
90.0–100.0	606	0.5	384	0.2
Total Taiwanese	128,802	100.0	175,016	100.0
		Japanese		
0– 9.9	3,069	5.8	3,640	4.5
10.0– 49.9	11,462	21.5	18,173	22.2
50.0– 89.9	24,928	46.7	48,775	59.7
90.0–100.0	13,884	26.0	11,116	13.6
Total Japanese	53,341	100.0	81,704	100.0

Sources: *Census of 1925, Statistical Tables*, Table 2.
Census of 1935, Statistical Tables, Table 2.

Taipei City in 1925 and 1935. Here both Taiwanese and Japanese have been grouped according to the degree of concentration of Japanese in each "ward." While the non-Japanese wards held the bulk of Taiwanese, there was some considerable area of overlap where the two groups were relatively mixed. From the evidence of this table, many Japanese who were arriving in Taiwan were forced to go to residential areas that contained some Taiwanese residents. This is shown by the relative gain of Japanese in the sections that were not purely Japanese, but where Japanese residents were in the majority. With its members increasing, the Japanese community eventually had to mix more widely with Taiwanese, since the areas that were already more than 90 per cent Japanese could not absorb any newcomers. They moved into wards with only the "better element" of Taiwanese, however, and managed to keep this mixture to a minimum. The proportion of Japanese living in predominantly Taiwanese wards actually fell off very slightly.

From the Taiwanese side, moving into mixed sections was carried somewhat further. Taiwanese were beginning to spread into wards that were not purely Taiwanese, sections closer to the center of the

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city which they had occupied together with Japanese. Because there were more of them, and because they had been more concentrated among their own kind before, the Taiwanese moving into these areas contributed more to the mixture than the Japanese. The data here do not signify that it was very extensive. But it makes some difference which of these two aspects of segregation we choose to use as a standard of comparison.

This trend in the segregation of urban residents was of some significance in the other cities during the years when they were growing rapidly, for the system was put under strain by the continuous arrival of new immigrants. On the whole, the Japanese were successful in housing most of their people in residential wards that were predominantly Japanese, and well-to-do Taiwanese were moderately successful in entering sections containing some Japanese, but not into the sections most prized by the Japanese.

For Japanese, no other city offered living quarters and facilities so exclusive as those of Taipei (see Table 28). In every one of these six other Municipalities they lived more widely intermixed with Taiwanese (though not necessarily at the same levels of comfort). Kao-

TABLE 28

RESIDENTIAL SEGREGATION IN SIX CITIES OF TAIWAN, 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese of Each Ward

Per Cent Japanese in Each Ward	*Chilung*	*Hsinchu*	*Taichung*	*Tainan*	*Chiayi*	*Kaohsiung*
			Taiwanese			
0– 9.9	56.6	68.5	52.7	50.0	58.2	56.1
10.0– 49.9	34.2	30.7	42.7	48.3	41.5	36.2
50.0– 89.9	8.9	0.7	4.5	1.7	0.3	7.7
90.0–100.0	0.3	0.1	0.1	0.0	0.0	0.0
Total Taiwanese	100.0	100.0	100.0	100.0	100.0	100.0
			Japanese			
0– 9.9	5.7	16.4	6.8	11.0	15.7	7.9
10.0– 49.9	35.6	54.3	53.0	69.9	80.0	38.6
50.0– 89.9	50.9	16.6	34.9	11.1	4.3	53.5
90.0–100.0	7.8	12.7	5.3	8.0	0.0	0.0
Total Japanese	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Census of 1935, Statistical Tables*, Table 2.

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hsiung and Chiayi had not a single ward with as high as 90 per cent 162
of its population Japanese. For Taiwanese, on the other hand, Taipei 361
consisted neither more nor less of mixed wards than the other cities. In all, at least nine-tenths of the Taiwanese population of every city stayed in districts in which less than a majority of the inhabitants were Japanese.

The Taiwanese in Cities

Of all Taiwanese, so few went to cities that one is prompted to 162
ask whether there were not some special factors present restricting
the size of this migration. The effects of such a selective process over 166
many years should produce differences in the characteristics of per- 463
sons living in cities and of those living outside.

Since few if any newcomers had an opportunity to take up agriculture in the cities, a prominent feature of cityward migration was a movement to new work. To the extent that it was, one would expect that the migrants were the types of persons who usually undertook new occupations in Taiwan—for example, men rather than women, primarily in the ages of young adulthood. If the migrant population had been limited to these categories, cities with large proportions of migrants in their populations must have had disproportionate numbers of young men as compared with the rest of the island. Such a tendency has characterized rapid urbanization elsewhere.

In addition, cities frequently offer opportunities for employment that are considered superior to those found in the countryside. This is especially true of many agrarian societies, where rural poverty sometimes reaches extremes that make the meanest of urban jobs seem attractive. Where such conditions exist, movement to cities very often serves to drain off large numbers of men in young working ages who have lost or overcome their attachment to farming.

In 1935, these effects of age and sex selection were hardly perceptible in Taiwan's urban population taken as a whole. The age composition of all their males combined was nearly the same as the rural population (Table 29). Surprisingly, urban females likewise had almost the same age structure as those outside of cities. Hence there could have been no sweeping dislocation of persons of different age and sex groups as a result of urbanization in Taiwan.

There are special circumstances in which it is not hard to imagine 162
some movement of single individuals in an agrarian society; this has 166

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TABLE 29

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AGE AND SEX COMPOSITION OF TAIWANESE, INSIDE AND OUTSIDE OF NINE MAJOR CITIES, 1925 AND 1935

Per Cent of Total Population in Selected Age Intervals, Male and Female

Age	Males Inside	Males Outside	Females Inside	Females Outside	Males per 100 Females Inside	Males per 100 Females Outside
			1925			
0–14	36.5	40.2	37.5	40.0	101	105
15–39	44.1	40.6	39.5	37.6	116	113
40–64	17.8	17.4	19.5	18.8	95	96
65+	1.6	1.8	3.5	3.6	47	52
Total	100.0	100.0	100.0	100.0	104	104
			1935			
0–14	41.0	43.2	41.1	42.9	103	103
15–39	41.6	38.5	39.0	37.0	110	107
40–64	15.9	16.5	16.8	16.8	97	101
65+	1.5	1.8	3.1	3.3	50	57
Total	100.0	100.0	100.0	100.0	103	103

Sources: *Census of 1925, Statistical Tables*, Table 3.
Census of 1935, Statistical Tables, Table 7.

been known to occur in the form of contractual servitude by children, of young men (though not frequently young women) shifting to non-agricultural employment, and of movement by old persons to reside with emigrant kin. But it is inconceivable that these deviant events might have occurred jointly in chance coordination so as to reproduce the rural age structure so closely in cities. Such a migration as this could have been possible only if many people travelled to cities in family units and not as isolated individuals. A great many migrants therefore must have moved merely because they were members of migrant kinship groups.[20]

This situation did not hold with equal force in all cities. Variations in composition among separate cities were as great as the distinction between city and non-city. Assuming the age group 15 to 39 among males to be the most responsive to new opportunities for

[20] Estimates for the age composition of the *migrants* lend weight to this supposition. Survivors to 1935 of people who were already in cities in 1925 can be estimated at every age by subtracting the deaths that one would expect of them; the amount by which these survivors fail to account for the people actually found in cities in 1935 gives a fair idea of the persons gained through migration at each age. Though migrants measured in this way were somewhat concentrated in young adult ages, there were also impressive numbers in younger and older ages.

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TABLE 30

DIFFERENCES IN AGE AND SEX COMPOSITION OF TAIWANESE BY CITY, 1935

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Cities	Per Cent 15-39 of all Taiwanese Males	Sex Ratios 15-39	Sex Ratios all Ages	Growth of City: Ratio of Taiwanese Population 1940/1920
Taipei	41.8	106	98	2.05
Chilung	42.4	112	103	2.07
Hsinchu	38.2	101	100	1.76
Taichung	43.2	115	107	2.92
Changhua	39.0	102	100	1.67
Tainan	40.6	110	105	1.97
Chiayi	42.2	112	105	2.58
Kaohsiung	42.8	120	110	3.56
P'ingtung	43.5	118	108	2.55
Total, All Cities	41.6	110	103	2.22

Source: *Census of 1935, Statistical Tables*, Table 7.

employment, we can use this group to summarize the differences (see Table 30). The cities of rapid growth—i.e., with relatively large proportions of immigrants—were the cities with more young men. Cities that grew faster did so in part by attracting more men in young working ages, and thus separated many of them from normal family life. Significantly, the age composition of females was nearly the same in *all* the individual cities, and thus was similar in each to rural communities.

The non-rural character of Municipalities in Taiwan, therefore, did not of itself make for non-rural age structure, but the same factors that were behind the more rapid growth of some cities tended to draw selectively from the population of different ages outside cities. One should always bear in mind that the greatest of the differences in Table 30 are moderate when considered alongside societies in which urban growth has been associated with sweeping modernization.

Something in addition can be learned about the particular characteristics of separate cities from the nature of economic activities in each. One single census table of persons with occupations was published in 1930 for individual cities, with the males of all ethnic groups lumped together. Cities were farthest removed of any civil

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TABLE 31

INTER-CITY DIFFERENCES IN OCCUPATIONAL COMPOSITION

Per Cent of Occupied Males in Selected Types of Occupation in Each of Seven Municipalities, 1930
All Nationality Groups

Cities	*Manufacturing*	*Commerce*	*Transportation*	*Government*	*Agriculture*	*Other Occupations*
Taipei	26	30	10	18	6	10
Chilung	16	21	23	9	4	27
Hsinchu	21	25	10	13	20	11
Taichung	23	28	10	19	14	6
Tainan	28	28	13	18	5	8
Chiayi	22	29	10	12	20	7
Kaohsiung	24	19	20	11	13	13
Total Seven Cities	24	27	13	15	9	12

Source: *Census of 1930, Statistical Tables*, Table 40.

divisions from rural conditions. Nevertheless, large blocs of Taiwan's urban population still supported themselves by farming. Only three Municipalities in 1930 had as few as one-twentieth of their working males engaged in agriculture. It is small wonder that these cities had failed to show symptoms of advanced urbanism in other respects.

Other types of employment in these cities also had certain special features. Government administration in Taipei, transshipping of seaport cargoes in Chilung and Kaohsiung, and sugar processing in Taichung and Tainan were reflected as important activities in their share of all male employment. These figures, pertaining to 1930, reveal nothing of the intensified industrial activity in these cities in the succeeding decade. They are the only available indication in demographic terms of the peculiarities of individual cities. In any event, we are less interested in these peculiar elements than in the relations between types of employment and urban settlement among Taiwanese. Since Table 31 does not show Taiwanese separately, it is affected by differences in the proportions of Japanese and in their work among the various cities. Hence the information, while illuminating, is less useful than one might wish.

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More information is available for the population of all seven cities combined. By means of some estimation, we can find the occupational

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TABLE 32

OCCUPATIONAL COMPOSITION IN CITIES OF TAIWAN BY ETHNIC GROUP, 1930*

Distribution of Occupied Males by Occupation and Nationality

	Taiwanese	*Japanese*	*Other Nationalities*
A. Per Cents by Occupation			
Agriculture	13.1	0.9	0.2
Fishing	2.1	2.2	0.5
Mining	2.1	0.2	1.1
Manufacturing	22.8	18.6	43.8
Commerce	29.1	19.6	27.8
Transportation	13.7	10.2	19.1
Govt. & Prof.	6.4	44.4	3.3
Other	10.7	3.9	4.2
Total Occupied	100.0	100.0	100.0
Per Cent Occupied of All Males	54.4	58.0	76.8
B. Per Cents by Ethnic Group			
Agriculture	97.5	2.4	0.1
Fishing	70.8	27.2	2.0
Mining	89.9	3.8	6.3
Manufacturing	65.0	19.0	16.0
Commerce	73.2	17.8	9.0
Transportation	69.1	18.5	12.4
Govt. & Prof.	28.2	70.0	1.8
Other	84.7	11.1	4.2
Total Occupied	67.4	24.0	8.6

* Includes the seven cities of Municipal rank in 1930.
Source: Estimated from *Census of 1930, Statistical Tables*, Table 39.

composition of each ethnic group separately (Table 32).[21] Taking account only of males with occupation, these data represent the urban Taiwanese at less of a disadvantage next to the Japanese than was true over the entire island. Of course, one must remember that Taiwanese (and Mainland Chinese) in the same type of work with Jap-

[21] The necessity to "estimate" arises because the occupational data *by ethnic groups* were given in "Occupation" units (i.e., persons with a principal occupation plus persons with a secondary occupation), and counted some persons twice. In the tables shown here, the ethnic composition of "Occupations" has been applied to the total of persons (males) in each occupation.

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162 anese usually had subordinate positions. Nevertheless, it seems con-
463 clusive that by moving into cities Taiwanese were able to narrow
563 the gap that separated their forms of livelihood from those of the Japanese.

The ethnic composition of occupied persons (appended to Table 32) indicates how the differences in occupational structure among these ethnic groups were weighted in the urban population. Taiwanese, of course, predominated in all lines except in government service and professional activities. Keeping these coveted positions in their own hands was one of the ways in which Japanese were able to live side by side with the rest of the population and avoid the pressure of competition.

Chinese nationals ("Other Nationalities" in Table 32) in these cities also appeared in a few types of work far more than in the working population as a whole. Their specialties were of an opposite kind: many worked as laborers in small manufacturing enterprises and as longshoremen, accounting for their large share of all "Manufacturing" and "Transportation" workers.

TABLE 33

OCCUPATIONAL DISTRIBUTION OF TAIWANESE MALES REPORTING AN OCCUPATION, INSIDE AND OUTSIDE MAJOR CITIES, 1905, 1920, 1930

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	1905		1920		1930	
	*Inside**	*Outside*	*Inside*†	*Outside*	*Inside*‡	*Outside*
Agriculture	2.3	72.1	13.2	71.9	13.1	74.0
Fishing	.6	2.9	1.2	2.3	2.1	2.0
Mining }	28.4	5.4	1.1	1.4	2.1	1.3
Manufacturing }			27.1	6.9	22.8	5.9
Commerce	37.7	6.4	28.9	6.4	29.1	8.2
Transportation	10.4	1.9	11.2	2.8	13.7	2.8
Govt. & Prof.	5.6	1.7	6.7	1.9	6.4	2.3
Other	15.0	9.6	10.6	6.4	10.7	3.5
Total Occup.	100.0	100.0	100.0	100.0	100.0	100.0

* Comprises the cities of Taipei, Taichung, and Tainan. The boundaries for Taipei in this tabulation were smaller than the city as subsequently organized.

† Cities of Taipei, Taichung, and Tainan, with the same boundaries used at later census dates.

‡ Cities of Taipei, Chilung, [illegible], Taichung, Tainan, Chiayi, Kaohsiung.

Sources: *Census of 1905, Detailed Tables, Prefectural Volume*, Table 17.
Census of 1920, Prefectural Volume, Table 16.
Census of 1930, Statistical Tables, Table 39.

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MIGRATION AND THE GROWTH OF CITIES

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Finally, the role of migration in social change can be clear only if we can make comparisons at different points of time. Occupational profiles of city and non-city working males are available in not quite the same form for three separate dates. The census reports of 1905 and 1920 each included a table of occupied persons in three cities (Taipei, Taichung and Tainan). Placed next to the corresponding figures in 1930 (Table 33), these early data are reasonably similar in all three years.

Not all of the same cities are included, and so the occupational distributions for cities alone do not stand close comparison with each other. One's attention is therefore drawn to the structure of occupations *outside* the cities involved. In Table 33, it appears that by removing the small group of urban working persons from the total population of Taiwanese, one in effect also removes most of the diversification in employment over time, and consequently a large share of the social changes that occurred in Taiwan. In other words, the new activities that resulted from Japanese occupation remained sealed up in the few urban centers. The Taiwanese population outside of these cities remained essentially as agrarian as at the beginning of Japanese rule.[22]

Even if as centers of innovation we did not consider Taiwan's cities important, a study of migration would have made them so. Permanent migration was rare among Taiwanese; but of those who migrated, a large proportion went to a few cities. Even though these cities were not growing fast enough to enlarge their share of all Taiwanese very substantially, they did the greatest part in redistributing the population.

The real significance of these shifts of residence arose from the fact that they were also shifts in activities. For the most part withdrawal from agriculture meant exit from rural communities. People departed every year to large towns or cities that had some provision for more diverse kinds of livelihood. It was primarily in these centers that the Japanese fostered modern enterprises and developed a need for labor. Migration was one of the forms of the response to

[22] Obviously, since more cities are represented in the 1930 figures, the figures themselves are biased and there is some chance of bias in the conclusion that we have drawn. By taking occupied men of all ethnic groups, the same comparison can be made based on the *same three cities* at all dates. This is possible because the table for all ethnic groups was published for each city separately (cf. Table 31, above). The result is the same, in that the data indicate no change in occupational structure outside even these three cities.

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166 these new opportunities for employment. It steadily brought more
162 Taiwanese into contact with the modern side of the Japanese economic program.

Yet even though movement to the cities did widen the horizons of
166 a few Taiwanese, it was surrounded by circumstances that tended to minimize this effect. The familial character of the migration made
178 the break between country and city less sharp than it might have been. Removal to a city did not expose migrants very readily to whatever new influences were there. These were all dominated by Japanese, who kept most of their innovations to themselves and erected barriers against free intercourse with the rest of the population.

Urban growth therefore did not promote general social change among the Taiwanese. It removed into cities those who were to feel the strongest effects of contact with these alien elements. Migration thus helped to absorb the modern aspects of economic development so that they did not intrude into the affairs of rural communities.

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CHAPTER VI

Public Health and the Risks of Death

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In the preceding pages, we have given attention to various features of intercourse between Taiwanese and Japanese in Taiwan. Most of the evidence has been in agreement on one point—the policies of Japanese as rulers of the island failed to make any substantial difference in the social structure of its people. The more it seemed to change in some particular, the more it turned out to be essentially the same thing. As a matter of official design many innovations were concentrated in the hands of a favored few. Even when it came to implementing their aims, Japanese found ways to meet the population on its own terms. Much of their success in colonial administration was due to the ability to make the social system serve their purposes without changing its form.

The most significant exception was their effort on behalf of the health of the inhabitants. Japanese have never received full credit for their achievement in this realm, either on the part of the Taiwanese (who resented the intrusions that it involved in their lives) or from Western students of population and public health (who mostly ignored or belittled it). The "benefits" of rationalizing Taiwanese agriculture may be a matter of dispute, for it enormously enriched a few Japanese at the same time that it broadened standards of consumption in the population. The motives of Japanese in introducing to Taiwan some of the advantages of scientific discovery from the outside world may likewise be suspect, for they managed to keep control over most of the fruits of improvement. But there is no doubt that in the field of public health Japanese rule added many years to the expected lifetime of Taiwanese. This, in an environment of opinion that looks with approval upon any postponement of death, deserves to be given adequate attention.

Early Health Conditions in Taiwan

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Prior to 1895, Taiwan was renowned as an unhealthful place to live. It presented special hazards to survival in addition to those which its people had learned to accept in South China. Unusual efforts had been called forth in expanding settlement into the relatively empty area, and these entailed unusual risks of death. Early Chinese migrants to Taiwan had to attend to clearing new lands,

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721 165 and to contend with many types of hardship not found on the mainland. As they pushed toward the island's foothills, they also suffered the consequences of many bloody incidents of violence that they provoked among aboriginal tribesmen.

164 Even in the lowlands, where activities were comparatively settled and routine, life itself was a very uncertain thing. From their environment people were subjected to attack by several kinds of fatal sickness. Through certain traditional practices they unwittingly exposed themselves to many others. The semi-tropical climate of Taiwan favored the spread of a multitude of disease-producing agents. Accustomed methods of cultivating the land—especially those having to do with the conservation of human wastes as fertilizer—encouraged the transmission of these organisms to humans.[1]

Through conditions such as these, the population harbored many body parasites and other sources of infection. As a result, many people passed their lives chronically enfeebled, and others remained constantly exposed to the onset of illness. Certain types of disease often spread over the island, restrained only by the isolation of many localities and the difficulty of travel. From time to time, some would grow to spectacular epidemics in which thousands perished. Disease even proved to be one of the best defenses that Taiwan had against attack by the troops of Western powers, and delayed the Japanese in taking control of the island.

Plague was the foremost among these epidemic diseases.[2] Taiwan was repeatedly swept by attacks of this illness, with heavy fatalities. An uncontrolled traffic of shipping from the mainland and from elsewhere in Asia, much of it illicit, made it easy to introduce infected rats and persons. Conditions of knowledge and sanitation in Taiwan were wholly inadequate to cope with the problem.[3]

Cholera was the second most important disease that occurred in epidemic proportions. Lacking knowledge or facilities to control the spread of cholera, Taiwanese sometimes suffered the full course of epidemics throughout a whole season without being able to take counter-measures.[4] Cholera also was well known and feared in the

[1] For an able popular account of some of the connections between custom and the "food cycle" that propagates these organisms, see Winfield, G. F. (1948), p. 112 ff.

[2] See Hsü Tze-wei (1946), p. 444.

[3] For some of the futile steps adopted against plague by the people, see Campbell, W. (1915), p. 77.

[4] Drinking water was usually taken from the rivers or from shallow wells, making them easily subject to pollution. See Takekoshi, Y. (1907), p. 285.

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early Western contacts with Taiwan. It all but wiped out some of the military expeditions sent there as tentative colonial ventures by European powers, and later helped to persuade the Japanese to embark on large-scale measures of control. 164

Malaria was ordinarily endemic in Taiwan. The moist heat, and the practice of admitting water into fields for irrigation in pools that were left to stagnate, helped to nurture the mosquitoes that spread the disease. Occasionally malaria broke out in epidemic form. It was likewise impossible to control, but was simply allowed to run its course. Even in the more fortunate years it served to undermine the strength of Taiwanese during much of the year, and probably also their resistance to other sickness.

In addition to these major diseases, Taiwanese were widely afflicted with the more common debilitating ailments that tend to shorten life and lead to complicating illnesses in Asia. Enteric diseases and internal parasites were always prevalent, as in China. Tuberculosis and venereal disease were later found to be widespread, and presumably had existed also at this earlier period. Superficial skin and eye maladies were frequent. Taiwan's position as a transshipping point in the opium trade introduced a plentiful amount of the drug for local consumption, which impaired the health of the inhabitants still further. In the census of 1905, it was found that nearly one-fifth of all Taiwanese men over age 30 were known users of opium, and there were probably others who managed to conceal the fact. As external trade increased, surreptitiously and openly, Taiwan became exposed to a wider variety of diseases and a greater number of transmitting agents from outside. At the same time, the official policy of seclusion also kept out the techniques that the West was evolving to deal with them. [276]

These baneful health conditions added new hardships for the people who migrated to Taiwan. The risks of death thus engendered became a formidable feature of everyday living. Moreover, under the pressure of poverty many families apparently eliminated certain unwanted offspring, either through exposure or deliberate neglect. As a result, a large proportion of those who were born into the population never survived to adulthood. The dangers to life were such that probably Taiwan gained few if any people through natural increase; very high fertility was needed merely to offset the losses through death. 165

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PUBLIC HEALTH AND THE RISKS OF DEATH

The Japanese and Public Health

165 The Japanese military forces that first set out to subdue Taiwan met no firmly organized resistance among the people, but were nearly overcome by sickness in their own ranks before taking possession of the island. Out of an undisclosed total number of troops taking part in the campaign, the Japanese acknowledged only 154 combat fatalities, but over 4,000 died of disease within the first several months, and 27,000 had to be hospitalized (most of them in Japan).[5] Epidemic illness did not, like poverty, stay confined to the Taiwanese population and leave the new rulers unmolested. Mosquitoes that carried malaria, for example, did not observe this distinction. The Japanese liking for raw fish was said to make them even more vulnerable than Taiwanese to the parasites that infested the food. Among the garrison alone, annual deaths of more than 40 per thousand were reported during the first decade of occupation, probably a higher figure than in the adult population of Taiwanese. In order to make this region of the world safe for imperialism, the Japanese found that they had to take drastic measures to curb the spread of disease.

657 744 They started almost at once to devise ways of counteracting the most serious sources. The steps that they adopted are instructive, for the result was a marked success with only a modest outlay. The campaign against sickness was launched when scientific knowledge as to the nature of these diseases was by present standards still rudimentary. Its weapons were crude and sometimes misguided. Moreover, there were many other goals of administration that competed with public health for attention. The authorities were never in a position to divert large blocs of funds to make their program elaborate or munificent. It lacked the grandeur of projects sometimes contemplated by those who draw up plans for "backward" areas today. The whole approach of the Japanese to the problem of disease in Taiwan was an austere one. They avoided every possible expense in equipment and physical facilities, and depended on intensive use of all the administrative resources at their command.

744 In slightly over a decade the authorities almost eradicated plague as a major disease, through strict vigilance for suspected cases of infection, rigorous quarantine regulations, and careful inspection of incoming ocean cargoes for infected rats.[6] Cholera was similarly pre-

[5] Davidson, James W. (1903), p. 354.
[6] Naito, Hideo (1937), p. 84 ff.

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vented from spreading in the population by incessant search for afflicted persons, and quarantine of those cases that were found. Inoculations gradually were developed into an indispensable preventive measure against both of these diseases.

The cities, where crowded and unsanitary living conditions invited some deterioration of health standards, were made less favorable to cholera by piping in water from mountain streams and from specially constructed wells. In nearby localities, regulations were issued—and enforced—requiring villagers to tap sub-surface sources of water with deep wells that were kept covered.[7] Contamination of food supplies in the larger cities was minimized by crude provision for sewage disposal—a few septic tanks and public sewers were built, but most municipal authorities merely supervised the removal of sewage by cart. Agencies of the Sanitation Bureau regulated food handling and butchery in the public market places.

Malaria had to be attacked indirectly, and hence proved more stubborn to keep in check. It remained a source of widespread enervation and an important cause of death even during the 1930's, when measures for its control had become most effective. There were then no very satisfactory ways to kill mosquitoes or to check their breeding under conditions in Taiwan. The government drained many swamps, but the irrigation procedures necessary for the island's food supply depended on open water storage and flooding of fields.[8] The localities most frequently affected soon became known, and the authorities relied on detection and compulsory treatment of cases that were discovered. They sent special medical personnel to these districts, backed up by police power, and forced all suspected individuals to undergo blood tests and compulsory treatment with quinine. In the later 1930's, over three million examinations were regularly being performed each year. By unremitting and energetic insistence on these devices, the Japanese managed at least to prevent any large epidemic outbreak of malaria during their stay in Taiwan.

With these few outstanding dangers under control, the principal remaining causes of ill health and death were respiratory ailments and enteric disorders. As the former ceased to produce epidemics, these more common types of sickness came to account for an increas-

[7] U.S. War Department. *Technical Bulletin* (TB Med 30) (1944), p. 2.

[8] It is moreover alleged that certain types of mosquitoes bred in streams of the interior foothills. See U.S. War Department, *Technical Bulletin* (TB Med 30), p. 9.

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744 ing share of all deaths.[9] They were diseases that could readily be avoided by individuals whose livelihood did not continually expose them to contact with likely sources of infection, and whose income permitted them to observe simple precautions. Most Japanese were consequently protected by the nature of their occupations from the common forms of fatal illness in Taiwan. These diseases did not jeopardize their possession of the island as had epidemics in the past.

Even so, the Japanese conducted among the Taiwanese population a wide program of education and instruction in some of the simpler techniques of contending with these sources of ill health. They issued countless sanitation rules, and utilized much of their apparatus of government to enforce their observance.[10] Administratively, the health and sanitation functions of government were coordinated in several departments. In practice most of the regulations were put into effect under the authority of the police. Some trained specialists participated, bringing elements of Western medicine to Taiwan where formerly there had been none except for scattered and uncoordinated efforts of missionaries.

The level of skill among the personnel at their disposal suffers by comparison with that of modern Western countries, and it probably also fell below the standards of the more restricted public health work in some of the tropical dependencies of European powers. The strength of the system established by the Japanese, however, was in its organization and generality, and not in its equipage. It was a comprehensive program rather than a piecemeal offering of the most elaborate medical treatment.[11] Though the physical facilities of sani-

[9] For reasons that we shall come to presently, the statistics on causes of death are hard to interpret in Taiwan. They show clearly, however, a decline in malaria and the epidemic diseases, and a relative increase in deaths due to these other more insidious ailments.

[10] Indeed, it sometimes almost appeared that they used these objectives to cement their control over the population. The enforcement of public health regulations provided an excellent occasion for the police to enhance their authority over everyday activities. The Taiwanese who protested that these measures were mere excuses to interfere in the private lives of the people probably had a certain amount of justification for their charges. See Hsü Tze-wei (1946), p. 444.

[11] The Japanese did not ignore training, but assigned it a special role in their general health program. Various medical schools were established for medical instruction of Taiwanese, the first as early as 1902. The staffs of these schools and part of the faculty at Taihoku Imperial University included some competent medical specialists, but these men were retained primarily for research that had no close bearing on public health in Taiwan. Through such limited educational facilities as these and the licensing of local doctors and midwives, Japanese managed to give elementary instruction to many Taiwanese practitioners. Though superficial, the training was distributed widely enough for a striking effect on mortality.

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tation were confined to some of the major cities, the influence of these broader health measures gradually spread evenly over most of the island. In this way Japanese gained results that were very substantial through the use of none but crude techniques.

The Japanese policy toward opium addiction was less consistent, for here they found welfare goals to be in conflict with profit motives. They made the manufacture of opium a government monopoly, and closely regulated its sale. The announced purpose for this control was to eradicate the use of the drug, but the Taiwanese occasionally complained that officials secretly abetted its consumption. The truth of the matter is not clear, but their success in other tasks suggests that opium addiction could have been stamped out far more quickly if they had made a determined effort to do so. Some of their own records show that new users of opium were being granted licenses as late as the 1920's. It is likely that the Japanese appreciated the effectiveness of addiction in enervating the resistance to their rule among wealthy families, and they made no secret of the steady public revenues that they derived from opium sales.[12]

The Evidence for Measurement of Mortality

There is not much point in describing the purposes and methods of public health work without having some independent appraisal of results. Such efforts have often been sponsored elsewhere with much fanfare and little accomplishment. The only trustworthy way to view the results of economic and sanitation policies in prolonging life is through some form of measurement; this is likewise the only precise way of comparing the risks of death in Taiwan and in other areas.

Fortunately the data that exist to gauge mortality in Taiwan are excellent. The occurrence of many kinds of illness involving danger of contagion was required by law to be reported to the authorities. Partly as a means of avoiding contamination of the living by the dead, and partly just as a means of tightening official control over the reporting of disease, the Japanese also strictly regulated burials and cremations.[13] The rigors of enforcing these rules led to concealment of some illness and evasions by mis-stating exact causes of

[12] A careful study of opium addiction in Taiwan and its relation to mortality is contained in Tu Tsung-ming (1935 and 1938).

[13] See Hsü Tze-wei (1946), p. 449.

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death;[14] but at the same time they led to registration of deaths that was virtually complete.

A person while living had a legitimate civil status only by being entered in an appropriate police register. Deceased, his absence could be legitimized only by removal from these rolls, and his burial could be permitted only by following this prescribed procedure. All of these records were kept by the police or by affiliated agencies. The police were alert and well-deployed to prevent evasions. Since such records were useful to them in surveillance of the population, they employed the *pao-chia* system to make the registration effective. The people in each locality were thus compelled to accept conformity with these requirements as a matter of their own collective interest. Consequently a person's identity in these records from birth till death was almost never subject to confusion or concealment.

This consistency of information in all the population registers has a special significance for demographic research. It means, for example, that each person's death record was matched to the record of his birth, so that the exact number of years elapsed between the two events can be calculated. The same legal identity of a person formed the basis for his entry in every census enumeration. "Age," as a census category, was not set down according to an individual's recollection of the number of birthdays experienced. Instead, the pertinent fact that was entered was his date of birth, and age was ascribed to him in the process of tabulation at the central census office.

Age in Taiwanese population statistics was therefore explicitly defined: it was a classification of equal intervals, in which each person ideally had one and only one "true" position at a time. It was possible for age to correspond perfectly in the recording of all three kinds of events of interest here—birth, enumeration at census date, and death. An unambiguous scheme of this sort for reckoning age is especially important in a population of Chinese, because most Chinese compute their ages in a manner that cannot be reconciled to Western usage. Starting with age one at the date of birth, it is customary for them to add a year of age with the passage of every (lunar)

[14] Once cases of smallpox, scarlet fever, typhoid fever and certain other diseases were discovered, the people were forced to undergo disinfection of lodgings and personal effects that was often destructive. Hence, it has been alleged that diagnoses were deliberately falsified to avoid these consequences (see OPNAV, Civil Affairs Handbook, 1944, *Shinchiku Province*, p. 54; U.S. War Department, TB Med 30, p. 6). A more important source of inaccuracy was probably (in the case of deaths) ignorance as to the nature of a decedent's illness. Tuberculosis was said to be very prevalent, and yet few deaths were ever diagnosed as due to this cause.

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New Year thereafter. The Japanese system of ascribing age completely avoided bias from this source.

Moreover, in this system the year of age that a person occupied at any date did not depend on his personal conception of it at the time. Such subjective conceptions of age often do not change through an individual lifetime exactly as "true" age does. Misstatement of age is always a source of error in census procedures that rely on people to report their own ages directly. The recorded ages of people in Taiwan at census dates and at death were determined at the date of birth. If the birth had been registered on the proper date, it was next to impossible for the reporting of age in a census enumeration to be incorrect. Even when the date of birth was reported wrongly, there was strong pressure to be consistent later when reporting it in the census and at death. For purposes of constructing life tables, the system thus made an automatic adjustment for these errors by shifting the age at death by exactly the same amount.[15] Decedents at a given year of age were registered according to the particular calendar year in which they were born; persons enumerated in a census of the same year at the same age were the survivors of births in that prior calendar year, from January to December. It follows that both registered deaths and census of population belonged to the same group of people. With these two figures, it is a simple problem in arithmetic to compute the number of persons who entered that year of age, the number who died before reaching the next higher age, and the proportion who died out of the first group.[16] This proportion is the most important element in the construction of life tables, and it places Taiwan's mortality data in this respect among the most remarkable that exist. The applications of this special feature are discussed in the next section.[17]

[15] The census of 1905 enumerated Taiwanese with birth dates as far back as the year of Meiji Restoration and earlier. Though evidence like family records and land titles were often called upon by the authorities in order to substantiate this information, some inaccuracies must have been present. They could not have been numerous, for they do not appear as "heaping" in census age distributions of people.

[16] Of course, the census population must be brought up to December 31 if the census was taken earlier (which has always been the case in Taiwan). Also, the figure for deaths must be re-constituted from the vital statistics reports of two years, since many of the decedents died later than December 31 of the census year. These two details do not alter the principle explained above.

[17] In the earlier census enumerations, before 1930, age was ascribed by calendar year of birth. Persons born after January 1 in the census year were placed into the first year of age, those born in the calendar year preceding the census into the second, and so on. To this peculiarity of the system we owe the possibility of making accurate early life

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A welcome feature of Taiwan's mortality and census data is that they lend themselves to a detailed test for accuracy. First, they can be checked against the number of people counted in one census who died before the next one. For any given cohort of births, if the data are all correct, this should be equal to the number of survivors counted in the earlier minus the number counted in the later census. The censuses of 1905 and 1920 are compared in these terms in Table 34, for males only; the result is almost identical for females. The column of ratios indicates the degree to which registered deaths account for the difference in the numbers of survivors counted at successive census dates.

If all records were complete and accurate, the ratios would be unity at every age. If the differences in census survivors are assumed to be correct, then apparently a few deaths went unregistered in certain years. It is obvious that the records were not perfect. As it is, they were so nearly complete that there is little if anything to be gained from trying to make corrections for the discrepancies. Since this is simultaneously a test of census enumeration and vital registration (and an extremely sensitive test of age reporting), it is not possible to decide whether the discrepancies arose from deaths that were omitted or people overlooked from the earlier census.[18]

Since mortality in the first year of life is usually measured on the basis of the number of live-born babies, it is necessary also to know how adequate the birth statistics were in relation to death and census records. A test for births, similar to that above, is shown in Table 35; the results give an excellent account of the birth registration. The registration of birth entered a child permanently in the police lists, and was an almost inescapable bond during his later life. By this criterion, the chances of evading subsequent controls allied to

tables for Taiwanese, for the yearly intervals had the same upper and lower limits as those of the vital statistics.

Japanese were apologetic about the deviation of this system from the Western mode of age reporting, and beginning with 1930 "modernized" the system so that its special virtue was eliminated. Starting with the census of that year, census-year rather than calendar-year intervals were used, making the system identical with the Western conventions in design. For dates after 1930 it is no longer possible to relate deaths precisely to enumerated census population.

[18] There is reason for not putting all the blame on registered deaths, for the area of effective administration was expanded slightly after 1905, and by 1915 and 1920 had brought more people into the registration and census system than the survivors of those enumerated in 1905. This being the case, it is possible that both measuring instruments were nearly perfect, and that the discrepancies arose entirely from the expansion of administration.

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TABLE 34

TEST FOR ADEQUACY OF DEATH REGISTRATION OF TAIWANESE 159

Males by Year of Birth, Surviving at Census Dates in 1905 and 1920, 165
and Intervening Deaths as Registered

Year of Birth	*Survivors 1905*	*Survivors 1920*	*Difference*	*Registered Deaths 1905-1920*	*"Completeness" of Death Registration**
1904	48,859	38,257	10,602	11,602	1.094
1903	43,432	35,769	7,663	7,768	1.014
1902	43,340	36,392	6,948	6,718	.967
1901	41,658	35,523	6,135	6,087	.992
1900	41,910	36,224	5,686	5,564	.979
1899	38,149	32,899	5,250	5,099	.971
1898	40,913	35,409	5,504	5,257	.955
1897	34,183	29,707	4,476	4,801	1.073
1896	33,855	29,149	4,706	4,872	1.035
1895	35,579	30,148	5,431	5,177	.053
1894	32,338	27,187	5,151	5,052	.981
1893	32,581	27,062	5,519	5,444	.986
1892	34,122	27,945	6,177	6,224	1.008
1891	32,421	25,963	6,458	6,263	.970
1890	31,626	24,672	6,954	6,540	.940
1889	32,164	25,479	6,685	7,273	1.088
1888	34,355	25,907	8,448	8,040	.952
1887	35,471	27,101	8,370	8,584	1.026
1886	33,697	25,254	8,443	8,587	1.017
1885	33,445	24,708	8,737	9,016	1.032
1884	36,969	27,156	9,813	10,023	1.021
1883	34,750	25,257	9,493	9,911	1.044
1882	32,431	23,034	9,397	9,922	1.056
1881	35,951	25,034	10,917	11,100	1.017
1880	31,335	21,484	9,851	10,242	1.040
1879	31,345	21,230	10,115	10,287	1.017
1878	29,016	19,036	9,980	9,961	.998
1877	27,669	18,379	9,290	9,988	1.075
1876	31,238	20,263	10,975	11,239	1.024
1875	27,991	17,880	10,111	10,741	1.062

* Ratio: Deaths/Difference.

Sources: *Census of 1920, Descriptive Report*, Appendix, Table 15.
Vital Statistics, yearly volumes, 1906-1920.
Statistical Summary, Table 58, for population by age in 1905.

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TABLE 35

TEST FOR ADEQUACY OF BIRTH REGISTRATION OF TAIWANESE

Births from 1906 to 1920, as Registered and as Estimated from Survivors Enumerated in Census of 1920 and Intervening Deaths

Year of Birth	*Survivors 1920*	*Registered Deaths Since Birth*	*Estimated Births (1) + (2)*	*Registered Births**	*"Completeness" of Registered Births†*
			Males		
1920	46,832	7,725	54,557	54,064	.9910
1919	55,006	12,993	67,999	70,349	1.0346
1918	52,260	18,219	70,479	71,764	1.0182
1917	52,245	19,854	72,099	73,430	1.0185
1916	46,234	19,805	66,039	65,837	.9969
1915	48,109	22,322	70,431	70,855	1.0060
1914	49,637	23,109	72,746	72,755	1.0001
1913	48,427	21,550	69,977	70,170	1.0028
1912	48,810	20,961	69,771	69,990	1.0031
1911	48,388	21,159	69,547	69,558	1.0002
1910	46,609	20,806	67,415	68,042	1.0093
1909	44,540	20,780	65,320	65,666	1.0053
1908	41,626	20,353	61,979	61,993	1.0002
1907	43,003	20,074	63,077	63,290	1.0034
1906	41,598	20,008	61,606	62,120	1.0083
			Females		
1920	46,017	5,815	51,832	51,410	.9919
1919	53,950	10,346	64,296	66,358	1.0321
1918	50,328	16,028	66,356	67,701	1.0203
1917	49,315	18,099	67,414	68,984	1.0233
1916	44,230	18,658	62,888	62,768	.9981
1915	45,348	21,372	66,720	66,814	1.0014
1914	46,245	22,279	68,524	68,695	1.0025
1913	45,434	21,281	66,715	66,797	1.0012
1912	45,403	21,090	66,493	66,632	1.0021
1911	45,373	20,805	66,178	66,100	.9988
1910	43,251	20,262	63,513	64,099	1.0092
1909	41,268	20,187	61,455	61,620	1.0027
1908	38,292	19,737	58,029	57,807	.9962
1907	38,594	19,981	58,575	58,466	.9981
1906	37,323	19,824	57,147	56,987	.9972

* In 1920, deaths and births have been taken only from January 1 to October 1.
† Ratio: Registered Births/Estimated Births.
Sources: *Census of 1920, Descriptive Report*, Appendix, Table 15.
Vital Statistics, yearly volumes, 1906-1920.

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the registration system were very slight. The same result is found for births of more recent years.

With very few exceptions, these events—births, deaths, and presence at each census date—were nearly all recorded and were recorded accurately. The pattern of omissions is itself significant: whatever their source, they contained practically no age or sex bias. Therefore (with one reservation)[19] we shall accept all published deaths and all population figures as complete and correct for the measurement of mortality. The differences would be trivial if they were distributed as adjustments over all the years of deaths; and the tests give no clue as to how such adjustment should be distributed.

The Decline of Mortality

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The simplest question that arises about the trend of Taiwanese mortality is also the easiest to answer: what happened to the prevalence of deaths in the population during colonial rule? Unfortunately for judging this trend, no one can say what was the level of mortality in Taiwan when the Japanese first arrived. The Manchu government did not even know the number of its subjects, far less their behavior with respect to births and deaths. The colonial regime founded by the Japanese started a thorough system of vital statistics only after a decade of control. Consequently the very earliest usable record began at a time when life had already been made more secure.

The trend of annual death rates after 1905 appears clearly in Table 36. It was not only downward, but was rapid in its fall. Over the same period there were scarcely any recorded instances to equal the speed of this decline. Supposing that there were over 40 deaths per thousand persons in 1895 and before, the yearly incidence must have dropped by more than one-half in the next fifty years.

Thanks to improved drugs and newer approaches to the problems of health, such a feat has since this time become fairly easy in countries of high mortality. Crude death rates of 20 are no longer considered low. But subsequent advances in medicine should not be allowed to detract from this performance. With the resources and

[19] The only reservation is in the case of infants. This requires special attention, and is discussed in the section on infant mortality.

In reality, the ambiguity is a more fundamental one than any amount of "correction" can remedy. It arises from an inherent difficulty in making a precise definition for a "live" birth in a society where infants are delivered without skilled medical care and where the chances of surviving the first day of life are very poor. Where families regard mere discussion of deceased offspring as inauspicious, the prospects for developing precise measuring standards for infant mortality are poor.

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TABLE 36

CRUDE DEATH RATES OF TAIWANESE, 1906-1943*

Years	*Deaths per Thousand Persons*
1906–10	33.4
1911–15	28.6
1916–20	31.0
1921–25	25.0
1926–30	22.1
1931–35	21.2
1936–40	20.6
1941–43	18.5

* Unweighted averages of annual death rates for each year. Before 1915, deaths have been adjusted slightly on the basis of the internal pattern of infant mortality in later years, as explained in the text.
Source: *Statistical Summary*, Table 64.

knowledge available in these earlier years it was a far more noteworthy achievement than it now appears. Almost entirely through the reduction of mortality, the annual natural increase of Taiwanese rose to 25 per thousand, which even today is rarely found.

The fall of mortality was not unbroken. It was interrupted in quick succession in 1915, 1918 and 1920 by waves of fatal illness over the island. The first occasion was accompanied by an unusual number of malaria deaths,[20] when the program of malaria control was only in its second year. In 1918 and 1920, the Taiwanese were visited by a part of the world-wide influenza outbreaks at the end of World War I. In all three years the cause-of-death data, defective as they were, revealed exceptional fatalities due to malaria and respiratory ailments respectively, but no serious recurrence of the old epidemic diseases.

None of these setbacks quite matched the initial years of statistical record. Since mortality in 1906 undoubtedly was already lower than it had been in the pre-Japanese period, one can say that for the island as a whole these later reversals were minor and transitory (see Fig. 21).

Taiwanese Life Tables

The life table is a device that represents mortality in a special conventionalized way. Conceptually it is an instrument of precision,

[20] And reportedly some civil disturbance, though such instances are always exaggerated and difficult to evaluate.

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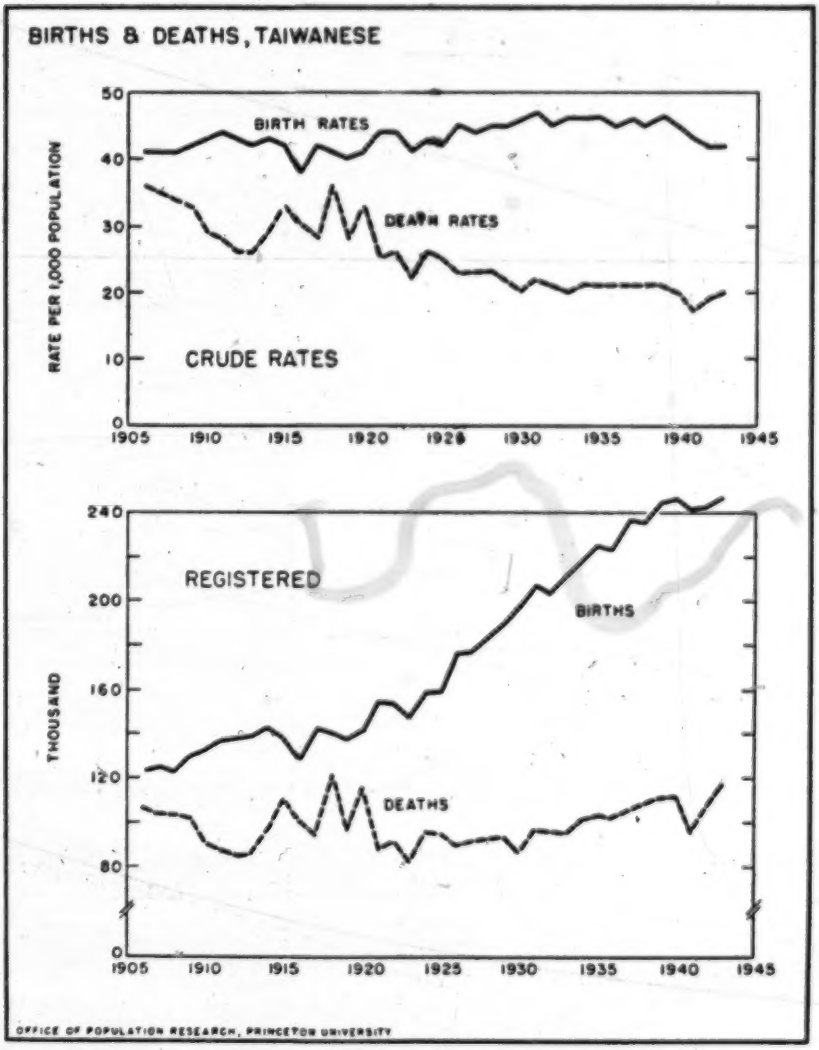

Fig. 21. Crude Birth and Death Rates and Total Registered Births and Deaths of Taiwanese, 1906-1943.

for it allows one to speak in terms of probabilities of dying, which is what we mean here by the notion of mortality. Being conventional, it lends itself easily to comparison with data from other places independent of differences in age structure, even when the procedures of computation are slightly varied. Some caution, of course, must be 165

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165 exercised in this application, for the life table is also a way of making poor mortality data look good. Since precise information about mortality has not heretofore existed for a population consisting of Chinese,[21] tables prepared for Taiwanese under differing mortality conditions should be of some additional interest from this standpoint alone.

Life tables are very convenient as a way of summarizing age-specific risks of mortality for each sex in a specified short period. They can also be used to illustrate one aspect of the course of mortality with the passage of time—the age incidence of change. There are more efficient ways of expressing secular change *per se*;[22] where secular change is interrupted by fluctuations of short duration, the age incidence of deaths in a given period is probably the sort of measure to be preferred.

In the case of Taiwan the life table is the most appropriate form in which to express the import of this particular type of death statistics. The data are peculiarly suited, as we have seen, to showing precisely the proportions of persons entering each year of age who died before the next birthday. This proportion is the figure conventionally used to estimate the probability of dying in the given year of age. Having such data as these, one can prepare life tables directly and not by the roundabout and arbitrary procedures that ordinarily must be used.[23]

Actuarial practice has adopted strong graduation formulae to make life-table data appear more regular than they are. Presumably these procedures are grounded on assumptions that mortality risks are fundamentally a continuous function of age. On the basis of wide experience, this assumption seems reasonable enough. However, the justification for smoothing is based also on the assumption that much of the fluctuation in observed data represents chance variations in the risks of death at given ages;[24] actuaries, understand-

[21] Little attention has been given to two official tables that have been published. See Taiwan, Government-General, Research Bureau. *Life Tables of Taiwan, 1926-1930* (First Issue) (1936), 160 pp.; Taiwan, Provincial Government, Department of Statistics. *Life Tables of Taiwan, 1936-1940* (Second Issue) (1947).

[22] A more satisfactory procedure for this specific purpose is to examine mortality of actual cohorts of persons over time, where age and time can be observed while varying together, and their interaction can be taken into account. It is planned to examine this aspect of mortality change in Taiwan at some later date.

[23] Where S_x represents the number of survivors to exact age x, and D_x the number of them who died in age x, q_x (the probability of dying at that age) can be expressed directly as D_x/S_x. The arbitrary conversion of an observed central death-rate, m_x, such as by assuming $q_x=2m_x/(2+m_x)$, then becomes superfluous and can be by-passed.

[24] See Knibbs, G. H. (1917), pp. 86-88.

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ably, do not relish the thought that their work consists merely of manipulating errors of observation.[25]

Taiwan's data throw some light on the relative magnitude of the random and the error components of irregularity in age-specific mortality rates. For example, one life table has been prepared for the period 1909-1911, in order to illustrate the risks of death at a time when they were still high. The mortality rates of this table (see Fig. 22) represent a small number of deaths, as do those of the succeeding tables, and have not been subjected to any graduation.[26]

The people in the lowest to the highest ages of any life table represent groups born over a long period of time, each of which might be expected to exhibit peculiarities of its own previous exposure to mortality. Nevertheless, the risks of death shown in Fig. 22 deviate only slightly from a smooth progression with age. The persons exposed to death at each age were few; in view of their number, much larger variability would appear reasonable. Even if we were to assume a complete lack of error in the data (throwing the whole burden of all deviations from continuity to the element of chance), the random component of these fluctuations is very small. A strong case for the notion of continuity can be made from this life table. But by the same token it appears that the *error* component of deviation from continuity in ordinary data is the major portion. Perhaps not much general significance for the variability of "true" mortality rates by age can be drawn from these data. Very likely, however, smoothing devices as commonly used have as their major function the adjustment for errors of observation. Aside from errors of omission, these presumably arise because information by age is incorrect and because deaths as usually registered do not belong to the people to whom they are assigned.[27]

Taiwan's mortality data have not been widely known. Two official

[25] There is in addition a possible third influence—the cohort effect, or effect of the date of birth. This is generally ignored.

[26] Strictly speaking, they represent the weighted averages of three cohorts of persons entering each year of age, in 1909, 1910, and 1911 respectively. The mortality rates are in the simple form $(D_1+D_2+D_3)/(S_1+S_2+S_3)$ in each year of age. This averaging has the effect of reducing the variability of single-year values as compared with the life tables to be presented later. The effect of different weighting for different cohorts is ignored.

[27] All this is not meant to imply that actuarial procedures are misguided or that smoothing is unwarranted when dealing with inferior data. The actual errors introduced in most instances by graduation of mortality rates are probably not very great. It does seem important, however, to know how close an approximation to continuity accurate data can give, as a basis for inferring that the error component of deviations is not inconsiderable.

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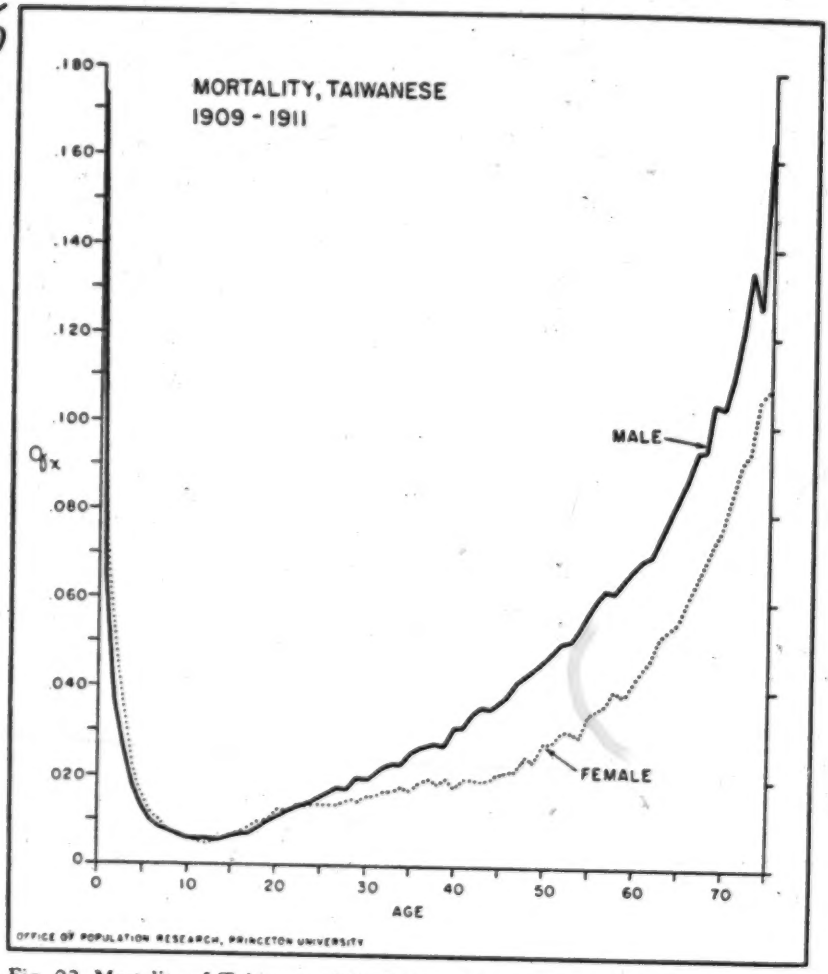

Fig. 22. Mortality of Taiwanese, Life Table of 1910-1911. Values of q_x, by Age, Male and Female.

life tables were compiled and published from them,[28] which have likewise not become well known to Western demographers. Consequently it is desirable to compare the conditions in Taiwan with

[28] These two official tables were constructed by conventional procedures. The 1926-1930 life table, the earlier of the two, covered a period when the information on year of birth had been temporarily dropped from publication of vital statistics. The second table, for 1936-1940, covered a span when the census population could no longer be matched to registered deaths. Hence, the more precise procedure used here was denied to both of them.

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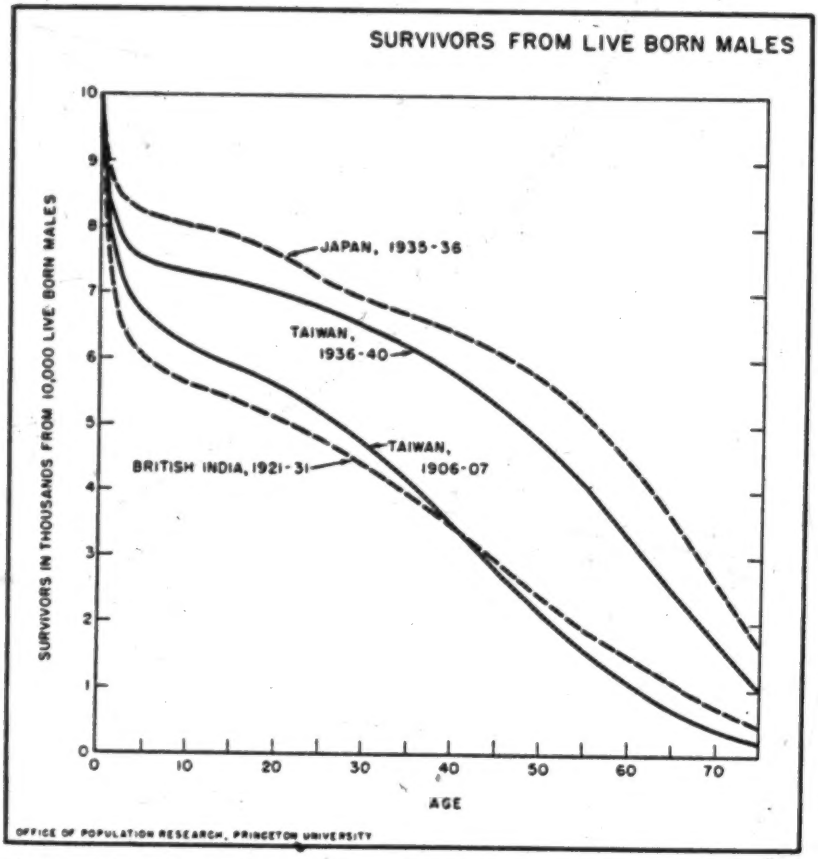

Fig. 23. Life Table Survivors of 10,000 Live Male Births, by Age (l_x). Taiwan and Selected Other Countries.

other examples that are more familiar. This is done in Fig. 23, where life-table survivors of an arbitrary 10,000 male births have been plotted for Taiwan in 1906 and 1936-1940, Japan in 1926-1930, and British India in 1921-1931. Even near the turn of the century, to take the year 1906 as an example, mortality in Taiwan was no higher than that of British India many years later. The gross effects of mortality in Taiwan had by 1940 come to a point closer to Japan during the 1920's than to the previous situation in Taiwan. The median age at death (the age at which mortality rates of the given period would have reduced a starting cohort by one-half) was nearly doubled between these two dates.

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165 Such a comparison does not, however, reveal much about mortality in Taiwan itself. It shows next to nothing of the nature or extent of the decline. A better way to examine the shifts by age is to look at the changes in the risks of death. The probabilities of dying show these changes in each age independently of other ages. Graphically this profile of mortality appears for various dates in Fig. 24, plotted

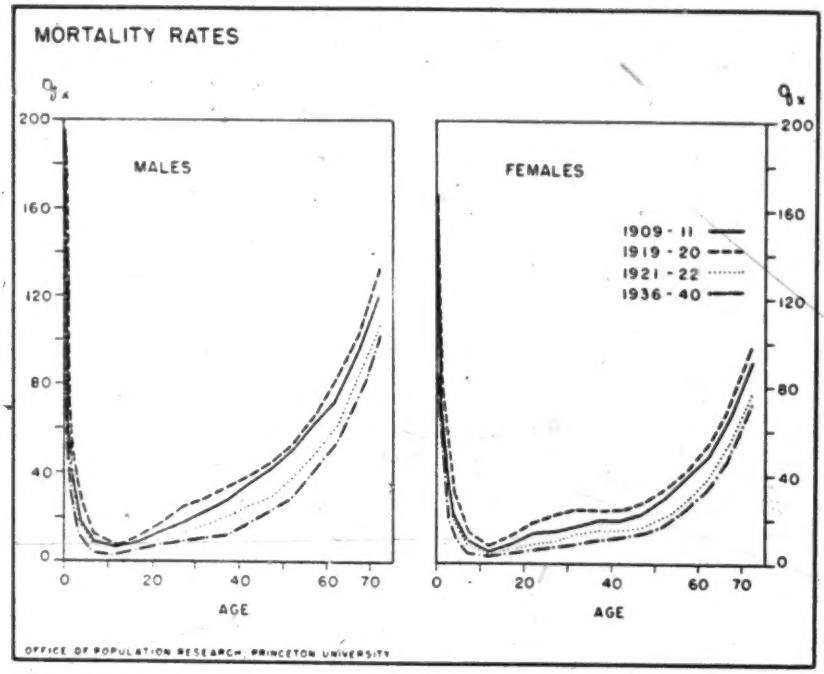

Fig. 24. Mortality of Taiwanese, by Age (q_x), Selected Life Tables. Males and Females.

on pivotal ages. The earliest point is the three-year period 1909-1911, expressing conditions that were greatly improved over those found in 1906.[29] It represents the effects of selective sanitation works (i.e., in the larger cities), and of mass disease controls of the crudest sort. Epidemics had been suppressed, but the full-scale attack on malaria,

[29] The procedures of preparing these life tables make them reflect the events of two calendar years. They are also based on the persons *entering* each age in the given year, some of whom did not die before the following year. The table for 1906, therefore, is composed mostly of deaths that occurred in 1906, plus some that did not take place until 1907. 1906 was the year of a severe earthquake in one Prefecture, and for this reason may have been less favorable than neighboring years.

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for example, had not yet begun. Not long before, the Japanese had just succeeded in gaining undisputed control of the island outside of the central mountain region. By implication, the conditions in 1909-1911 thus give an indication of what is possible with the most rudimentary types of health measures. At that time most were still experimental, for the Japanese were just beginning to struggle with the problems of rationalizing agricultural practices, and had not had enough time to organize a concerted program against infection and disease.

If mortality had been reduced easily and quickly, the gain was not a very secure one. The reversals in 1915, 1918, and 1920 are shown in Fig. 24 in their incidence by age; they again restored temporarily the unhealthful state that had prevailed before. (Influenza in 1920 struck early in the year, and affected principally those who had not passed a birthday since 1919; the age cohorts of 1919 were the ones that absorbed the force of the disease.) By contrast, when the steady effects of economic and health policies gradually became felt, mortality risks (as exemplified by the period 1936-1940) were brought firmly down to much lower levels. Translated into figures for the mean expectation of life at various ages in each year, the risks of these years are summarized in Table 37.

The pattern of the decline appears only when the mortality rates themselves are viewed in detail. From age 15 to age 50, most people pass through the most active portion of their lives. Adults in a country of relatively high mortality move from ages when death is rare through a stage of steadily increasing risks. By age 50 in Taiwan at least half of the members of each cohort of births were no longer alive. Adulthood is usually associated with two chief hazards of death. In a society like Taiwan, the working activities undertaken by men and childbearing of women begin to bring people of both sexes into contact with greater risks of dying. The interval covers the entire normal childbearing period of women and most of the time of active employment of men.

Deaths occurred in different patterns for men and women in these ages. Mortality actually started at slightly lower levels for women who were approaching adulthood than for men. It also advanced less rapidly with age. In years of moderate mortality this progression with age was nearly continuous; when there were extraordinary hazards, they had the heaviest effect on women of younger ages and

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TABLE 37

MEAN LIFE EXPECTANCY OF TAIWANESE AT DIFFERENT AGES

Selected Life Tables. Values of e_x, in Years

Age	*1906*	*1909-11*	*1919*	*1921*	*1926-30*	*1936-40*
			Males			
0	27.7	32.4	27.7	34.5	38.8	41.1
1	33.2	38.1	33.4	41.6	45.9	47.6
5	35.9	40.0	36.2	44.0	47.5	49.5
10	33.5	36.7	33.4	40.8	43.6	45.6
30	20.4	22.6	20.8	26.2	28.1	29.7
50	12.0	13.2	12.5	15.0	16.0	16.5
			Females			
0	29.0	35.6	29.6	38.6	43.1	45.7
1	34.0	40.7	34.4	45.0	49.4	51.5
5	38.8	44.7	38.9	49.2	52.5	54.6
10	27.2	41.9	36.9	46.4	48.8	50.8
30	25.5	29.0	25.8	31.9	33.5	34.8
50	15.5	17.4	16.4	19.6	20.3	20.6

Sources: Life tables of 1906, 1909-11, 1919 and 1921 were computed from the assembled data of Taiwan's censuses and vital registration. The table of 1926-30 is from Taiwan, Government-General (1936); that of 1936-40 is from Taiwan, Provincial Government (1947).

altered the entire pattern that usually prevailed (see Fig. 25).[30] Thus enlarged from the mortality rates given in Fig. 24, the disparity between male and female age structure of adult mortality also appears more strongly.

In spite of the differences in structure, male and female risks of death have both given the appearance of reacting in the same way to the changes in general conditions of health in the population. And this is very nearly true as far as secular decline in mortality was concerned. But the exceptional risks (as in 1915, 1918, and 1920) affected women very differently from men. Their age incidence remained unchanged for men. For women, these risks were heavily concentrated at some of the later years of the childbearing period.

The most typical pattern of sex selection of age-specific mortality is illustrated in the period 1936-1940 (see Fig. 26). The values are

[30] Fig. 25 is based on age-specific death rates rather than on life-table probabilities. It makes no difference in the pattern of the results. Death rates are adopted for this illustration because they show the events of the exact calendar years that are most appropriate for this comparison.

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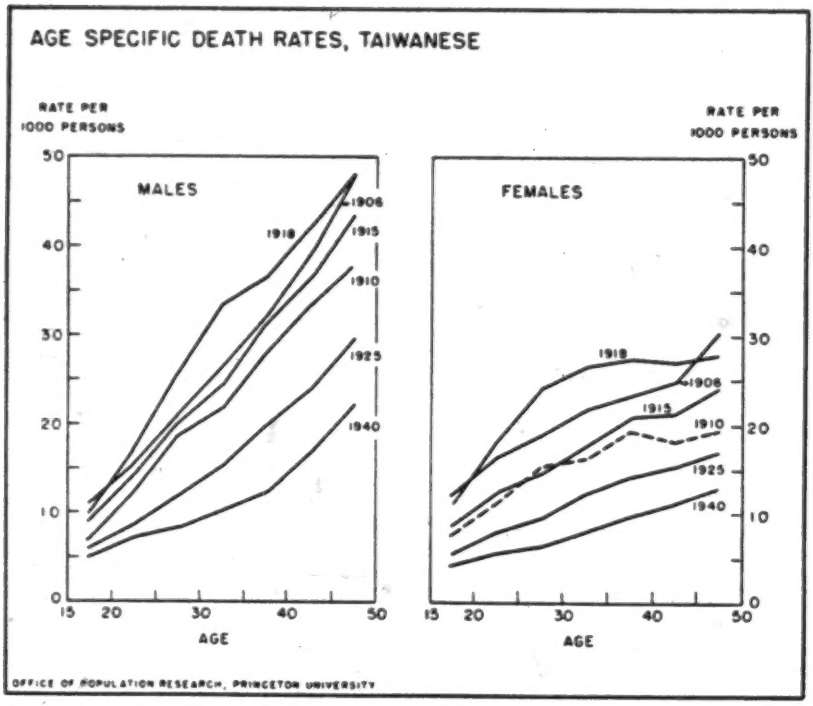

Fig. 25. Age-Specific Death Rates of Adults in Selected Years. Taiwanese Males and Females.

sex ratios of deaths at each age to an equal number of males and females beginning that age during the year in question.[31] The usual sex balance of mortality risks in Taiwan was different from what prevailed in other recorded Asian populations—e.g., Japan and India. It is, of course, not surprising to see that it was not the same as the United States. But the nature of the difference also runs contrary to what might be expected. In particular, it is startling to find that females were normally less likely to die than males at all ages over 15 years. This critical age span, when women of a high-fertility society are entering a period of frequent pregnancy and childbirth, is commonly thought to be likewise a stage of high mortality for them. The evidence as to fertility, which will appear in the following chapter, shows that Taiwanese women did not avoid these risks by avoid-

[31] Above age 4, the actual values plotted are sex ratios of ${}_5q_x$, or mortality rates over age intervals of 5 years each.

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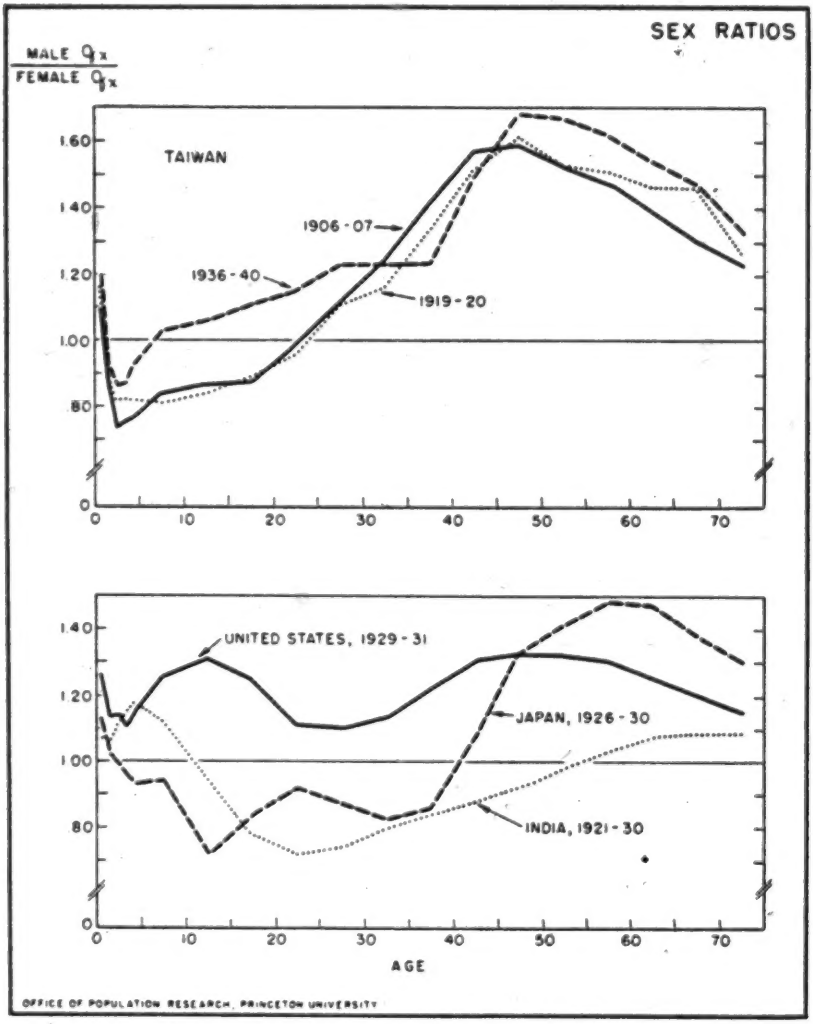

Fig. 26. Sex Selectivity of Mortality in Taiwan and Other Countries. Number of Male Deaths for Every Female Death, Among an Equal Number of Each Sex Entering Each Age.

ing childbirth. Fertility in Taiwan was consistently higher than for all of Japan, and yet in Japan women in childbearing ages were put at considerable disadvantage with men in their chances of survival.[32]

[32] In both societies, the cessation of childbearing is marked, for example at age 40 and above, by a decided improvement in likelihood of survival of women in relation to

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Though Taiwanese women in most years succeeded in warding off more risks of death than men in early adulthood, they did not fare so well during times of greatest sickness or near-epidemic. In both 1906 and 1920 the situation was reversed. In all ages other than infancy up to mid-adulthood, females experienced higher risks than males. Their greater susceptibility in these times is as puzzling as their comparative robustness in other years. It did not move them much closer to the position of Japanese females in relation to males, for the pattern of selectivity was still distinct from that of Japan.

Regardless of the year of observation, young girls consistently suffered greater risks than boys. In the first year of life, as is usually the case, males invariably had inferior average chances of surviving to their first birthday. For the next nine or more years they more than made up for this initial disadvantage. Without fail, there were more male than female survivors to age ten from an equal number of each who managed to enter the second year of life (see Table 38). This was the case for all cohorts of which the record is available from the first birthday to the tenth—26 cohorts in all. Because of this, a higher proportion of boys than girls survived from birth to age ten.

It is easier to reconcile lower rates of survival for young girls with known features of Chinese society than it is the advantage held by women over men at all higher ages. With a few exceptions, the difference in risks was consistent in every year of age. It often extended to age 12 or beyond, after which males generally remained at greater risk for the rest of life. Sex ratios of even numbers of one-year-olds surviving to age ten show a steady movement toward equalizing the risks of death in this interval with the passage of time. It is well known that male offspring are especially cherished in Chinese families, for they provide the basis for family continuity over several generations. The resulting preferential treatment in childhood for boys rather than girls is borne out by the evidence of Table 38, since survival of young girls elsewhere in the world is usually found to be superior to that of boys.[33]

men. So it is barely conceivable that unhealthful activities of men simply over-balanced these special risks of women. (Due to tuberculosis in Japan, male mortality almost outweighed that of females for a short span between age 20 and age 30, despite the fact that mortality for women was high.) It seems unlikely, however, on comparison with the pattern for India (Fig. 26). India was similarly an unhealthful place for men, but placed women at an even greater disadvantage.

[33] A trace of this same phenomenon can be found in the early life tables for Japan. These are based, of course, on a particular period and not on actual cohorts. In the 1947 table for all Japan, however, mortality of males was higher at every age.

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TABLE 38

TAIWANESE SURVIVORS THROUGH EARLY CHILDHOOD
(After Infancy)

Actual Survivors to Exact Age 10 of Each Thousand Males and Females Who Passed their First Birthday, by Year of First Birthday

Year	*Males*	*Females*	*Male Survivors per 100 Females*
1907	812	769	106
1908	822	781	105
1909	819	785	104
1910	825	792	104
1911	826	790	104
1912	820	784	105
1913	819	777	105
1914	813	777	105
1915	807	773	104
1916	812	780	104
1917	810	778	104
1918	814	787	103
1919	825	801	103
1920	843	822	102
1921	853	834	102
1922	865	846	102
1923	856	840	102
1924	852	834	102
1925	862	841	102
1926	863	846	102
1927	870	854	102
1928	870	854	102
1929	874	858	102
1930	870	855	102
1931	866	848	102
1932	873	861	101
1933	870	858	101
1934	870	858	101

Source: Based on Vital Statistics of each year.

In most of the world, more deaths occur in infancy than at any other year of age. This is especially true of Asia. Deaths before completing the first year of life used to eliminate close to one-fifth of all births in Taiwan. In many countries this figure is believed to be

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higher; cases of 25 per cent wastage of births in infancy have been known. Infant mortality is important for life tables also because it is difficult to measure. Most countries with high risks of death have been unable to keep adequate records of births, and infants who die after a few days or weeks in the world may not be accounted for either as births or deaths. The tests of completeness in registration and enumeration have demonstrated that in Taiwan nearly all children whose births were registered were also either enumerated in subsequent censuses or recorded as deaths if they did not survive.

The system of regulation that kept the local registers was severe as well as thorough. An entire community was held responsible, through its *pao-chia* organization, for failures to keep the registers in order. Some kinds of oversight might be successfully concealed, but if a child survived, its legal status as a person depended on having a record with the police, which was initiated by entering the event of birth. Pressure brought to bear by neighbors, if not prudence on the part of the family itself, tended to promote compliance with these rules. Consequently, a child could not easily remain alive very long and escape being entered in the official records.[34]

There remains, however, a problem of unregistered non-survivors, who might have died so young that no official cognizance was ever taken of their existence or decease. There are three kinds of evidence that some non-conformity of this sort existed early in the registration period. First, birth rates (Fig. 21) appear to have risen slightly, which though possible seems unlikely. Second, the rates of infant mortality that one can derive from unadjusted registration figures seem lower than they must have actually been, in view of the decline in mortality at other ages.[35] Finally, the sex ratio of registered live births was somewhat more masculine at the beginning than in later years. There is reason to suspect that some female infants might have been destroyed and not registered.[36]

[34] The government made provision for late registrations; there were very few, from which one can infer that almost all registrations that were made occurred soon after birth.

[35] All figures for infant mortality before 1916 that are shown here have been adjusted slightly, by a procedure that is described below. Unadjusted, the data make infant mortality appear to have *increased* over the first several years of record. One is led to believe that the opposite was true, in view of the fall of mortality at other ages.

[36] It is not easy to determine the extent or even the general existence of early infanticide in Taiwan. Missionaries and Western travellers often expressed indignation at the practice (see Pickering, Campbell, Davidson). Writings on both China and Taiwan have many references to it, mostly only gossip. Japanese officials took a strongly hostile attitude toward this disposal of infants, and apparently succeeded after a few years in

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165 This idiosyncrasy of the registration system did not prevent our tests from demonstrating almost perfect correspondence among registered births, deaths, and children counted in the census. In other words, the omissions were exactly the same for births as for deaths. Internal evidence indicates that they were not permitted to continue very long. Infant deaths were also tabulated for small intervals within a year, from which probabilities of survival by month can be estimated. The probabilities for the first month of life form a reasonably close regression on those for the second and third combined, for all years *except 1915 and earlier*. Between 1906 and 1915, the probabilities as recorded in the first month were higher than the values that the regression would imply. If we assume the regression of yearly observations after 1915 to be correct, and the probabilities in the second and third months of life to be accurate throughout, then the values for the first month reflect omissions before 1916 of babies who did not survive to one month of age. Following this assumption, all figures for births and infant deaths before 1916 that are used here have been adjusted upward slightly from their registered number to fit what regression values of these probabilities imply for infant mortality and births.[37]

Two procedures are often employed to measure infant mortality. The more appropriate one is to compile it as the proportion born who died in the first year of life, based on births occurring in a calendar year and the deaths to this cohort of births before their first birthday. This is the measure that corresponds to the concept of life-table mortality, and that will be used here except where otherwise specified. Ordinarily, however, deaths are not known by the year of birth of the decedents, but only by the calendar year of occurrence and by age. In this case it is customary to compute what we shall here call infant death rates, using simply the ratio of calendar-year births and calendar-year infant deaths.

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stamping it out. By 1906, when the vital statistics records can be relied upon in most matters, there was scarcely any trace of infanticide among Taiwanese.

To set limits on the extent of the practice, we may assume that all male births were registered, that infanticide occurred only to females, and that the true sex ratio of live births was 105. Then (the sex ratio of registered births in early years being 109), in the first five years not more than 2 per cent of female babies could have been disposed of in this way. In any case, the sex ratio of registered births soon fell to 105, and stayed between 105 and 106 thereafter.

[37] This is a conservative correction, since it entails the further assumption that these were the only omissions. The number of survivors to the end of the first year of life remains the same as before the adjustment.

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TABLE 39

INFANT MORTALITY OF TAIWANESE*

Deaths Per 1,000 Live Births in Each Year

	Males		*Females*	
Year	*Death Rate (Calendar-Year Deaths)*	*Mortality Rate (Actual Deaths)*	*Death Rate (Calendar-Year Deaths)*	*Mortality Rate (Actual Deaths)*
1906	192	182	173	165
1907	174	175	161	162
1908	190	188	173	172
1909	182	183	162	163
1910	167	168	144	144
1911	176	171	144	141
1912	164	169	139	143
1913	177	178	149	152
1914	180	187	161	167
1915	203	202	183	180
1916	193	179	161	150
1917	173	182	148	155
1918	202	199	172	173
1919	186	196	160	167
1920	190	178	161	149
1921	173	175	144	147
1922	184	180	155	150
1923	164	171	133	141
1924	190	196	159	164
1925	186	177	158	150
1926	171	—	139	—
1927	175	—	145	—
1928	181	—	152	—
1929	171	—	141	—
1930	163	—	139	—
1931	177	—	146	—
1932	167	—	140	—
1933	161	169	137	143
1934	167	163	143	139
1935	160	163	133	133
1936	159	159	131	133
1937	157	159	132	134
1938	159	155	132	128

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TABLE 39 (continued)

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Year	Males: Death Rate (Calendar-Year Deaths)	Males: Mortality Rate (Actual Deaths)	Females: Death Rate (Calendar-Year Deaths)	Females: Mortality Rate (Actual Deaths)
1939	152	156	126	129
1940	148	136	122	114
1941	131	133	114	116
1942	136	—	116	—
1943	134	—	116	—

* Registered deaths have been adjusted slightly before 1916, based on a regression of mortality in the first month of life on mortality in the second and third months of life in 1916 and all subsequent years. Births have been adjusted accordingly. Data for actual mortality rates were not published for certain years.

Sources: Vital Statistics, individual years; *Statistical Summary*, Tables 64 and 89.

We must rely on death rates of this latter sort to examine the internal composition of infant mortality, for deaths by month-of-age were published only in this form. This approximation measures infant mortality with nearly the same yearly values as did the actual rates (see Table 39). It is worth while to tolerate some disagreement between the two in order to divide mortality of the first year into smaller intervals.

The progression of these death rates through time is plotted in Fig. 27. Infant mortality on the whole did not decline very sharply. (There will be occasion shortly to compare it with other ages.) If our guess about the defect in registration is correct, then two conclusions necessarily follow. First, the risks of death after the first month of age are documented fully, without omissions. Second, and more important, mortality in this span—the so-called postneonatal mortality—dropped no more than all infant mortality. Neonatal mortality then changed just as sharply as that of infants who survived the first month.[38]

Such a pattern of decline in infant deaths is contrary to what is commonly taken for granted. The usual suppositions about infant mortality in the process of decline have been made *a priori*, for

[38] In addition, according to our guess above, if additional events (births and deaths) ought to be added to the earliest years to make the figures absolutely complete, they must be added to the neonatal period, making mortality in the first month still higher at the beginning. This could only have the effect of indicating a more pronounced drop in neonatal mortality. There is almost no way of allocating extra deaths that could reverse the pattern shown in Fig. 27.

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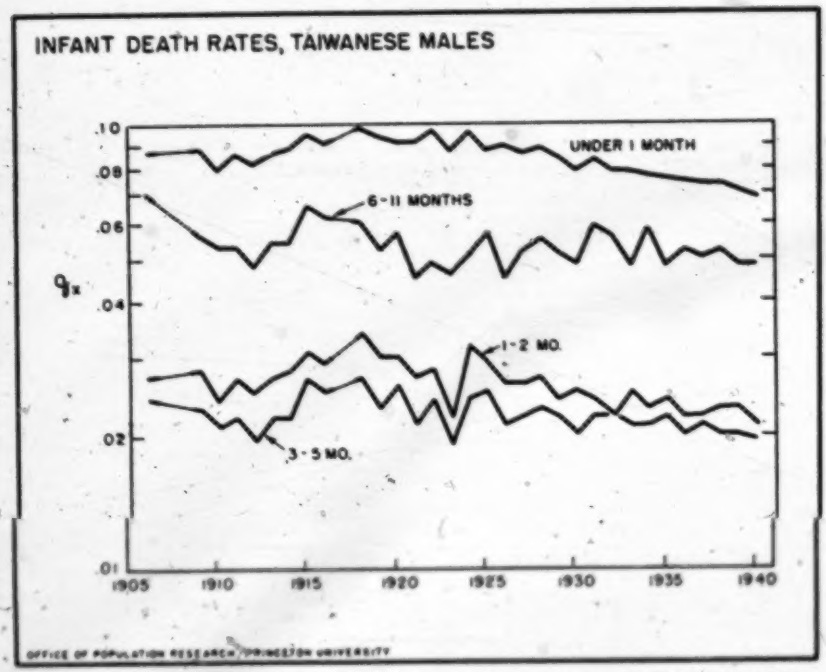

Fig. 27. Fall of Death Rates of Infants by Month of Age. Taiwanese Males, 1906-1940.

actual evidence is rare.[59] Neonatal mortality is thought to be resistant to measures that bring infant mortality under control and thus to most general health measures. Part of the reason may lie in particular environmental influences such as standards of nutrition in a population, the climatic conditions, and the customs governing childbirth and infant care. Part also may be linked with maternal health, which could exert a pre-natal as well as post-natal effect on the chances of live-born babies to survive. It is curious that the distinctive behavior of neonatal mortality in Taiwan (as compared with Europe and America) should coincide with the distinctive low mortality of adult women in childbearing ages. Whether or not one has influenced the other is impossible to say without actual information on the matter. The medical aspects of reproduction in such an Asian

[59] The evidence also has come from European and American countries. Unfortunately it has been subject to a large sampling bias, inasmuch as it represents those countries whose progress toward low mortality has occurred within a particular cultural order, of which the individual countries are but variants.

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165 cultural order are so little known in the West that the question cannot be pursued further except by speculation.

Decline of Mortality by Age

The appearance that the data above give to infant mortality may lead us to keep certain reservations about their accuracy. No such doubt can exist about the general validity of mortality registered at age one and above. The tests reported in Table 34 and Table 35 present Taiwan's statistical system as a paragon even among those of the technologically advanced nations in the world. The trends they show in mortality of later life cannot but be accepted.

For what they are worth, our best estimates of mortality in infancy suggest that it did not decline sharply. On surer ground, it is certain that the chances of dying in later years of childhood and early adulthood fell faster. Fig. 28 displays graphically the basic data on rate of decline in mortality (chances of dying) at selected ages of males entering those ages each year.[40] In the ages taken here as examples—1, 2, 3, 4, 10 and 25—older children and young adults gained the most in chances of survival. Among children, in general the older, the more the improvement. Every higher age gained more ground than infants. Part of this difference may be due to the nature of changes made through colonial administration in the external risks confronting persons of each age. But doubtless a certain part is also due to the effect of carrying improved health from one age to the next by the same individuals—the "cohort effect." Yearly fluctuations are large enough, however, that no special patterns of either type are to be found without complicated manipulations of the data.

To find the risks declining more or less together at different ages does not imply that the number of years of life saved in the population was the same with advancing age. The saving of life in infancy was greater, despite the more moderate drop in the risks than at any other age. This fact holds true regardless of whether one adopts this period-by-period approach or follows the mortality of successive actual cohorts.

[40] The earlier values of the mortality rates at higher ages are connected with broken lines because the observations are not spaced at every year. Mortality rates for every year have been computed only for persons born after 1905.

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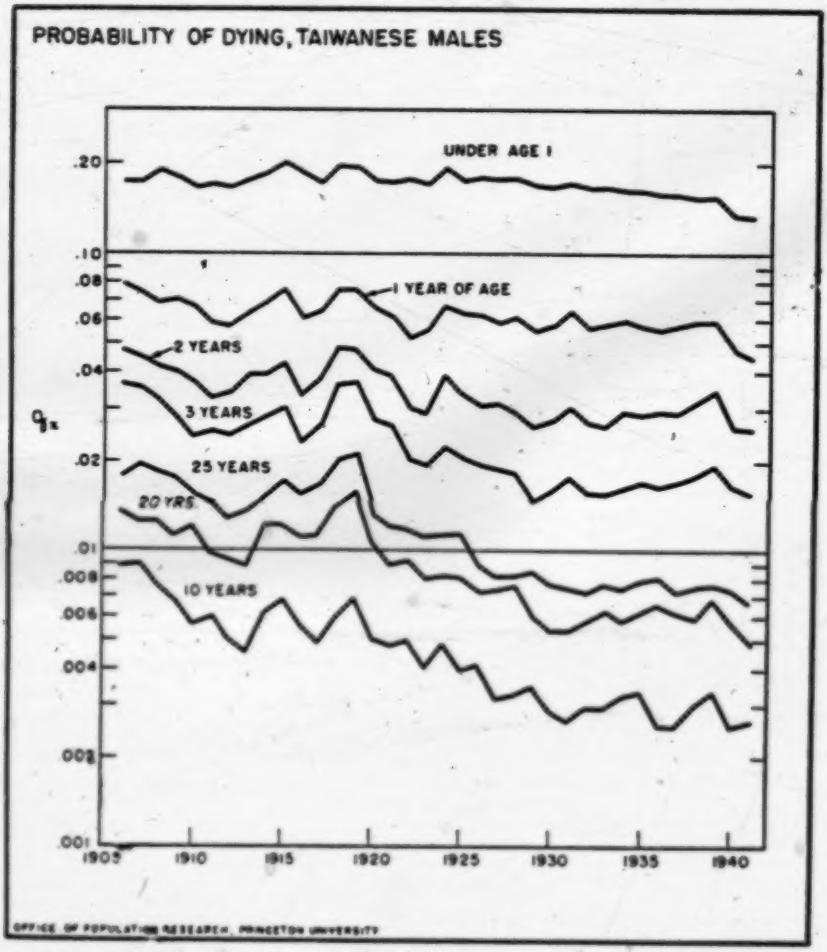

Fig. 28. Decline of Mortality by Age, 1906-1941. Taiwanese Males.

Sectional Differences in Mortality

It would be strange if for people of each age the risks of death were the same everywhere in Taiwan. It happens that most of our information can be obtained only for the island taken as a whole. The measures have been designed to take advantage of this and to present a detailed view of the total population at some sacrifice of knowledge about its parts. Moreover, with a total population that

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165 was so small, any reduction in the number of cases tends to make sensitive measurements unreliable.

The livelihood of Taiwanese farmers brought them into close and continual contact with their physical surroundings. Such a people cannot avoid some influence of climate and environment on its chances of survival. For a place so small there were marked differences in seasons and rainfall over the island. Whether or not related to this factor, from time to time local peculiarities in the incidence of disease have often been noted.

In pre-Japanese times, isolation of small localities kept much of the communicable disease from being transmitted across the island. Even epidemics were observed that stayed confined to towns and apparently did not become general. The Japanese destroyed this barrier by an efficient network of communications, but maintained special medical inspections on the railroads and at check points on routes of heavy travel. They also imposed port restrictions to prevent disease from being imported from abroad.

As the site of the most modern cities and the favorite residence of Japanese, Taipei Prefecture was one of the safest places in which to live. It was also more liberally supplied with medical facilities than any other Prefecture, because it was Taiwan's center for training and research in tropical medicine. It was relatively free from malaria, and contained the most elaborate sanitary facilities in the island. Other sections were less distinguished, unless by exceptionally heavy incidence of sickness. Taichung was the most afflicted with malaria. The three southern Prefectures were all said to have an unusual amount of influenza and other respiratory disease. The smaller settlements along the eastern coast started out with health conditions far inferior to the rest, though they were gradually improved.

Whatever the causes, there were wide disparities in age-specific mortality among the various Prefectures as late as 1925 (see Fig. 29, for males only). For some unknown reason Hsinchu was the most favored part of the island, followed by Taipei. The range from highest to lowest at this date was almost as great as between the beginning and the end of the Japanese period. It is interesting also that the differences were consistent at all ages, with almost no shifts in the standing of Prefectures at any age. At a time when there was very little migration between Prefectures, these life table values may be regarded as a good representation of actual differences.

Expressed as the mean expectation of life at selected ages (Table

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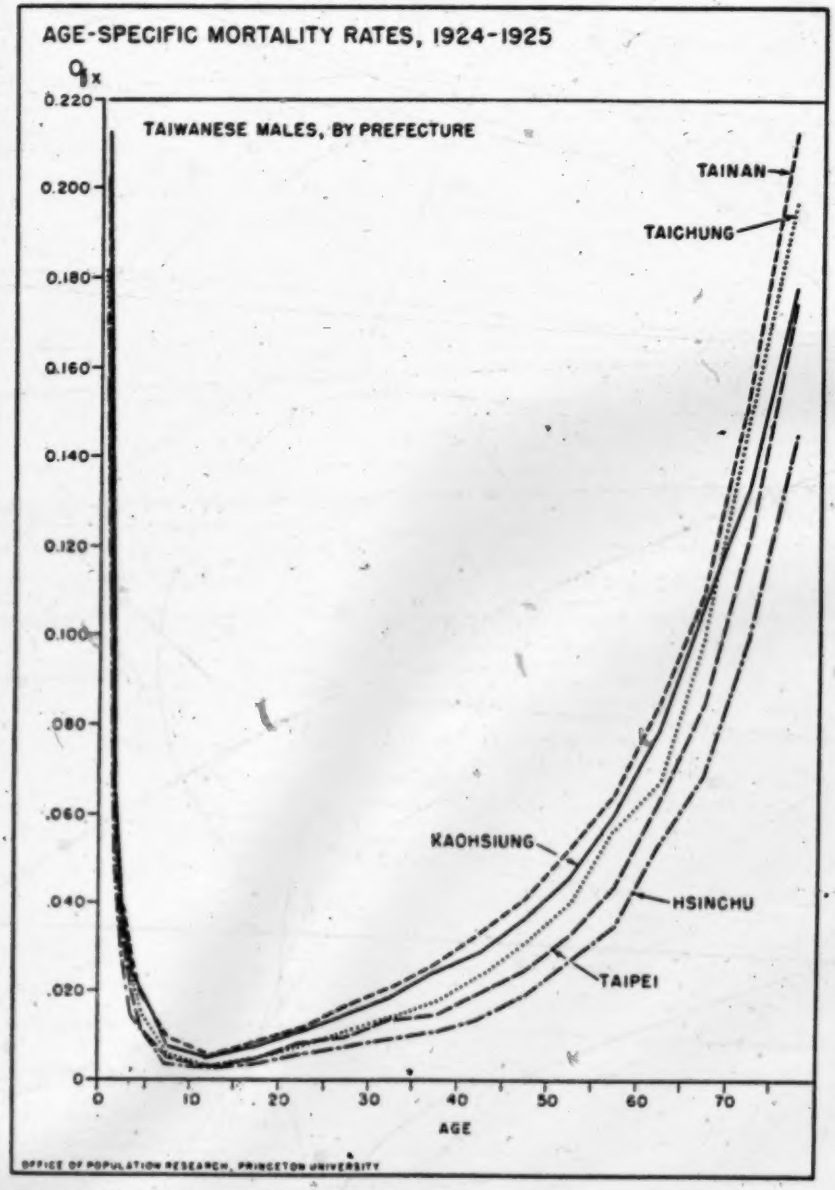

Fig. 29. Mortality of Taiwanese Males in Each Age, by Prefecture. Values of q_x, Life Tables of 1924-1925.

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TABLE 40

MEAN LIFE EXPECTANCY OF TAIWANESE AT DIFFERENT AGES

Prefectural Life Tables of 1924-1925. Values of e_x, in Years

Age	PREFECTURE				
	Taipei	*Hsinchu*	*Taichung*	*Tainan*	*Kaohsiung*
			Males		
0	38.3	43.1	35.9	30.4	31.7
1	45.2	50.2	42.8	37.1	39.2
5	47.5	51.5	45.7	39.7	41.8
10	43.6	47.4	42.0	36.5	38.3
30	28.0	31.1	26.0	22.3	23.8
50	15.4	17.1	13.9	12.4	13.2
			Females		
0	42.2	46.6	40.7	34.7	34.5
1	48.3	52.3	46.9	40.8	41.4
5	52.8	55.1	52.0	45.0	45.8
10	49.2	51.4	48.5	41.9	42.7
30	33.7	35.4	32.6	28.3	28.8
50	20.1	20.4	19.1	17.0	17.2

Sources: Computed from census and vital registration data of 1924 and 1925.

40), the effects of mortality were as heavy in Tainan as for the total island in 1909-1911. On the other hand, the expectancy was even higher at all ages in Hsinchu than for all of Taiwan in 1936-1940, and much higher in the ages of childhood (cf. Table 37, above). Mortality according to these data tended to align itself with the axis of the island—low in the north, high in the south, and intermediate in the central part. For a land so small, and a population of so few, sectional differences of this magnitude are indeed surprising. (The two small eastern Prefectures have been omitted, not having enough people to make a meaningful life table.)

This pattern of dissimilarity was of long standing. Turning to cruder indices, we can see that the same order of ranking existed throughout the registration period (see Table 41). No matter what index of mortality is used, the grouping remains almost unchanged.

Here also it is evident that the places of higher mortality were making the faster progress toward control over death than the ones that were already low. This appears as well in the fact that the rela-

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TABLE 41

TAIWAN. DIFFERENCES IN MORTALITY BY PREFECTURE, IN SELECTED YEARS

Crude Death Rates, Infant Death Rates, and Deaths Per Thousand Females Aged 15 to 49†

	PREFECTURES*							
Year	*Taipei*	*Hsinchu*	*Taichung*	*Tainan*	*Kaohsiung*	*Taitung & Hualien*	*P'enghu Islands*	*Total Island*
				Crude Death Rates				
1906	28	22	37	42	41	35	37	35
1915	25	20	30	36	34	30	26	29
1925	23	19	24	29	29	31	26	25
1930	22	17	21	23	24	21	22	21
1935	22	19	21	21	21	21	19	21
				Infant Death Rates				
1906	—	—	—	—	—	—	—	192
1915	162	138	176	192	191	148	204	174
1925	157	139	164	180	191	149	—‡	167
1930	157	130	153	161	179	152	172	156
1935	154	139	146	151	155	160	131	149
				Deaths per Thousand Women Aged 15-49				
1906	13	10	15	29	26	24	15	20
1915	11	9	13	20	20	16	12	15
1925	9	7	9	14	14	15	—‡	11
1930	8	6	7	9	10	8	9	8
1935	8	7	8	8	9	9	5	8

† All rates are averaged over three years around the census year. Those for 1906 represent one year only. Infant death rates have been omitted for 1906, as being unreliable.

* Prefectural divisions before 1920 have been matched approximately to the subsequent boundaries.

‡ Included in Kaohsiung Prefecture.

tive dispersion of death rates was continually being reduced along with the death rates themselves.

As expressed in terms of the *relative* variation among Prefectures in Table 42, the gains in survival were being spread more evenly over the various portions of the island as time went on. And part of the reduction in mortality for the total must have taken the form merely of levelling some of the initial inequities in health

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TABLE 42

RELATIVE VARIATION OF MORTALITY AMONG PREFECTURES IN SELECTED YEARS

Coefficients of Variation for the Death Rates of Each Year in Table 41

Year	*Crude Death Rates*	*Infant Death Rates*	*Deaths/ Women 15–49*
1906	19.2	–	36.0
1915	17.7	13.2	27.9
1925	15.2	10.8	27.3
1930	9.6	9.3	15.2
1935	5.1	6.3	16.6

Source: Computed from data of Table 41.

conditions. Much headway was made in this process after 1925, when the life tables above revealed such large gaps in the degree of control over sickness and death. It must be kept in mind when studying mortality here and in other areas of rapid decline that initial achievement is likely not to extend to many in the population, and that later progress may be no more than bringing more types of people nearer to the same point as the ones who were privileged in the beginning.

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Taiwan formerly had a well-earned reputation as a spot of capricious and unchecked risks to life among its inhabitants. Its position athwart trading routes of the last century made it a likely place to introduce epidemic disease from the rest of Asia. As it became drawn into contact with the outside world and its wider sources of infection, the state of medical knowledge among its people did not keep pace. The former government lacked the capacity and the incentive to adopt measures that might alleviate or forestall such sickness. Taiwanese were therefore often subjected to intense attacks of these diseases, some of them becoming general over the island.

In fifty years of administration the Japanese quickly eliminated epidemics. They succeeded in gradually making the other sources of fatal illness and ill health less prevalent, and thus postponed the prospect of death for Taiwanese. While some characteristics of the decline in mortality that they induced followed familiar patterns, it also carried certain distinctive traits of the society in which it occurred. Special features like the apparent vitality of adult women

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and the importance of neonatal mortality in the decline of total infant mortality we have established with repeated observations. As far as present knowledge is equipped to deal with them, these peculiarities must remain inexplicable.

The means to this accomplishment were inexpensive and rudimentary. Aside from probably raising levels of living, the Japanese developed a concerted program against an important group of dangers to health. They attacked those pestilent conditions that can be reached through sanitation and slight reorganizations on a mass scale of practices that were deeply rooted in custom. More thorough measures, which were also more burdensome, were avoided. Their health program relied on administrative efficiency and energy in execution to make up for what it lacked in elegance of equipment and technique.

It is significant to find that such an approach could achieve the results that it did. In many other areas of high mortality the desire to reduce the risks of death is prompting steps in the same direction, and Taiwan's experience ought to prove instructive for such efforts. It is only a modest sample of what might be done in a "backward" region with effective administration—without necessarily incurring the great expense often thought to be associated with high standards of public health. Recent progress in research and development of drugs can make success more certain than before. Future strides in medical knowledge can enhance it still further.

The greatest limitation is that health promotion among people with high mortality requires constant vigilance. Default threatens such a program with collapse, for medical procedures now known are still not automatic, nor are they foolproof. Japanese measures to control disease were primarily suppressive. They did not eradicate malaria or remove the potential sources of cholera infection. Failure to appreciate these latent dangers led to severe outbreaks of cholera and malaria after the island was taken over by forces from the mainland in 1945. Since then the standards of administration, which had been allowed to deteriorate, have been raised again; with the improved technical knowledge at its disposal, the Nationalist government may be able to keep mortality at levels even below those of the Japanese period. The example of Japanese health policies, however, remains a useful lesson in what energetic measures can accomplish without the benefit of these superior medical facilities.

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CHAPTER VI. APPENDIX

TAIWANESE LIFE TABLES

Number of Survivors to 10,000 Live Births (l_x), Selected Years, by Year in Which Persons Entered Each Age

	1906		*1909-1911*		*1915*		*1919*		*1921*		*1926-1930*		*1936-1940*		
Age	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Age*
0	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0
1	8,078	8,270	8,261	8,510	7,980	8,200	8,037	8,328	8,080	8,377	8,257	8,546	8,444	8,706	1
2	7,458	7,552	7,728	7,892	7,363	7,472	7,422	7,611	7,590	7,811	7,775	8,004	7,959	8,169	2
3	7,100	7,061	7,446	7,491	7,045	7,033	7,061	7,158	7,290	7,450	7,551	7,705	7,713	7,876	3
4	6,841	6,721	7,253	7,232	6,829	6,750	6,802	6,838	7,097	7,209	7,420	7,541	7,578	7,717	4
5	6,668	6,498	7,125	7,072	6,683	6,562	6,613	6,607	6,974	7,062	7,337	7,445	7,495	7,627	5
10	6,189	5,945	6,811	6,717	6,337	6,159	6,217	6,121	6,694	6,745	7,154	7,258	7,319	7,453	10
15	5,949	5,680	6,624	6,543	6,139	5,980	6,009	5,876	6,554	6,612	7,038	7,150	7,216	7,354	15
20	5,646	5,353	6,379	6,273	5,872	5,704	5,691	5,528	6,329	6,419	6,860	6,975	7,048	7,199	20
25	5,222	4,948	5,986	5,886	5,477	5,344	5,212	5,043	6,020	6,122	6,592	6,724	6,809	6,988	25
30	4,707	4,514	5,491	5,486	4,954	4,938	4,617	4,524	5,634	5,816	6,268	6,440	6,530	6,754	30
35	4,123	4,061	4,924	5,058	4,355	4,511	4,015	4,014	5,194	5,446	5,884	6,114	6,201	6,479	35
40	3,479	3,615	4,301	4,605	3,725	4,061	3,398	3,550	4,705	5,074	5,423	5,749	5,820	6,156	40
45	2,841	3,193	3,625	4,183	3,063	3,620	2,805	3,140	4,154	4,696	4,892	5,377	5,234	5,816	45
50	2,217	2,753	2,944	3,739	2,413	3,201	2,236	2,744	3,590	4,305	4,290	4,986	4,766	5,443	50
55	1,642	2,285	2,278	3,227	1,812	2,696	1,712	2,324	2,957	3,884	3,637	4,534	4,101	4,990	55
60	1,153	1,819	1,658	2,674	1,260	2,150	1,224	1,884	2,311	3,366	2,938	3,988	3,347	4,424	60
65	735	1,344	1,139	2,092	812	1,586	798	1,434	1,689	2,766	2,192	3,315	2,546	3,734	65
70	414	892	697	1,498	456	1,056	443	996	1,087	2,107	1,472	2,553	1,738	2,926	70
75	191	502	368	931	212	573	217	595	616	1,413	845	1,750	1,010	2,005	75
80	73	232	137	477	80	244	80	281	288	745	387	1,007	465	1,126	80
85	24	103	45	212	26	108	26	125	95	330	128	446	153	461	85
90	5	31	9	64	5	32	5	38	19	99	26	134	30	114	90

Sources: Life tables of 1906, 1909-11, 1915, 1919 and 1921 were computed from the assembled data of Taiwan's censuses and vital registration. The table of 1926-30 is from Taiwan, Government-General (1936); that of 1936-40 is from Taiwan, Provincial Government (1947).

[p. 178]

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CHAPTER VII

The Setting for Family Life

NO MATTER what part of Taiwanese life we have investigated, it has not been possible to proceed very far without encountering evidences of familial pressures and sentiments. This has been true of the organization of farming, the "inheritance" of skills, the reluctance to migrate, certain special patterns of mortality, and the attainment of peace and order by the Japanese. Yet kinship is something that people usually consider as a private matter (and moreover take for granted without inquiry as it exists among themselves), and so it is not easy to increase our knowledge of it. 596

The aspect of kinship that makes it so important is the framework of obligations and expectations that it imposes on people's activities in related spheres.[1] Like many forces affecting behavior, the Chinese family system is an intangible thing, and must be approached by indirection—for example, by construing some of the basic moral precepts that the society has received from the past, which is the usual procedure, or, as we shall essay in this chapter, by examining some of the patterns that people display in their familial roles. The former of these devices has been singularly appropriate, for Chinese have one of the richest accumulations of expressions about their sentiments in family matters that ever existed; but it has left us with a one-sided and sometimes unclear view of the subject, largely because it has been followed with little reference to the latter. While neither of these alternatives gives a perfect representation of the family system in actual operation, the advantage here lies in using Taiwan's census data to illuminate a few points on which accurate information has previously been lacking.

The Size of Household Units

Japanese authorities showed that they were aware of the family's practical significance to the people, for in Taiwan they made it the basis of their census and vital registration statistics as well as of their regular civil administration. In each census the blank forms that were distributed to be filled in with personal information were all made out with the *household* as the unit of enumeration. The head 592

[1] For thorough discussion of the family's role in Chinese social organization, see Lang, O. (1946) and Levy, M. J., Jr. (1950).

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592 of a household was the one responsible for entering the correct facts regarding each member. The Japanese owed much of their creditable success in census enumeration in Taiwan to the way they were able to secure conformity to these standards by household heads. Once they were in possession of authority to do this, the family system did the rest.[2]

The household is not identical with a family unit. It includes some persons living with a family group who are not related by birth or marriage to the others, and it leaves out all who are temporarily or permanently absent at the date of the census. But the household, properly defined, is the unit that counts in Chinese society. It is the concrete group in which joint decisions are made, and in which the obligations of the family system operate most directly. Also, it is the foremost, for some people the only, unit of participation in the society at large.[3] Provided that sufficient information is given about its members, the household is probably a more useful basis for enumeration than kinship, strictly defined.

[2] The high caliber of their census system did not owe everything to this expedient, however. It had been a common feature of the ancient registrations of people in China, where in pre-modern times it had not given such gratifying results. Japanese adapted the lessons of experience in these matters by Western nations, and added some innovations of their own. They worked out sets of definitions which provided meaningful categories and consistent groupings of the population (as well, of course, as some that did not), and they developed an effective administration to carry out the work of enumeration.

In such a society the most modern innovations in census technique are useless by themselves. Similarly, the family system *without* special statistical standards may be a poor instrument for recording information about its members—there is every encouragement to evasion unless this is forestalled. Systematic omissions might be more serious in household statistics than in any other type of tabulation, for they would probably be concentrated in certain types of household members whom there was some incentive to conceal—the biases would be strongest in a table that showed household membership.

In order to control the responses in these household schedules, the census rules defined an ordinary household as those persons actually present who had residence, family budget, or both, in common. People, or branches of a family, who did not meet these simple but effective requirements were enumerated as separate households; special types of living arrangements ("quasi-households," q.v. below) were assigned to another category. These and other rules of procedure were maintained with only minor changes of wording in all of the seven censuses of Taiwan. They were reported fully in the explanatory section or appendix of the main descriptive volumes for 1905, 1915, 1920 and 1930.

[3] In Taiwan there was another basis for organizing family solidarity, the so-called "clan" or *tsu*. It was very prominent, especially in pre-Japanese times when it was the basis for setting in motion insurrections and often the means for restoring peace and order. But the clan was never a *family* in the sense of a common unit of participation in the society. It was a loose alliance of affiliated families rather than the unit in which everyday matters were conducted. For the distinction between the two, and a discussion of the *tsu* as it appeared in South China, see Hu Hsien-chin (1948).

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Chinese cultural norms set no limit to the number of family relatives that it is desirable to maintain in a single household, but attach great merit to holding together many branches of a family in one unit. Though Chinese are thus inclined to feel that the bigger the family the better—there seem to be no general class or status differences in the ideal size that they should strive for—so many degrees of relationship are eligible for inclusion that other considerations usually enter and help to settle the question. In practice, the real limitations tend to be how strongly a particular family feels it can enhance its prestige through adherence to tradition, and how well it can afford financially to do so.

TABLE 43

SIZE OF HOUSEHOLDS IN TAIWAN IN SUCCESSIVE CENSUSES

Average Persons per Household, All Types of Household, All Ethnic Groups, 1905 to 1940

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1905	5.2
1915	5.3
1920	5.3
1925	5.5
1930	5.7
1935	5.8
1940	6.0

Sources: *1935 Census, Statistical Tables*, Descriptive Section, p. 30.
1940 Census, Summary Returns, published in the Gazette of the Government-General of Taiwan, April 22, 1941.

Despite the considerable emphasis on their size and cohesion, these family units actually are not exceptionally large. From the total numbers of households and of people, published with the regular report of each census of Taiwan, we can first establish a few main features of the case to guide the more detailed discussion that is to follow. Expressed as the average number of persons to a household, these figures show that the size of households (for everyone, mixing together all nationality groups and all types of household arrangements) started out in 1905 at 5.2, and rose steadily during the census period (see Table 43). The increase was not especially rapid, but it was unbroken and marked by acceleration with the passage of time. Correlated with what is already known about the growth of population in Taiwan, this steady movement implies that

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592 households were not keeping up with the increase of people, and
162 that family groups were therefore undergoing some change in their composition. Though some aspects of this change can be shown more satisfactorily below, the process is most easily seen in these figures, since they cover the complete span of the census administration.

162 As usual, the published results of these census materials did not
128 do justice to the care that went into their collection. Household tables were not always shown in useful form, and the figures of Table 43 do not convey very much even about the size of families in Taiwan. Obviously in order to draw reliable conclusions about families of Taiwanese it must be possible to separate them as a group in the statistics, and to make sure that the statistics employed are a fair representation of family groups. For exactly this purpose, the Japanese treated one kind of household as standard, the so-called "ordinary" household, to cover the "normal" types of living arrangements. People in certain special categories were excluded; residents of these non-family households, or "quasi-households," will be omitted from most of the tables that follow.[4]

162 Information about quasi-households is sketchy and hard to find.
592 The size of these establishments is unknown for separate nationality
563 groups, perhaps through a deliberate effort to conceal the military forces (though they would nearly all have been classified as Japanese anyway, according to the status of the person in charge). The figures can be pieced together for the entire population, and appear in Tables 44 and 45. Quasi-households were a very small part of the total, but accounted for a much larger portion of non-Taiwanese. Only one person in a hundred of all nationality groups lived in such circumstances; 6.6 per cent of Japanese and 20 per cent of Mainland Chinese lived in quasi-households in 1930, but relatively few of the Taiwanese were found outside of ordinary households. Since Taiwanese are the main source of interest in the problem, the few living in quasi-households are unimportant, and for the remainder of this chapter the term "household" will be used to refer to "ordinary" households only.

On the average, ordinary households of Taiwanese contained be-

[4] They comprise people counted in hospitals, prisons, schools, military barracks, police and other special dormitories, and hotels. Although they must be removed before the household data can be said to represent patterns of familial life, the line drawn between the two types of household is not entirely rigorous. Many of these people, especially the ones in hotels and schools, were only temporarily absent from their homes, and their family affiliations may have continued undiminished.

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TABLE 44

PER CENT OF TAIWAN'S POPULATION LIVING IN "ORDINARY" HOUSEHOLDS, 1905-1930

Both Sexes

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Year	Persons Living in Ordinary Households	Persons Living in "Quasi-Households"	Per Cent Living in Ordinary Households
	All Nationality Groups		
1905	3,021,260	18,491	99.4
1915	3,461,282	18,640	99.5
1920	3,624,403	30,905	99.2
1930	4,546,970	45,567	99.0
	Taiwanese		
1920	3,454,956	11,551	99.7
1930	4,293,234	20,447	99.5
	Japanese		
1920	151,862	12,404	92.4
1930	213,314	14,967	93.4
	Other Nationalities*		
1920	17,585	6,950	71.7
1930	40,422	10,153	79.9

* "Other nationalities" consists almost entirely of Mainland Chinese.

Sources: *Census of 1905, General Volume of Statistical Tables*, Table 114.
Census of 1915, Statistical Tables, Table 109 and 116.
Census of 1920, Descriptive Report with Appendix, Appendix Table 149, 164, 165 and 169.
Census of 1930, Statistical Tables, Total Island, Table 5.

tween five and six persons during that portion of the census period when they can be observed separately. Because Taiwanese made up almost the entire population and because most of them lived in family groups, the initial approximation of Table 43 was fairly close to the actual size of their households. Differences begin to emerge when other nationality groups are listed by themselves; the households of both Japanese and Mainland Chinese on the average were smaller by a considerable margin than those of the Taiwanese, and remained that way (see Table 45).

Not only did Taiwanese follow the ideal of large households more closely than the other population groups in Taiwan, but they displayed a different pattern in approaching it. Distributed according to the number of persons in each, only the households of Taiwanese

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TABLE 45

SIZE OF HOUSEHOLDS, BY TYPE AND NATIONALITY OF HEAD

Average Persons Per Household, "Ordinary" Households and "Quasi-Households"

All Nationality Groups, Taiwanese, Japanese and Other Nationalities 1905 to 1930

Year	*Ordinary Households*	*Quasi-Households*
	All Nationality Groups	
1905	5.19	6.2
1915	5.31	12.4
1920	5.30	20.6
1930	5.64	17.1
	Taiwanese	
1920	5.45	
1930	5.82	
	Japanese	
1920	3.37	
1930	3.74	
	Other Nationalities*	
1920	3.79	
1930	3.84	

* "Other nationalities" consists almost entirely of Mainland Chinese.

Source: From data of preceding table. Certain army and navy barracks were included as quasi-households in the Census of 1920 for the first time, accounting for much of the increase over 1915 and 1905 in the average size of quasi-households shown above.

were in a pattern that reveals a predominance of families with two or more generations, families of the sort that must be required to maintain a high rate of natural increase. Their households were found most commonly with four and five members, more rarely of smaller sizes. The process by which the average size of Taiwanese households rose from 1905 on was not a completely general shift toward larger units, but rather one of forming relatively fewer small households (with the exception of people living alone) and raising the proportion of very large ones (see Fig. 30). The sizes most often achieved remained very nearly the same as before, and the distribution simply became more skewed. (Expressed in terms of the numbers of persons involved, the effect of this change would, of course,

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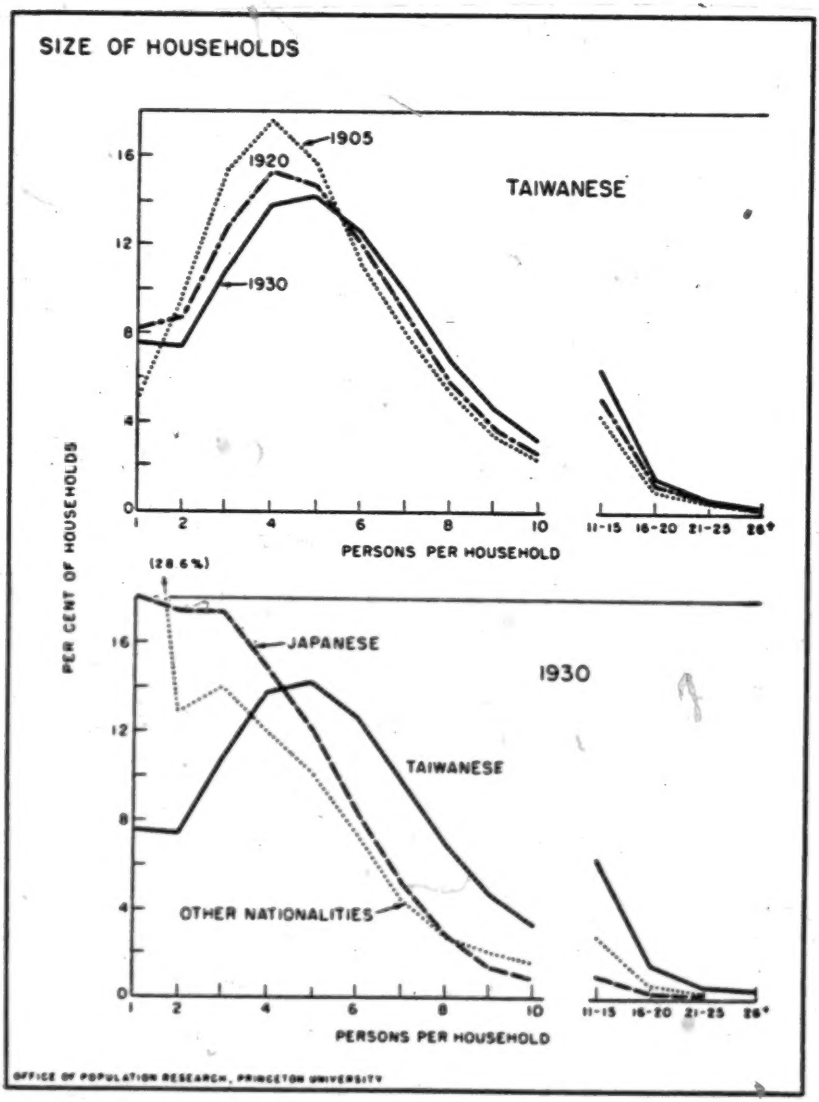

Fig. 30. Size of Households in Taiwan at Various Dates. Households Distributed by the Number of Persons in Each. Taiwanese, Japanese and Others.

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592 be multiplied in households of larger size, since they were larger by virtue of containing many people.)

563 A great many Japanese and Chinese nationals staying in Taiwan 162 obviously were separated from close family ties—for example, those who lived alone, and perhaps some of those in households of two or three persons, not to mention the ones who stayed in quasi-households. Few in either group maintained households in Taiwan as large as those that were usual among their countrymen at home. The Japanese gradually began to establish families in Taiwan, and to take up solitary living somewhat less frequently than at the beginning of their rule. In contrast, an extremely high proportion (29 per cent) of Chinese from the mainland by 1930 were still living alone in households of single persons, a result of the transient and impermanent status that they occupied in the island. It is interesting that in both of these minority groups, households of more than five persons, though not very numerous, had a distribution less unlike those of the Taiwanese. Apparently among the more settled and permanent non-Taiwanese in the population the ideals of the desirable family size were similar to those of the Taiwanese; but this attitude seems to have been more widely shared by Taiwanese, who as a group came closer to realizing it.

Composition of Taiwanese Households

592 It is not size in itself that distinguishes the Chinese family system from its counterparts in other countries. Nor does it mean a great deal to know about the size of family or household groups—even when we know their distribution from large to small—unless something can be discovered about their composition. Kinship would not be such a preoccupation in the minds of Chinese if it did not include other things that we have accustomed ourselves to regard as "non-familial." All that the factor of size indicates is the extent to which diverse familial roles can be encompassed within household units. In ascertaining these more diverse activities that were carried on in Taiwanese households, it will be helpful to find out some of the various kinds of members that were present.

The census schedules made inquiry into the family relationship of each household member, reckoned with reference to the head of the household. When the person was not a relative of the head, some further statement was still required—whether hired help, domestic servant, or simply a "lodger" in the house. The trouble is that the

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greatest part of this information was discarded by the time the census reached the stage of publication. The work of tabulating and publishing the wealth of material that was collected on people's family affiliations—which would have entailed tremendous cost—was apparently never carried out. With the 200-odd different positions of kinship that are recognized in the language, and the nine proverbial generations through which they might be counted, probably most of the population of Taiwan would prove to be mutually related if their full genealogies were known. Consequently, the tables that resulted from these censuses indicate relationship only in the indefinite sense of "family members," without giving any clear idea of what this term actually meant.[5]

Only two censuses, those of 1920 and 1930, published information on household composition that can stand comparison in detail.[6] The membership of "ordinary" households at both dates is shown in Table 46, in terms of the average number of persons per household, in each census category. The totals, 5.45 and 5.81 respectively, correspond to those given in Table 45 above. Taiwan's households were made up mostly of "family members," or relatives of the household heads; the entire group of related persons is represented by *both* of these two categories combined. Non-related occupants were rare—averaged over all households, they were so few that for most purposes they may be thrown together into one group, "Other."

One member of each household was expected to be entered as the "head" in the census enumeration. This designation meant the person who actually represented the household with the outside world and who held authority in making joint decisions that affected the group as a whole. The category was well adapted to the situation, for the same person would as a matter of course assume responsibility to fill out the household's census report. Almost all of the heads were men; but in view of the strong ideal that this should be

[5] The directions for filling out the forms in the census of 1920 stated that it should be interpreted to mean "lineal relatives," and we know from the general features of the family system that kinship in this sense would ordinarily be restricted to relatives on the male side only. But no more definite instructions were given on this point by the census regulations. See *Census of 1920, Descriptive Report with Appendix*, p. 15 of descriptive section.

The meaning of "lodger" (or "guest," or "visitor," as the term might also be translated), is still unclear; apparently it was a catch-all for all people who did not fit into the other categories.

[6] The census of 1915 contained some similar household tables, but these have not been available for this study. Those published for 1920 are the most complete and detailed of all, and will be drawn upon most heavily.

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TABLE 46

COMPOSITION OF TAIWANESE HOUSEHOLDS, 1920 AND 1930

Average Number of Persons per Household, by Status in the Household, and Sex

	1920			1930			Change 1920 to 1930 (1930/1920 = x 100)
	Total	Males	Females	Total	Males	Females	Both Sexes
All Household Residents	5.45	2.79	2.66	5.81	2.95	2.87	107
Heads	0.99	0.87	0.12	0.99	0.86	0.12	100
Family Members	4.36	1.85	2.51	4.71	2.01	2.71	108
Occupied							
a. In Household	1.48	0.85	0.63	0.96	0.57	0.38	89
b. Outside				0.35	0.27	0.08	
No Occupation	2.88	1.00	1.88	3.41	1.17	2.24	118
Employees	0.05	0.05	•	0.05	0.05	0.01	110
Domestics	0.01	•	•	•	•	•	
"Lodgers"	0.04	0.02	0.01	0.06	0.03	0.03	

• Indicates less than 0.005. Due to rounding of figures, sub-totals occasionally do not add to the correct totals.

Source: From *Census of 1920, Detailed Tables*, Table 36 and *Census of 1930, Statistical Tables, Total Island*, Table 5.

the general rule, there is significance in the fact that more than ten per cent of all households were managed by women. Several signs, which can be discussed somewhat later, suggest that it is not always looked upon as out of the way for women to attain this position.

At the moment of enumeration, Taiwanese had more households than heads of households, or not enough heads (regardless of sex) to go around. In this detail Taiwan was different from both Korea and Japan, where there was an inflexible requirement that each household must have one of its members counted in this role. The difference apparently came from a peculiarity of administration, because for some reason the Japanese did not apply the same regulation in Taiwan. This is not to say, however, that certain households were "headless"—the excess of households over heads meant either that some heads maintained more than one establishment (which might be possible through concubinage), or that the person in this position was in certain instances temporarily absent from home (in which case he would be counted merely as a member of some other

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household, wherever he might be).[7] This discrepancy is present in all the tables that follow, but is usually very small and can be ignored.

Of the remaining family members in both 1920 and 1930, those who had an occupation were outnumbered by those who had none. There is nothing unusual in this, for the family nearly everywhere is conspicuous for the amount of dependency that it regularly supports. The generality of this fact is partly due to nothing but the generality of relying on families to bring forth and nurture new generations of adults, which all known societies have done in greater or lesser degree. But dependency is especially prominent in Taiwan and similar countries: children there are very numerous, and they are joined by the aged in partaking of the family's resources on a non-productive basis. The support of each person above as well as below the limits of the working life falls completely on his kinsmen—this is an expectation enforced throughout the society, and it concentrates practically the entire burden on the resources of individual households.[8]

Excluding the heads of households (who in almost all cases were employed), nearly three-fourths of all other family members had no recognized occupation in 1930—the fraction being less than this for males, somewhat higher for females. Non-producing members took up a large part of family groups in more than just a static sense; people with no occupation also accounted for the major part of enlargements in household size that accompanied population increase. Even though the period of comparison here is short (the decade between 1920 and 1930), it is clear that on the average the largest gain per household was in this large category (see the final column in Table 46). In other words, the institutional system translated the growth of population into an increase of dependent family members as well as an increase of families, and turned the greater lon-

[7] This second possibility is more plausible, since the excess was greatest where heads were most likely to be absent—in Prefectures with most emigration, outside of agriculture (as compared with agricultural households), and in those households with larger numbers of non-relatives. The same was true of Japanese living in Taiwan.

[8] Even though this burden may be mitigated by the fact that old people are *not* very numerous, and that children *are* put to work, high mortality usually ensures that a high proportion of infants will survive only long enough to claim their full share of dependency, and will die before contributing any large measure of productive effort. Moreover, countries that are faced with this problem also lack the extra-familial provisions (schools, labor-saving equipment) that many industrial countries have utilized to offset this burden.

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592 gevity discussed in the previous chapter into additional old and young members of non-working ages.[9]

Family Membership in Households

592 Not all households had the variety in their membership shown by the average of all of them in Table 46. In fact, it was not common for households to contain non-family members at all, and the in-
596 ternal affairs of most households did not involve persons other than near relatives. Owing to the indefinite criterion of family relationship in the census data, no more than a crude approach can be made to discovering what special or unusual features were present in those families that incorporated "outsiders" into their households.

The traditions that shape Chinese familial life are explicit as to why large families are desirable and how they should be achieved. Their foremost concern is that of descent, of preserving the continuity of a particular family indefinitely into the future. The most emphatic rule of descent is that it should be patrilineal, that a family line may be perpetuated only through its male side. There are no notable exceptions to this rule; in cases where it cannot be followed to the letter, its purpose is observed by means of adoption, changing of surnames, or even reversing some of the usual procedures in marriage, as we shall see in the next chapter.

Since the exact relationships are not shown, it is never possible to be certain just *which* family relatives were included in a household of a given size. But the nuclear group might be described as husband, wife, and unmarried children, for the kinship system does not customarily provide these people (or such of them who remain alive and present) any alternative place of residence. With this group alone, much of which was usually made up of dependent children, the actual size of most households was not large enough to leave room for either additional relatives or "outsiders." (See Fig. 30, above.)

The goal of still larger families, which was realized by a restricted though substantial part of the population, could not have been attained without encountering special difficulties imposed by the family system itself.[10] But any further enlargements of a family could be

[9] There was some change in the standard of what constituted employment for women between these two censuses, and this accentuated slightly what otherwise would be the pattern of change in Table 46. The same pattern results, perhaps less strongly, if only males are used in the comparison.

[10] Of course, the parents of the husband or other relatives of the father's (or higher)

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made in only one way—by retaining in it two or more brothers, with *their* nuclear family groups, if any. In achieving the extended families that have been cherished in Chinese tradition this is the crucial step, for there are counter-pressures that tend to discourage it. Collateral ties are known to be relatively weak among Chinese—sons do not have bonds of the same strength with each other that they have with their fathers. These ties are especially difficult to maintain after the death of a father, for sons may exercise individual claims to shares in the family property. These claims sometimes lead to division of the family and its property even before the father dies; they are intensified as soon as the brothers are married. Extending the family unit to any considerable size implies some ability to coordinate these conflicting interests and requires leisure for devoting attention to managing its collective affairs, not to mention special resources to support its existence on a more elaborate scale. Obviously it was unusual to succeed in preventing family division along such lines as these. If everyone had succeeded, the number of households in Taiwan would have remained about the same, and the entire increase of population would have gone toward enlarging those that were already there. Although this is not what actually happened, the fact that larger households in Taiwan increased in proportion after 1905 (see Fig. 30) may be a sign that the opportunities for staving off the division of families were improving.

Changes in the size distribution of households are probably an accurate indicator of the rise and fall of family fortunes, if not a very illuminating one. For in reality, when one speaks of ordinary households among Taiwanese, it is practically the same thing as speaking of family groups and nothing else. Nearly everyone who lived in a household of more than one member was a blood relative of the head. In these "co-resident" households, excluding for the moment those Taiwanese who lived alone, over 98 per cent of all Taiwanese in 1920 were related to the household head (if the head

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generation might be added, for they had claims of support that could not be disregarded—one of them might even be the head of the household. But Taiwanese did not live long enough to allow more than three lineal generations to be represented for very long at the same time in the same family.

On the other hand, daughters ordinarily ceased to be included in a family after marriage, since the rule of male descent worked in reverse for them—they were expected to enter the families of their husbands, where in most cases they were found in census enumerations. Though the actual practice in these matters was less uniform than has usually been supposed, it remains true that the expected and preferred arrangement is that outlined here.

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TABLE 47

EXTENT OF FAMILY RELATIONSHIP IN TAIWANESE HOUSEHOLDS, 1920

Persons in All (Ordinary) Households, Those Living Alone, Those Living in Households with Others ("Co-Residents"), Co-Residents Who Were Mutually Related, and the Per Cent Who Were Related. By Type of Household

	All Household Residents	*Persons Living Alone*	*Co-Residents (1)–(2)*	*Mutually Related Co-Residents (Including Head of Household)*	*Per Cent of Co-Residents Mutually Related*
All Households					
a. All Types	3,454,956	51,694	3,403,262	3,343,175	98.2
b. Purely family			3,093,000	3,093,000	100.0
c. Mixed			310,262	250,175	80.6
Households with Head Occupied					
a. All types	3,111,558	44,417	3,067,141	3,012,945	98.2
b. Purely family			2,788,813	2,788,813	100.0
c. Mixed			278,328	224,132	80.5
Households with Head Not Occupied					
a. All Types	343,398	7,277	336,121	330,230	98.2
b. Purely family			304,187	304,187	100.0
c. Mixed			31,934	26,043	81.6
Head Occupied in Agriculture*					
a. All Types	2,230,098	14,929	2,215,169	2,189,415	98.8
b. Purely family			2,033,653	2,033,653	100.0
c. Mixed			181,516	155,762	85.8
Head Occupied Outside Agriculture					
a. All Types	881,460	29,488	851,972	823,530	96.7
b. Purely family			755,160	755,160	100.0
c. Mixed			96,812	68,370	70.6
Head Occupied in Manufacturing					
a. All Types	212,380	7,547	204,833	194,852	95.1
b. Purely family			173,210	173,210	100.0
c. Mixed			31,623	21,642	68.4
Head Occupied in Commerce					
a. All Types	242,048	6,991	235,057	223,124	94.9
b. Purely family			192,816	192,816	100.0
c. Mixed			42,241	30,308	71.8
Head Occupied Elsewhere Outside Agriculture					
a. All Types	427,032	14,950	412,082	405,554	98.4
b. Purely family			389,134	389,134	100.0
c. Mixed			22,948	16,420	71.6

* Includes Forestry.

Source: From *Census of 1920, Detailed Tables*, Table 36.

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is also counted in the figure). This held true in almost the same degree throughout some of the major portions of the society—whether or not the head had a regular occupation, and on the average regardless of the particular occupation of the head (see Table 47). 592 [596]

Closer inspection reveals that the apparent similarity in membership existed chiefly through a preponderance of households made up exclusively of family members, with no outsiders ("purely family households" in Table 47). Of all "co-residents," over nine-tenths lived together in households of this kind, and the case was the same in all the major occupational groups. Whatever differences arose in each occupational group as a whole, therefore, stemmed from a minority of households containing families together with non-relatives—the "mixed households." It is only within *this* segment that the principal characteristics distinguishing various groups in the population can be found. While four-fifths of all people in even these "mixed" units consisted of family relatives, the proportion was larger in those households dependent on agriculture, and considerably smaller where the head was employed elsewhere (especially in manufacturing and commerce) (see Table 47).

There were different ways of becoming a member of a household, according to the kind of member one was to be, and some of these differences are reflected in the balance between male and female in households of various sizes (see Table 48). Relatives entered a family unit through circumstances well covered by institutional rules or procedures—most commonly by birth or by marriage. Neither of these channels permits much latitude of choice to the parties most directly involved—birth is non-voluntary for those being born, and marriage is usually an alliance arranged by persons other than the partners being married. Hence marked sex disparities should not be expected in households that are formed on the basis of kinship alone. However, these "normal" paths of entry were not the only ones, though the predominance of purely family households very nearly made them so. Men obviously had moved out of many family units, especially the smaller ones, and into mixed households of various sizes—*not* conspicuously into the larger ones. A considerable share of these men must have been single, for departure accompanied by a wife would not have altered the sex balance as between larger and smaller households.

Although very few households contained any outsiders, the larger the unit the less likely it was to consist solely of related persons. It

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TABLE 48

FAMILY RELATEDNESS AND SEX COMPOSITION OF HOUSEHOLD RESIDENTS

By Size of Household, 1920

Persons per Household	Total Taiwanese Residents (in Ordinary Households)*	Per Cent in Mixed Households, Each Size	Males per 100 Females†		
			All Households	Purely Family Households	Mixed Households
1	51,694	—	421	—	—
2	110,618	4.2	122	116	407
3	242,469	3.4	100	98	186
4	385,756	3.8	99	97	144
5	465,810	4.6	100	99	132
6	461,430	5.9	103	102	123
7	394,282	7.6	106	104	122
8	298,984	8.4	107	106	123
9	219,402	10.8	107	105	121
10	162,460	13.1	106	104	121
11–15	409,643	16.4	106	103	120
16–20	142,703	22.5	105	102	112
21–25	59,615	26.9	105	104	109
26–30	24,760	33.2	106	105	107
31 and above	25,306	41.6	111	104	121

* This column was computed by multiplication, and its total is 24 persons less than the totals published in other tables.

† These sex ratios were computed from figures for the entire population, Taiwanese and other groups together. Taiwanese, however, preponderate.

Source: *Census of 1920, Detailed Tables*, Tables 33 and 35.

might seem inevitable that households that had added outsiders would be larger than others, but the circumstance is less obvious than at first appears: as we shall see shortly, the households of greater size were not larger by this fact alone, for they also had more family members as well, implying that their familial structure must likewise have been distinctive in some respect. Only in households of more usual size, say of less than eight or nine persons, was the purely family type nearly universal. Yet it should be noted that more than half of all Taiwanese in households of more than 25 persons were also living in units made up exclusively of their family relatives—incorporating outsiders was not essential in order to achieve large size.

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Persons Living Alone

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For a people who take family matters as seriously as they do, Taiwanese appeared to forego to a remarkable extent the relationships that grow out of residing together in some kind of household group. The proportion who lived alone does not look especially large—1.5 per cent in 1920 and 1.3 per cent in 1930 (though these people formed a much larger figure when counted as households, as in Fig. 30). But this meant that more than 50 thousand Taiwanese in 1920, and 56 thousand in 1930 were out of immediate contact with a family group at the time of the census (see Table 49).

TABLE 49

TAIWANESE PERSONS LIVING ALONE, 1920

("Single-Person Households.") By Occupation

	Persons Living Alone	*Per Cent of Total*	*Per Cent Female*
Total	51,694	100.0	21.5
Occupied	44,417	85.9	13.9
Not Occupied	7,277	14.1	68.1
By Occupation:			
Agriculture	14,929	28.9	15.7
Outside Agriculture	29,488	57.0	13.0
a. Manufacturing	7,547	14.6	23.1
b. Commerce	6,991	13.5	7.7
c. Other	14,950	28.9	10.3

Source: *Census of 1920, Detailed Tables*, Table 36.

It should not be supposed that for this reason they were out of touch with the kinship system. Fourteen per cent were listed as "not occupied" in 1920, most of whom were probably retired parents without sons or living apart from them. The remainder may have included people temporarily absent from home, perhaps even some of the household heads who were not enumerated with their families. By their livelihood they do not appear to have been a very representative group, for most were spread through miscellaneous occupations outside of agriculture, but were rarely found among farmers. Only one-fifth were women, still fewer among those who were self-supporting.

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Without more knowledge about these people there is little that can be done except to remark on their numbers, and perhaps to entertain suspicions that many of them were counted apart from familial households due to arbitrary application of census rules, when they actually were more closely affiliated with some group of relatives. Having the information in Table 49, however, we can separate these relatively isolated individuals from those who *were* living in constant association with other household members, and thereby gain a better picture of the patterns that arose from this association. This is the meaning that will be given to "co-resident" households in the subsequent discussion.

The Composition of Co-Resident Households

The average number of persons living together in all "co-resident" households was larger than the figures in Table 46 above.[11] The average size of purely family households was almost the same—"outsiders" were so few that their total number was scarcely noticeable in the figures for households of all types together (see Table 50). But the composition of all households resembled that of purely family households only because nearly all were of the latter type. Mixed households, considered by themselves, were distinguished by more than simply the presence of "outsiders." On the average they also had more members who were family relatives (see the last column in Table 50). Being larger in both categories brought their average total size up to 8.1 persons, as compared with 5.7 in purely family households. Outsiders thus were not incorporated into families of the usual sort, but into families that were already exceptional for their large size. In addition, these non-relatives were actually more of a group to be reckoned with than it first appeared; they were distributed so unevenly that they formed a considerable part of the households where they were found.[12]

The picture of membership for all households was dominated in a similar manner by those households with the head actively employed. Since most fell into this category, the figures for all households in Table 46 or Table 50 are little more than a representation of those whose heads had some occupation. The case was the same

[11] The 1920 census was the only one that allows this distinction to be made. Therefore, when comparisons are to be drawn between 1920 and 1930, these "single-person households" must be restored.

[12] Some "outsiders" formed households that were nothing but business enterprises, usually small handicraft establishments, with no nucleus of family members. Most, however, were incorporated into households already organized as family units.

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TABLE 50

COMPOSITION OF TAIWANESE HOUSEHOLDS—TOTAL, HEAD OCCUPIED AND HEAD NOT OCCUPIED, 1920

Average Persons per Household, by Position in Household, Type of Household, and Sex. (Persons Living Alone Are Excluded)*

	Households of All types			*Purely Family Households*			*Mixed Households*		
	Both Sexes	*Males*	*Females*	*Both Sexes*	*Males*	*Females*	*Both Sexes*	*Males*	*Females*
1. All Households									
All Members	5.8	3.0	2.9	5.7	2.9	2.8	8.1	4.5	3.7
Head	1.0	0.9	0.1	1.0	0.9	0.1	1.0	0.9	0.1
Relatives	4.7	2.0	2.7	4.7	2.0	2.7	5.6	2.4	3.2
Others	0.1	0.1	0.0	—	—	—	1.6	1.2	0.4
2. Households with Head Occupied									
All Members	5.9	3.0	2.9	5.8	2.9	2.8	8.1	4.5	3.6
Head	1.0	0.9	0.1	1.0	0.9	0.1	1.0	0.9	0.1
Relatives	4.8	2.0	2.8	4.8	2.0	2.7	5.6	2.4	3.2
Others	0.1	0.1	0.0	—	—	—	1.6	1.2	0.4
3. Households with Head Not Occupied									
All Members	5.3	2.4	2.9	5.1	2.3	2.8	8.1	3.9	4.3
Head	1.0	0.5	0.4	1.0	0.5	0.4	1.0	0.5	0.5
Relatives	4.2	1.8	2.4	4.1	1.8	2.3	5.6	2.4	3.3
Others	0.1	0.1	0.0	—	—	—	1.5	1.0	0.5

* Rounding makes some figures fail to add up to the totals that are shown.
Source: From *Census of 1920, Detailed Tables*, Table 36.

for both the purely family and the mixed units. Where the head was *not* occupied, however, there were certain differences. For one thing, these had more females and fewer males. In purely family households, this shortage of males made the average total size smaller than in those where the head was employed (see Table 51). Mixed households with the head not occupied, which also had higher proportions of females, were as large as they were elsewhere; but here the deficiency of males for some reason was made up by non-family members. For example, almost half of the domestic servants (male and female) found in all Taiwanese households appeared in those whose heads were not occupied—they averaged more than one for every three households.

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TABLE 51

COMPOSITION OF TAIWANESE HOUSEHOLDS, BY OCCUPATION OF HEAD, 1920

Average Persons per Household, According to Position in Household, Taiwanese Households Only. Persons Living Alone Are Excluded. Total, Both Sexes*

	Households of All Types	*Purely Family Households*	*Mixed Households*
1. Head Occupied in Agriculture			
All Members	6.3	6.1	9.3
Head	1.0	1.0	1.0
Relatives	5.3	5.1	7.0
Others	0.1	—	1.3
2. Head Occupied Outside Agriculture			
All Members	5.1	4.9	6.6
Head	1.0	1.0	1.0
Relatives	3.9	3.9	3.7
Others	0.2	—	1.9
3. Head Occupied in Manufacturing			
All Members	4.9	4.7	6.5
Head	1.0	1.0	1.0
Relatives	3.7	3.7	3.5
Others	0.2	—	2.1
4. Head Occupied in Commerce			
All Members	5.6	5.3	7.0
Head	1.0	1.0	1.0
Relatives	4.3	4.3	4.0
Others	0.3	—	2.0
5. Head Occupied Elsewhere Outside Agriculture			
All Members	4.9	4.8	6.0
Head	1.0	1.0	1.0
Relatives	3.8	3.8	3.3
Others	0.1	—	1.7

* Rounding makes some figures fail to add up to the totals that are shown.
Source: From *Census of 1920, Detailed Tables*, Table 36.

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Just as in many other instances, the greatest contrast among those with head occupied was that between farming and non-farming households. Those directly dependent on agriculture averaged over six persons each, larger than the rest. The greater part of farming households, however, were purely family establishments (cf. Table 47, above), which did not exceed other familial households in size by any large margin. Many of the largest families, therefore, must have been concentrated in that portion of farming households in which outsiders were mixed with family members, which reached an average size of 9.3 persons each. Agriculture thus provided the most favorable setting for realizing the goal of extended and joint families, although one suspects that large farming households may have been partly due to lack of employment opportunities elsewhere.

But though large families and the presence of non-family members tended to go together in Taiwanese agriculture, the opposite was true in most other parts of the society. Mixed households outside of agriculture were actually *smaller* as family groups than their counterparts consisting of family members only. At the same time, mixed households outside agriculture had substantially more outsiders than mixed farming households. While the mixed households in agriculture were large by virtue of the cohesion provided by family ties, they were larger outside of agriculture in spite of it.

Whatever weakening of one's own familial connections was associated with working or living in the household of someone else, it was not equally available to persons of both sexes. The Chinese family system makes little provision for women to live away from the family of either their parents or their husbands, and in Taiwan hardly any of them did so.[13] There were few women anywhere in Taiwan living in households where they were unrelated to the head—less than one per cent of all those counted in 1920 (see Table 52). The fraction that lived in quasi-households was negligible. Though men were also limited in their opportunities for individual achievement unencumbered by family obligations, such restrictions were nearly unavoidable in the case of women. Even in those households shown in Table 50 and in Table 51 that did contain some outsiders —i.e., the mixed households—less than one-fifth of the women were

[13] Many of these women must have been merely the wives of men who were staying in the households of others. Most of the non-related women in mixed households were in the ambiguous category of "lodgers," which leaves us without any clear indication of the circumstances of their position.

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TABLE 52

"OUTSIDERS" IN TAIWANESE HOUSEHOLDS, 1920

592 Per Cent of All Members Who Were Not Relatives of the Head, by Sex, and by Occupation of Head.

(Heads of Households Are Included, Persons Living Alone Excluded)

	Males	*Females*
A. Households of All Types		
All Households	2.6	0.9
Households with Head Occupied	2.7	0.8
Households with Head Not Occupied	2.5	1.1
Head Occupied in Agriculture	1.8	0.6
Head Occupied Outside Agriculture	4.8	1.7
Manufacturing	7.4	2.2
Commerce	7.3	2.7
Other	2.1	1.1
B. Mixed Households		
All Households	26.8	10.3
Households with Head Occupied	27.0	10.0
Households with Head Not Occupied	25.2	12.3
Head Occupied in Agriculture	21.0	6.2
Head Occupied Outside Agriculture	37.1	18.1
Manufacturing	40.5	17.4
Commerce	36.0	17.3
Other	34.2	20.4

Source: From *Census of 1920, Detailed Tables*, Table 36.

not family members, whereas outsiders usually were at least twice as frequent among the men.

Participation by Women in Household Roles

592 562 The Chinese are notable in not allotting to women a status of any particular prominence or responsibility in the society at large. As a result, their participation in non-familial activities is very restricted, and the evidence of previous chapters has not often shown them to be engaged in affairs outside of their family groups. Since they are not found anywhere else, it is of some interest to discover what is possible about the position of women in the household.

Significantly, in the households of various types shown here, women were distributed almost everywhere in about the same pro-

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TABLE 53

PROPORTIONS OF FEMALES IN TAIWANESE HOUSEHOLDS, 1920

By Type of Household and Occupation of Head

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	Households of All Types	*Purely Family Households*	*Mixed Households*
A. Per Cent Female:			
Family Members*			
All Households	49.6	49.6	50.1
Households with Head Occupied	49.0	49.0	49.3
Households with Head Not Occupied	54.7	54.6	56.4
Head Occupied in Agriculture†	49.0	48.9	50.2
Head Occupied Outside Agriculture	49.1	49.3	47.3
a. Manufacturing	50.0	50.4	46.9
b. Commerce	49.4	49.6	47.9
c. Other	48.5	48.6	46.6
B. Per Cent Female:			
Head of Household			
All Households	11.2	11.3	10.6
Households with Head Occupied	7.1	7.2	6.5
Households with Head Not Occupied	45.1	45.1	45.7
Head Occupied in Agriculture†	7.4	7.3	7.3
Head Occupied Outside Agriculture	6.4	6.5	5.5
a. Manufacturing	12.8	13.5	7.5
b. Commerce	3.8	3.7	4.3
c. Other	4.6	4.6	4.8

* The head of the household is included as a family member.
† Includes Forestry.
Source: From *Census of 1920, Detailed Tables*, Table 36.

portion to men (see Table 53). Slightly less than half of the membership of most households was female, and it made almost no difference what was the family's source of support.[14] Despite the association between sex composition and household size found in Table 48, the degree of subordination of women apparently did not vary as between any of the principal lines of employment—women did not gain their positions in Taiwanese households through independent achievement, but chiefly through their attachment to men.

[14] The proportions of *all* household residents who were women is not shown in Table 55. Since women were nearly all members of the family, their percentages among *family* members is practically the same thing, except in mixed households.

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592 This uniformity was due in large measure to the fact that almost all women were members of their households by virtue of kinship, 562 and hardly any of them stayed as non-relatives in the families of others. True, slightly over 20 per cent of all persons who were counted as outsiders were women; but this still did not amount to a large *number*, and it has already been pointed out that many must have been wives or children of men in this status.

Though on the average they were found in nearly equal numbers with men, there is no chance that women occupied the same positions in their families. Chinese ideas of propriety in behavior are never more consistent than in creating a distinction in familial roles based on a person's sex. The patriarchal ideal of authority in Taiwanese families is illustrated by the infrequency with which women became heads of households. Among those of the household heads who were employed (that is, practically all of them), men exceeded women by nine to one; in all but seven per cent of these households it was reported that the affairs were managed by men. In the minority of families where the head was not employed, this responsibility fell almost as often on women as on men—45 per cent of these households were managed by women. The only way for most women to accede to this position was through the death of their husbands. Therefore the concentration of female heads of households among the households with no apparent source of family support most likely represents those widows who were not taken in by their husbands' relatives.

Family Membership and Employment

592 Questions of livelihood, which are important to all peoples, are treated with a particular seriousness by Chinese. They are usually 464 regarded as questions of household management, and thereby become closely interlocked with the ideas and values of the family system itself. When this happens, a large part of a society's economic life is likely to be sealed up in self-sufficient family units, and to lack the aspect of inter-dependence that characterizes the activities of individuals in the industrial regions of the world.

The households of Taiwan were the scene of most of the effort that went into providing support for the population, and hence are the most appropriate place to look for traces of its organization. A good indication of the contribution to household support in different classes of households is given by the extent of regular work by

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male residents. The work of women may have been equally important; but the indices for assessing it have the same shortcomings in making such comparisons that they had in measurement of the labor force—female labor was almost entirely contained within household units, and the census statistics do not represent it accurately at all, but only the willingness to acknowledge and report it as such.

Work by men was looked upon more readily as maintaining the household in relation to the external society, despite a similar tendency for it to be in actuality an internal matter. Male family members seemed to have regular employment in almost the same proportion regardless of the occupation of the head of the household. Slightly over 60 per cent of them reported some occupation in 1920 if the head is counted. This, of course, is only what is implied by the findings in earlier chapters, for the figure is close to that fraction of the entire male population in working ages. Although the average size of family varied among different groups, the share of family members' services taken by full-time work did not. The one exception to this rule large enough to appear in Table 54 occurred in families engaged in commerce, which for some reason held more non-employed men than families in any other non-agricultural type of work.[18] But if leisure was supported to any appreciable extent in Taiwanese families, there is little sign that it was concentrated in any particular field of livelihood.

It will make the comparison more complete if we also adopt an alternative view of dependency. Since in households with head occupied the head by definition cannot be a dependent, it is only fair to compare family members in commercial and other households after the family heads are excluded. The remaining males are the ones whose conduct is subordinate to the authority of the head, and who represent the part of the population most likely to have leisure status where a family's wealth will permit. It would appear that farming families, which had more of these subordinate members to support, put their services to much greater use. Only 35.5 per cent of subordinate males in commercial households reported employment in 1920 (35.9 per cent in purely family households). Other families tended to be distributed in between (see the columns "Excluding Head" in Section B, Table 54).

[18] Whatever the explanation for this peculiarity, it stemmed from an unusually *large* number of non-occupied men rather than abnormally *few* who had an occupation, since commercial families were uncommonly large in every respect as compared with other non-agricultural households.

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Families with unoccupied heads, which in several respects formed a class by themselves, were not so distinct when it came to employing their subordinate male family members. When the head is included in the computation, the fact that he (or she) was not occupied gives an appearance of dependency far greater than that found anywhere else in the population. Excluding the head (in Table 54) reveals that more of the remaining family members were employed than in any other field of livelihood except agriculture. Unfortunately there is no way of knowing what sorts of work they did; if

TABLE 54

EMPLOYMENT AND DEPENDENCY IN TAIWANESE HOUSEHOLDS, 1920

Male Family Members Who Reported a Regular Occupation, and Those Who Reported None, by Type of Household

A. Average Male Family Members Per Household, Occupied and Dependent†	*Households of All Types*	*Purely Family Households*	*Mixed Households*
All Households			
a. Occupied	1.74*	1.74*	1.84*
b. Dependent	1.15	1.13	1.43
Households with Head Occupied			
a. Occupied	1.85	1.84	1.96
b. Dependent	1.11	1.09	1.36
Households with Head Not Occupied			
a. Occupied	0.86	0.86	0.85
b. Dependent	1.49	1.46	2.04
Head Occupied in Agriculture‡			
a. Occupied	2.01	1.99	2.32
b. Dependent	1.18	1.15	1.66
Head Occupied Outside Agriculture			
a. Occupied	1.52	1.53	1.48
b. Dependent	0.97	0.97	0.97
Head Occupied in Manufacturing			
a. Occupied	1.46	1.45	1.47
b. Dependent	0.89	0.89	0.90
Head Occupied in Commerce			
a. Occupied	1.56	1.57	1.49
b. Dependent	1.11	1.11	1.13
Head Occupied in Other Non-Agricultural Occupation			
a. Occupied	1.54	1.54	1.47
b. Dependent	0.93	0.94	0.81

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TABLE 54 (continued)

B. Per Cent of Male Family Members Occupied	Households of All Types: Including Head	Households of All Types: Excluding Head	Purely Family Households: Including Head	Purely Family Households: Excluding Head	Mixed Households: Including Head	Mixed Households: Excluding Head
All Households	60.2	45.8	60.6	46.1	56.3	42.4
Households with Head Occupied	62.5	45.6	62.8	45.8	59.0	43.1
Households with Head Not Occupied	36.6	47.7	37.2	48.7	29.5	36.2
Head Occupied in Agriculture	63.0	48.0	63.4	48.2	58.3	45.7
Head Occupied Outside Agr.	61.2	38.4	61.3	38.6	60.4	36.4
Manufacturing	62.0	40.0	62.0	40.2	61.9	38.4
Commerce	58.4	35.5	58.7	35.9	57.0	33.0
Other	62.3	39.3	62.2	39.3	64.5	40.3

* Household heads with no occupation are of course not included. All figures of average persons per household have been rounded, and sometimes will not add to the totals that are shown in other tables; they also will not always produce the exact percentages shown in the lower section of this table.

† "Dependent" refers to persons reporting no occupation in the census.

‡ "Agriculture" includes Forestry.

Source: From *Census of 1920, Detailed Tables*, Table 36.

many of the unoccupied heads were widows who had not re-married, it may be surmised that these households probably had representatives in most occupational groups.

But the most pervasive distinction in engaging in work or leisure within families appeared in those that incorporated outsiders to assist in the work of the household—the mixed households—which made less use of labor by family members than households consisting of family members only. In all but one of the occupational classes of Table 54, employment was less common among members of the families living in mixed households, whether the heads are counted or not. Households with heads not occupied were no exception. Even their subordinate male family members were put to work less often—when not dependent solely on their own resources of manpower, such families supported the greatest amount of leisure that can be found in any of these groups.

Differences of Occupational Status

The variation that these data show in the composition of family groups was recorded at a date before any strong force of Japanese

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592 554 government policy could have been felt in this sphere, and so it must have been a pattern of long standing among the Taiwanese. Though there is no way of knowing how much the variation amounted to between individual families, between various sources of livelihood it was of a very restricted nature. One of the principal features of the Chinese social order, however, is that there has been very little variation in the general notions that people in different stations hold about what forms of conduct are *desirable*—the standards of behavior within one's family, or with members of related families, have been remarkably similar from group to group, whether or not these ideals are completely fulfilled in fact. It has also been characteristic of this system through many historic periods that it has not given rise to rigid status and class distinctions that became hereditary and remained fixed over time. The commonest sources of prestige have been associated with symbols that leave some room for personal achievements, and not simply privileged birth, in their attainment—the adoption of genteel as apart from vulgar pursuits, a highly esteemed and arduous classical education, and observance of traditional forms of ritual that are inappropriate to commonplace affairs. Wealth, in almost any form of livelihood, has conferred a capacity (e.g., through leisure) to practice these ideals, in many ways that poverty denied to the greatest part of the society.

Status distinctions of this sort are lines that cut across most if not 592 all of the occupational divisions recognized in Japanese census prac- 463 tice, though they obviously were present in some more than others (commerce or government service, for example, more than agricul- 554 ture or fishing). There are further resources, however, to use in finding out the extent of variation within occupations. In the one master table published with the census of 1920, households were also classified by three additional categories of "occupational status"—"Owners" or "Independent Workers," "Officials," and "Laborers."[10] Each household, if the head was occupied, was assigned to one of these groups as well as to a regular occupation, so as to specify more fully the nature of the head's position. The classification is limited in value, for it is not certain that the terms signify anything that is

[10] The English terms are only approximations of the meaning in Japanese. The sense of "Independents" (*Yeh-chu* in the Chinese reading of the term) really is closer to the notion of "master" of an enterprise, somewhat like the term "self-employed" in Western census practice. "Officials" (*Yi-yüan* in Chinese, where it means a lowly and subordinate position) has an honorific connotation in Japanese. "Laborer" (read *Lao-wu* in Chinese) is relatively unambiguous, though it is not clear what line divides it from the others.

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consistent from one occupation to another. In agriculture, a person apparently was "independent" if he actually operated a farm (without distinction between landlords and others), and "laborer" if simply working for another. Agricultural occupations had hardly any positions that could be designated as "officials"; practically all of these were found as government officials or professionals of some kind. These terms are so vague that it is useless to be distressed over what they do not reveal. The service they *do* perform is to separate, within each broad occupational class, the more from the less successful families ("independent" as opposed to "laborers," based on the fortunes of the household head), and to distinguish a few of the cases that do not easily fall in either of these (the "officials," wherever they occurred).

The households of "laborers," in each of the main classes of occupations, were on the average smaller than those in the same occupations that were more prosperous, and smaller even than those of "officials" (see Table 55). The more prosperous ("independent") households were consistently larger than either of the others, whether they were composed solely of family members or included outsiders.[27] Mixed households of "independent" heads were the largest of all, and had smaller proportions of outsiders than mixed households of the two other "status" groups. In other words, the wealthier mixed households exceeded the lesser ones in the same manner that had marked the difference between mixed households and those composed of family relatives only—chiefly through the extension of their families rather than the incorporation of outsiders. Not merely in the families of farmers, but within any occupational category, the households of the well-to-do were larger than those of the poorer portions of the population, and in this same pattern.

Households whose heads were "independently" employed had the smallest proportions of their male family members engaged in full-time work. But while leisure, as measured by this standard, was especially common in "independent" households whether outsiders were present or not, it was greater in mixed households of this group

[27] Here, as before, persons living alone ("single-person households") have been excluded, and Table 55 represents co-resident households only. Therefore the actual number of persons per household is less important (e.g., for comparison with later dates in Taiwan or with other data), than the pattern of variation from group to group in Table 55. It happens in this case that most of the single-person households were of the "laborer" group, and so would make the contrast between the two more pronounced if included, by giving the "laborers" a still smaller figure for average household size.

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TABLE 55

AVERAGE SIZE OF HOUSEHOLD AND EXTENT OF MALE EMPLOYMENT IN FAMILIES CLASSIFIED BY "OCCUPATIONAL STATUS," 1920

By Occupation of Head and Type of Household

	Number of Households	*Households of All Types*	*Purely Family Households*	*Mixed Households*
A. Average Persons per Household, both Sexes, by Occupation of Head.				
All Occupations				
a. Independents*	388,635	6.4	6.2	8.7
b. Laborers	128,768	4.4	4.4	5.4
c. Officials	1,462	4.9	4.6	5.8
Agriculture				
a. Independents	309,158	6.6	6.4	9.5
b. Laborers	41,314	4.2	4.2	5.5
Outside Agriculture				
a. Independents	79,477	5.7	5.5	7.1
b. Laborers	87,454	4.5	4.5	5.3
B. Per Cent of Male Family Members Who Reported an Occupation				
All Occupations				
a. Independents		62.0	62.3	57.9
b. Laborers		65.1	65.0	69.2
c. Officials		54.0	52.5	60.9
Agriculture				
a. Independents		62.6	63.0	58.1
b. Laborers		67.6	67.6	65.2
Outside Agriculture				
a. Independents		58.8	59.0	57.3
b. Laborers		64.0	63.7	70.0

* For an explanation of the meaning of these terms, see text.
Source: From *Census of 1920, Detailed Tables,* Table 36.

than anywhere else (see Table 55, Section B). Apparently these more prosperous households also took in outsiders for different purposes. Though not shown in Table 55, the non-relatives in "laborers'" households were chiefly "lodgers" (whatever might be included under this term); the ones in "independent" households were mostly

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listed as employees, who allowed family members to be released from regular work.

Changes Between 1920 and 1930

The decade between 1920 and 1930 produced little change in household or family structure as far as size or other observable features were concerned (see Table 46, above). Families on the average became slightly larger than before, but chiefly by additions to their dependent children and possibly older relatives. When the data for 1920 are put back into terms appropriate for comparison with 1930 (that is, by replacing the single-person households in the computation of averages), it appears that the growth of households was distributed almost uniformly in different portions of the population—it is necessary merely to add the figure of about 4/10 to the average size of households in each major occupational group in 1920 to approximate the size found in that group in 1930. The tables showing household composition were much abridged in 1930, and permit only restricted comparison. In many of the features already used to describe their structure in 1920, however, households in 1930 were practically the same. They were made up almost entirely of family relatives; and presumably the contrasts between mixed and purely family households were unaltered. The same uniformity in sex composition prevailed among the various classes of occupations, with the same exception in the case of households with non-occupied heads. Since these data contribute nothing to the discussion, they have not been reproduced here.

There is more to be gained by comparing economic activities of family members. The burden of dependency was on the average slightly increased between 1920 and 1930, as we have seen (Table 46, above). By 1930, households representing all the main sources of support (i.e., occupations of heads) had smaller proportions of male family members occupied than 10 years before.[18]

Agricultural households seemed to share less in this rise of family dependency than others (see Table 56). In part the divergence may be because peasant agriculture is better able to provide a secure livelihood for many who could not find steady employment elsewhere—especially young boys and older men. We have found, in

[18] How the added burden was shared between households of only family and mixed households cannot be ascertained, though the similarity of other patterns leads one to presume that this one remained nearly the same as in 1920. This was one of the items of detail omitted in publication of the 1930 census.

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TABLE 56

CHANGES IN THE EXTENT OF MALE EMPLOYMENT IN TAIWANESE FAMILIES
1920 TO 1930
(Persons Living Alone Are Included)

	Per Cent of Male Family Members Occupied, Including Head	
	1920	*1930*
All Households	61.0	56.9
Households with Head Occupied	63.4	59.6
Households with Head Not Occupied	36.6	36.6
Head Occupied in Agriculture*	63.4	60.0
Head Occupied Outside Agriculture*	63.4	58.5

* The remaining occupational groups are not shown for comparison here, because the tables published in 1930 followed a different scheme of classification for households—according to the "*industry*" of the heads. The category "Agriculture" has been made comparable in 1930 by taking those engaged in "Cultivation" only. (A special table published in 1930 shows that almost everyone in this category was also classified as having an agricultural "occupation"; workers in "Forestry," of course, are not included.) The group with head "Not Occupied" is the same in both occupational and industrial classifications.

Source: From *Census of 1930, Statistical Tables, Total Island*, Table 5. Data for 1920 from preceding tables.

Chapter IV, that agriculture in Taiwan exerted its greatest attraction compared with other occupations for men of these ages. Thus men of these borderline ages probably were reported as employed in agriculture, and as dependents elsewhere, and some of this divergence may be simply a difference of standards rather than of work that was performed. But farming families had more use for the services of these people (and of those with physical disabilities); it is possible that the greater readiness to recognize these services—of women as well as of men—reflects their actual importance in contributing to the support of their households.

This apparent trend toward creating a gap between agriculture and other parts of the society was not a very impressive one. It is worthy of attention chiefly because it stands alone; there are no other new patterns of dependency to be found between 1920 and 1930, since the other occupational categories cannot be matched at both dates. And, more important, insofar as there was a leisured group or class among Taiwanese, it was still not to any marked extent occupationally aligned.

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Work Within the Household

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People's working activities play a part in familial life that is larger than merely the support that they provide. Since they are ordinarily not carried on in isolation, these activities supply one of the connections between the family and the remainder of the society. In industrial countries they sometimes appear to dominate this connection, and have become one of the criteria that fix a person's station in society. In agrarian countries it tends to be the other way around; the working roles of most adults are carried on as adjuncts to their other familial roles, and depend on kinship obligations for coordination. This, for example, is almost completely the case in household enterprises, and holds true in varying degrees for such wider market transactions that exist.

In Taiwan, the productive effort of most people was in fact confined to work pursued in cooperation with other family members and organized as household duties. This has already been demonstrated in a negative way as far as women were concerned—the occupational statistics, in failing to show very much about the work of women, do confirm that they were scarcely ever employed outside of their households. In household enterprises—and practically all farming was conducted on this basis—the head of the household was almost automatically the chief participant. However, since the statistics give no positive answer in the case of women or household heads, it is in the activities of subordinate male family members who were employed that we have the best indication of the concentration of work within households, and of its variation in different sections of the society.

Except for the minority counted as "employees," these remaining men were the ones with most opportunity to find work unrestricted (or unaided) by their kinship affiliations—i.e., in something that might approach a "labor market." Yet as late as 1930, over two-thirds of the Taiwanese men in this group still pursued their occupations in the households of their own families (see Table 57). In reality their labor was even more family-centered than this. In the large majority of households the head had some occupation, and there 76.1 per cent of all occupied male family members worked in the same enterprise. The remaining household heads had no occupation themselves, and hence did not operate family enterprises that could claim the services of men in their families. Most of the men in these fam-

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TABLE 57

CONCENTRATION OF EMPLOYMENT WITHIN HOUSEHOLDS, 1930
Per Cent of "Subordinate" Male Family Members
(i.e., Excluding the Household Head) Who Were
Employed Within Their Households
(Taiwanese Households Only, Including Persons Living Alone)

	Per Cent of Employed "Subordinate" Male Family Members Whose Employment Was Inside Their Household
All Households	68.2
Households with Head Occupied	76.1
Households with Head Not Occupied	21.6
Head Occupied in Agriculture*	87.3
Head Occupied Outside Agriculture	34.2
Manufacturing	33.1
Commerce	42.2
Other	26.3

* See note to preceding table.
Source: From *Census of 1930, Statistical Tables, Total Island*, Table 5.

ilies who were occupied found employment outside—only 21.6 per cent of them carried on their work in the family.[19]

Among those households with heads occupied, there were differences just as great between the fields of livelihood that provided support for the households. Farming families kept 87.3 per cent of their subordinate working males occupied at home. It was their numerical weight in the population that made the figure for all occupations so high—in non-agricultural households it was only one-third (see Table 57). The influence of the more modern parts of the economy is indicated by the fact that families engaged in these fields had the greatest proportion of working-out among their eligible men.[20] Of the non-agricultural categories of occupation shown in Table 57, the commercial households came the closest to conforming to the norm exemplified in agriculture.

[19] Literally, the data of Table 57 refer to those working in the "same occupation or same enterprise" as the head of the household. The meaning is not so broad as the literal translation might suggest, because "same occupation" did not mean merely "also in agriculture" or "also in commerce" or some other large category. It means the same type of work in considerable detail—"also a butcher" or "also a bean-curd maker," for example. In nearly every case it probably meant work in the same family enterprise.

[20] Of course, many who worked out may have gone to work for relatives, and still did not enter the labor market.

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Of interest for the sake of comparison are the corresponding data illustrating the variation between different parts of the island (Table 58). In most of the individual Prefectures there were only minor differences in the extent to which employed men in all families (excluding the heads) performed their work at home. The most populous sections seemed uniform in the proportion that were so en-

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TABLE 58

CONCENTRATION OF EMPLOYMENT WITHIN HOUSEHOLDS: VARIATION BETWEEN PREFECTURES OF TAIWAN, 1930

Per Cent of Employed "Subordinate" Male Family Members Whose Employment Was Inside Their Households

Name of Prefecture	*All Households*	*Households With Head Occupied*	*Head Occupied in Agriculture**	*Head Occupied Outside Agriculture*	*Head Reporting No Occupation*
Taipei	50.4	59.6	81.8	21.4	10.5
Hsinchu	72.3	79.5	88.5	34.3	19.7
Taichung	71.0	79.1	88.3	36.5	25.6
Tainan	71.6	79.5	88.6	41.6	25.7
Kaohsiung	72.2	78.4	85.7	45.9	26.5
Taitung	95.1	95.8	97.6	52.0	69.9
Hualien	82.5	85.0	91.8	30.5	34.1
P'enghu	64.5	64.5	75.1	54.8	30.7
Total Island	68.2	76.1	87.3	34.2	21.6

* See footnote for Table 56.

Source: From *Census of 1930, Statistical Tables*, by Prefecture (respective Prefectural volumes), Table 5.

gaged; the deviations in the two Prefectures on the East Coast (where hardly anyone worked outside of his household), and in P'enghu Islands, did not affect many people. Taipei Prefecture was the significant exception to the rule, for it was the only place with considerable numbers of male workers occupied in extra-familial pursuits.

The more detailed columns of Table 58 help to clarify the source of the variation. As the site of the capital city and administrative center of the island, and the portion in which Japanese concentrated their efforts in developing modern conveniences and comforts, Taipei had even before 1930 gained many features of distinction over the rest of the island. It was at this time the transportation hub (built around shipping from the port of Chilung, which later de-

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596 clined), the home of one-third of all Japanese, the location of the better educational facilities, the commercial area of most importance
464 for trade in other than farm products, and of course the center of most large government and business offices. Taipei Prefecture, therefore, had proceeded farthest in the spread of non-agricultural activities in its population. Even though a substantial group in this population does not appear in these tables because they were Japanese, the effect of their presence is evident in the way that non-farming occupations were conducted by Taiwanese—all but 21 per cent of the men in such work (excepting the heads of households and people staying in the households of others) were employed away from their families, a proportion less than any other Prefecture and only half the figure in some. Agriculture was much less affected by the unusual character of other pursuits, but it did not go untouched. Though most farmers in Taipei did their work in their own households, they fell somewhat below the mark set by the rest of the agricultural population.[21]

Significantly, in all of the other Prefectures (except P'enghu, which was not of much account in size), agricultural households were nearly uniform in the degree to which they retained the use of services by subordinate men in their families—close to 90 per cent of the men in this category who lived with their families.[22] The principal differences from one Prefecture to another when all households are considered at once, therefore, must have arisen from the prevalence and the mode of organization in activities *outside* of agriculture, for they practically disappear when farming households alone are compared.

592 There can be little doubt that the family system, through its weight in the conduct of household affairs, has furnished the most impor-
596 tant social setting for behavior of the Taiwanese. We have not only the testimony of Chinese tradition to support this conclusion, but the corroboration of statistical evidence as well. Practically everyone was a member of some familial household—most were related by

[21] Taipei was the site of tea plantations, which, through a greater use of wage labor, may have been responsible for the deviation from the pattern elsewhere in the island. A plantation might employ men (and actually did employ many women) on a more or less regular basis from several farming households, and leave their services free at some seasons of the year for work in their own fields.

[22] Naturally this does not include those who had left home to enter some other occupation; these would appear as outsiders in some other households or as persons living alone, perhaps in some cases as separate families.

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kinship, and those who were not, the "outsiders," generally owed their membership to the work that they performed in the families of others. In addition, many strong obligations were observed among people who were related but not living together in the same household. So in reality the significance of the family system was wider than can be adequately conveyed by the facts of this chapter; it extended beyond the bounds of kinship, in its application to non-related household residents, and beyond the limits of individual households, in governing the intercourse between related families.

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As for those Taiwanese who lived in their own familial households, the best-documented of all their activities is the work that they performed. The extent of male employment in these family groups showed no large differences as between the major classes of occupations. But leisure, as judged by the abstention from regular work, was apparently more widespread in families of greater affluence, regardless of their particular source of support. And their households were also the ones that made the most use of services of non-family members, which was one of the ways of making leisure possible.

It is significant that the work of most men was carried on in household enterprises inside their own families. In a sense this was a fulfillment of traditional exhortations that families should be self-sufficient, but a great deal more was involved at the same time. A society which is family-centered in most respects cannot afford to make very far-reaching exceptions in the case of economic activities: since employment, if it occurs outside of the household, is a possible avenue for a person to advance in social position independently of family influence, it also is potentially a competing source of loyalty. In this and various other ways, the stability of the social order was buttressed by the force of its own organization as well as through the support of its moral precepts, by making it difficult for people to by-pass the family system in pursuit of their self-interest.

Though the span of observation is short and confined to a relatively early period in Taiwan, the facts betray no remarkable sign of yielding in this household structure. And changes that did not alter this fundamental pattern could not amount to very much. The failure of "colonial development" to be a clearcut departure from the past among Taiwanese should be attributed very largely to the stability of their familial institutions.

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CHAPTER VIII

Patterns of Marriage and Divorce

581 UP TO THIS POINT, it has been possible to describe the manifestations of the Chinese family system in Taiwan only through an abbreviated view of the families existing at a particular moment—the view which is afforded by enumeration of households in the census. This approach suffers from several shortcomings. The delineation of what should comprise a family, inherently arbitrary, was one that took account of only those family members who resided together, and thus understated the influence of kinship in the society. Also, the data give but a sketchy indication of family members' characteristics from which we might deduce more satisfactorily their familial roles (items like age, marital status, and their degrees of relationship to each other). In short, our knowledge of what occurs in Taiwanese families is not so well documented as the behavior of their members outside of the family units, and comes largely by inference from this second kind of information.

Part of this gap may be filled in two ways from other sorts of data. The conclusions about family composition will be supplemented in this chapter by a discussion of *marriage*, on which depended the formation of new family units and the continuation of old ones. The next chapter will be devoted to measuring the fertility of Taiwanese, through which their families replenished the population with new members.

Like people in other countries, most Taiwanese marry sooner or later. The differences between Taiwan and many Western countries are superficially those of degree—for most Taiwanese men and women marriage comes early and is nearly universal. It ranks as one of the most significant events that can happen in a family, and is attended by attitudes and customs that reflect the importance ascribed to it. The wedding itself is ordinarily solemnized by the most elaborate and festive ceremony that a family can afford.[1] The idea of marriage is so endowed with importance and virtuous purpose that for a person to remain celibate is usually a mark of unexampled mis-

[1] There are many descriptions of the conduct of Chinese on these occasions and the ways in which this fits in with other familial life. Cf. Lang. O. (1946), and Levy, M. J., Jr. (1949).

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fortune. In contrast to the West, Chinese culture entertains no alternatives that offer serious competition to the "normal" family roles. 581

TABLE 59

PROPORTIONS OF TAIWANESE EVER-MARRIED, BY AGE AND SEX, 1905 TO 1935 162

Males and Females

Age	1905	1915	1920	1925	1930	1935
			Males			
10–14	0.1	0.0	0.2	0.1	0.1	0.1
15–19	10.2	5.7	6.3	5.3	7.3	5.7
20–24	45.7	40.1	42.8	44.7	51.6	49.8
25–29	77.4	72.9	76.5	78.2	82.9	83.1
30–34	89.4	88.1	88.6	89.7	91.3	91.9
35 and over	95.3	95.4	95.5	95.8	96.2	96.0
			Females			
10–14	2.3	0.7	0.6	0.4	0.5	0.4
15–19	47.3	34.7	32.8	29.4	32.6	28.1
20–24	91.6	87.4	86.6	84.4	86.3	83.0
25–29	98.2	96.6	96.9	96.2	96.1	95.9
30–34	99.2	98.5	98.5	98.3	98.0	97.7
35 and over	99.7	99.5	99.4	99.3	99.3	99.0

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census. The "Informally Married," who in 1920 were shown as a subtotal of "Unmarried," have been reinstated here as "Married," in conformity with the census procedure at other dates.

There has been no indication from related spheres of activity already discussed that these pressures to marry were anything but constant and unyielding during Japanese rule in Taiwan. The percentages of Taiwanese over age 30 who eventually married remained about the same—all but one or two per cent of women, and all but nine or ten per cent of men. Yet the proportions of Taiwanese who had ever been married did not remain constant at all ages. The younger people of both sexes displayed some signs of altering the time when their marriage took place (see Table 59). 582 162

So far as this evidence is germane, however, it offers conflicting testimony: the pressures would appear to have been weakened for women under age 30 and to have grown stronger for men. Faced with this apparent inconsistency, we naturally cannot vouch for the inner motives of people about to marry. Nor can we adopt the usual

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course in demography and merely say that there was a trend for people in Taiwan to "marry earlier" or "marry later," for this is to say nothing about why men and women apparently were of different minds in the matter. But thanks to the assiduity of the Japanese in maintaining Taiwan's population statistics, the problem is open to closer examination with the help of additional data.

TABLE 60

SEX BALANCE OF TAIWANESE IN MARRIAGEABLE AGES

Males per 100 Females Enumerated in Ages 15–49 in Successive Censuses, 1905 to 1940

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*	*1940*
10–14	122	113	109	107	105	103	104
15–19	126	116	112	109	106	104	100
20–24	123	121	115	112	108	106	102
25–29	122	123	120	114	111	108	104
30–34	119	119	120	118	114	110	107
35–39	116	114	114	118	116	112	109
40–44	112	107	108	110	114	114	110
45–49	100	100	99	101	105	109	108
Total, 15–49	119	115	112	111	109	107	104

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

It is worth while first to consider the conditions of the marriage market in Taiwan, in terms of the relative supply of men and women available to marry. Since, practically speaking, the Taiwanese were a "closed population," this is one instance where demographic trends in births and deaths may be observed very simply in their bearing on the more complex aspects of behavior. We have already seen that the chances of surviving through infancy and childhood had been extremely poor for girls born before 1895, and that this handicap disappeared only gradually in later years. As a result, by the time they were nearing age 20—the range when most of them married—there were not enough women to furnish wives for the eligible men.

In 1905, for example, there were more than 20 "surplus" males for every 100 females in the age group 15-19, who could not find wives from the same age group, and would have difficulty in finding them from any younger groups of girls which had suffered similar high mortality (see Table 60). Apparently, as girls began to catch

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up with the boys in the chances of surviving in earlier life, they lost some of this advantage relative to men in marrying; and, as the scarcity of marriageable women became less of a factor conditioning the marriage opportunities for men and women, the result was that the chances of marrying at each age (under, say, 30) improved for men and declined for women.

TABLE 61
EXCESS OF MARRIED WOMEN IN TAIWAN, 1905-1935

	Married Men	*Married Women*	*Difference (2)–(1)*	*Males per 100 Females*
1905				
Taiwanese	594,827	598,556	3,729	99.4
Japanese	12,302	8,246	–4,056	149.2
Other	3,487	220	–3,267	1,585.0
Total	610,616	607,022	–3,594	100.6
1920				
Taiwanese	641,746	648,764	7,018	98.9
Japanese	37,377	32,946	–4,431	113.4
Other	7,427	2,270	–5,157	327.2
Total	686,550	683,980	–2,570	100.4
1935				
Taiwanese	913,655	924,963	11,308	98.8
Japanese	56,562	52,663	–3,899	107.4
Other	15,342	8,132	–7,210	188.7
Total	985,559	985,758	199	100.0

Sources: *Census of 1905, Detailed Tables*, Table 5; *Census of 1920, Descriptive Report with Appendix*, Appendix Table 26; *Census of 1935, Statistical Tables*, Table 7. The category of "Married" as published in 1920 has been reconstituted so as to make it the same as that shown in the other censuses.

All this would be strictly true only if the Taiwanese population had been "closed" against marriage with other groups as completely as it was against migration. There were barriers to intermarriage, but in fact they were less effective. To some extent women enjoyed their felicitous marriage prospects because their nuptial horizons were not entirely restricted to Taiwanese men. Some of them married Mainland Chinese or even Japanese, which helped to enhance their scarcity. These mixed unions probably had a dubious legal status, for many of the male Japanese and Chinese nationals in Taiwan were little more than transients, and some who reported them-

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selves as married may have done so because of a wife at home. It is unknown how many supplemental unions of this sort with Taiwanese women there were. They were not legally registered as marriages where Japanese were involved, for prior to 1932 such marriages were prohibited by law.

The legal status of a union, however, did not make so much difference in the census figures on married persons, since the census was designed to record unregistered as well as "legal" marriages. In this it seems to have been successful, even for those that were not fully legitimized by law, and the census reports are therefore a fairly good source to detect whether or not mixed unions existed.[2] A brief summary of this information is given in Table 61. With monogamous mating and without intermarriage, there should have been equal numbers of Taiwanese married men and married women at any one moment.[3] Actually, every census showed an excess of women over men who were married: a proportion in the neighborhood of one per cent of Taiwanese women were "unmatched" in this sense.

But although some of these had undoubtedly become wives of Japanese or Chinese nationals, from the census materials there is no way of determining how widespread this intermarriage was. In the first place, Taiwanese men of wealth were said to take concubines, after the fashion of old-style Chinese gentry, and thereby may have accounted for some of the extra married women.[4] Also, from the Japanese (and Chinese) side, there is no way of knowing how many of these men were reported as married because of wives in Japan (or China), and how many because of wives among the Taiwanese.

Finally, a small though unknown number of Taiwanese men had found wives from women in the other nationality groups in the island, and these have the effect of cancelling some of the "excess" of married Taiwanese women.

These factors make the situation more complicated than it would

[2] The first census (1905) was an exception. Liaisons with Japanese men and Taiwanese women were explicitly not recognized, though such unions involving Mainland Chinese were. In all other censuses, the "informally married"—i.e., those whose marriages were not legally registered—were always shown separately, though sometimes included as a subtotal of "married" and sometimes as a subtotal of "single."

[3] Some Taiwanese men, by the time of the later censuses, were absent in Japan and elsewhere in the Empire, but they were too few to have any noticeable effect in these tabulations.

[4] By the same token, the sex imbalance of married Taiwanese cannot be said to be a measure of concubinage, because of the unknown amount of intermarriage. Neither of these two questions, both important, can be clarified beyond this indeterminate state of information.

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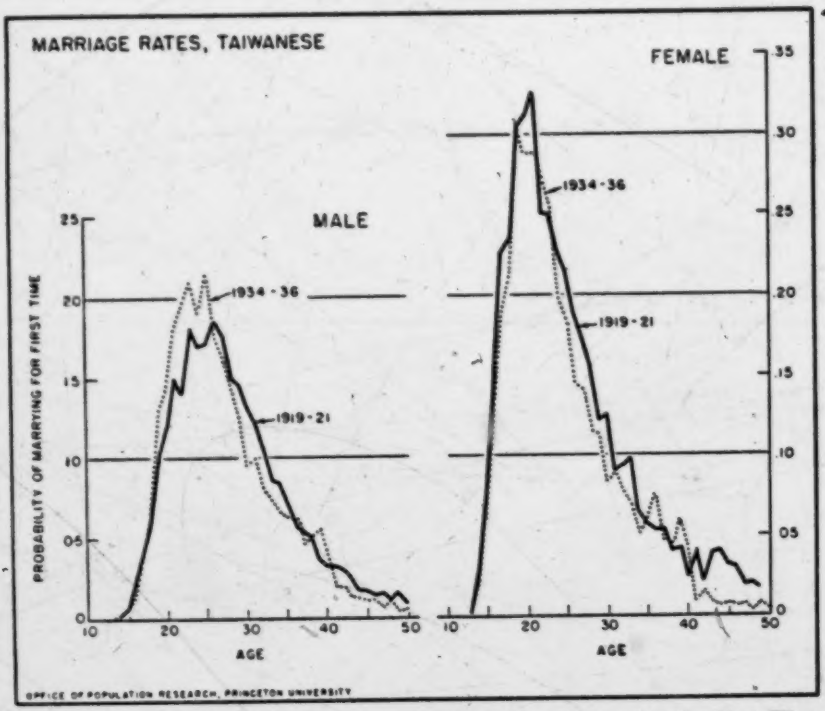

Fig. 31. Marriage Rates of Taiwanese. Probabilities of Marrying for First Time at Each Year of Age, 1919-21 and 1934-36. Males and Females.

be if Taiwanese alone were involved. Still, it is possible to get a more refined idea of the trends already observed by examining the age pattern of marrying that can be found among the Taiwanese. Marriage rates of moderate accuracy can be calculated, based on registered marriages with adjustments for those which were not registered.[5] But because the data on marital status were not published

[5] Marriage rates in this sense have been computed in the form of a "gross nuptiality table." In this form they are often termed "probabilities of marrying," which must first be computed as "probabilities of remaining single." They are exactly analogous to the "probabilities of dying" in a life table, in that they represent the proportion of persons entering each year of age who would have married during that age if none had died, according to the age pattern of the particular calendar year in question.

The rates given by such a table in its raw form are deficient; registered marriages in Taiwan were enough only to produce the number of "legally" married couples that were recorded in each census, but insufficient to have supplied all those whom the census found to be "actually" married (i.e., living together in socially recognized unions). This first set of marriage rates was therefore *adjusted* to bring it more nearly into accord with the facts as shown by the census. The adjustment was arrived at by calculating separately, from the census alone, a nuptiality table for "actually" married and

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582 in full detail at each census, there are just two occasions for which satisfactory marriage rates can be found—1920 and 1935. Marriage
162 rates for these two dates are shown in Fig. 31, representing the marriages of three years averaged around the census year (i.e., 1919-21 and 1934-36).

The data of Fig. 31 pertain only to those being married for the first time, since the first marriage removes a person permanently from the unmarried. They show something less than the full extent of the changes in marriages that have already been demonstrated, for the shifting that appears in Fig. 31 is confined to half of the total period of observation. Already by 1920 women's extremely high chances of marrying before age 25 had begun to subside and those of men to rise. Even so, the persistence of this change is clearly evident in the latter half of the period. Marriage rates continued to move in opposite directions for men and for women after 1920 (though after 1920 it is less apparent for women). Taiwanese customs of marriage still allotted the better opportunities to women when young, concentrating these near age 20, while the high point in men's chances came three or four years later in life. Regardless of their differences in earlier adulthood (when most of the first marriages actually occurred), between 1920 and 1935 neither men nor women showed any tendency to defer marrying until after age 25—the rates of both sexes declined after age 30 and in the later 20's.

Widowhood and Divorce

162 Not everyone who marries stays married. In societies where mortality is relatively severe, large proportions of spouses are likely to
589 be separated from their partners through death. Since the mortality of Taiwanese was higher for men than for women, wives were more likely to be bereaved than husbands and there were more widows than widowers. While every census found substantial portions of people of both sexes who had once been married but whose husbands

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"legally" married persons; the ratio of the one to the other was used for "correcting" the rates based on registered (legal) marriages. This procedure leaves something to be desired; the most that can be said in its favor is that it converts into useful form data that would otherwise be useless.

The procedures of estimating nuptiality from census data were an adaptation of those discussed in Mortara, G. (1949). These figures might be suitable to use in place of the data that actually appear in the text, but for the fact that they reflect unduly the events of the census year, and thus give a poor indication of trend. The age pattern of unregistered marriages has no significance as such, for there was nothing to prevent unregistered marriages from being subsequently registered.

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or wives had died, the proportions at nearly every age were two to three times as great for women as for men (see Table 62). 162 589

TABLE 62

WIDOWS AND WIDOWERS IN TAIWAN

Per Cent of Taiwanese Men and Women Who Were Counted as Widows or Widowers in Each Census, 1905 to 1935, by Age

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*
			Males			
20–24	1.0	0.7	0.8	0.5	0.5	0.4
25–29	2.5	2.1	2.4	1.4	1.2	1.1
30–34	4.3	4.1	4.2	2.9	2.3	1.9
35–39	6.8	6.1	6.6	4.9	4.0	3.4
40–44	10.1	8.8	9.2	7.7	6.5	5.7
45–49	14.0	12.1	12.4	10.7	10.1	8.9
50 and over	28.6	26.3	29.3	23.1	22.2	21.3
			Females			
20–24	2.1	1.7	1.9	1.2	1.0	1.0
25–29	4.8	3.7	4.0	2.7	2.3	2.2
30–34	9.4	6.9	7.4	5.3	4.7	4.4
35–39	17.6	13.2	13.2	10.2	9.3	8.2
40–44	30.2	23.7	22.5	18.7	16.5	15.0
45–49	43.4	37.9	35.2	29.9	27.2	24.1
50 and over	72.2	71.2	69.2	65.1	61.6	57.9

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

By 1935, the proportions of adult women who were widows had gradually fallen at all ages, until they were no more than half as high as they had been in 1905. The decrease in proportions of widowed men was similar, though less pronounced. Most of this decline probably arose from the fact that spouses of both sexes became less likely to die during early adulthood, thanks to improved mortality. Not all, however, can be definitely attributed to an actual decrease in widowhood, for the census recorded as widowed only those who remained in the status of widows.

Just as death of a husband or wife is a way to end a marriage, remarriage is a way out of widowhood. In the case of women it is one that is not highly regarded by Chinese tradition. A wife leaves her original family and enters that of her husband, where her status at 587

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587 first is uncertain and tends to be the target of considerable hostility.[6] But if she bears a child, especially a son, during the husband's lifetime, her membership in his family is made relatively secure, for she becomes the means for continuation of the family line. If the family has enough wealth and enough adult family members to prevail in the matter, it is to be preferred that the wife remain a widow rather than remarry. The attitudes generated by the family system, which manage to induce nearly everyone to marry once, act to some extent as a restraint on the number of years that may be spent in married life. Depending on the circumstances, widowhood therefore may be permanent and have the effect of preventing many women from being mothers of additional children.

But the prohibition against remarrying is often given lax observance. In Taiwan special arrangements were sometimes made to ease the practical difficulties.[7] Many women must have lost their husbands before providing a male heir, and a childless widow might have very little claim to standing in her husband's family. Because the remarriage of widows was not looked upon with favor, they were not likely to enjoy the prospects of so good a match as those of unmarried women. It is commonly known that a cheap wedding can be arranged with widows, and so they probably became wives of poorer men. With the shortage of marriageable women that existed in early Taiwan, the abundance of widows doubtless was a factor in finding wives for many men who otherwise might not have married at all.

Remarriage is not regarded so austerely for widowed men; the same circumstances affect them, but all work in the other direction. A man has compelling reasons to remarry after the death of his wife, and these are even stronger if he has become the head of a household and the father of children. A widower's incentive was equal to that of a widow, and he had fewer obstacles.

586 Like widowhood, *divorce* also removes some men and women from
162 married life and helps to reduce still further the efficiency of mar-

[6] See Levy, M. J., Jr. (1949), Chapters III and IV.

[7] Since the Chinese conception of marriage and descent is patrilineal, the "normal" course for a widow who remarries would be to enter the family of the second husband. The presence of children born to her as a wife, however, complicates the situation, for they are regarded as descendants in the male line—i.e., members of the first husband's family—and would not ordinarily be relinquished. Among poorer Taiwanese there existed a special form of marriage in situations of this sort, observed also in many parts of China, which provides that the second husband marries *into* the family of the widow's children. Marriage of this kind is deprecated and probably occurs chiefly when a widow is left without able-bodied members of her husband's family.

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riage in cementing marital unions. Divorces are different, however, in that most of them occur early, rather than increasing with the length of married life. They leave (at least initially) an equal number of ex-partners of either sex who can remarry if the institutional system permits. They also leave a lesser total residue of persons in a non-married status. The divorced enumerated in the censuses were very small proportions of Taiwanese adults, and showed no trend with the passage of time save reduction to still smaller sizes at the younger ages (see Table 63).

TABLE 63

DIVORCED MEN AND WOMEN IN TAIWAN

Per Cent of Taiwanese Who Were Counted as Divorced from a Previous Marriage, 1905 to 1935, by Age

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*
			Males			
15–19	0.3	0.1	0.1	0.1	0.1	0.0
20–24	1.2	0.8	0.8	0.7	0.7	0.6
25–29	1.9	1.8	1.8	1.6	1.4	1.3
30–34	2.1	2.3	2.3	2.0	1.8	1.6
35–39	1.8	2.1	2.4	2.2	1.9	1.7
40 and over	1.3	1.5	1.8	1.8	1.8	1.8
			Females			
15–19	0.7	0.4	0.4	0.3	0.3	0.2
20–24	1.2	0.9	1.2	0.9	0.9	0.7
25–29	0.9	1.0	1.3	1.0	1.0	0.9
30–34	0.8	0.9	1.2	1.0	1.0	1.0
35–39	0.7	0.8	1.1	1.0	1.0	0.9
40 and over	0.4	0.6	0.8	0.8	0.7	0.8

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

A paucity of divorced people has led observers from time to time to conclude that divorce itself is all but unknown among Chinese. On similar grounds, the abundance of widows is often taken as a rough measurement of how great are the proportions of people who have been widowed. The reasoning behind both types of inference is that the chances of remarriage are poor (especially for women), and therefore the number of observed survivors of divorce and widowhood are a gauge of their frequency.

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586 But neither divorce nor widowhood has been seriously investigated in an agrarian society. Though one must admit that reliable data have been rare, scholars have usually fallen back on stereotypes drawn from the folklore and value statements of the societies themselves. This approach has its pitfalls, especially when these statements are accepted literally without much attention to the social situations in which they have their effect.

Divorce, we are told, happens at the whim of the husband or his family; a wife may be sent back to her original home if her behavior fails to satisfy them on any of several grounds, all very explicitly stated. The divorced woman must return disgraced to her family, nevermore to be sought in marriage. The harshness of this procedure is tempered, mercifully, by prospective loss of the dowry to the husband's family, by recognized conditions that call forth forbearance on their part, and by "local sentiment" which may be offended by the arbitrariness of the whole affair.

In short, the prescriptions of archaic Chinese moral codes leave one with just about as much insight as to what to expect as if he knew nothing of them. In reality not a great deal can be said about the reasons for divorce with the assurance that it is generally accurate. It differs from widowhood in being the outcome of decision rather than death, decision affecting the two families between which the original marriage had been arranged. If a dispute is involved, which is likely, the focal point will probably be the relations of the wife with her husband's family, but only if the marriage was patrilocal. The grounds may be anything rising from these relations, which are known to be difficult. Grievances may exist on either side, though it is easy to see that they originate more readily from that of the husband's family.

586 162 Luckily there is a way of checking on the frequency of divorce in Taiwan, as there is not in the case of widowhood. Its legal significance was judged by Japanese to be sufficient to warrant keeping records of divorce as it occurred. Divorces were registered each year, according to the time elapsed since marriage (in single years of duration up to five, and thence in broader intervals). These data have been slightly rearranged, assuming (with some error) that all of those which occurred less than one year after marriage belonged to marriages made in the same calendar year, that those occurring between the first and the second year of the marriages' duration belonged to

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marriages of the previous year, and so on. It is then possible to calculate approximately the number of marriages of any particular year that ended in divorce within five years[8] (see Table 64).

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TABLE 64

MARRIAGES ENDED IN DIVORCE, 1906-1940

Per Cent of Registered Marriages of Each Year That Were Dissolved by Divorce within 5 Years' Duration
Taiwanese Only

Year	*A. Assuming That* All *Taiwanese Marriages Could End in Divorce*	*B. Assuming That Divorce Occurred Only to* First *Marriages*
1906	14.4	22.3
1910	9.4	13.8
1915	10.5	14.0
1920	7.9	10.6
1925	7.7	9.4
1930	5.8	6.8
1935	4.7	5.2
1939	3.6	3.9

Source: *Statistical Summary*, Table 77.

It makes some difference whether we include those persons who were marrying for the second (or subsequent) time or whether we assume that only first-married couples were divorced. Since the truth probably lies somewhere between these alternatives, Table 64 has a column of figures for each, based of course on the same number of divorces in both cases. Close to 10 per cent of Taiwanese marriages before 1920, nearly 15 per cent if first marriages alone are considered, were regularly being dissolved within five years. The outcome of marriages in 190[illegible]y suggest that divorce had an even higher

[8] For example, it is assumed that first-year divorces in 1910 belonged to marriages of 1910, and that divorces in the second year of marriages to these people all took place in 1911, in the third year 1912, etc. This procedure makes no allowance for those marriages that might have been broken by death, but it will be seen that this omission merely makes the evidence of trend more conservative, and does not exaggerate it.

In most years, between 60 and 70 per cent of registered divorces happened within the first five years of married life. Table 64 must be confined to this period for each annual crop of marriages, because the published data show only the first five years' divorces by single year of duration. The result is that the "divorce rates" of Table 64 represent only two-thirds to three-quarters of the divorces that eventually occurred. This fraction fell slightly during the period of registration, leading to some exaggeration of the decline in divorce shown in Table 64.

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586 162 incidence before the registration system was established, but also may have been nothing more than a peculiarity of the early operation of the registration system itself. Whatever its initial level, the divorce rate fell steadily throughout the Japanese occupation. Somewhat under four per cent of marriages registered in 1939 failed to last for five years.

The Prevalence of Remarriage

587 162 It is beyond the capacity of these resources to reveal the percentages of any year's marriages that ever ended in divorce. Our disregard of divorces if they occurred more than five years after marriage and the omission of many marriages from registration make it not worth while to strive for more than this approximation. More pressing is the question of what happened to all the people whose marriages suffered this adverse outcome. Even at its lowest stage in Taiwan, divorce was still not uncommon, and produced far more divorced people than the census enumerations were able to detect. Yet experience with these census materials has justified a high respect for their accuracy; there is no reason to doubt that they are the most dependable of all public records in Taiwan. It follows, then, that a large share of those who had been divorced, amounting to most of all those divorced before age 25 or 30, must have remarried. Moreover, they must have remarried without delay, for as a group they spent too little time out of wedlock for more than a small fraction to be counted as divorced in any census.

By way of illustrating the grounds for these conclusions, Table 65 shows the numbers of Taiwanese recorded as divorced in the census of 1920. In adjacent columns are the numbers of remarriages that were registered to divorced persons during that year. In the second portion of Table 65 the same information is given for widows and widowers. Unfortunately the case cannot be made more rigorously. Since there is no way of knowing how many people of each age became divorced or widowed during the year, the total time spent in either status cannot be estimated, and we cannot construct "remarriage rates" by the same procedures applied to people marrying for the first time. In Table 65 it is nonetheless evident that the turnover in divorced and widowed spouses was remarkably high.[9] Remarriages

[9] The turnover may well have been higher than that suggested by Table 65: some remarriages were probably not registered, and some may have been registered incorrectly as first marriages.

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TABLE 65

REMARRIAGES OF WIDOWED AND DIVORCED PERSONS, 1920

(Taiwanese Only)

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Age	Males: Divorced Men Counted on October 1	Males: Remarriages Registered During 1920	Females: Divorced Women Counted on October 1	Females: Remarriages Registered During 1920
A. Divorced*				
10–14	3	1	20	16
15–19	155	66	622	586
20–24	1,303	506	1,389	1,193
25–29	2,362	825	1,185	738
30–34	2,771	727	999	412
35–39	2,756	434	929	236
40–44	2,081	211	786	115
45–49	1,377	100	711	45
50 and over	1,943	53	1,097	20
Total, All Ages	14,751	2,923	7,738	3,361

Age	Males: Widowers Counted on October 1	Males: Remarriages Registered During 1920	Females: Widows Counted on October 1	Females: Remarriages Registered During 1920
B. Widowed*				
10–14	17	1	22	8
15–19	154	48	607	412
20–24	1,278	445	2,504	1,269
25–29	3,191	923	4,224	1,560
30–34	5,058	1,254	7,263	1,455
35–39	7,743	1,364	13,457	1,081
40–44	8,548	930	20,061	624
45–49	9,214	595	27,215	284
50 and over	35,819	503	137,752	133
Total, All Ages	71,022	6,063	213,105	6,826

* The categories of "Widowed" and "Divorced" in this table are restricted to the persons whose original marriages had been registered. Those widowed or divorced men and women whose marriages were not registered have been excluded, for if they remarried they would probably register the event as their first marriage. Accordingly, the numbers in this table are slightly lower than those shown in most census tables for 1920.

Sources: *Census of 1920, Detailed Tables, Total Island*, Table 2; *Vital Statistics of the Population, 1920*, Table 12.

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at some ages were almost as numerous as those who were found to be eligible at the census date.

In 1920, divorced women were favored over men in remarriage, but widows apparently were not. One cannot help noticing that more widows were remarrying in 1920 than widowers—6,826 as against 6,063, taking all ages together. This could happen only because there were many more of them to seek remarriage. The actual likelihood of marrying again was almost certainly poorer for widows than for widowed men, partly for the reasons already mentioned. While the experience of divorced persons was superficially about the same—3,361 remarriages of women, compared with 2,923 of men—the real situation was almost reversed. Since divorce withdraws an equal number of men and of women from marriage, any later sex disparity among the divorced (aside from some loss of men through heavier mortality) must be the result of unequal chances of remarrying. It turns out, therefore, that divorced women enjoyed better chances than divorced men to marry again. Even during the earlier years when divorce was exceptionally widespread in Taiwan, it probably interfered less with future childbearing among the women affected than did widowhood among widows.[10]

Though these facts do not advance us very far toward explaining the reasons for the wide incidence of divorce in Taiwan and its fall, it helps to know that entering divorce (or widowhood) was not an irrevocable step, provided that the people involved were young enough.[11] Some of the advantage that divorced women maintained over widows was simply that they were younger (though it was more than this, since they also remarried more readily at the same ages). But in order to get a more complete answer one must look for the consequences of the high divorce rates among those who were marrying. For this answer it is necessary to put one additional question: Whom did people find to marry in their second attempt?

Under conditions in Taiwan after 1895, and probably also under those that were current before, a remarkably small proportion of all marriages were introducing people into matrimony for the first time. Only 717 of every thousand marriages in 1906 had this effect for men, still fewer—644—for women. A mere 585, less than 60 per cent,

[10] Of course, divorced women were younger, and this made remarriage more likely. But men and women at the same ages also showed the same disparity.

[11] This is, of course, only another way of saying that part of the handicaps often associated with divorce and widowhood arise because many people in these categories are older than the ages at which it is customary to marry.

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TABLE 66

THE SHIFT TOWARD FIRST MARRIAGES IN TAIWAN

Persons Marrying for the First Time, Per 1,000 Total Marriages between Taiwanese, 1906-1943

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Year	*Husbands*	*Wives*	*Both Husband and Wife Marrying for First Time*
1906	717	644	585
1910	754	685	629
1915	791	746	691
1920	776	746	684
1925	835	825	766
1930	858	854	797
1935	887	893	836
1940	896	907	851
1943	901	921	864

Source: *Statistical Summary*, Table 70.

united *both* partners for the first time. The remainder went toward restoring to married life the widowed and divorced, who were very numerous. Because so many people dropped out, marriage had become surprisingly inefficient as a way of perpetuating family lines, and a large-scale duplication of effort was regularly incurred by those who tried again.

As time went on, however, we have seen that the shortage of women of marriageable age began to disappear, death separated husbands and wives less frequently, and divorce gradually declined in its incidence. By 1940, marriages had become more lasting and less recidivous for both men and women. The margin by which the proportion of women marrying for the first time lagged behind that of men almost vanished, and as high as 85 per cent of all registered matches were first marriages for both husband and wife.

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There were further implications of this shift away from remarriage. Other things being equal (such as the prestige or importance of the particular family connection), a match in which the opposite partner was being married for the first time would be preferred, by the family of either the bride or the groom, over one in which the partner had been divorced or widowed from a previous marriage. The Chinese do not impose on relatives of the deceased the obligation (which is binding in some societies) of marrying a widowed husband or wife; far less do they have any preference for divorced

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TABLE 67

RELATIVE RESTRICTION OF CHOICE IN MATES BY MEN AND WOMEN MARRYING FOR THE FIRST TIME

Per Cent of First Marriages in Each Year That Occurred with Divorced or Widowed Partners of the Opposite Sex. Taiwanese Only

Year	*Unmarried Men. Per Cent Marrying Divorced Wives or Widows*	*Unmarried Women. Per Cent Marrying Divorced Husbands or Widowers*
1906	18	9
1910	16	8
1915	13	7
1920	12	8
1925	8	7
1930	7	7
1935	6	6
1940	5	6
1943	4	6

Source: *Statistical Summary*, Table 70.

persons as candidates for marriage. When people marrying for the first time must take this less desirable latter alternative, it amounts to a restriction in marital choice, through circumstances of poverty or low prestige. We have already found that in their matrimonial position men in some ways were situated unfavorably, owing to the scarcity of eligible women. It is a reflection of this handicap that in the earlier years of registration a much larger proportion of Taiwanese men than women in their first marriage had to accept divorced wives or widows. In this matter of latitude of choice, the subsequent trends in marriage patterns can be summed up as a process of reducing the amount of restriction and equalizing this difference (see Table 67).

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The prospects of widowed or divorced people in remarriage are of course the opposite sides of the same picture, since by Chinese cultural standards their position is expected to be unfavorable. Other things being equal, *their* most advantageous matches are with people previously unmarried. The situation being defined in this way, their chances are closely related to the trends in first marriages—so long as unmarried partners cannot be found for some persons marrying for the first time, these chances might be fairly high.

But it is also true that widowed and divorced people of both sexes

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declined as a portion of the population. For this reason, their chances on remarriage of finding partners not previously married were steadily improved, in spite of the fact that the first-married became less dependent on the widowed and divorced for their supply of

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TABLE 68

RELATIVE ADVANTAGE OF MEN AND OF WOMEN IN REMARRIAGE

Per Cent of Registered Remarriages by Widowed and Divorced Persons with Previously Unmarried Partners of the Opposite Sex

Taiwanese Only

	WIDOWED		*DIVORCED*	
Year	*Husbands. Per Cent Marrying Unmarried Women*	*Wives. Per Cent Marrying Unmarried Men*	*Husbands. Per Cent Marrying Unmarried Women*	*Wives. Per Cent Marrying Unmarried Men*
1906	15	30	32	49
1910	17	33	37	53
1915	20	35	39	48
1920	23	31	39	47
1925	29	34	48	48
1930	30	33	54	51
1935	44	40	60	55
1940	48	42	63	54
1943	52	43	68	52

Source: *Statistical Summary*, Table 70.

spouses (see Table 68). Let it be said, however, that these chances were never very poor. The scarcity of women helped to place widows and divorced women in a position that was surprisingly good, especially in view of the contrary impression given by the accepted notions about their low repute in China.

Men made much larger gains than women, and here they not only equalled but eventually surpassed women in the degree to which they succeeded in getting such terms on remarriage. Judged by this standard, divorced people of either sex were better off than the widowed. This was partly because they were younger and in that respect more marriageable; but in any case if their prospects were so bright, it is impossible to assert that a Chinese taboo against remarriage of divorced people is very strong.

So it is evident that the explanation for these trends in divorce rests upon answers to questions about other trends and patterns of marriage, and that these more significant answers are incomplete

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587 without some explanation of the peculiar role of divorce in early Taiwan. But there is a common thread running through both of
162 these problems. The negotiation of marriages has been profoundly influenced by the supply of eligible women in relation to that of men—the marriage market formerly was one in which women of marriageable age were scarce. This situation conferred several advantages on the families containing eligible girls, as against those with young men seeking marriage: (1) an excellent chance to avoid permanent spinsterhood by eventually marrying, (2) a better chance to find a partner not previously married, (3) a better chance for them to remarry, if a widow or divorced, and (4) more favorable terms on remarriage.

586 The premium formerly enjoyed by marriageable women supplies the best clue not only to the favorable matches open to families with
162 adult daughters, but also to the reasons why they might afford to suffer the supposed indignity of a divorce. It has been pointed out above that Chinese tradition views divorce one-sidedly—it is something to be initiated by the husband's family, since the wedding makes the wife a member of their household, and the household is where the well-known strains attending her presence arise. But the trends in divorce cannot be explained on this basis. It would imply that husbands, or their families, provoked a profusion of divorces when their own chances of remarriage were at low ebb, and that they became less desirous of divorce as these chances improved.

The wife's parental family does not actually suspend its attachments or obligations to her upon marriage, though commentaries on the Chinese family system commonly give this impression. Her relatives are ordinarily a party to the marriage itself, and may be very alert to the connection which it establishes between the two families. They can often choose whether to let a dispute develop into a break in this connection; sometimes they ensure this turn of events by upholding her interests, or by quarreling over unfulfilled terms of the marriage agreement, whereas they would show more restraint if her chance for remarriage were not good.

58' Nor is the position of the wife herself always so helpless as it is depicted. Over one-fifth of the earlier registered marriages between
162 Taiwanese were not of the "ordinary" type at all, but were matri-
591 local. Though they did not all have the same standing in custom,[12]

[12] They include three recognized forms: adoption of a future son-in-law by a girl's parents, who may then be in charge of him from childhood on; simply marrying-in by the husband; and marrying-in with apparently some restriction to his rights of inheritance. The exact distinctions are left somewhat unclear, for the terms are Japanese, and the facts Chinese. It is also likely that there were variations in procedure from one place to another.

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TABLE 69

PER CENT OF ALL REGISTERED MARRIAGES BETWEEN TAIWANESE THAT WERE MATRILOCAL, 1906-43

1906	21.8
1910	20.4
1915	18.4
1920	17.5
1925	16.1
1930	15.7
1935	9.8
1940	7.8
1943	6.2

Source: *Statistical Summary*, Table 65.

these marriages had in common the fact that the husbands entered the families of the wives, in the reverse of the pattern that was considered normal. These extraordinary marriages were a measure of necessity rather than a repudiation of tradition, for they diminished as a share of all marriages along with the major difficulties of men in finding brides. But matrilocal marriage signifies a considerable compromise with the dominance allotted to men by Chinese tradition. Where it occurs, it means that in order to maintain the rule of male descent, either the husband must be relegated to a less important position or the continuity of the wife's family must be broken. Chinese may on different occasions prefer one or the other of these alternatives, but when they resort to matrilocal marriage it is a sign that precedence has been given to continuation of the wife's family line. This solution makes the husband's status in the wife's family rest on sufferance, and cannot avoid undermining his dignity and authority.[12] The norms of patriarchal authority were not undermined, however, in the Taiwanese population as a whole: when men were no longer obliged to marry on these degrading terms, they began to shun this type of marriage (see Table 69). Because it was inconsistent with the rest of the family system, matrilocal marriage presented a special occasion for discord—men were led to expect one kind of familial role as husbands, but required to accept another one that was inferior.

[12] Further compromise is actually possible. Various devices are practiced in China, such as entering the husband on the registers of the wife's family, changing his surname to theirs, and perhaps admitting him to her inheritance, as ways to smooth over the departure from tradition in such marriages. How urgent these niceties are probably depends on the importance and wealth of the families involved—i.e., how urgently they feel the need to keep up conventional appearances.

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586 591 Evidently it is mistaken to consider divorce simply as a prerogative of the husband or his family, just because the Chinese believe that it ought to be. Several sources of friction can be found in Chinese family structure that might lead to divorce, but by their manifestations in Taiwan they point to the wife's side, and not the husband's, as having been responsible for its exceptionally high incidence. A great many of the divorces that were recorded must have been precipitated by the wife's family (if not by the wife herself), and it seems inescapable that their willingness to do so was governed largely by the opportunities to find another match for her. The patterns of marriage as well as divorce lend support to this conclusion.

The Reproductive Span of Married Life

162 582 One reason for giving attention to marriage is that it is the principal step by which people pass into adult familial roles, and thus embodies many of their ideas about the significance of these roles. It is also a matter of great interest in connection with reproductive behavior, since in all known societies some form of marriage establishes the approved social setting for bringing children into the world. From the standpoint of replacement of members in a population, however, the important thing is not simply when people first become married, but how much time they actually spend in married life. But because a particular marriage almost never lasts through the lifetime of both its immediate partners, the duration of married life cannot be precisely determined for Taiwanese. People are arriving and departing continually, and not all of them leave a sufficient trace in the sorts of demographic statistics that are usually available.

The most practical expedient for estimating the amount of time spent in marriage is to consider only those women of reproductive ages who are currently married at some particular time.[14] In Table 70 they are arranged as proportions of all women at these ages at census dates, confirming what has already been implied above—that many years were spent without their husbands by women who had been married, because widowhood and divorce were too prevalent to be cancelled out by remarriage. As women became older more of them became widows, but the percentages of women who dropped

[14] From the standpoint of demographic concepts, there is nothing inherently "better" about narrowing attention to women instead of men. The main reason for doing so here is that we have ways of estimating the fertility of women in Taiwan according to age, but not that of men. The choice of 15-49 as the age interval to use is dictated by convention, but in other populations it has been found to include nearly all cases of maternity.

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TABLE 70

PER CENT OF TAIWANESE WOMEN CURRENTLY MARRIED, BY AGE, AT VARIOUS CENSUS DATES

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Age	1905	1920	1935
15–19	45.9	32.0	27.7
20–24	88.3	83.5	81.2
25–29	92.5	91.6	92.8
30–34	89.0	89.8	92.4
35–39	81.2	84.7	89.3
40–44	68.8	75.8	82.8
45–49	55.9	63.2	74.2
Total, 15–49	75.7	72.2	74.1

Source: Tables of the Taiwanese population by age, sex and marital status in the respective censuses. "Married" in 1920 includes women whose marriages were not registered.

out of married life in this way declined sharply with the fall in mortality among husbands and in the frequency of divorce. Hence some of the time lost to young wives through later marriage was made up by others through prolonged survival of their husbands. One cannot say with certainty that the *net* result was a lengthening of married life for the women of Table 70.[18] But even if it had been, this lengthening might not make much of a contribution to the fertility of women in reproductive ages. It had most of its effect over age 35, when many women had already completed their childbearing.

When it comes to patterns of difference in marriage between groups of Taiwanese, there is not much to find. Little information

[18] There is no simple answer to the question of whether the time spent in marriage increased or not. Other things equal, the fact that women lived longer would result automatically in a lengthening of married life—fewer wives at these ages would die before their husbands. Similarly with longer life for husbands (and less divorce)—women would spend a greater *proportion* of their time married.

The case becomes complicated as soon as new generations of women entering the reproductive ages are included. These new groups of women were becoming larger every year, making the extra time that they spent awaiting marriage still greater, and offsetting some of the increase of the married among older women.

The balance of these effects at census dates is shown by the proportions of women married in the entire age group 15-49, which fell after 1905 and partially recovered later. But these do not give the only answer to the question, for there is no doubt that those women *already* married would stay married longer than women had before, owing largely to the reduction of mortality in the population. It makes a difference whether the question about years spent in marriage is put in terms of a particular group (or "cohort") of women at different times or different groups of women at some particular time. Although the first of these alternatives is really more pertinent to the other problems of interest, even an approximate answer makes extravagant demands for data, and the second form is the one in which related questions (such as local differences, in this chapter, and of fertility, in the next) must be phrased.

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exists to indicate the marrying habits of the people according to their occupations; and for the meager material that is available, the study of Taiwan's occupational data has shown that these can be relied upon only for men, whereas it is the women that interest us here.[16] A comparison can be made, in 1920, between the principal

TABLE 71

PER CENT OF TAIWANESE WOMEN MARRIED, 1920, BY AGE AND ANCESTRAL PLACE OF ORIGIN

Age	*Fukien Origin*	*Kwangtung Origin*	*Other Taiwanese**
15–19	31.9	31.1	37.3
20–24	84.2	81.1	76.2
25–29	92.0	91.3	83.6
30–34	89.9	90.8	84.1
35–39	84.5	86.5	82.6
40–44	75.0	80.0	75.7
45–49	61.8	70.4	66.9
Total, 15–49	72.1	72.9	70.8

* "Other Taiwanese" consisted almost entirely of non-Chinese members of aboriginal tribes in Taiwan.

Source: *Census of 1920, Detailed Tables*, Table 2.

"Married" includes women whose marriages were not registered.

groups of Taiwanese according to place of origin. Those married among Chinese who traced their ancestry from Fukien, and those from Kwangtung, are listed separately in Table 71. Both had almost equal proportions of all their women 15-49 married in 1920. The group from Fukien, which comprised most of the population in Taiwan, apparently married somewhat earlier, but were more widowed in the higher reproductive ages. The women from families of Kwangtung origin, most of whom are descendants from the "Hakka" group in Taiwan, were married to a lesser extent while young, but were able to avoid widowhood until later in life.

It is not possible to find out definitely whether Kwangtung widows were more likely to remarry, or whether they simply had hardier husbands and became widows less often. Their smaller quota of widows can be partly explained away, however, by two facts: their

[16] The later census reports did not show this information at all. In 1920 a long and complicated table was devoted to cross-tabulation of occupation and marital status by age, and similarly for the census of 1905. But for the reason noted in the text they are not of much value in answering the questions raised here. Figures for registered marriages were published according to the occupation of each spouse, but for these and additional reasons these tables are practically useless.

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whole age pattern in marrying was a later one (and therefore probably made their husbands younger in relation to themselves); and most of them lived in Hsinchu Prefecture, which gave them and their husbands better chances of surviving. In view of these considerations, it seems that greater remarriage of widows probably was not very important in producing this difference.

The entry for "Other Taiwanese" in Table 71 gives some indication of the prevalence of marriage in those small groups of the island's aborigines who lived in the foothills and plains. Their women were distinguished from the Chinese by earlier marriage, and poorer chances both of marrying for the first time and of remarrying when widowed or divorced. They were a small group, however, and information about them probably tells nothing about the inhabitants of the interior, who were not enumerated in the census of 1920.

TABLE 72

PER CENT OF TAIWANESE WOMEN MARRIED

By Age, Inside and Outside Major Cities*

1925 and 1935

Age	1925 Inside Cities	1925 Outside Cities	1935 Inside Cities	1935 Outside Cities
15–19	24.4	29.4	23.9	28.3
20–24	73.3	83.5	73.8	82.4
25–29	85.9	93.5	87.3	93.7
30–34	87.2	92.7	87.6	93.1
35–39	83.4	88.3	84.6	90.1
40–44	74.8	80.1	78.6	83.5
45–49	63.0	68.9	69.1	75.0
Total, 15–49	67.0	73.0	69.4	74.9

* "Inside Cities" includes the nine cities of Municipal rank in 1935. The data for 1925 have been rearranged to conform to this rule.

Source: *Census of 1925, Statistical Tables*, Table 3; *Census of 1935, Statistical Tables*, Table 7.

Local conditions peculiar to different parts of Taiwan also produced a certain amount of variation in the extent of marriage by women. A clear-cut distinction of this sort is that which appears between the people in the major cities and those in the surrounding rural regions. When all the cities that were of Municipal rank in 1935 are grouped together, and then the remainder of the population collected in another group, the women in cities are found to have lagged behind the others by a considerable margin in getting

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married. The gap in proportions married was greatest for the young women in the age interval 20-24, narrowing with advancing age (see Table 72). The gap was similar and located at the same ages both in 1925 and 1935, suggesting that the cities probably shared with the rest of the island in the trend toward later marriage for women.

TABLE 73

VARIATION IN PROPORTIONS MARRIED

Per Cent of Women in the Ages 20–34 Currently Married
By Prefecture, Inside and Outside Major Cities, 1925 and 1935
Taiwanese Only

	1925		1935		
Name of Prefecture	*Inside Cities*	*Outside Cities*	*Inside Cities*	*Outside Cities*	*Name of City*
Taipei		88.4		88.3	
	76.2		76.1		(Taipei)
	79.0		84.0		(Chilung)
Hsinchu		87.3		87.2	
	84.7		84.0		(Hsinchu)
Taichung		90.2		89.8	
	86.8		86.1		(Taichung)
	85.5		87.1		(Changhua)
Tainan		92.2		92.1	
	80.2		78.6		(Tainan)
	86.1		87.5		(Chiayi)
Kaohsiung		87.6		85.8	
	87.9		87.1		(Kaohsiung)
	87.1		85.7		(P'ingtung)
Taitung		80.4		83.7	
Hualien		84.0		87.8	
P'enghu Islands		84.6		84.7	
Total Island	81.6	89.3	82.2	89.0	

Source: *Census of 1925, Statistical Tables*, Table 3; *Census of 1935, Statistical Tables*, Table 7.

One cannot deny that there were better incentives or opportunities outside than inside the major cities for women to marry while very young. The extent of marriage among women in these cities is one of the principal features that set them off from the rural sections. But the sharpness of the difference is misleading, and gives an impression of contrast between country and city that is unwarranted. The notion of "urban" as distinct from agrarian conditions

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does not accurately characterize cities that are so little urbanized as those in Taiwan. Some of the difference in Table 72 comes, not from their distinctness as cities, but from the characteristics of people in their surrounding areas. It turns out that cities were less unlike the rural sections of the island when they are compared with those parts from which they drew many of their people (see Table 73). One city actually had a *higher* proportion of its women 20-34 married than the rest of the Prefecture in which it was located.

The case is similar when variation in the individual rural Districts that make up the remainder of the Prefectures (outside of the major cities) is taken into account. Most of it falls in the ages 15-19, which are not shown in Table 73. Even in the ages dealt with here these smaller civil divisions exhibited considerable differences in their marriage customs, which make it impossible to discern patterns of any consequence in the proportions married, as far as cities are concerned, that might denote change. Those places where women had a relatively late start in marrying were sometimes among the *highest* in proportions married by age 30; some of the early-marrying ones were among the lowest in those still married of their older women. But insofar as these local peculiarities represent differences in the way that marriage was regarded by the people, one common factor stands out in all of them—the variation seems to have been in scheduling *when* the women should marry, and not in fixing the proportion who eventually were found to be married.[17] The percentages of women married over age 30 were similar in all smaller civil divisions, both Municipalities and rural Districts. And so the principal result of their diversity may have been to make localities gain or lose in the time that their younger women spent in married life.[18]

[17] The local peculiarities seem also to have been firmly rooted in custom and not patterns of accidental variation, for they were fairly stable through time. The differences in proportions married repeated themselves: they were correlated with nothing else more strongly than with the same proportions at a later date, even though the women involved of course were different each time. Some idea of this stability can be gained by comparing 1925 and 1935 in Table 73, though the case is more impressive when all rural Districts are compared separately. Although it might be expected that young women with lower incidence of marriage would also have lower fertility, there is no indication that this was so in Taiwan to any marked degree, as we shall see in the next chapter. Part of the explanation is doubtless that the differences followed this pattern of local custom more than one of change.

[18] Local variations cannot be said to be linked to the same factors that were discussed above for the entire island. For example, families of young men seeking marriage might, if confronted by a local shortage of young women, arrange a match in a neighboring place. Moreover, the shortage itself might not be one revealed in the statistics, but merely one of families having eligible *surnames* (or sufficiently distant relationships). Chinese regard marriage between persons of the same family name as incestuous, and the residents of small communities often are nearly all of the same

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PATTERNS OF MARRIAGE AND DIVORCE

000 In order to understand fully the motives that lie behind attitudes and actions toward family life, one needs to pursue a comprehensive study of the many sides to the problem. This is especially true in analyzing the family system of the Chinese, which enters prominently into most of their everyday affairs. If one were concentrating on this task alone, it would be necessary to go thoroughly into (a) the sentiments that they hold and (b) the conduct that they display where kinship is concerned. Most study of the subject has dealt with the first of these two parts, for Chinese have in their literature provided convenient (though often unlikely) statements of their beliefs in these matters and there have been only casual records to check how closely their behavior conforms to these statements.

Patterns and trends in people's passage from one marital status to another, which can be discovered in demographic data, contribute most directly to the second part of the problem. They also increase our knowledge of the interconnections between the sentiments and actions, particularly with regard to some of the behavior that is often thought to issue from the internal structure of relationships in the family unit. This behavior apparently is subject to considerable variation in response to the circumstances that confront it in the external society—circumstances that may arise in turn through the conduct of others, perhaps in full conformity with the conventions of the society. The clearest example is the result of preferential treatment of boys during infancy and childhood: the girls who survived to adulthood were too few to furnish wives for eligible men, and there were far-reaching consequences of the shortage when it came to marriage.

It is also instructive to be able to determine the incidence of divorce, which Chinese do not sanction for resolution of ordinary family discord, and remarriage, which they disapprove when it can be avoided. Actual practice, as we have found, may depart widely from the stereotyped picture that is often entertained about the degree of abhorrence felt toward these expedients. There is an apparent discrepancy between the views that are overtly professed by some Chinese and those reflected in the conduct of others, which contains a hint that the moral pronouncements have not yet been examined sufficiently in relation to the functioning of familial groups.

Finally, the shifts that have been observed above in marriage and divorce have considerable significance. They cannot be traced to any substantial changes in the system of family values, but can be

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surname. A local shortage of women from this cause is just as real in its consequences as an absolute shortage in numbers.

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traced to differences in the framework of opportunities that existed for fulfilling these values. In spite of some similarity of appearance, these trends bear no real resemblance to the kinds of social change that have come to be regarded, often wishfully, as inalienable appurtenances of "economic development." In fact, some worked in the opposite direction. The desire to marry while young apparently did not slacken; young men actually succeeded in marrying earlier than before, and the fact that women did not seems due to reasons beyond their control. Divorces could scarcely have been a sign of "individualism" in marriage, because they were most frequent at a time when the force of tradition was at its strongest, and declined rather than mounted in incidence with the events that might have introduced change. The total time spent in married life did not fall—it certainly rose for men, since more of them married, and probably (through prolongation of life) for women too. If the only trends discernible in marriage and divorce had little or nothing to do with changes in the normative system—i.e., "social change" in the most usual sense of the term—then the total impact of Japanese colonial policies on people's motives in this sphere must have been negligible. Discussion of fertility patterns in the next chapter will reveal how minor this impact really was.

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CHAPTER IX

The Fertility of the Taiwanese

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JUDGED by appropriate standards, the Japanese made an impressive success of improving health in Taiwan. In less than 50 years they transformed the island from a turbulent and pestilential area into a place where the major hazards to existence in former times were removed. It was a place where the Japanese themselves could live more healthily on the average than their countrymen did in Japan.[1] Measured in any conventional way, mortality among the Taiwanese was sharply reduced. Its decline was as rapid as almost any other contemporary case for which there is a record.

Like the economic program of the Japanese, the health program was carefully designed to function through the society that existed in Taiwan, and not to reform it. Therefore, the policies that made deaths less prevalent in the population did substantially nothing to the incidence of births. The result was the growth of population described in Chapter I, which doubled the number of Taiwanese in less than half a century.

Improvement in mortality would not have had this consequence if it had not been for the high level of fertility among the Taiwanese. Birth rates, as illustrated in Fig. 21, remained about the same throughout this period, fluctuating from year to year, perhaps even rising slightly from the beginning.[2] Though the fertility of Taiwanese was not the highest that has been recorded, and their mortality was far from the lowest, in conjunction these two factors created a natural increase that became as rapid as any yet known.

Steady high fertility produced more than a steady flow of births. While death rates fell and birth rates persisted at former levels, the total annual deaths stayed at almost the same number and the births that occurred each year mounted sharply (Fig. 21). Many people remained living who previously would have died, and thus had opportunity to give birth to children who otherwise would never have entered the world.

[1] See Taiwan, Government-General, Research Bureau, *Life Tables of Taiwan, 1926-1930* (First Issue) (1936). The health of Japanese in Taiwan may appear better than it actually was, for their deaths were not always registered in Taiwan. Many were recorded back at the legal residence of their families in Japan.

[2] The trend takes on a slightly different appearance when measured in different terms, as we shall presently see.

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THE FERTILITY OF THE TAIWANESE

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Regrettably there is very little actual knowledge of the early demographic situation in Taiwan that preceded this development. Poor records are most often characteristic of such conditions, for the same factors that stand in the way of promoting longevity also inhibit modernization in other respects. But ignorance of the details need not prevent us from ascertaining broadly what was the state of affairs that formerly prevailed. It is certain, for example, that the early population of Taiwanese regularly suffered heavy attrition by mortality. As late as 1906, at least 35 deaths were still occurring per thousand in the population. If this was the case after ten years of pacification, conscientious civil administration and preliminary sanitation measures by the Japanese, then the usual level of mortality before must have been even higher.

The Taiwanese on the island before 1895 were already a firmly established population, and no longer relied on immigrants to replenish their numbers. In age composition the population was a settled and not a transient one (see Fig. 3). If the decade or so preceding the first census had not presented unusually high risks of death, the age structure would have been almost the same in 1905 as it was in 1940. Even so, it was marked by large proportions of infants and young children, indicating steady and high fertility in the past. Though we have given migration credit for most of the population growth in Taiwan before 1895, there is every sign that fertility continued there at the same rate that was customary on the mainland.

Chinese culture from the earliest known times has been faced with mortality that was proverbially high. As a normal state of affairs, this imposes certain requirements if a population is to continue in existence. For example, barring large migration, enough births must regularly be produced to offset the risks of dying. Failing this, a population would also fail to survive. Prolonged high mortality thus helps to develop social institutions that encourge high fertility.

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Sufficient numbers of births, however, are not forthcoming due to this necessity alone. Their supply is ensured in countries of high fertility through elaborate features of social organization. Custom and moral precept in such societies create firm sentiment in favor of the obligations and continuity of family relationships. They furnish powerful incentives to bring forth abundant offspring. There are strong and subtle pressures toward marriage of young men and women. Family life receives great emphasis, and becomes the center of numerous activities that give it additional weight. When a wide

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161 enough range of social functions is carried on in family units, indi-
182 viduals cannot readily participate in the society except as family members. Their contacts with the rest of the society may come to depend on ties of kinship, lacking provision for being conducted on other terms.

Familial institutions have always been one of the most prominent elements in Chinese society. The culture of China is dominated by a morality that systematically urges and abets the production of progeny. We have already seen the by-products of this situation among the Taiwanese. The organization of livelihood, the inheritance of occupation, the immobility of the rural population and the character of migration to cities all reflected the influence of family relationships in the decisions of individuals.

At the same time, events under Japanese rule undeniably altered many of the conditions of life in Taiwan. In fifty years of selective exposure to modern innovations, Taiwanese were showing the effects of this contact, though none of these effects—except the gains in longevity—could be called spectacular. It now remains to be seen whether these developments had created more than superficial social changes, and had begun to exert any influence on fertility.

The Course of Fertility in Taiwan

163 Due to its peculiar nature in Taiwan, the system of vital registration recorded the numbers of Taiwanese births with a high standard of accuracy. Births were registered by the same system as were deaths, which has been described in some detail in Chapter VI. It functioned as part of a more comprehensive scheme of control; this scheme in turn owed its effectiveness to the ingenious way that it was fitted into local solidarities and backed by police power. Since the system recorded deaths accurately and since the figures it helped to compile in census enumerations were practically complete, the tests illustrated in Chapter VI indicate that few live births went unregistered.

By this token the data for births are nearly as valid as were the figures for deaths. In other respects, however, they are less adequate. It is not enough for the study of fertility to know the numbers of births that occurred. The significant event is in reality parenthood rather than the birth itself—we do not search for the motives of a child in entering the world, but of its parents in bringing about the event. Accordingly, some information is needed about the circumstances of birth, and in particular about the characteristics of parents. Though Taiwan's Research Bureau issued copious data each year

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in its regular report on vital statistics, no direct information of this sort was published. Births were tabulated simply by the civil division in which they occurred. The few other characteristics that were shown did not include any usable information about parents.[3]

Japanese showed no interest in taking advantage of their excellent birth statistics in Taiwan. Their failure to do so all but precludes any detailed study of the nature of fertility in this society, for it has denied us the information that might reveal some of the motivations surrounding parenthood. Since many of the relevant details are lacking from published sources, we shall have to fall back on approximations to conduct the sorts of measurements that will have some meaning in comparison with other countries.

"Fertility" is usually defined less precisely than mortality. Records

TABLE 74
CRUDE BIRTH AND DEATH RATES OF TAIWANESE, 1906-1943, AND RATES OF NATURAL INCREASE*

Years	*Births per Thousand Persons*	*Deaths per Thousand Persons*	*Natural Increase per Thousand Persons*
1906–10	41.7	33.4	8.3
1911–15	42.9	28.6	14.3
1916–20	40.4	31.0	9.4
1921–25	42.8	25.0	17.8
1926–30	45.0	22.1	22.9
1931–35	46.0	21.2	24.8
1936–40	45.4	20.6	24.8
1941–43	42.1	18.5	23.6

* Figures here are unweighted averages of annual birth and death rates for each year. Before 1915, births and deaths have been adjusted slightly on the basis of the internal pattern of infant mortality in later years. Otherwise no allowance has been made for under-registration.

Source: *Statistical Summary*, Table 64.

[3] The vital statistics did contain tables of births by occupation of parent, but the standards of classification were different from those used in the census (though the categories were the same), and did not receive much care in compilation. Similarly, tables were published purporting to show whether or not births were legitimate, but these cannot be relied upon to indicate the actual marital status of parents, because the Japanese did not recognize marriages that were not legally registered. Basic demographic data like the ages of mothers and actual marital status were never published.

On the credit side, the tables of births by place of occurrence were reliable, and were not noticeably affected by arbitrary allocations to other places or the migration of pregnant women just before childbirth, as in Japan. (See Taeuber, I. B., and Beal, E. G., Jr. [October 1946], pp. 17-18.) It should be noted that even this advantage did not hold for Japanese in Taiwan. Some of their births were recorded in Taiwan, and some allocated to the legal residence of their families in Japan, making it almost impossible to estimate fertility or infant mortality of Japanese in Taiwan.

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of births are kept primarily as records of the persons being born, whereas for purposes of measurement we have seen above that they must be viewed in relation to some population of actual or potential parents.[4] When the ages of mothers have not been specified, for example, arbitrary procedures have to be adopted for deciding which women might have been parents. There is consequently more latitude in devising measures to express the level of fertility than of mortality. Each different convention that is adopted bears some different significance.

The simplest expression for fertility is the births of each calendar year per thousand total population, or crude birth rate. By including everybody in the denominator, it avoids most of the problems that arise with more complex measures.[5] Table 74 summarizes the trend of crude birth rates for Taiwanese. Crude rates are useful in showing the balance of the two in changes of population size, for they place births on the same footing as deaths. In contrast to their death rates, Taiwanese crude birth rates scarcely changed in almost forty years. In a sense, therefore, the rates of natural increase rose almost solely because of decline in mortality; but they would not have risen to their high level in Table 74 if crude birth rates had not remained nearly constant at between 40 and 50 per thousand.

These data show no tendency for fertility to fall along with death rates. Quite to the contrary, birth rates actually rose slightly over the period. Crude birth rates, however, have a well-known property of indicating trends that are spurious, due to changes in age composition of the population. Before attaching much significance to these minor movements of rates, one should first examine the evidence of more precise indices of fertility.

[4] Moreover, as events occurring to adults, births are more complex in their distribution than deaths. A birth can happen more than once to any one parent, as death cannot, and introduces at least one more possible dimension for measurement.

[5] Use of crude birth rates does not avoid all of these problems. (It also creates new ones, as indicated below in the text.) Usually part of the births of a given year are included in both terms of the rates.

More important, however, is another difficulty which all measures share equally. Birth itself is not so definite an event as death. In societies where infant mortality is high, it is next to impossible to determine exactly what is a "live" birth. In Taiwan we have seen this problem illustrated in the case of unregistered non-survivors—babies who were perhaps born alive but died in the first few hours or days of infancy. Some of these may have been listed as stillbirths in the statistics, but an unknown number were probably omitted completely. Hence any measure of fertility based on these figures is certainly in some degree an understatement. Aside from the adjustment of births made before 1915, we must accept the figures of "live" births as they were published, with only minor adjustments to bring them into line with the numbers of children counted in the census.

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Trends in fertility can be better approximated in terms of child-bearing by potential mothers. In countries where this information is known, practically all women who become mothers do in fact have their births between ages 15 and 50. General fertility ratios, or total births per thousand women in this age interval, give a better idea of actual trends among women who might have become mothers. The first column of Table 75 shows a series of such ratios centered around

TABLE 75
GENERAL FERTILITY RATIOS FOR TAIWANESE, 1905-1940
Births per 1,000 Women 15-49, Based on Three Separate Estimates of Births

Year	*Births Registered During Census Year*	*Three-Year Average of Registered Births, Centered Around Census Year*	*Births Estimated From Infants Counted in Census*
1905	170*	170†	188‡
1915	179	176	188
1920	174	177	184
1930	199	200	204
1935	209	206	215
1940	203	201	206

* This is the value actually computed for 1906.
† Represents the unweighted average of ratios for 1906 to 1909.
‡ Births estimated by adding to infant survivors the deaths implied by the infant death rate in each calendar year.
Sources: Vital Statistics Reports for each year involved; tables of population by age and sex from each census, and special tables of infants by month of age.

census years. It is based on the births as registered, just as were the crude rates in Table 74. These ratios make the apparent rise of fertility seem just as prominent as when based on the evidence of crude birth rates. Neither index is conclusive, for there is reason to suspect omission in the early birth registration.

There is available still another resource, one that is not impaired by defective birth reporting in the early years. Through the combination of Chinese consciousness of age and careful Japanese census procedures, enumerations of infants at each census year were more complete in their coverage than birth registration.* Since the census was always taken on the first day of October, the Japanese scheme

* They have been invaluable, in fact, in testing the adequacy of birth registration for small civil divisions in later census years. This information was omitted in the tabulation of one census, that of 1925.

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163 for allocating age (by calendar year of birth) gave an age interval for infants representing only three-fourths of a full year's births. Recognizing this shortcoming, census authorities tabulated full information on infants by month of age and published supplemental tables with all enumerated infants born since October 1 of the preceding year.[7] These tables make possible an estimate of births in each of the early census years that is nearly independent of the bias in the registration system. Given thorough enumeration, it should hence be consistent over time and not exhibit as increasing fertility what was in fact improvement in registration.

The last column of Table 75 gives general fertility ratios based on these special enumerations at each census. Here the infants have been used to estimate births occurring over the preceding year. For this estimation we have assumed that the births preceding the census date were affected by mortality conditions that prevailed during the calendar year of the census.[8]

These figures represent the trend of fertility in Taiwan more dependably than crude birth rates. Far from declining in the slightest, these ratios of all adult Taiwanese women evidently *increased* slightly. The fertility ratios based on census infants show that the rise before 1920 was probably a matter of improvement in registration, for infants were so carefully enumerated that they could not have been over-counted. On the other hand, the numbers of census infants counted at any one date may reflect an extraordinary crop of births in the preceding year. This was apparently the case in 1935. Taken separately, that year yielded the highest observation for fertility. Averaged with adjacent years it produces a value that is less extreme, and more appropriate to use in estimating the trend. (The same interpretation does not apply to the discrepancy between the single-year ratio and the 3-year ratio for 1915; here births were exceptionally low in 1916, possibly in reaction to an outbreak of malaria in 1915. To judge from the large number of deaths among potential mothers in that year, they must have been heavily affected by the disease.)

[7] As for validity, these show consistency of age reporting even by single months when tested against births by month of occurrence. The same tables continued to be published after 1930, when the age system above infancy was changed.

[8] Specifically, that the calendar-year infant death rate is a true mortality rate. The calculation is based on the life-table term l_1, converted to L_0 by the arbitrary weights $.28\,l_0 + .72\,l_1$ for males and $.29\,l_0 + .71\,l_1$ for females. If the life table radix is 1, then the ration $1/L_0$ applied to infants of each sex serves to estimate births over the preceding year. This figure is always conservative, for in years of under-registration infant mortality was not fully reported.

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Insofar as any actual change can be detected from the ratios before 1930—and this was very slight—it was not downward. The situation after 1930 is less clear. There is little to be gained by augmenting the materials used so far with observations for single years, for yearly fertility ratios indicate fluctuation as well as trend. There were two high points, in 1935 and 1937, after which they fell slightly until 1943.

Since fertility had remained high enough up to this time to maintain an accelerating rate of growth in population, it is of special interest to see whether we have observed after 1935 merely a wavering in its upward course or the portent of actual decline. Unfortunately, the figures presented in Table 75 are the total of direct knowledge about the problem that is at present available outside of Taiwan. They cannot be verified, nor investigated in further detail, nor disproved on the basis of other data now at hand. They cannot even be examined for differences between civil divisions, for such data too are lacking after 1935.

The trends of the 1930's can be given closer scrutiny, however, by recourse to indirect procedures. Using supplemental data from Japan, it is possible to make a closer comparison of points within the census period by means of gross reproduction rates.[9] With the allowance that these make for varying age composition among the women in reproductive ages, fertility in 1940 appears to have been just slightly less than in 1935, and less *in both years* than in 1930.[10] General fertility ratios followed their peculiar course during the 1930's primarily because a large group of women were passing through their ages of greatest childbirth in the middle portion of the decade. The rise and fall of general fertility ratios after 1930 therefore indicated nothing but the unusual concentration of potential mothers: with-

[9] As employed here, the gross reproduction rate is no more than a procedure of age standardization for women. It is the sum of the age-specific fertility rates of women at all the reproductive ages 15-49, representing the average number of female births produced by one woman passed through all of these ages and exposed successively to all of these rates.

As we have remarked, births were not published in Taiwan by age of mother. Age-specific schedules of births have therefore been borrowed from Japan in 1930 as a way of estimating the distribution of births among women of different ages. Taking the age-specific rates associated with general fertility ratios that most closely fit those of Taiwan, we have used them to distribute a given number of total births among enumerated women by age. The total number of births that occurred is not altered by this procedure, but expected age differences in fertility are weighted by the number of women in each age. Cf. Taeuber, I. B., and Notestein, F. W. (1947), p. 15, where the original age-specific schedules are discussed.

[10] Actually, all three of these figures are based on 3-year averages of births centered around 1930, 1935, and 1940 respectively, with an allowance for under-registration.

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163 out this fortuitous circumstance, the fertility ratios would have shown the same trend as the reproduction rates in Table 76.

TABLE 76
GROSS REPRODUCTION RATES FOR TAIWANESE, 1905-1940*

1905	2.93
1915	3.07
1920	3.00
1930	3.39
1935	3.31
1940	3.26

* Computed through the use of age schedules of fertility substituted from Japan in 1930. The number of births occurring in 1905, 1915 and 1920 was assumed to be the number of infants counted in each census plus those who had died since birth (according to infant death rates of the given calendar year). Rates for 1930, 1935, and 1940 are based on the average yearly number of registered births during 3-year periods centered on each census year, plus a slight allowance for under-registration.

These reproduction rates seem to be the closest approximation to the "true" fertility trend of Taiwanese women that is possible. It apparently increased between 1920 and 1930, though one must bear in mind that the procedure for estimating births in 1920 differed from that in later years.[11] On surer ground, fertility probably was declining very slightly from 1930 into the period of World War II. But if fertility did change at all, it changed very little, and at the end of Japanese rule in Taiwan was at practically the same level as at the beginning.

Taiwan and Selected Other Countries

A comparison with other countries gives a better idea of how high this level was. Because of the difficulties alluded to in measuring fertility, we shall again resort to gross reproduction rates as a standard form for this purpose.

Gross reproduction rates in Taiwan ranked among the highest recorded for any population in the world. Japan and Korea, for example, were the closest parallel cases. Both are Asian countries with large segments of rural population, who in the past had adjusted their livelihood and reproduction to conditions similar to those

[11] The difference was such that it might give false testimony about the trend. Since births were estimated from infants enumerated in the census, too low a value for infant mortality would give too low a figure for births. Moreover, the calendar year 1920 may have deviated from a "true" trend, for it was a year of unusual sickness in the population, which may have reduced the number of births.

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TABLE 77
GROSS REPRODUCTION RATES
For Selected Countries

Korea*	
1935	3.38
Japan†	
Total Country	
1920	2.68
1930	2.40
1940	2.06
Hokkaido Province	
1920	3.32
1930	2.95
1940	2.35
Aomori Province	
1920	3.39
1930	3.05
1940	2.44
Chinese in Malaya‡	
1947	3.25-3.37
Rumania§	
1930-31	2.38
Palestine Moslems¶	
1935	3.57

* *Population Index* (1944), p. 239.
† Taeuber, I. B., and Notestein, F. W. (1947), p. 18.
‡ Smith, T. E. (1950), p. 73; based on two alternative estimates.
§ *Population Index* (1950), p. 175.
¶ *Ibid.*, p. 177.

confronting most Taiwanese. Korea stands somewhere between Japan and Taiwan in the agrarian condition of its people, but closer to Taiwan. Only there did reproduction rates exceed those of the Taiwanese. In Japan, during recent decades large groups of people had been drawn into a rapid process of industrial development, and had begun to pay overt attention to restricting the numbers of their children. There, to find reproduction rates for provinces as high as the averages of all Taiwanese, one must go to the "backward" frontier provinces of Hokkaido and Aomori, and go back in time to the years 1920 and 1925. Even in these areas, which were extreme in relation to the rest of Japan, gross reproduction rates became lower by 1930 than the ones we have found for all of Taiwan.[12]

[12] See Taeuber, I. B., and Notestein, F. W. (1947), p. 18.

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163 Estimated reproduction rates for Chinese in Malaya are included in Table 77. They furnish a useful illustration of Chinese living outside of their own country. They are also outside the scope of the Japanese system of population statistics, and any possible bias that might be imputed to it. The range of the estimate brings it near to the level that we have found in Taiwan. This is a somewhat exceptional case, for almost half of the Chinese in Malaya in 1947 were living in towns and cities, and were engaged in non-agricultural pursuits. In their fertility they still resembled Taiwanese; their gross reproduction rates were higher than the agricultural Malaysians.[18]

Presumably fertility of this level is not actually uncommon in the world, but has existed without benefit of statistics to reveal the fact. One cannot find reproduction rates of this magnitude in recent years anywhere in Europe outside the Soviet Union. For comparable cases on a national scale it is necessary to go back to the turn of the century. In short, reproduction rates such as those of the Taiwanese have almost ceased to be characteristics of the nations that maintain adequate statistics.

The Spatial Pattern of Fertility in Taiwan

If the fertility of Taiwanese was so high and if it had scarcely changed over time, it becomes important to know whether it remained the same everywhere in the island. Familial traditions drawn from China being what they were, it would be surprising if differences had been widespread before Japanese occupation. Previous chapters have shown that only selected portions of the population came into direct contact with the new influences generated by Japanese administration. Consequently one should not expect that any large number of Taiwanese had been led to change their reproductive behavior as a result. The mode of selection and the extent of participation by Taiwanese in non-traditional activities, however, did touch some groups more than others. The question that remains to be decided is whether these factors were sufficient to induce any appreciable portions of the population to depart from their accustomed levels of fertility.

The same advantage of gross reproduction rates for international comparison also makes them useful for examining different portions of the same population—they make allowance for inequalities of age distribution in different groups of women. The only groups of

[18] See Smith, T. E. (1950), pp. 48-52; 73.

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Taiwanese for which births can be matched to parents are those counted in each civil division at census dates. Migration was small, and so it happens that age differences between civil divisions were not large. Such elaborate indicators would not be needed were it not for the fact that differences in fertility were likewise small, and require sensitive tests to be discriminated at all (see Fig. 32).

These measures do reveal that average fertility was not identical as between the main sections of the island (see Table 78). By Prefecture, reproduction rates varied from high to low in somewhat the same spatial arrangement as mortality. Northern Taiwanese had lower fertility on the whole than those in the south. These differences, which were consistent from 1930 to 1935, appear to have been present for many years.[14]

A clue to the source of this variation is given by the fertility of Taiwanese in cities. Reproduction rates for cities in Table 78 were also consistent from 1930 to 1935—consistent both in relation to each other and in relation to the surrounding countryside. The differences were most extreme for cities as compared with the remainder. In a rural region, a city is a center of most activities that differ from those of its hinterland. Since urban boundaries are arbitrarily defined, it is easy to presume that the lower reproduction rates in some Prefectures had their roots in cities and spread out to the surrounding population. The presumption holds true only in part. Taipei and Chilung, for example, are bordered by an area that shared many of the activities distinguishing the city populations as more "urban" than the rest. But the other cities were less like their bordering Districts, even though they tended to differ still more from Districts of other Prefectures (see Fig. 32).

It is important to find that Taiwanese women in some cities tended to be less fertile than those in rural Districts, for our treatment of migration showed that the cities were centers of Japanese influence in the population. It appeared that this influence was not the same in all cities; hence there is no reason to suppose that its effect on fertility should be identical everywhere. But the differences within the group of nine cities in 1935 *exceeded* the variation between Prefectures. Gross reproduction rates for Taiwanese in Kaohsiung City—one of the most rapidly developing urban centers of the island—actually were very slightly higher than the average of those who

[14] Provisional estimates of fertility in 1905 have some trace of the same pattern. They are less precise and less reliable than these, however, due to the difficulty in determining the levels of births and infant mortality in this early period.

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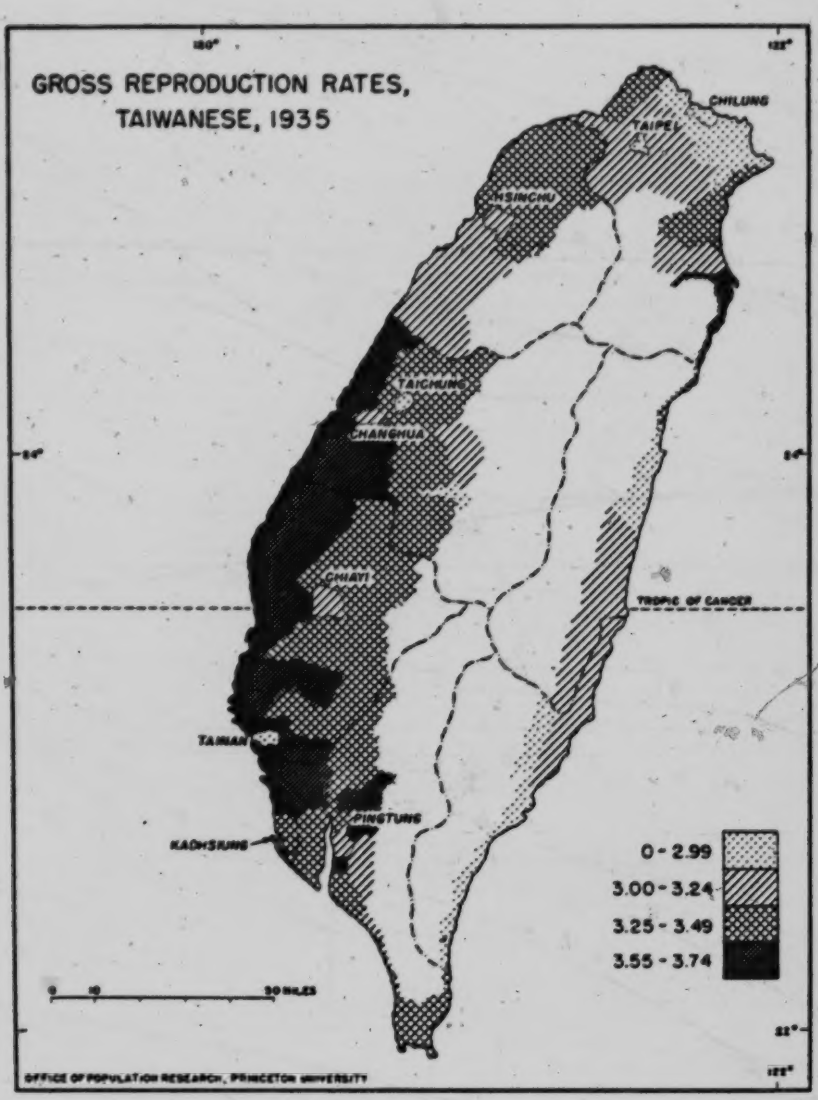

Fig. 32. Gross Reproduction Rates of Taiwanese, by Civil Division, 1935. Aborigine Territory is excluded.

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TABLE 78

TAIWAN. GROSS REPRODUCTION RATES, 1930 AND 1935
Prefectures, Major Cities, and Prefectures Outside Cities

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Prefecture	1930 Total Pref.	1930 Inside Cities	1930 Outside Cities	1935 Total Pref.	1935 Inside Cities	1935 Outside Cities	(City)
Taipei	3.12		3.24	2.99		3.10	
		2.78			2.69		(Taipei)
		2.76			2.76		(Chilung)
Hsinchu	3.34		3.35	3.23		3.24	
		3.13			3.05		(Hsinchu)
Taichung	3.56		3.57	3.39		3.42	
		3.17			2.93		(Taichung)
		—			3.16		(Changhua)
Tainan	3.59		3.66	3.44		3.51	
		3.04			2.90		(Tainan)
		3.19			3.06		(Chiayi)
Kaohsiung	3.39		3.39	3.39		3.36	
		3.40			3.40		(Kaohsiung)
		—			3.16		(P'ingtung)
Taitung	2.83			2.97			
Hualien	3.27			3.06			
Total Island	3.39			3.31			

Source: Based on census tables of Taiwanese population by age, registered births, and fertility schedules substituted from Japan, 1930.

lived outside in the same Prefecture. The range of variation between cities was also greater than between Prefectures. It nearly coincided with the range over all of the rural Districts, if the small settlements on the east coast are excluded.[18]

But we are really interested in variation among individuals or non-territorial groups of individuals. In an agrarian society it is probably more inefficient than elsewhere to use civil divisions as units of observation for this purpose. One of the principal features of agrarian social organization is that localities are as far as possible self-sufficient.

[18] It is difficult to compare these with fertility over the rest of the island. Registration of births was less complete, and fertility estimates were based on smaller numbers of cases. Since these reproduction rates are a complicated type of ratio, it is impractical to estimate the random error to be expected when cases become few. It seems best not to consider these observations as being equally reliable with the remainder.

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163 When this is the case, grouped differences in activities tend to be distributed in much the same way within the various geographical units. The same should follow for the motives and interests that one might expect to find associated with substantial differences in fertility. If, for example, wives of rural gentry were more or less fertile than those of rural peasants (and there is no evidence on either side of this question), the fact that most gentry subsisted as landowners in rural villages and towns would in every case conceal the variation in the average of each civil division observed.

The case is identical with all other types of activities that are organized with the same local scope. Since we know that very few people migrated from one part of the island to another, and not many people changed their type of employment, such sources of variation apparently were contained within the boundaries of Districts. For this reason, it has not been possible to find any evidence of association between fertility and other recorded types of behavior of rural Taiwanese by Districts. It is not a fault of the statistics, but a characteristic of the society.

This diagnosis explains why fertility is not observed to have varied with other characteristics of Taiwanese over the various rural sections of the island, but it leaves two other questions unsettled. First, the strongest spatial pattern of fertility was the sectional one, viewed in prefectural units. This is surprising to find, especially since Taiwan is small in size and new in its settlement, and Taiwanese displayed little variation in demographic characteristics among Prefectures. One would not expect to find "regional" differences, which would most likely stem from long tradition and established usage. Yet this pattern was present, and lacks any apparent reason to explain it.[16]

Second, if the social structure of most rural localities was homogeneous because they were agrarian, that of cities ought not to be, since they were responsible for the greatest differences in economic and related activities over the island. Yet fertility of Taiwanese in the major cities in no instance fell outside the range established by

[16] Conceivably it could reflect traditional practices brought over from the mainland with the original migrants and preserved intact in local villages, though there is no evidence on this point. It appears not to have been related with the one outstanding difference by place of origin, however; in 1920 general fertility ratios of descendants of Fukien Chinese and Kwangtung Chinese were substantially the same. There remain the possible "factors" of climate and different types of agriculture, which did vary more or less with the sectional pattern of fertility. But knowing these is not of much help, for they supply no reason why fertility actually should have varied.

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rural Districts, though each city tended to have somewhat lower rates than the whole of the Prefecture to which it belonged. The diagnosis above thus seems inadequate in two respects: it fails to account for the broad sectional differences in fertility that existed, and by implication it accounts for differences between city and countryside that did not exist.

Those differences that can be found in fertility do not appear to be coupled with other known features that are thought to affect the motives of reproduction. Reproduction rates showed no consistent patterns of association with the different kinds of livelihood prevailing in civil divisions, with the standing of the various places with respect to migration, or with the extent to which most localities had felt Japanese influence. Over the island as a whole, the case was the same where marriage is concerned—it is not possible to explain the variation that existed in fertility by saying that it reflected differences in the desire or opportunities of women to marry.

In Taipei City, however, it does appear that conditions preventing women from being married may have offered some interference with their childbearing. Many of its women avoided marriage and abstained from remarriage, and gross reproduction rates there were the lowest of all Districts or cities. As between the separate "wards" of the city, ratios of children to women (an alternative measurement of fertility) were closely related to the proportions of Taiwanese women who were married: those wards with more of their young adult women married had higher ratios, and the ratios where there were many unmarried women were lower. Taipei's low fertility might even be said to have depended on preventing potential mothers from marrying, for those who did marry exceeded the rural women of the same Prefecture in childbearing—the gross reproduction rate for *married* women in Taipei City was very slightly higher than that for the remainder of the Prefecture in 1935. Lower fertility, *where found*, was hence not a matter of fewer children among the married, but of absence of children among those who did not marry.

But though this conclusion seems to fit, since the Taiwanese were not yet subject to the better-known pressures for raising small families, it is not sufficient to establish a general rule for the rest of Taiwan or for Chinese people living elsewhere. In other parts of Taiwan lower birth rates were not often to be found. Other cities, for example, did not lose in distinctness from their respective Prefectures when the reproduction rates of their married women are

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163 compared. Basing these fertility rates on married instead of total women makes very little difference in the way they are distributed, and practically none in the observed trend of fertility, for the ages in which marriage patterns changed were not the ages in which women made their large contributions to fertility. Insofar as the factor of marriage did make a difference it seems to have cancelled out some of the variation that can be observed, but not enough of it to alter the relative standing of most civil divisions in their fertility.

Viewed in relation to other peoples who have come to restrict their fertility under modern conditions, however, the whole range of variation among Taiwanese by civil divisions seems trivial. The very lowest of "urban" gross reproduction rates, in Taipei City, corresponds to very high fertility in most other countries. In Japan, even in 1935 more than half of the provinces *outside* the principal cities had lower rates than this. There is no way to determine, then, whether or not the observed differences in Taiwan might have presaged further declines in the segments of Taiwanese that were exposed to outside influence. But two things are certain: such a decline had not proceeded very far, and its progress was extremely slow. It may have been nothing more than a continuation of differences that existed before the arrival of Japanese in Taiwan.

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CHAPTER X

Conclusion

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THE results of Japanese rule in Taiwan are of little consequence to social science as an isolated series of events. They gain their strongest claim to importance by revealing some social and demographic implications of policies that are often urged and undertaken towards non-industrial peoples. Whether through sinister and selfish motives or through a benign desire for improvements "to fit the needs" of the recipients, such policies can equally well have the same effect. They all may be tempted to eschew any radical social changes and may run the risk of starting an uncontrollable growth of population—growth that is initially gratifying but cannot be maintained, and can be checked only through disaster.

In order to give these findings a wider application, we have therefore stressed those points of Taiwan's development which are of general significance, and have dwelt less on problems that are peculiar to this one example. We have not supplied a chronicle of events or a source book of information about Taiwan. Facts have been presented so as to illustrate the general problem: what are the consequences of introducing "backward" peoples to certain advantages of modern technology without its counterparts in social organization? We have shown, for example, that it is possible to "raise the levels of living" by measures having the least interference with indigenous custom, without affecting the formidable structure of familial institutions that the poorer peoples have relied upon in the past for survival. If policies either of betterment or of exploitation follow this course, they may reduce mortality but not fertility, and must eventually face the consequences of population growth where it is the last thing that is needed.

From both a demographic and a sociological point of view, the outstanding fact about the Taiwanese population has been its phenomenal increase in recent decades. After setting forth the dimensions of this growth in the first chapter, we have proceeded to search out some of the factors which were responsible. This inquiry has led through an examination of the social structure of the Taiwanese, of the types of innovations that were imposed upon it, and of the modes of response to these changes by the people of the island. By

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177 this time it should be possible to review some of the salient points and to see how they are pertinent to problems encountered elsewhere.

Taiwanese entered the twentieth century as an agrarian people, one that had just come under the rule of a colonial regime dedicated to instituting change. The Japanese who controlled the island were determined to make its economy more efficient, but also to concentrate rather than distribute the gains. Though their success in devising an orderly program of development was unique, and though the response of Taiwanese was likewise so, the objectives of the program and the type of reactions to it had a close resemblance to those in other areas. Japanese took their lessons in overseas administration from the record of European powers in the last century, particularly of Dutch policies in Indonesia. As a colonial dependency they governed Taiwan in a manner that was nothing short of exemplary by these standards—indeed, they excited the admiration of Old Colonial Hands who had a chance to witness their methods.

Their experience in Taiwan thus embodied the aspirations of most colonial rulers since the Industrial Revolution. With the benefit of past experience of others, and the advantage of their own firm determination, Japanese made strides that were sure and exceedingly quick. Their success represented the techniques and policies of others carried to a new degree of refinement.

In fact they succeeded too well, for their endeavor was out of date. The techniques of colonial rule that they shrewdly adapted and developed in Taiwan were capable of promoting individual survival in the population more effectively than before. Their methods also frustrated the types of social changes that might have induced Taiwanese to lower their fertility. Unabated growth at the rate attained by 1940 ultimately would have disrupted the goals of the Japanese themselves, for Taiwanese could not have continued to increase at this pace indefinitely—the world itself in a few centuries would not have been large enough to hold all of them.

Achievement of Japanese economic goals in Taiwan turned on their energy in building up investment in the island and their ingenuity in finding cheap ways to aid its agriculture. As we have seen, extended industrial development was an afterthought. The steps that they took to gain these ends improved the health of Taiwanese and reduced the hazards of dying—sometimes directly as with medicine and sanitation, sometimes as a by-product of ordinary administration.

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As investment began to expand, they also took steps to concentrate it in a few hands. This was the more remarkable since capital was not poured in from outside. As we have seen, through heavy taxation, charges for capital services, conscription of labor, and manipulation of farm prices, the authorities and businessmen managed to defray the expenses of their program and to secure net proceeds for export to Japan. Taiwanese more than paid their own way in economic development.

The Japanese, who initiated most of the social changes in Taiwan after 1895, kept the greater part to themselves. When it came to their overt policies toward the population, practically all indications have pointed in this direction: they systematically avoided modifying the social structure except for separate and specific purposes. After discovering where and how to apply authority in rural villages, they approached most details of local government by indirection (e.g., through the *pao-chia* system), and husbanded their administrative resources for more urgent objectives. By confining their modern changes to a few major cities, Japanese obstructed the spread of these influences to the rural parts of the island. Even in the cities, barriers like favoritism in employment and segregation of the two groups prevented free intercourse between them. At every turn, the forces that might have drawn Taiwanese into more varied types of activities were consistently deflected from this result. Farming never ceased to be their main source of support, and the operation of individual farms was scarcely altered by the improvements around the fringes of agriculture.

The only aspect in the lives of Taiwanese subject to marked and unequivocal change was their mortality. The chances of surviving were steadily improved at all ages. Levels of living must have increased to some extent, denying poverty its former part in undermining health. Japanese also brought to Taiwan the knowledge and the drugs of modern Western medicine, with which they treated disease and forestalled its spread. The quality of their medical practice fell far short of usual standards in Western countries, and the expenditures on actual medical equipment were modest. But Japanese health authorities put these limited resources to use in a way that made spectacular progress against the risks of death. Their health effort, so niggardly with its facilities, succeeded largely because of the energy that was devoted to its administration.

In former times, the Taiwanese population had survived in spite

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177 of its high mortality. One of the conditions thus imposed on the society was the maintenance of high fertility. It contained a complex and pervasive set of injunctions to preserve the continuity of family lines, traditions of fondness and indulgence for children, pressures to marry, and incentives to rear large families. Family membership became a status through which an individual was linked to most other activities. The portions of the social structure where these ties were strongest were the portions that the Japanese left intact. Many were features that Japanese depended on for keeping order and making their administration effective.

Since nothing occurred to diminish the strength of these familial institutions, there is no reason why fertility should have declined. Mortality was lowered by simple measures applied on a mass scale. They could be carried out cheaply and through the social order as it existed—indeed, these were the two greatest virtues of the program. Consequently, fertility remained sufficient to offset the risks of death that had prevailed in the past. The result was a natural increase in population as rapid as any that had yet been recorded.

Starting out with this increase in the Taiwanese population, inquiry into other aspects of the society has necessarily come full circle, and returned to the factors that were most conspicuous in making the growth possible—steady high fertility and persistence of the family system that maintained it. Using the best measurements that are available, the findings of Chapter IX have shown that average fertility declined inconsiderably as time went on, if at all.

If we know less about variation of fertility among Taiwanese at any one time, it is partly because the data are limited, partly because there is less to know. The entire range of our measurements for civil divisions in Taiwan would fall within what is today regarded as very "high" fertility. Even in cities, where birth rates in other countries have tended to be the first to decline, Taiwanese showed almost no desire to reduce the size of their families: urban conditions either had very little effect on fertility, or affected the fertility of only a few people.

It would be welcome if studying the demographic and social events of the past were to yield predictions about the future. Such questions are continually put to demographers, who must exercise all their scruples if they are to avoid giving answers that will mislead. In the case of Taiwan, half a century of rapid and accelerating growth has unfortunately given little indication of what is in store for later

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years. To predict actual trends in population implies some prognostication of events in related spheres. These events in turn will be the outcome of decisions that are not yet made, political tensions that are not yet resolved, and perhaps even wars that are not yet fought.

The Japanese made many contributions to the ability of the Taiwanese population to support itself on an increasing scale. Although one hears a great deal today about Japanese oppression in Taiwan, little is said about the large physical plant that they constructed. But the fact is that they bequeathed almost all of this, albeit in somewhat run-down and damaged condition, to the future of Taiwan and whatever power holds control of the island. On the other hand, the greatest factor, and the one they did not leave behind (though they would have been happy to do so), was the fund of skills residing in the Japanese community. Without these, or appropriate substitutes and watchful care, the island's economy could never be made to yield as before.

The removal of the Japanese left a great deal that still could be accomplished by a more enlightened regime. The best part of this opportunity was lost by the Chinese from the mainland who replaced them. The war-time deterioration of physical equipment under the Japanese was as nothing compared to the wanton destruction and almost deliberate undermining of the economy in the early postwar years. More recently the Nationalist government, since Taiwan became its refuge from Communist expansion in China, has acquired a stake in the island's future that it did not have before. Through creditable effort and outside assistance, it has restored most of the former productive facilities and in many ways has improved upon them. But in order to feed the population and their own nationals, the present authorities have found it necessary to fall back upon the island's agricultural resources, and have kept as much of an agrarian emphasis in their methods as did the Japanese. Under them, for example, industrial management has apparently been still further concentrated under official control, and has not become more widespread among the Taiwanese. Insofar as this amounts to a population policy, it seems to favor a continuance of high fertility and, if unchanged, to offer very little promise of a decline in the rate of growth from this source.

If more concrete predictions are to be made, however, it is safer to begin by guessing what will *not* happen. For example, natural

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600 increase of 25 per thousand, or growth compounded at 2.5 per cent per annum, could not long continue in any but an empty land. From their present numbers, at that rate Taiwanese would reach fantastic proportions in a few generations. They cannot emigrate in large numbers, for Asia has no countries that will accept them. Hence it is inconceivable that they should actually continue to expand on this scale. Thus the best of care may not ensure against some resurgence of mortality, unless drastic changes are made in the social environment of family life. If they are able to remain long enough in control of Taiwan, the Nationalist authorities will have to face this problem sooner or later. Having squandered their first chance to take over Taiwan's economy as a going concern, they must face it on terms that become progessively less advantageous as time goes on.

The lessons that are most pertinent to this example, however, cannot be drawn from it alone, but emerge only from comparison with other parts of the world. The factors that led to population growth in Taiwan were by no means novel events. They have appeared several times in recent history, and have become a familiar and unhappy pattern of colonial areas. Rapid natural increase, wherever it has occurred, has been an accompaniment of measures that assist human survival, and of some innovations in modes of livelihood for human support. But it has not everywhere been synonymous with poverty, for some countries have maintained a rising scale of wealth while their people increased.

Those countries that prospered during this expansion of their populations have usually done so in a spectacular degree, because for them it has been part of a much wider process that ushered in profound and sweeping alterations in their forms of social and economic organization. While this process of "modernization" has contained some unique and adventitious factors from case to case, it is usually associated with a general industrial development, with a tendency for people's activities of all sorts to become more specialized and more widely interdependent, with a decline in the influence of rural life, and with some ascendancy of the more flexible and less intimate social contacts afforded by large cities. And, finally, this process is also characterized by a shifting away from self-sufficient family units as the center for most human behavior, and towards more frequent association with people *outside* the context of family relationships.

Hand in hand with these changes, familial institutions have gradually lost some ground as the basis for organizing or coordinating

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people's actions, and more emphasis has been placed on other types of association and other forms of societal control. Though the details may vary, it usually happens that people find their survival to depend less on maintaining the continuity of their family groups, that family continuity ceases to require abundant children (owing to lowered mortality), and that competing interests begin to intervene and dampen the desire for abundant children as an end in itself. As a result, the recent industrial world has experienced sharp drops in its fertility—sometimes to a point that arouses alarm about *under*-production of births.

Because high fertility can make its contribution to population growth merely by remaining constant, without being modified in any way, it cannot be long overlooked by programs which seek to establish modern industry in non-industrial areas. It is easy to forget, however, that the permanent shift towards lower fertility is not to be expected by itself. Where observed in the past, it has been part of the entire *process* of change, which will not develop very far if sealed off in privileged segments of a society.

Unfortunately, the social correlates of this process are not yet well understood; one cannot say that, if one or another aspect of Japan's administration in Taiwan had been altered, the outcome would have differed in some definite way. Stronger and less restrictive measures might be required to shake the stability of traditional institutions, even if more opportunities were provided for popular participation. On the other hand, it is also possible that a program of truly radical proportions might be sufficient to precipitate revolutionary upheavals and might threaten the established order on which the leaders of agrarian countries must depend for their authority. But one thing seems certain: if more comprehensive results are desired from such programs, they cannot be achieved *without* more thoroughgoing changes, of the sorts we have been discussing, in the social structure.

Since the familial attitudes supporting high levels of fertility appear eventually to be incompatible with an industrial system, in a sense lowered birth rates are probably automatic features of successful modernization. But this is not of much help to those who would use such knowledge as a guide to policy, for it takes time for the process to develop to this point—time during which the techniques of mortality control, which now can operate efficiently without re-

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000 quiring extensive reorientation of values and sentiments, are capable of doing their part to start rapid population increase.

Today it is doubtful whether any non-industrial nation, desirous of securing for itself the advantages of an industrial system of production, can afford to rely on this "automatic" decline in fertility, even if it is prepared to let the social changes run their course. The time is too short, the starting position too precarious, and the large empty areas of the world are no longer open to migration if fertility fails to fall. The increase of people would probably have to be suppressed, either by accident or by design, through a restoration of high mortality. Agrarian countries that wish to play safe in their plans for development are now left with little choice but to promote the idea of deliberative fertility control among their people.

Of course, this does not mean that they will actually want to go this far. The traditions of the past are harder to part with than its archaic modes of production, and there are strong views that oppose any calculated weakening of these traditions. Furthermore, many people in these countries feel that policies overtly designed to popularize the restriction of births are morally offensive. These two influences—conservatism and outright taboos—may persuade the leaders of agrarian countries to try some middle path, to treat industrialization as merely a set of technical measures that can be adopted without the type of organization required to make use of it.

A program of this selective nature may have a wide appeal as a way of achieving "economic progress with social stability." And there is no reason why it should not enjoy short-run success, for methods that are now known can scarcely fail, barring mismanagement, to raise production, improve health and bring agricultural prosperity. But this kind of progress is illusory, for it fosters stability of economic organization as well as of social institutions, and hinders the growth of an industrial system. The result may amount to the same thing as "colonial development," whether or not a "colonial" relationship exists.

It is hard to imagine that modern changes can be kept away from non-industrial regions forever just because some people are lukewarm to their social implications. The prospects for a further diffusion of industrial culture are continually being strengthened as more people become aware of its material advantages. But the time consumed in the process, and the social and demographic consequences of the delay, may prevent industrialization from accomplishing the things that are hopefully expected of it.

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4. 集計原表:全島ノ部
5. 結果表
6. 職業名字彙

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(c)台中州
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(f)台東州
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CHINESE OR JAPANESE TERMS REFERRED TO IN THE TEXT (GIVEN WITH MANDARIN READINGS)

Changhua	彰化
Cheng Ch'eng-kung	鄭成功
Chiayi	嘉義
Chilung	基隆
District	郡
Hsinchu	新竹
Hualien	花連
Kaohsiung	高雄
Lao-wu	勞務
Minseki	民籍
Municipality	市
P'enghu	澎湖
P'ingtung	屏東
Prefecture	州
Taichung	臺中
Tainan	臺南
Taipei	臺北
Taitung	臺東
Yeh-chu	業主
Yi-yüan	役員

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4:Grajdanzev--v S-4 (no date) 1942 Formosans-1-2
116, 121, 127

"This study of the Japanese colony of Formosa or Taiwan is based almost entirely on Japanese official sources, the exceptions being very few and explicitly mentioned. This reliance on Japanese sources may be explained by the fact that few foreigners have visited the island and fewer still have written about it. But even in the Japanese language comprehensive studies of Formosa are rather exceptional.

Those who have read something about Formosa may be astonished at some of the author's conclusions. They may remember the idyllic conditions pictured by the Japanese administration or its spokesmen in English publications. They may remember a picture of a prosperous and progressing island, the population of which is happy under the benevolent colonial administration. If progress consists in building roads, railways, harbors, radio stations, irrigation works, primary schools and hospitals, there is such progress in Formosa, and this book abounds in proofs of such progress. But the author has been interested not only in this question but even more in the question of how the Formosan people have fared under its rulers? At the time of annexation—45 years ago—Formosa was economically on about the same level as Japan. Japan was just emerging from her medieval state and was predominantly an agricultural country. Her agricultural technique at that time was hardly above that which prevailed in Formosa. Insofar as land was more abundant in the colony, its population was probably better off than that of Japan. What has happened in these last 45 years? How did the islanders fare in their political and cultural development? Had they any chance to perfect their culture enriched by contact with

the Japanese? Have they any semblance of political freedom or any opportunities to advance? If they are not masters of their own fate politically, do they control their own economic life? If the answers to these questions are of a discouraging character, it is not because of the author's attitude but because of the facts revealed in the Japanese reports.

The best known example of a colonial regime is probably that of British India. In the Western world British policy in India evoked much criticism. Yet conditions in British India cannot even be compared with those in Formosa. The Indian people can organize; they use their own languages in middle schools and even in the Universities; they publish their own newspapers and books in their own languages; they have their own political groups and parties, their voice and their criticism are heard in the provincial assemblies; certain important industries of India are now in the hands of Indians. However limited all these rights and the opportunities to use them may be in India, they are infinitely greater than those of the people of Formosa.

The author expresses his deepest gratitude to Mr. W. L. Holland, Mr. Joseph Phillips, and Mr. Alexander Stevenson for their editorial help and criticism of the manuscript, though this does not mean, of course, that they necessarily share the views and interpretations of the author."

A. J. Grajdanzev

New York City October, 1941

4: Grajdanzev--1 S-4 (no date) 1942 Formosans
116, 101, 121

"Taiwan, or Formosa is a Japanese island near the Chinese province of Fukien and the northern Philippine island of Luzon with a population of six million. One may wonder what are the reasons for a better acquaintance with a relatively small island lost in the Western Pacific, forming a very small part of the Japanese yen-bloc area. Readers may be expected to be interested in broad problems or in problems concerning large areas but not in a small island or a local Japanese problem. However there are important reasons for a better knowledge of Taiwan."

4: Grajdanzev--1-2 S-4 (no date) 1942 Formosans-1-2
116, 113, 121

"Previous to Japan's occupation in 1895 Taiwan was a Chinese island, and after 45 years its population is still predominantly Chinese. What have the Japanese accomplished during this period? How has the Chinese population fared under foreign rule? Japan now promises China a new era of 'co-existence and co-prosperity.' What forms have co-existence and co-prosperity taken in Taiwan? Of course, all historical analogies have an important defect: new factors may intervene to alter the course of events. This however, does not render analogies completely useless, but demands only a more precise analysis of their respective actual bases. In the case of Taiwan we have a quite recent experiment. In both occupied China and Taiwan the masters are Japanese and the servants Chinese. What are the reasons for expecting that in conquered China the Japanese will behave worse or better than they behave now in Taiwan? [2]

The part assigned by her Japanese rulers to Taiwan in their plans for penetration into Southeast Asia is extremely important, and a knowledge of Taiwan is necessary for an appreciation of these plans.

Despite the significance of Taiwan, both as an example of Japanese rule and for its own sake, scarcely a work of importance has appeared in English since 1907, when a translation of a book by Yosaburo Takekoshi (1) was published. Previous to that time interest

1. Japanese Rule in Formosa, London, 1907.

in Taiwan among the Powers resulted in a number of works out of all proportion to the island's importance. But since that time only a few travellers' stories of the type of 'Glimpses from Japan and Formosa' and 'Scrambles in Japan and Formosa' have appeared. This island, however small and remote, nevertheless has an external trade surpassing that of either Yugoslavia, Indo-China, or Turkey and thus certainly deserves closer attention."

9; Yamasaki--221 [4] N-5 (1896-1897) 1900 Formosans
116, 121

For five months, and starting from Kilung, we went round the greater part of the island, constantly pushing into the interior from various parts of the coast, as the red line on the accompanying map shows. [MC: see next slip for adaptation of map. For full scale map in color see source: page 298, plate 19] Only once, on the eastern side of Taiwan, did our paths separate, Professor Kotō starting from Pinan and following the longitudinal valley of the Pinan, Shūkoran and Karenkō rivers to the mouth at the locality called Karenkō, while I reached this place along the precipitous coast. In this way we got to know the western plain, the mountainous country between it and the central mountain chain, the rushing upper course of the Dakusuikei, the largest river on the island, the southern point of the island, a considerable part of the east coast and various regions inhabited by natives. Finally we made our way back by steamer from Karenkō to Kilung and on to Tokyo.

9: Yamasaki--298 N-5 (1896-1897) 1900 Formosans
116, 102, 121

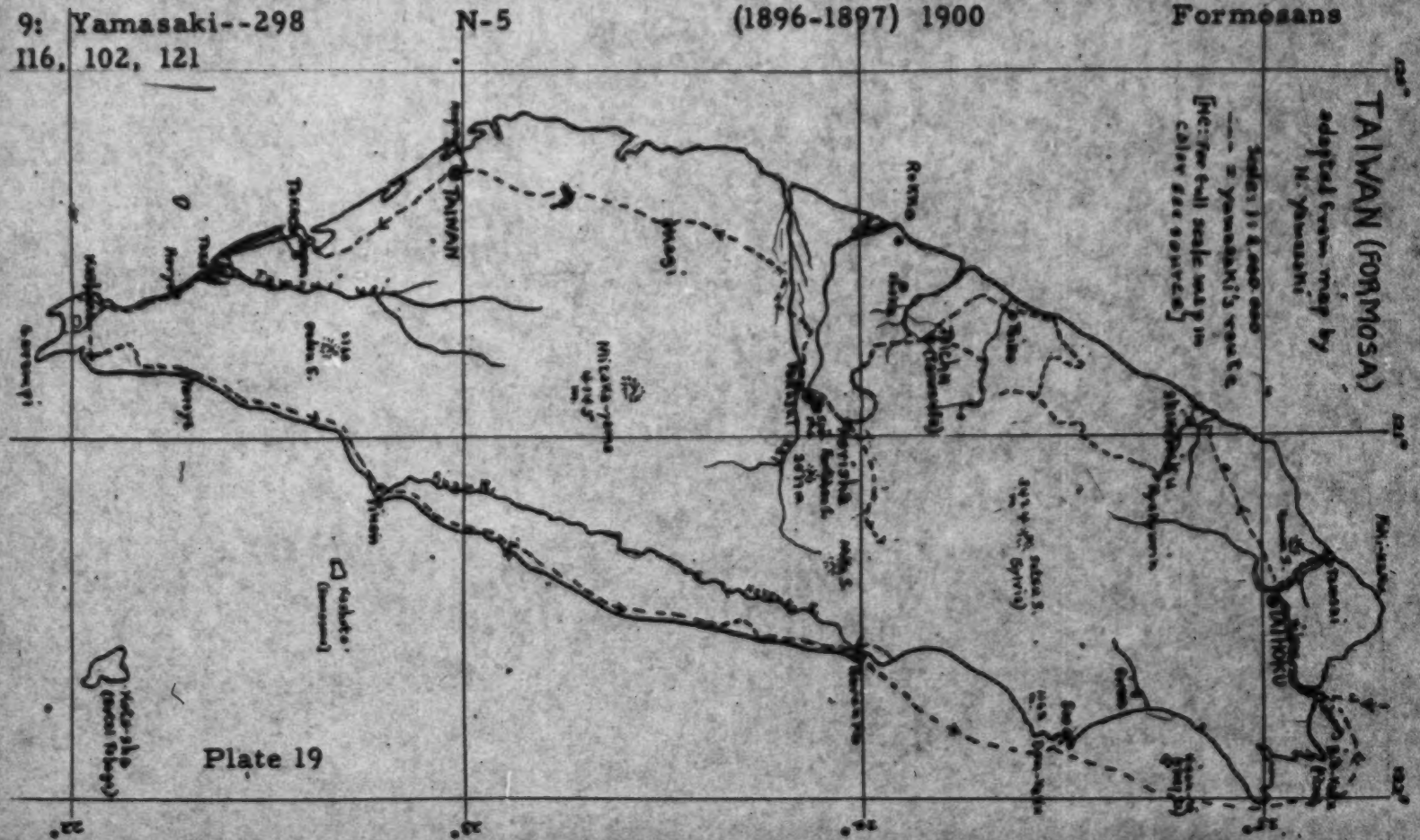

Plate 19

37: Steere--318-319 S-3 (1873-74?) 1875 Formosans
116, 121

"The map used in traveling was one made by General Legendre, who was formerly United States consul for Amoy and Formosa. The only means of telling distance was the Chinese report and our own fatigue, and the only method we had of telling the direction traveled was by a pocket compass. [319]

General Legendre's map seems to be very correct when he had the opportunity of personal observation; outside of this, as might be expected, when dependence has to be placed on Chinese data, there is little reliance to be put upon it. The arrangement of the mountain ranges appears to be imaginary."

121

We construed our function of preliminary reconnaissance as involving a general appraisal of the population problems of the region; assessment of the information available for analysis; discussion with, and evaluation of, the people interested in population problems, and exploration with serious students in each country of feasible approaches to solutions.

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The survey was made primarily in the interests of The Rockefeller Foundation and the full report submitted to the Foundation included recommendations for its consideration in connection with the policy and program of that organization. By courtesy of the Foundation, the present slightly abridged version is made available privately as a possible service to scholars, officials and others concerned with these problems.

The observations, assessments and analyses herein contained are made on the individual responsibility of the members of the group and they do not necessarily represent in any way the view or judgment of The Rockefeller Foundation.

This report is written on the basis of information acquired in the field or available to us in the United States on or before October, 1949. Names of places are those current at the time of our visit. Finally, we wish to express our gratitude to the many people who assisted our work with unfailing generosity in the midst of difficult and often momentous times. We have found it possible to include only a partial list of their names in the Appendix. To them and to many unnamed colleagues here and in the field go our heartfelt thanks. For all errors of fact, interpretation and judgment we take full responsibility.

MCB
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New York, March, 1950

[p. 2]

48: Chen E-4 (no date) 1968 ADI Formosa ADI

POPULATION GROWTH AND SOCIAL CHANGE IN TAIWAN

CHEN SHAO-HSING

The original title of this paper was "Population Change and Social Change in Taiwan". Owing to the limitation of space, it had to be divided into two parts. With the consent of the author, the first part is being printed under the above title; the part on population change will be printed in next number.—Editor.

I. INTRODUCTORY REMARKS

1. *Significance of the Study of Taiwan's Population.*

121 As universally admitted, the population problem is one of the most important problems of the present world. Since one fifth of the world population is Chinese, the study of Chinese population is an urgent task. But, sorry to say, we still have no population census, and though there are some population statistics, all are fragmentary and only for a short period of time. Because of these circumstances, "Taiwan is the only place where it is possible to study the processes of change of a Chinese population over a substantial period of time on the basis of excellent data" (Notestein's preface to G. W. Barclay's Colonial Development and Population in Taiwan, p. v. See No. 1 of the main references enumerated on the last page of this paper. Hereafter, the quotation will be abbreviated as follows, 1: p. v.). The study of Taiwan's population will tell us how a part of Chinese population has changed under a specific set of circumstances, and thus enable us to estimate the potential population change in China. This is the reason why the several millions of people on this little island are worthy of our consideration.

2. *Characteristics of the Data of Taiwan's Population.*

161 In order to promote an effective colonial administration, the Japanese started complete surveys of land and population in the early years of their occupation of Taiwan. During the half century of Japanese occupation (1895–1945), there were population figures of the whole island for 48 years from 1896 to 1943. The statistics from 1905 to 1943, that is from the year when the first census was taken to two years before the Japanese surrender, are especially trustworthy, judged by G. W. Barclay as "complete" and "correct", and Taiwan's statistical system was "a paragon even among those of the technologically advanced nations in the world" (1: p. 145, p. 164). For administrative reference, the population of Taiwan was registered according to different ethnic stocks, and by this we can trace the change of a part of the Chinese population under certain specific circumstance. The subject of this paper is not to treat the population of Taiwan as a whole, but to analyze how a part of Chinese population has changed in

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

Introduction

TAIWAN, or "Formosa," as the island is still widely known to Westerners, has been the scene of international contention as long as it has had a recorded history. From its discovery by curious Chinese and Japanese before 1600 down to the present time, the island has repeatedly been visited, occupied and fought over. No one can claim that Taiwan has failed to receive its full share of attention by the outside world. The people of the island would be the last to make this complaint, for, while opinions may differ as to whether the intrusions have been beneficial to the population, it is certain that they have not been welcome. 177

But for people who have long felt the disadvantages of being small and weak with large and powerful neighbors, the inhabitants of Taiwan have in some respects fared remarkably well. They avoided, through hardly more than chance, the domination by Western nations that has called forth great bitterness and aroused quixotic nationalism in many parts of Asia. They fell under the control of Japan at a time when that country was willing to invest strong efforts in developing Taiwan's productive resources. So far they have emerged from the war that destroyed the Japanese Empire without suffering the mass bloodshed or wide devastation that followed the regular military operations elsewhere in the Far East. And, ironically, during the fifty years of "exploitation" and "oppression" by Japan, they enjoyed more peace and prosperity than their former countrymen on the mainland of China.

As the aftermath of these events Taiwan has acquired a status that is uneasy and insecure, poised again as a prize desired by rival powers. It is not the purpose of this book to trace the sequence of steps leading up to this situation, or to speculate about the future international status of the island. Because prominence has not come to them of their own seeking, the Taiwanese have usually played a passive part in shaping their position in world affairs. Knowledge of the island's external relations therefore does not offer much in understanding the social order of its people, and information about the internal structure of the society fails to contribute anything of great value in appreciating its present international position. 121

For similar reasons, this book will not be concerned with the prospects for the island under the present Chinese Nationalist govern-

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

121 ment, since they are likewise closely allied to international developments that have not yet taken place.[1] This present era of Taiwan's history has just begun; discussion of its future in these terms necessarily rests on conjecture and may have little to do with the facts that are known about the population. The half-century of colonial rule, on the other hand, is over, and most of the facts are in. Hence this is the phase that can be investigated to the best purpose, for it can serve as an instructive example of its type in other places.

It is a well-documented case. There is no lack of thoughtful research on the island during this period. While under Japanese rule Taiwan probably had the distinction of being the most thoroughly inventoried colonial area in the world. Huge compilations of statistics and numerous special surveys were made from year to year. The economy, the terrain, the aboriginal tribes, the mineral wealth, the agricultural output, the industrial production and the foreign trade have all been studied and restudied until there is little to be added to this knowledge unless new evidence is uncovered that is not now available.[2]

127 Strangely enough, with all this interest in finding out about the island, there were very few attempts to study the social institutions and cultural patterns of the people, and the attention devoted to these matters has been scanty and perfunctory. Yet the numerical data relating to the population are the best of all, since their collection was most directly linked to the very effective system of control imposed by the Japanese. The largest task required of this investigation has been to test and evaluate these unknown source materials, and to introduce them into the Western literature. They comprise one of the most ample and creditable records for a population of this size that has ever been at the disposal of demographers, and the only systematic set of data for a portion of the Chinese population.

121 This is not to say that the subject of Taiwan's population has been entirely neglected. Nearly every published work about Taiwan, especially since 1945, has included a section on the people of the island.

[1] There is growing literature on Taiwan dealing with its political status. See, for example, Riggs, F. W. (1952), Ravenholt, A. (1952), Bate, H. M. (1952).

[2] Some of this material has already appeared in the form of special studies. See Yanaihara, Tadao (1929), Grajdanzev, A. J. (1942), Ch'en Cheng-hsiang (1950), Taiwan Keizai Nempo (1941). For a study of the characteristics of Taiwan's population, see Ch'en Cheng-hsiang and Tuan Chi-hsien (1951). The most useful single compilation of statistics is the *Statistical Summary of Taiwan for the Past 51 Years* (Taipei, 1946), which will be referred to hereafter simply as *Statistical Summary*.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

Such discussion is often confined, however, to establishing *how many* of them there are, and frequently begins and ends with the premise that there are "too many." This issue lies afield from the topics that we propose to consider—a population could not attain its present size, flourish or decline, or even remain in existence were it not for the complex societal arrangements that have made these things possible. Population thus could not become a "problem" by itself, but is a fruitful way of viewing problems in these other spheres. These, along with trends in the numbers of people, are the subject matter of this study, and the succeeding pages are an endeavor to discover what Taiwan's demographic data can be made to reveal about the nature of the society.

The following plan of procedure has been adopted. We shall first describe how Taiwan came to be settled, and take note of the growth of its population, for these are features which mark it off at the outset as a special type of case and furnish clues as to what else one should expect to find. We shall then turn to examine the aims and policies of Japanese colonial development and their consequences for the population. It is not proposed to dwell on what is commonly treated as the "economic" side of this colonial program, such as the spread of the Japanese banking system, the corporate structure of their industry, the expansion of output, construction of factories, or contribution to the "welfare" of the population. A catalog of these direct achievements gives but a very superficial idea of their most interesting aspect—the form in which these innovations were communicated to the Taiwanese.

It will appear that participation in this program on the part of Taiwanese was impeded by barriers at nearly every point, and that they felt its effect on their livelihood and their customs only by indirection. Some of the reasons for the cleavage between these two groups are to be found in the restrictive measures of the Japanese, and some in the stability of Taiwanese social institutions. Evidence of this stability will be shown in the economic activities of the people, their immobility, the persistence of certain mortality patterns, and the organization of marriage and family affairs. These various aspects of Taiwanese life will also be drawn upon to see how and where minor social changes tended to be fitted into this agrarian system. Finally, we shall assess one overshadowing result of this social stability, the steady high fertility of the Taiwanese.

Throughout, of course, much of the interest in the Taiwanese as

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

the island and set out to discover the responsibilities and rewards of colonial administration. 648

Japan embarked on this first colonial venture without having at the outset any very clear idea of what use to make of it. The first few years were taken up in consolidating their control over the population and in deciding what to do with the island. As their experiment progressed, the Japanese began to introduce some profound and subtle changes. Their objectives became clarified, and their policies toward Taiwanese more firm. Gradually they evolved a system of managing affairs in Taiwan that developed into one of the most successful colonial programs in the world. As long as they remained, Taiwan repaid them handsomely for their initial investment of care and expense.

Some of the more important aspects of this program will be discussed in subsequent chapters. Here it is appropriate to establish what were broadly the consequences in terms of population trends, and to discover what sorts of information about Taiwan's people can be gained from the records of this administration. The Japanese rationalized certain parts of Taiwan's agriculture, so that the island produced a substantial surplus of farm commodities each year. They established a strong and efficient government, the first that the island ever had. With a shrewd combination of police force and political guile, they imposed strict public order and penetrated every town and village with a structure of organized control. 648 178

They constructed excellent facilities for transportation and communication where there had been none before, founded modern business institutions and commercial centers, promoted some industrial processing of the island's products, rebuilt the major cities, and stamped out the principal epidemic diseases. In short, they transformed Taiwan from a "backward" and neglected land into a thriving region that could regularly export a large share of its agricultural produce. This was a success that would satisfy most of the countries striving for modernization today.

All these material accomplishments of the Japanese in Taiwan are well known. With some justifiable pride, they publicized this side of their rule and compiled an imposing set of statistics to document it. What we propose here is to examine the human side of these developments and to appraise some of its consequences in the 121

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

133

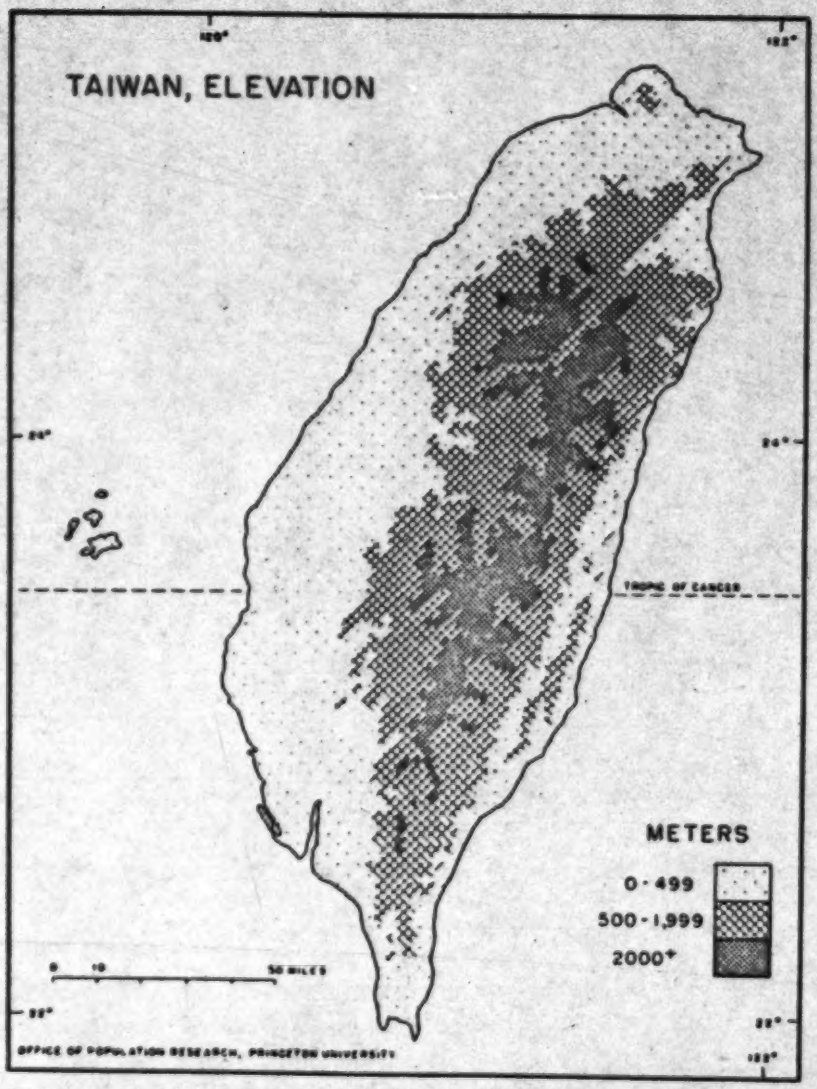

Fig. 1. Topography of Taiwan. (Adapted from Taiwan Provincial Government, Department of Communications, *A Map of the Main Roads of Taiwan*, February, 1950.)

121 lives of the population. This aspect of Taiwan's history, and of "economic development" in general, receives a surprisingly small share of attention as compared with questions of technological advance.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER IV

The Disposition of Manpower

THE human side of livelihood in the countries of Asia understandably attracts serious attention. For many years both Westerners and Asians have displayed increasing interest in the tedium of work in this portion of the world. Human labor under these conditions has variously been held the object of pity for its drudgery, praise for its industriousness, impatience for its low productivity, and admiration for the contentment it sometimes fosters and for its integration with cultural traditions. 461

Such impressions are not always a help in gaining a disinterested and factual grasp of the problem. They often are based on sentiment or feeling more than on actuality. Few of the commentators on the lot of the Asian peasant have ever come into contact with it at first hand, which may help to account for the diversity of views on the subject. Yet underlying all of them is a certain foundation of fact. No one will deny that work in these parts of the world is normally toilsome and arduous. It is, by our standards, conducted with such a lack of advantage from effective instruments that prodigious amounts of labor must be expended simply to keep alive. In addition, as compared with industrial societies, a person's usual work is more firmly imbedded in the social position that he occupies, which in turn may bear less relation to the income that he gains or the commodity that he produces.

No single project could properly cover all of these aspects of livelihood. For Taiwan the advantages of the data that exist lie in adopting a demographic view of work and discovering how laboring activities are distributed through the population. This approach does not enable us to answer all of the questions that usually arise about economic activities and their setting, but we can move from it to a more adequate conception of the connections between livelihood and the social structure. This point of view was introduced in the previous chapter in order to fill out the one-sided picture that resulted from taking Japanese policy at face value and surveying the economy through its specialized corporate structures. Since the body of facts to be covered was large, the evidence of the occupational statistics has up to this point been treated cursorily. 121

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

THE DISPOSITION OF MANPOWER

121 Economic activity is usually approached in demographic analysis by drawing attention first to the portion of a population that is involved. This group may be designated as manpower, or, more ambitiously, as the "labor force." It consists of those persons whom the influence of customary rules, the demand for labor in the economy, and expectations of others have induced to work for a living. In this chapter we shall take up some problems of determining the nature and size of this group in a population such as that of Taiwan, and to discover in greater detail some of the patterns that existed in its composition. Since this inquiry is also a means to observe the institutional environment of work, we shall be concerned only with the people whose society is reflected in these patterns, the Taiwanese.

The Nature of the Labor Force

By itself, the statement that the labor force is supposed to include people who work as distinct from others is not very useful. It is like knowing that humankind is composed of good- and bad-tempered persons—neither proposition gives any basis for assigning people to one class or the other. To classify a universe of individuals by any such principle requires a set of criteria for judging what activities should count as "work," and what degree of performance is necessary to qualify a person as being fully employed.

The first problem in specifying these criteria is a conceptual one: what purpose is the distinction intended to serve? This purpose may be to ascertain the usual state of affairs in a society where conditions of livelihood are relatively stable. One can expect that most of the population holds some employment status that is recognized in well-established usage. In this class the census procedure most likely to succeed is one that elicits a statement of the activities most commonly engaged in, according to this usage. Placing many arbitrary barriers in the way of such a response, like special rules for weighing levels of wages or exact units of working time, probably does not make the answers more precise. Such considerations may even obstruct the purpose by calling for facts that are irrelevant to the situation.[1]

On the other hand, the classification may be designed as a basis for estimating the volume of employment at a particular time (or of "unemployment," in the sense of people not working who would if they could), mobility between different types of labor, or short-term

[1] cf. United Nations, Population Division and Statistical Office. *Studies of Census Methods*, No. 4 (1948), pp. 14-38.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

fluctuations in employment. If employment is to be regarded in this way, it needs a set of criteria that are more complex, more sensitive to particular circumstances, and better oriented to the activities of people at a given moment. 121

Census Procedures in Taiwan for Determining the Working Population

Even if the conceptual questions can be settled, there remains a group of procedural ones. Since information which might be used to measure the size of the labor force must cover the entire population, it is ordinarily secured as part of a general census enumeration. Consequently most of the issues in collecting such materials are encountered in connection with census administration, and they have usually been dealt with by official organs charged with managing a census. Until very recently, it has been in this procedural realm that most attention has been given to labor force measurement—how to establish definitions, etc.

In actual experience, some of these criteria of working status have always been incorporated into census data that are already collected and published. They are beyond the control of the persons who make use of the materials, who are as a rule not the same ones who gathered and compiled them. Most of them must be accepted as they are, save for slight alterations (like shifting or combining certain categories) which may or may not aid in comparing data from different sources. Often the best that can be done is to scrutinize carefully the standards that were used in any given instance, and to make whatever allowance is possible for peculiarities that may exist from case to case.

In Taiwan, where census practices in Japan were followed,[2] the first of the two concepts of employment was used with little variation from census to census. Some specific entry as to "principal occupation" or customary activity was required of each individual. This left it up to each person or household head to decide whether he held an occupation; if so, he was supposed to specify the usual activities that he actually performed, as distinct from the part of the economy in which the work was carried on.[3] The information was compiled 659

[2] The enumerations of 1905 and 1915 in Taiwan had been planned likewise to synchronize with Japan in every major respect, but were carried out actually without the intended counterparts in Japan Proper.

[3] That is, in the current census usage of the terms, the enumerations were "occupational" rather than "industrial." The compilation of occupational titles before 1930,

1;Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
China AF1

[I

Introduction

This book, primarily a study of a Hokkien Chinese agricultural community on the west-central coastal plain of Taiwan, is based on a field study carried on during sixteen months of actual residence in Hsin Hsing village. It is more than simply an ethnographic description, however, since it also provides a picture of the changing life of the Chinese peasant, at least in one area of the island.

Taiwan provides an especially unique opportunity for the study of the nature of Chinese culture change and its dynamics. In a relatively brief span of years it has evolved from a traditional, premodern society to an emerging urban-industrial society. As more and more scholars have come to realize, the essential material for the study of this dynamic process is available there for analysis.

At the same time, until fieldwork can be carried on again on the Chinese mainland, research in Taiwan is perhaps the closest one can come to studying a Chinese cultural group living in a Chinese context. This has unfortunately been the case since Western scholars were virtually halted in their firsthand ethnographic research on the mainland of China when the Communists assumed power in 1949. The several studies published before and since then, ranging in type from J. L. Buck's (1930, 1937) detailed land-utilization and farm family surveys to the anthropological and sociological community study type (see bibliography), are of scattered areas dotting the great Chinese land mass. For the extremely important area of southeastern China, Fukien and Kwangtung, where most of the Taiwanese came from, only three published Western language studies exist—those of Kulp (1925), Lin (1947), and C. K. Yang (1960). Other than some scattered general studies (discussed briefly in Chapter 2) and a number of brief works dealing with highly specific subjects, this book, which combines ethnography with detailed analysis, is the first of its kind to be made available for Taiwan.

Culturally, Taiwan has been and still is a part of China. Before the influx of Chinese between 1945 and 1949, immigration from the south-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

121 167 177 178 eastern part of the mainland to Taiwan had been going on for several hundred years, beginning in the 1600's and virtually ending about 1900 when it was almost completely stopped by the Japanese regime. Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 179 178 During the Japanese occupation of Taiwan, except for the period just before and during World War II when they attempted to Japanize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese population has been significant. The combination of relatively efficient government, orderliness of life, and public health measures, together with an extensive system of communications on a relatively small island has greatly facilitated rapid population increase on a stable land base and a rapidly increasing growth of urban centers.

[744] [20] [161] [369]

Out of these developments, the most significant changes for the rural population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and, with this an increased spread of urban influences or at least their effects into the rural villages. These increasingly significant extensions

369 [167]

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
People's Republic of China AF18

F 369 167

have taken the form of the villagers' increased involvement in the greater market economy, the necessary migration of more and more villagers to the expanding cities with their newly developing economic opportunities, and, of course, the increased impingement of the government on the rural areas.

J 121 172 178

In this study of a peasant community, I will describe and analyze the manner in which the Taiwanese agricultural villager is being transformed from a peasant primarily involved in a basically subsistence type of agriculture to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. I will show how such developments are interrelated with and have increasingly effected certain changes in village social organization, community and kinship solidarity, and some of the general patterns of village life. However, we will also see that the cultural and social changes have been weighty in some areas of life and scant in others.

PRC 369 172 178 668

These changes in the Taiwanese village are perhaps far less dramatic and less drastic than those which the Chinese Communists are now attempting to institute among the Chinese peasants on the mainland, where in the past social change was relatively slow due to its massive size, poor system of communications, and lack of an effective centralized government organization. In order to achieve a strong Communist state, the Chinese Communists are consciously attempting to accelerate the process of urbanization, breaking down the traditional large kinship-group oriented rural society and the provincialism of the entire Chinese population. They hold that a single-class Communist society can be achieved only through the total transformation of the agrarian population, dominated by a peasant mentality, into an agrarian proletariat with a national and social consciousness. The commune system has perhaps been one technique used to speed the urbanization process and to develop an "urban mentality" by transforming the thought processes of a large agrarian segment of the population through education, mass organizations, and group cooperation as well as by changing its standard of living. It is unfortunate that we are unable to observe this changing phenomenon on the mainland today, because we are undoubtedly missing much which would greatly contribute to our understanding of the process of change in such a complex society. There are, of course, qualitative and quantitative differences between the mainland and Taiwan, much as there are differences between various areas of the mainland. Nevertheless, by observing and analyzing the nature of culture change in Taiwan, we may not only be able to understand the changing Taiwanese situation but may also gain insights into the nature and development of Chinese culture and society generally and, perhaps also, by analogy derive

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
People's Republic of China AF18

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some insights into what is now taking place on the Chinese mainland. For many of the changes now taking place both in Taiwan and on the mainland are primarily due to the same cause—the encroachment of urbanization on a traditionally agrarian culture, whether enforced by the Japanese, the Nationalist Chinese, or the Chinese Communists.

FIELD METHODS AND PROBLEMS

T 121

In the selection of a research site, I looked for a Taiwanese village with several attributes. These were that the inhabitants be of mainland origin, preferably descendants of early emigrants from the province of Fukien; that the village have agriculture as its primary means of livelihood; that it have a moderate-sized population, preferably between five hundred and one thousand inhabitants, to facilitate the achievement of familiarity with most of the people and with all aspects of village cultural life; that it be fairly traditional both culturally and socially and as typical as possible of the general villages in that area; and that housing be available inside the village for me, my wife, and our interpreter. It was also important that the village not be too near a major city, and yet not be geographically or culturally isolated from the main flow of Taiwanese life; it had to be identifiable as a definite community.

And, of course, it was important that the villagers be receptive to having a foreign observer move into the village.

It is no easy task to search for a village in which to carry on research in an unfamiliar country. The island of Taiwan, which on the map appears to be minute, is actually 250 miles long from north to south and 90 miles wide; it has an area of 13.8 thousand square miles.

F [133] [131]

At the start of my search, I talked with the staff of the Joint Commission on Rural Reconstruction (JCRR), a Chinese and American agency which plays an important role in rural development in Taiwan. They briefed me on the cultural and geographic areas of rural Taiwan, and we decided that the *hsien* (counties) of Chang-hua, Taichung, and Yun Lin (all on the west-central coastal plain of Taiwan) offered the best possibilities for a suitable village. The next step was to travel by jeep within this area with JCRR field agents to visit many different kinds of villages and make a final choice. The interpreter, whom I hired at that time to live and work with my wife and me in the village, was a companion on these excursions. (For a discussion of translation methods and the use of the interpreter in the field see Appendix I.)

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During the time we were investigating the many villages, we also visited local Farmers' Associations and *hsiang* (district) public offices. We held many long discussions with local officials to get additional

T 121

9: Yamasaki--221[3] N-5 (1896-1897) 1900 Formosans
116, 114, 122

With the transfer of the island to Japan, it entered a new age, not only politically, but also with regard to its scientific investigation. This begins in 1896-97 with an expedition that was organized by the University of Tokyo. Among others, the Professor of Geology, Dr. B. Kotō, took part, and the writer of these lines had the good fortune to accompany him as his assistant.

26: Honda--469 [2] N-3 (1896) 1897 Formosans-1-2
116, 122, 137

... I felt an urge to explore the hitherto unknown mountainous part of the island of Formosa. In the fall of last year the Imperial Government finally asked me to make a study of the forestry of that region. I departed at the beginning of October, 1896, and after seven days I landed in Kelung, the northernmost port of the island; we had briefly stopped at the Liukiu Islands in the course of our voyage. Together with four companions I set out on my march through the western slopes of the almost central mountain chain; we were headed south. Beautiful evergreen woods - ficus and palm trees, camphor trees, bamboos, fig trees, pineapple, banana trees and cinnamon trees - covered the western spurs of the mountains where several Chinese villages are still found. Towards the east, however, in the direction of the mountain ridge the population is exclusively native. As the elevation increases, the vegetation changes. The tropical appearance is lost and Crypto-meriae, pine-trees, and firs are reminiscent of the temperate zone. Fortunately the Chinese have not yet deeply penetrated into the mountain regions, for they certainly do not know any such thing as consideration of the forest. Wherever they go war is made on the forest with fire. The Chinese inhabit bare plains where nothing but bamboo groves are visible; they are planted close to the dwellings. Incalculable damage has already been done by barbaric devastation. After a journey of ten days we arrived in Ling-ki-ho, a place inhabited by Chinese where I encountered the last Japanese guards. From here on to Mt. Morrison there are no Chinese settlements. I

was unable to find horses anywhere although I needed them badly, nor were mules or donkeys available.

The actual ascent of Mount Morrison started from the village of Ling-ki-ho. It is surrounded by bare hills between which spread fields of rice and sweet potatoes. The little town has a population of about a thousand who initially showed themselves very hostile towards the Japanese; the ranks of the rebels included people engaged in the camphor trade. We had an extremely hard time finding porters in Ling-ki-ho and were completely unsuccessful in our search for guides. We had finally managed to engage twenty men who, when they learnt of our destination, promptly deserted us to the last man for fear of the aborigines, among whom individuals can distinguish themselves by capturing the heads of several Chinese. A youth of their group can think of marriage only after he has proved his courage by such an achievement. Once more twenty porters were hired; they were locked up overnight, examined by the doctor who eliminated four of them, and the next morning a load of about 24 kilograms was tied on the back of each one of them in the presence of armed soldiers, so that there was no opportunity for desertion. Our group included two officers with twenty-five men and their equipment and seven Japanese including a newspaper reporter, an interpreter, a doctor, geologist, and a topographer. I was not only supposed to be the leader of the expedition but was also entrusted with the task of studying the forest conditions in detail and of photographing everything of interest. Naturally we were well equipped with all kinds of scientific

instruments and tools for clearing our way through the thicket, for building huts against the rain, etc.

40: Kirk--22-23 S-2 (no date) 1941 Formosans
116, 123, 626, 797, 177.79 Japanese

"Religion. Besides changing the language and social customs of the people, the Japanese wish to destroy the Taiwan religion and the local temples, and substitute in their place the Japanese torii, shrine, and the Shinto [23] ritual. This policy is well illustrated by a personal experience. During his stay in Formosa, the writer was closely guarded by the military police. One gendarme, and sometimes two, always accompanied the 'foreign suspect' on his visits to the Chinese and primitive settlements. Even in Taihoku, the principal city, a policeman in plain clothes was invariably on hand when the writer would appear in the morning, and this 'guard-of-honor' would not take his leave until the day's work was done. The 'foreigner' made a useful discovery very early in his Formosan career. Whenever a new 'guard' appeared, a visit to the nearest Shrine came first on the day's schedule. At once the whole attitude of the policeman toward his non-Japanese companion seemed to change from one suspicion to friendliness and he unconsciously became more or less an interested 'research assistant.' Unfortunately, the Japanese system seemed to call for a change of policemen as soon as one 'guard' showed signs of proving his worth as 'a social investigator.'

The residents of Formosa today, it appears, if they with to gain status in the eyes of public officials, may do well to forsake all other religions and follow the teachings of Shintoism."

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable. 175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan. 175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu. 464 369 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[8] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were 175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

NOTES

Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, *i.e.*, only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 3.93–5.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 39.37–59.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chroniclers, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1716), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1750), Wang Ying-ts'eng (1764), Hsieh Chin-luan (1807), and Chen Shu-chün (1832) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

F 124 picture of life rather than ethnographic-type studies of any one area.
127 During the Japanese period in Taiwan (1895–1945), Japanese police,
175 administrators, and academic researchers also made extensive detailed studies in Taiwan. These works, such as the *Taiwan Sou Fa* (1910–1911), also were usually composite studies. But these more often dealt with specific aspects of Taiwanese (Chinese) life, such as: family, civil law, economics and agricultural processes, religion and magic (frequently viewing the local people as superstitious and backward), and general customs and habits of the Taiwanese. In these studies, the researchers frequently used scattered illustrative material drawn from either the cities and/or the rural areas of Taiwan.

Thus, a number of the Chinese and Japanese studies are generally valuable for providing a picture of early conditions for some general areas and on many specific subjects in Taiwan. They are, of course, also valuable for comparative purposes. Unfortunately, rarely, if ever, do any of them furnish any ethnographic or contextual picture of Taiwanese life for any particular area in Taiwan, and especially not for the area of Hsin Hsing village. This has meant, therefore, that the available material has been of only limited value in the historical reconstruction of life in the immediate area of Hsin Hsing. It is also unfortunate that either during or after World War II, the historical records for Hsin Hsing and its immediate area which, during Japanese times, were usually kept in the district police station were apparently destroyed or lost.

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161 164 social factors affecting the birthrate and the trends in population growth
702 will be examined in the chapters on social organization and especially on life cycle.

37: Steere--320-321 S-3 (1873-74?) 1875 Formosans
116, 126, 193

"Lists of words were procured of the native tribes. The first list belongs to the Tsui-whan. The second list belongs to the Lek-whans, [321] who have their principal settlement at Posia and two neighboring villages.

The Che-whans, from whom the third list was procured, inhabit the adjoining district. The Pepo-whans, from whom the fourth and fifth lists were taken, occupy the large track of country to the east of Takao and Taiwanfu; while the Kale-whans are among the mountains further east. From these was procured the sixth list of words."

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AD5 Taiwan Hokkien
Formosa AD1

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175 124 127 [161] [579] 241 312

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Formosa AD1

NOTES

Chapter 1: Introduction

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114 social factors affecting the birthrate and the trends in population growth
702 will be examined in the chapters on social organization and especially on life cycle.

"This study of the Japanese colony of Formosa or Taiwan is based almost entirely on Japanese official sources, the exceptions being very few and explicitly mentioned. This reliance on Japanese sources may be explained by the fact that few foreigners have visited the island and fewer still have written about it. But even in the Japanese language comprehensive studies of Formosa are rather exceptional.

Those who have read something about Formosa may be astonished at some of the author's conclusions. They may remember the idyllic conditions pictured by the Japanese administration or its spokesmen in English publications. They may remember a picture of a prosperous and progressing island, the population of which is happy under the benevolent colonial administration. If progress consists in building roads, railways, harbors, radio stations, irrigation works, primary schools and hospitals, there is such progress in Formosa, and this book abounds in proofs of such progress. But the author has been interested not only in this question but even more in the question of how the Formosan people have fared under its rulers? At the time of annexation—45 years ago—Formosa was economically on about the same level as Japan. Japan was just emerging from her medieval state and was predominantly an agricultural country. Her agricultural technique at that time was hardly above that which prevailed in Formosa. Insofar as land was more abundant in the colony, its population was probably better off than that of Japan. What has happened in these last 45 years? How did the islanders fare in their political and cultural development? Had they any chance to perfect their culture enriched by contact with

the Japanese? Have they any semblance of political freedom or any opportunities to advance? If they are not masters of their own fate politically, do they control their own economic life? If the answers to these questions are of a discouraging character, it is not because of the author's attitude but because of the facts revealed in the Japanese reports.

The best known example of a colonial regime is probably that of British India. In the Western world British policy in India evoked much criticism. Yet conditions in British India cannot even be compared with those in Formosa. The Indian people can organize; they use their own languages in middle schools and even in the Universities; they publish their own newspapers and books in their own languages; they have their own political groups and parties, their voice and their criticism are heard in the provincial assemblies; certain important industries of India are now in the hands of Indians. However limited all these rights and the opportunities to use them may be in India, they are infinitely greater than those of the people of Formosa.

The author expresses his deepest gratitude to Mr. W. L. Holland, Mr. Joseph Phillips, and Mr. Alexander Stevenson for their editorial help and criticism of the manuscript, though this does not mean, of course, that they necessarily share the views and interpretations of the author."

A. J. Grajdanzev

New York City October, 1941

4:Grajdanzev--72 S-4 (no date) 1942 Formosans
116, 127, 421

"In many cases it has been shown that the Taiwan official statistics are not entirely satisfactory. But the problems which we shall now discuss, important though they are, are given much less attention in the available official sources. These questions are: how many farmers own their land and how many rent it; how is the land distributed among the landowners and among the cultivators."

"First of all, the total number of those occupied in agriculture should be known. It may be given as the number of families—the easiest and perhaps the best way for certain purposes, because in countries where agriculture is the most important economic activity it is usually the family which works as a unit. Another way is to give the number of active persons occupied in agriculture. This method is good for comparison with the number of persons occupied in other economic fields where the family does not play any part in production, but its application to agriculture encounters certain obstacles: it is not easy to determine the number occupied because some members of the family are only partially employed in agriculture and some only seasonally (e.g. children in harvesting). Finally, the total number of persons dependent on agriculture may be given—farmers and members of their families not occupied elsewhere. Current statistics in Taiwan use the first and the last methods; they give the number of families occupied in agriculture and the 'agricultural population'. The census statistics give the number of persons actively occupied [73] in agriculture or, as it is often expressed, the number gainfully employed in agriculture. Unfortunately, these statistics are not consistent. It was shown above that, according to the census of the population taken in 1930 (the latest in which the question of occupation was asked), 71.4 per cent of the Chinese and 67 per cent of all the population gainfully employed were occupied in agriculture and forestry. But forestry as a principal occupation gives work to very few; it is mostly a sideline occupation for the

farmer, and its part in the economy of Taiwan is very small. If one takes into consideration the fact that the families in rural localities have more children per family than families in the cities, then the 'agricultural population' in Taiwan should constitute about 70 or 75 per cent in 1930. Since that date no revolutionary changes have occurred."

4:Grajdanzev--132 S-4 (no date) 1942 Formosans
116, 127, 652, 177.65 Japan
636.65

"Before giving tables of the revenue and expenditures of the government-general, a few explanatory remarks should be made. (1) We give only net revenue (or expenditures) for the fiscal monopolies (1), railway communications, forests, hospitals, etc., because

1. In Taiwan fiscal monopolies include salt, camphor, opium, tobacco, and alcohol.

gross revenue figures give an exaggerated value to these items; (2) on the expenditure side we have changed the classification according to the purpose of the expenditures and all 'extraordinary' revenues and expenditures we combined with ordinary ones in order to give a more complete picture. The official heading, for example, 'grants to the sufferers from natural calamities' is misleading. One might assume that this represents aid rendered by the state to the local population, but on closer inspection one sees that a greater part of this item in the last year was made up of grants to the railways. Under the heading of 'building and repairs' (eizen hi) we find expenditures on airfields (more than one million yen) out of all proportion to the number of passengers carried (about 40 passengers per day), not including subsidies to airlines.

Unfortunately we cannot disentangle many other large items in view of the absence of information, and consequently, the amounts given represent a minimum for certain expenditures (war, police, 'subsidies' to business men, etc.) and if data were available they might be of much larger proportions."

4:Grajdanzev--154 S-4 (no date) 1942 Formosans
116, 127, 471, 661

"We have now come to a point where some estimate may be made of what the Japanese are getting from Taiwan (1). It is important to emphasize that all that follows is based,

1. Such questions as how many among the Japanese receive benefits from Taiwan and whether these benefits are distributed equally among recipients, do not concern us here.

with few exceptions, not on more or less exact official figures, but only on estimates. All those who have worked on colonial problems know how difficult it is to get certain data. This does not mean, however, that we should give up the idea of forming an opinion concerning, for example, colonial profits, for many facts are available which help us to make estimates. These are not therefore based on intuitive guesses, but are all founded on certain facts supplied by official and unofficial Japanese statistics."

8: Chen--438 N-3 (no date) 1951 Formosans
127

"1. All tables are based on data contained in the Taiwan Agricultural Yearbook, Dept. of Agriculture and Forestry, Taipei."

25; Plaut--29 U-4 (no date) 1903 Formosans
116, 115, 127

I obtained most of my material about the Chinese population of Formosa from the work of Okamatsu, but I have omitted the question of the properties, as that was given in too great detail. The data on the natives is based first on a report made by two assistants to the Civil Government of Formosa, the scholar Ino Yoshinori and Awano Dennojo; they prepared this for the Civil Governor Goto (Taiwan banjin jijo, Status of the savages on Formosa) January 9 Meiji 32 (1899). Taipei (Taihoku), Meiji 33 (1900) and secondly it is based on the first number of a periodical Banjo-Kenkyu-Kwai-shi that is the periodical of the Society to Investigate the Conditions of the Savages.) Tokyo, Meiji 31, (1898). This society was founded in 1898 to study the island of Formosa and the status of its native inhabitants.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

Taiwan[1].

Before the Japanese occupation there was frequent migration between the China mainland and Taiwan. After the Japanese occupation, the fundamental policy of the colonial government was to cut off the relation between China mainland and Taiwan. Thus the entrance of mainlanders to Taiwan and the departure of Taiwanese to the mainland was strictly controlled. After the restoration of Taiwan to China in 1945, especially since 1949, many people came to Taiwan from the mainland, and the populations factors have changed greatly. During the half century of Japanese occupation the Chinese population in Taiwan was a "closed" population (1: p. 12), its change was almost wholly caused by natural increase, and the influence of migration was insignificant. It seemed that Taiwan was kept as a laboratory for experimentation on Chinese population change, and this is a very valuable condition from a demographic point of view. 161

Besides dependable data of population statistics, there are statistical data of administration, industry, communication and transportation, hygiene, and education, etc., which will enable us to trace the interrelation of population change and social change. Usually, statistical records begin after a society has attained some degree of development, and the data of the initial stages of modernization are not easy to find. Besides, neglect of birth and death registration is unavoidable in early statistics. Thus even when there are statistictical records, dependable data are hard to get. Taiwan is an exception in these points. Since statistical records were taken by the colonial government under strict police control, dependable statistics from the initial stages of modernisation are available, which will enable us to make a study of a complete processes of population change and social change. "It is", as pointed out by Notestein, "if not the only case, then certainly one of the very few cases in the world" (1: p. v.). 161 178 270

Social change in western Europe took place from within, developed by inner necessity, and the change was from the base to the top. Social change in Taiwan was different from this, as pointed out by G. W. Barclay. In Taiwan the Change was started and pushed by the colonial ruler. It was passive in character, and was from the top to the bottom. There are many areas in the world which were occupied as colonies in former times, and their social change shows the same trend as that of Taiwan. The study of social change in Taiwan will help us to understand the colonial type of social change. 178

By the time of the Japanese occupation (1895), the islands of Taiwan and Hainan had about same size of population, around two and a half million. Fifty years thence, the population of Hainan remained almost the same, but the Taiwanese population had 161

Note 1: Hitherto the population of Taiwan was treated as a whole in most articles and books. In a paper by the present writer: "Sociological Study of Mortality in Taiwan", published in 1947-48 (main references, No. 6), a different standpoint was adopted, Chinese population in Taiwan was the subject of the analysis. Two books by G. W. Barclay published in 1954 also adopted the same standpoint.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

121 ment, since they are likewise closely allied to international developments that have not yet taken place.[1] This present era of Taiwan's history has just begun; discussion of its future in these terms necessarily rests on conjecture and may have little to do with the facts that are known about the population. The half-century of colonial rule, on the other hand, is over, and most of the facts are in. Hence this is the phase that can be investigated to the best purpose, for it can serve as an instructive example of its type in other places.

It is a well-documented case. There is no lack of thoughtful research on the island during this period. While under Japanese rule Taiwan probably had the distinction of being the most thoroughly inventoried colonial area in the world. Huge compilations of statistics and numerous special surveys were made from year to year. The economy, the terrain, the aboriginal tribes, the mineral wealth, the agricultural output, the industrial production and the foreign trade have all been studied and restudied until there is little to be added to this knowledge unless new evidence is uncovered that is not now available.[2]

•127 Strangely enough, with all this interest in finding out about the island, there were very few attempts to study the social institutions and cultural patterns of the people, and the attention devoted to these matters has been scanty and perfunctory. Yet the numerical data relating to the population are the best of all, since their collection was most directly linked to the very effective system of control imposed by the Japanese. The largest task required of this investigation has been to test and evaluate these unknown source materials, and to introduce them into the Western literature. They comprise one of the most ample and creditable records for a population of this size that has ever been at the disposal of demographers, and the only systematic set of data for a portion of the Chinese population.

121 This is not to say that the subject of Taiwan's population has been entirely neglected. Nearly every published work about Taiwan, especially since 1945, has included a section on the people of the island.

[1] There is growing literature on Taiwan dealing with its political status. See, for example, Riggs, F. W. (1952), Ravenholt, A. (1952), Bate, H. M. (1952).

[2] Some of this material has already appeared in the form of special studies. See Yanaihara, Tadao (1929), Grajlanzev, A. J. (1942), Ch'en Cheng-hsiang (1950), Taiwan Keizai Nempo (1941). For a study of the characteristics of Taiwan's population, see Ch'en Cheng-hsiang and Tuan Chi-hsien (1951). The most useful single compilation of statistics is the *Statistical Summary of Taiwan for the Past 51 Years* (Taipei, 1946), which will be referred to hereafter simply as *Statistical Summary*.

"2. The 'index of cultivation' is the percentage of cultivated land in the total land area. The total land area of Formosa, including Penghu and other islands, is 3,596,100 hectares; the total area of cultivated land (10-year average, 1936 to 1945) is 846,552 hectares. Hence the index of cultivation is 23.5 per cent, which is higher than that for South China, Japan, or Korea."

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

Such discussion is often confined, however, to establishing *how many* of them there are, and frequently begins and ends with the premise that there are "too many." This issue lies afield from the topics that we propose to consider—a population could not attain its present size, flourish or decline, or even remain in existence were it not for the complex societal arrangements that have made these things possible. Population thus could not become a "problem" by itself, but is a fruitful way of viewing problems in these other spheres. These, along with trends in the numbers of people, are the subject matter of this study, and the succeeding pages are an endeavor to discover what Taiwan's demographic data can be made to reveal about the nature of the society.

The following plan of procedure has been adopted. We shall first describe how Taiwan came to be settled, and take note of the growth of its population, for these are features which mark it off at the outset as a special type of case and furnish clues as to what else one should expect to find. We shall then turn to examine the aims and policies of Japanese colonial development and their consequences for the population. It is not proposed to dwell on what is commonly treated as the "economic" side of this colonial program, such as the spread of the Japanese banking system, the corporate structure of their industry, the expansion of output, construction of factories, or contribution to the "welfare" of the population. A catalog of these direct achievements gives but a very superficial idea of their most interesting aspect—the form in which these innovations were communicated to the Taiwanese.

It will appear that participation in this program on the part of Taiwanese was impeded by barriers at nearly every point, and that they felt its effect on their livelihood and their customs only by indirection. Some of the reasons for the cleavage between these two groups are to be found in the restrictive measures of the Japanese, and some in the stability of Taiwanese social institutions. Evidence of this stability will be shown in the economic activities of the people, their immobility, the persistence of certain mortality patterns, and the organization of marriage and family affairs. These various aspects of Taiwanese life will also be drawn upon to see how and where minor social changes tended to be fitted into this agrarian system. Finally, we shall assess one overshadowing result of this social stability, the steady high fertility of the Taiwanese.

Throughout, of course, much of the interest in the Taiwanese as

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

128 a people stems from the fact that almost all of these are of Chinese origin, and that their behavior under Japanese colonial adminstration may be said to represent the reaction of Chinese cultural norms to selective innovations which fail to attain the dimensions of sweeping societal changes. But this is a pattern of change that has not been uncommon elsewhere in the world. Additional significance can be attached to those findings in Taiwan which have counterparts in other agrarian countries, and the following chapters have been organized with considerable care to emphasize these matters of more general interest.

G.W.B.

September 1952

ACKNOWLEDGMENTS

000 For a long and patient investment in the work involved in this study, full recognition and thanks are to be given to the Office of Population Research, Princeton University. Invaluable counsel was received from individual members of this office, in particular from Irene B. Taeuber, Frank W. Notestein, and Wilbert E. Moore, which should be recorded here for want of a more adequate form of acknowledgment. Special thanks are due to Daphne Notestein, for distinctive execution of the maps and diagrams, and to Erna Härm, foremost among several, for her care in the statistical computations on which the study is based. Finally, for contributions of assistance and encouragement at every stage, a debt of a broader kind is owed to Audrey N. Barclay. Of course, responsibility for all statements and conclusions in the book rests with the author.

52: Barclay S-5 (no date) 1954 AD1 Formosa AD1

592 162 households were not keeping up with the increase of people, and that family groups were therefore undergoing some change in their composition. Though some aspects of this change can be shown more satisfactorily below, the process is most easily seen in these figures, since they cover the complete span of the census administration.

162 128 As usual, the published results of these census materials did not do justice to the care that went into their collection. Household tables were not always shown in useful form, and the figures of Table 43 do not convey very much even about the size of families in Taiwan. Obviously in order to draw reliable conclusions about families of Taiwanese it must be possible to separate them as a group in the statistics, and to make sure that the statistics employed are a fair representation of family groups. For exactly this purpose, the Japanese treated one kind of household as standard, the so-called "ordinary" household, to cover the "normal" types of living arrangements. People in certain special categories were excluded; residents of these non-family households, or "quasi-households," will be omitted from most of the tables that follow.[4]

162 592 563 Information about quasi-households is sketchy and hard to find. The size of these establishments is unknown for separate nationality groups, perhaps through a deliberate effort to conceal the military forces (though they would nearly all have been classified as Japanese anyway, according to the status of the person in charge). The figures can be pieced together for the entire population, and appear in Tables 44 and 45. Quasi-households were a very small part of the total, but accounted for a much larger portion of non-Taiwanese. Only one person in a hundred of all nationality groups lived in such circumstances; 6.6 per cent of Japanese and 20 per cent of Mainland Chinese lived in quasi-households in 1930, but relatively few of the Taiwanese were found outside of ordinary households. Since Taiwanese are the main source of interest in the problem, the few living in quasi-households are unimportant, and for the remainder of this chapter the term "household" will be used to refer to "ordinary" households only.

On the average, ordinary households of Taiwanese contained be-

[4] They comprise people counted in hospitals, prisons, schools, military barracks, police and other special dormitories, and hotels. Although they must be removed before the household data can be said to represent patterns of familial life, the line drawn between the two types of household is not entirely rigorous. Many of these people, especially the ones in hotels and schools, were only temporarily absent from their homes, and their family affiliations may have continued undiminished.

113, 13

Formosa AD1

[For information on the geography of Formosa, see 81: Cressey, AF1 China, category 116, pp. 234-244]

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
People's Republic of China AF18

F P.R.C. 121 369

some insights into what is now taking place on the Chinese mainland. For many of the changes now taking place both in Taiwan and on the mainland are primarily due to the same cause—the encroachment of urbanization on a traditionally agrarian culture, whether enforced by the Japanese, the Nationalist Chinese, or the Chinese Communists.

FIELD METHODS AND PROBLEMS

T 121

In the selection of a research site, I looked for a Taiwanese village with several attributes. These were that the inhabitants be of mainland origin, preferably descendants of early emigrants from the province of Fukien; that the village have agriculture as its primary means of livelihood; that it have a moderate-sized population, preferably between five hundred and one thousand inhabitants, to facilitate the achievement of familiarity with most of the people and with all aspects of village cultural life; that it be fairly traditional both culturally and socially and as typical as possible of the general villages in that area; and that housing be available inside the village for me, my wife, and our interpreter. It was also important that the village not be too near a major city, and yet not be geographically or culturally isolated from the main flow of Taiwanese life; it had to be identifiable as a definite community.

And, of course, it was important that the villagers be receptive to having a foreign observer move into the village.

It is no easy task to search for a village in which to carry on research in an unfamiliar country. The island of Taiwan, which on the map appears to be minute, is actually 250 miles long from north to south and 90 miles wide; it has an area of 13.8 thousand square miles.

F 133 131

At the start of my search, I talked with the staff of the Joint Commission on Rural Reconstruction (JCRR), a Chinese and American agency which plays an important role in rural development in Taiwan. They briefed me on the cultural and geographic areas of rural Taiwan, and we decided that the *hsien* (counties) of Chang-hua, Taichung, and Yun Lin (all on the west-central coastal plain of Taiwan) offered the best possibilities for a suitable village. The next step was to travel by jeep within this area with JCRR field agents to visit many different kinds of villages and make a final choice. The interpreter, whom I hired at that time to live and work with my wife and me in the village, was a companion on these excursions. (For a discussion of translation methods and the use of the interpreter in the field see Appendix 1.)

T F 121 654 648 T 124

During the time we were investigating the many villages, we also visited local Farmers' Associations and *hsiang* (district) public offices. We held many long discussions with local officials to get additional

T 121

4:Grajdanzev--3 S-4 (no date) 1942 Formosans
116, 131, 631, 177.63 Japan
636.63

"The area of Taiwan, excluding the islands around it, is 35,760 sq. km. (13,807 sq. miles), a little more than the area of the Netherlands, or one-third as large as Virginia, and almost equal to the area of Kyushu or the Japanese part of Saghalien. The island stretches from north to south, the distance from its northern-most point to its southern promontory being 400 km. (249 miles) and, from east to west at the broadest part, 150 km. (93 miles). As an administrative area the Taiwan government-general includes adjacent islands and the Pescadores. The total number of these islands is 76, but their total area is only 64 sq. km. Recently the Spratley Islands off the coast of Indo-China were made a part of the territory of the government-general, but as yet they have not been adequately surveyed."

4:Grajdanzev--3 [2] S-4 (no date) 1942 Formosans
116, 131

"The geographical position of the island is as follows: its northerly point lies at 25° 38′ north latitude, while its southern-most point is 21°45′ N. In other words, Taiwan is crossed by the Tropic of Cancer."

4:Grajdanzev--4 S-4 (no date) 1942 Formosans
116, 131

"The most westerly point of Taiwan is 119°18´E. longitude and the eastermost point 122° 6´E. Thus Taiwan is situated almost 30° (or 2 hours' difference in time) to the west of Japan proper, and on the same meridian as Shanghai. Below are distances from the chief ports of the island to the important points of the Far East (in miles):

To	From Keelung*	Tamsui	Takao
Amoy, China	217	192	186
Foochow, China	144	115	175
Shanghai, China	436	418	637
Yokohama, Japan	1,245	1,276	1,495
Hongkong	466	440	360
Manila, Philippines	1,116	1,090	1,010
Saigon, Indo-China	1,534	1,508	1,530
Singapore, British Malaya	1,906	1,880	1,800

*'Kirun' in Japanese transcription."

4;Grajdanzev--9 S-4 (no date) 1942 Formosans
116, 101, 131

"The name Formosa was given to the island in 1590 when the first Portuguese sailors to sight the island are said to have called it Ihla formosa (Beautiful island). However the name Formosa is not used by either the Chinese inhabitants or their Japanese masters. In Chinese and in Japanese alike it has been called Taiwan (or Terraced Bay) since 1612.

The island is only 100-120 miles from the coast of the Chinese province of Fukien. Two hundred miles to the south, separated by the Bashi Straits, lies Luzon, northernmost of the major Philippine islands, and less than 700 miles to the north lies Nagasaki, southern port of Japan. The intervening Riu-Kiu Archipelago made it possible for even primitive fishing boats to make the journey from Japan to Taiwan. These three connections—to the south with the Malayan Archipelago, to the west with the mainland of China, and to the north with Japan—have shaped the history of Taiwan."

6: Kirchhoff--25 U-4 (no date) 1895 Formosans
116, 131

The oval area of Formosa, which is broader in the southern half and stretches out to form a narrow point of land at the extremity, measures 35,000 sq. km.* ... In length

* This figure is the result of a planimetric measurement which I based on the map of Formosa in the proportion of 1: 696,960, as given in the informative "Report by Alexander Hosie on the Island of Formosa, presented to both Houses of Parliament," London 1893. The figure that has usually been given up to this, estimating the area of the island at 34,550 sq. km. only, certainly falls short of the truth, while much more certainly exaggerated is the statement of Imbault-Huart that the island measures "approximately" 38,803 sq. km. ...

it measures about 380 km., and at the broadest point about 150 km.

9: Yamasaki--221[5] N-5 (1896-1897) 1900 Formosans
116, 101, 131

The Taiwan island group embraces the chief island of Taiwan (Formosa), the Hōko-tō or Pescadores Islands and a number of accessory islets. To these last belong: Kōtō-sho (Botel-Tobago), Shōkōtō-sho (Small Botel-Tobago), Kashō-tō (Samasana), Shō-ryūkyū-tō (Lambay Island), Kisan-tō (Steep Island), Agincourt and some even smaller rocky islands. The group lies opposite the Chinese province of Fōkien which, in keeping with a treaty with Japan, the Chinese Government may not cede to other nations. The Taiwan Islands form the southern end of the three great Japanese island groups which, in three curves, cut off three of the eastern Asiatic bordering seas from the Pacific Ocean. In the north west we have the Ryūkyū (Riukiu) Islands. These form a whole with Taiwan not only geographically but also geologically, and in the south are separated by the Bashi Straits from the Batan Islands, the northernmost group of the Philippines.

9: Yamasaki--221 [6] N-5 (1896-1897) 1900 Formosans
116, 131

The chief island of Taiwan, which forms a longish oval, lies between latitudes N. 21° 54′ and 25° 18′ and longitudes E. 120° 45′ and 122° from Greenwich. The length from north to south is 395 km., and the greatest width in the middle of the island is 123 km. In the southern part the island narrows towards the 22nd parallel, which it crosses at two points. The total area is almost 34,700 sq. km., while that of the other smaller islands amounts to about 200 square km.

9: Yamasaki--229 N-5 (1896-1897) 1900 Formosans
116, 131, 133, 361 Pescadores

Apart from the chief island of Taiwan, there are various subsidiary islands. Among these the Pescadores are the most important. This group consists of about eighty islets and cliffs, situated to the west of Taiwan in the Formosa Channel, between lat. N. 23° and 24°. The Portuguese called these islands Pescadores (Fisher Islands) because of the extensive fishing which the Chinese have practised there for many centuries. The largest island is called Hōkō-tō (Penghu Island). It consists of basalt and coral reefs. On its western side a bay is formed by the two islands next in importance, Hakusa-tō (Pehoe Island), or "white sand island" and Gyo-ō-tō (Fisher Island). This protected area offers an important haven in the stormy China Sea. The chief locality on the largest island, Makō or Mekon, is a small harbor on this bay with about 3,000 inhabitants, to which there must now be added a small Japanese garrison. The harbor is deep and quiet; always to be found there are some steamers and Chinese trading junks, together with a large number of fishing boats. The island is flat and poor in flora. The highest elevation is only 48 m. high. Other islands worthy of note in this group are Kitsubai or "Bird Island" to the north and the Pachan (Rover) group with Pachan and Tsiang, the Kitsu group (East group) with Tōkitsu and Saikitsu and Taisho or "Junk Island" in the south.

9: Yamasaki--229 [2] N-5 (1896-1897) 1900 Formosans
116, 131, 133

To the southwest of Taiwan lies the small coral island of Shō-ryū-kyū-tō or Lambay Island, while to the east of Taiwan the three volcanic islands of Kashō-tō or Samasana, Kōtō-sho or Botel-Tobago and Sho-kōtō-to or Small Botel-Tobago are also counted with Taiwan. Kisho or "steep island," is a small island on the coast of the Kapsiulan Plain. At the mouth of the port of Kilung there are two islands, Sai-rō-to and Kilung-tō; the latter, consisting of volcanic rock, rises steeply from the sea. Farther to the north lie Agincourt and two other islets.

10: Schumacher--226 [8] T-1 (ca. 1896) 1898 Formosans
116, 131, 133

Strategically Formosa is highly significant because from here insuperable obstacles may be imposed which would prevent passage through the Formosa canal.

On the other hand, Formosa does not have a single port which might serve as a base for maritime operations and which could shelter modern war-ships. Instead it has good natural fortifications which in the north protect the entrance to Kelung and Tamsui and, in the south, that to Takao. In addition the Dutch and the French have built forts in Amping. In case of war it might thus be possible to maintain traffic between Formosa and the Pescadores, or at least it will be facilitated to a great degree. And the Pescadores have a harbor which we should be inclined to judge one of the best and safest of the world.

20: Alvarez--248 (no date) 1927 Formosans
116, 131, 101

"Formosa is still almost unknown to [MC: the] scientist. It is one of the great islands which are situated to the southeast of the vast Chinese empire (now republic), and it is separated from the mainland by the Strait of Formosa, also called Channel of Formosa. In the centre of the latter, about 25 sea-miles away from Formosa and from the shores of China, are the poor islands named 'islas Pescadoras' (fisher islands), which, on account of their important strategical position have on several occasions been coveted by powerful foreign nations."

20: Alvarez--248[2] (no date) 1927 Formosans
116, 131

"The island is about 264 miles in length and 80 miles in breadth. The total area of Formosa thus amounts to 14,000 square miles, embracing the sinuosities and entangled foldings formed by the numerous and elevated mountains of the high ranges, some of which, as for instance Mount Sylvia and Mount Morrison, rise to twelve and thirteen thousand feet above the level of the sea."

35: Collingwood--135 D-2 (1866) 1867 Formosans
116, 131, 133, 361

"On the 13th June, 1866, I visited Sano Bay, on the east coast of Formosa, in H. M. S. Serpent, Commander Bullock, proceeding thither from the harbour of Kelung. The object of this visit was chiefly the verification of some supposed dangers in the harbour, which is spacious and not difficult of approach, and, although little frequented, is of importance as the only available harbour upon the whole east coast of the island. Our visit acquired additional interest from the fact that there was believed to be a village in the bay, occupied by the aborigines of the island, whom we were anxious to meet with. We found four villages in the bay: the first and smallest upon the northern side was a mere hamlet of Chinese fishermen, consisting of half-a-dozen cottages upon the hill-side, their boats drawn up on the beach in front. Passing by this, we proceeded up the harbour, and anchored near a sandy beach, beyond which we could see some roofs of houses. All the rest of the bay had a desolate and lifeless appearance, the lofty hills sweeping down to the water's edge, generally densely wooded, and presenting an aspect of wildness, which accorded well with our belief that they were inhabited by the still savage aborigines of Formosa."

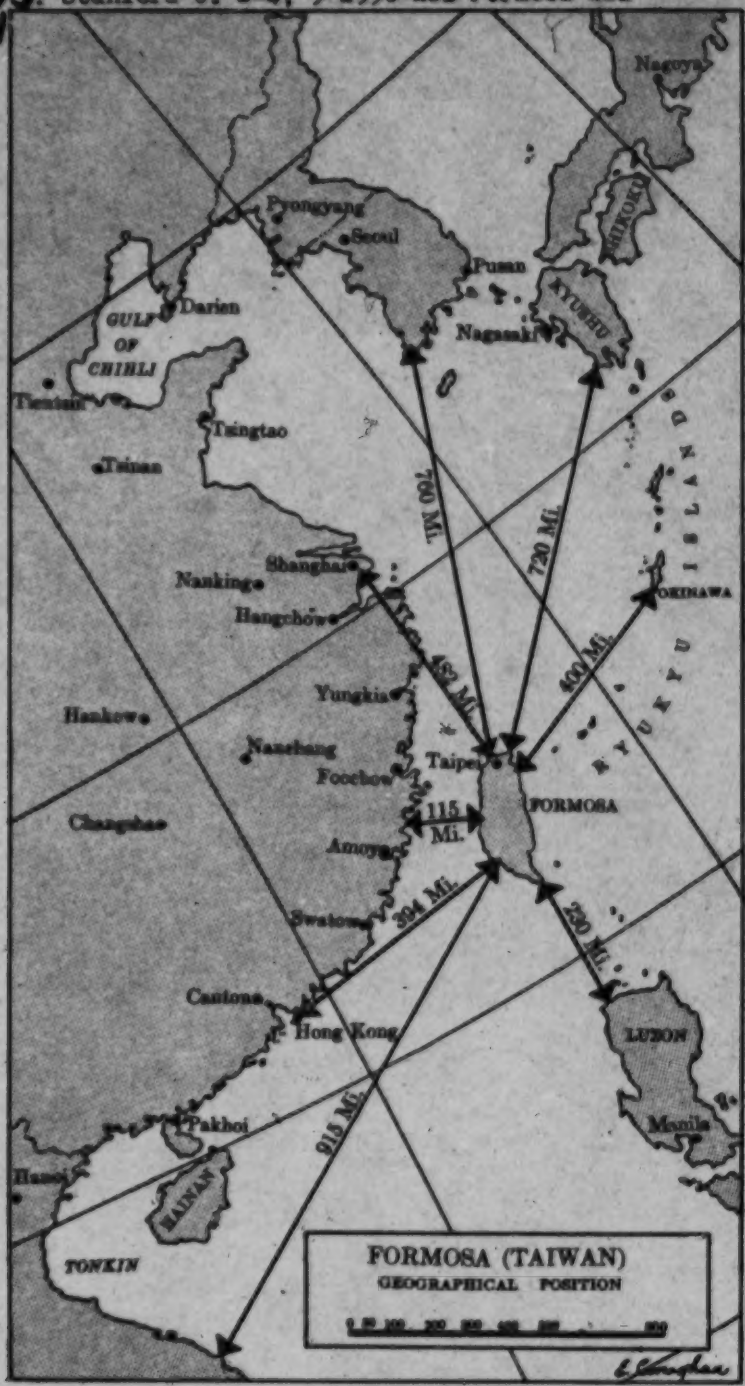
37: Steere--315-316 S-3 (1873-74?) 1875 Formosans
116, 131, 133

"The Island of Formosa lies about eighty miles from the main land of China, and is two hundred and fifty miles in length and eighty or ninety in breadth. Physically considered it is made up of a lofty range, or system of ranges, of mountains on the east-side, with a rocky and precipitous coast on the Pacific, and rich level plains on the west, extending down to shallow seas in the Formosa channel, with immense sand flats, which are uncovered at low tide, and are apparently rapidly rising and adding to the cultivable lands. Several of the mountains are over twelve thousand feet in height, and the whole range from east of Takao for a hundred miles to the north must stand at near eleven thousand feet. In January, 1874, this whole extent was covered with snow, and it is probably so covered every winter. The highest mountains when visited were very steep, and were composed of slate rock with veins of quartz from an inch to several feet in thickness. The bases of the mountains and the foot hills are generally composed of coarse, friable sandstone, containing tertiary fossils. There are numerous plateaus among the foot hills and below them, evidently the remains of ancient plains that are now left far above the great plain below, the rivers having [316] cut down through to a lower level. Many of these plateaus are tilted out of level apparently by the rising of the mountain chain behind them, and the foot hills are evidently thrown up in this way, especially those east of Taiwanfu that were like great furrows in the general direction of the mountain range, the strata of sandstone of which they are composed being tilted at an angle of 20°, but growing greater toward the mountains."

37: Steere--318 S-3 (1873-74?) 1875 Formosans
116, 131, 311, 161, 563, 157

"The Pescadores are a group of low flat islands between Formosa and the mainland. They seem to be composed almost entirely of basaltic rock, which is partly columnar in many of the cliffs. There is iron ore found upon Fisher's island. The rock of the island is barely covered with soil, but nearly their whole surface is cultivated during the south-west monsoon, in sweet potatoes, pea-nuts, and millet. The inhabitants are estimated at eighty thousand, and there are said to be thirty towns and villages. The town of Makang, which is the largest, probably has twelve or fifteen thousand inhabitants. Its harbor is good, but the entrance is intricate. The Chinese live generally in houses made of coral rock that is frequently cut into blocks. They are descendants of the Fuh-kienese, and are all fishermen. They have considerable trade with the mainland and with Formosa in dried fish and in hogs, which are fattened upon pea-nuts, and in pea-nut oil. The feet of all the women are small, though their hard and laborious life must make this custom troublesome enough. I saw one small-footed woman ploughing and driving the buffalo, though the wind was blowing a gale at the time, so that we could hardly stand before it. The islanders are a rough and uncivilized race, accustomed to hardships, and the charges of piracy and wrecking made against them, are, without doubt, true. They are the boldest of fisherman, and during the warm monsoon, are almost amphibious. I was there in January, when the weather was cold and the wind and sea high, but when they found that I wished coral and shells, they procured me large quantities living. The islands make a good place for shelter for Chinese junks

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1
•131



A B

C B

Reduce AB to CB [Facing p. 1]

Annex "A," Subparagraph 1a',
Sociological Background

GEOGRAPHICAL SETTING

101 The island of Formosa is called Taiwan by the Chinese and the Japanese. The name may have been derived from an aboriginal tribe called Tai-yuan who inhabited the western coast of the island and with whom the Chinese first came into contact in the early sixteenth century. Taiwan means "Terraced Bay". Later, the Portuguese appeared as regular traders in the China Sea. Plying between the coast of China and Japan, they often sighted the island. Apparently impressed by its scenic grandeur, they gave it the name "Ihla Formosa", the beautiful isle.

I. LOCATION AND AREA

131 Taiwan, as a province, comprises the islands of Formosa and the Pescadores. It is situated in the western Pacific astride the Tropic of Cancer, between latitudes 21° 45' 25" N and 25° 37' 53" N, and longitudes 122° 10' 25" E and 119° 18' 13" E. To the west, the Formosa Strait separates the islands from the China Mainland by less than one hundred miles of water at the closest point; to the south, the Philippines lie beyond the 230 miles of Bashi (Luzon) Strait; to the east is the Pacific Ocean. The islands of Formosa are midway on the water route between Shanghai and Hong Kong, 400 miles southwest of Okinawa, and 720 miles south of Japan.

1: Stanford U, S-4, 5 1956 AD1 Formosa AD1

131

[Facing p.15]

The Heritage of Japanese Rule. The City of Taipeh.

TAIWAN (FORMOSA)

Taiwan is a small island of less than 14,000 square miles. Its cultivable land is a narrow plain bordered by mountain ranges extending 250 miles from north to south. Scarcely more than 100 miles to the west are South China's commercial cities and rice lands. Two hundred miles to the south is the Philippine island of Luzon. The Ryukyu Islands and Kyushu lie to the north. This strategic location, combined with the fertile western plain, the tropical climate and the impregnable mountain areas, has made the people of Taiwan pawns of the empires that have fought for the suzerainty of Asia's Pacific littoral.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

CHAPTER I

The Growth of Population

101 In the last century and again in modern times, Taiwan has repeatedly become the object of rivalries among some of the most powerful nations of the world. Though its history has been a succession of disruptive incidents resulting from such contacts, by its size alone the island scarcely seems to merit the covetous attention that outsiders have given to it. It is not large—only 250 miles from north to [131] south, and about 90 miles across at the widest point. The area that it covers is only 14,000 square miles, or slightly less than that of the Netherlands. There is little in the way of precious minerals that would arouse the desire of industrial countries. It offers no great area into which other peoples can expand. It has only its significant location in the path of transportation routes off the coast of China, and a territory potentially rich in agricultural output. While the former of these has had the greater attraction to foreign nations, it is the latter that actually yielded—perhaps exceeded—the full measure of wealth that was expected.

132 The topography and climate of Taiwan in the past have combined to make the island inhospitable to settlement. Being at the fringe of the tropics, the climate is hot and rainy, with marked changes of season and variations from one section to another. The greater part of its surface is not readily put to human use. Over half of this area consists of rugged mountains, rising steeply from a plain along the western coast and extending to the Pacific Ocean in the east. Heavy rainfall therefore runs off very quickly, creating torrential floods and occasional droughts in between. Large parts of the island are frequently swept by typhoons and shaken by earthquakes.

175 Within the span of recorded history, the difficulties presented by the physical environment never succeeded in discouraging human habitation. There were vague reports of residents there before A.D. 1000. When Taiwan first came officially to the attention of China, during the Ming dynasty, some tribes of primitives were known to be living near the western coast. Since the 16th century people swarmed to Taiwan from the relatively crowded parts of South China, and prospered there as agriculturists. The Japanese, who ruled the island from 1895 to 1945 and exploited its possibilities

4:Grajdanzev--3-4 S-4 (no date) 1942 Formosans
116, 132, 175

"Its climate and vegetation are tropical, a fact which was of special importance to Japan, which is situated in the temperate zone and which, before the World War, had no possessions in the tropics, except Taiwan. After the War she received a mandate over the German Pacific islands lying north of the equator, but their total area is only 2,149 sq. km. (830 sq. miles). Thus before the recent occupation of Kwangtung and Hainan Island, Taiwan was the only important Japanese possession in the tropics. As we see later, [4] this had an important bearing on Japanese economic policy there."

4:Grajdanzev--5-6 S-4 (no date) 1942 Formosans
116, 132, 137

"Situated as it is in the tropics, Taiwan has high temperatures with small variations from year to year, and relatively small fluctuations from month to month.

Average Yearly Temperatures In Taiwan At Sea Level

	Centigrade			Fahrenheit		
	1931	1932	1936	1931	1932	1936
Taihoku (north)	21.6	21.6	21.7	70.9	71.9	71.2
Taichu (middle)	22.1	22.1	22.1	71.8	71.8	71.8
Koshun (south)	24.3	24.3	24.4	75.7	75.7	75.9

Source; Japan-Manchoukuo Year Book and Taiwan Jijo.

The average annual temperature in Manila is 26.6°C. and in Hongkong 22.2°C. January temperature in Koshun is a little above that of Miami, Florida, and the July temperature is the same. Taiwan at low levels thus resembles Florida and is considerably warmer than California. Tropical fruits can [6] ripen in Taiwan and it is possible to raise two crops of rice from the same field and in some cases to grow a third crop also, usually of some vegetable. Land may be used much more intensively than in Japan. Frost is very rare in Taiwan (2) while snow is unknown, even on the mountains.

2. The lowest temperature observed was -0.2 C (31.6 F) at Taihoku and -0.1 C (31.8 F) at Taichu."

"Not less important for the vegetation is rainfall, and in this respect Taiwan is numbered among the places with heavy precipitation, as may be seen from the following table:

Yearly Precipitation

Taiwan (1936)	In mm.	In inches
Taihoku	1,913	75.4
Keelung	3,175	135.0
Taichu	1,503	59.2
Taito	1,132	44.5
Koshun	1,708	67.3
Averages		
Singapore	2,340	92
Calcutta	1,930	76
London	636	25
Key West (Florida)	968	38.1
Mobile (Alabama)	1,565	61.6
New York City	1,094	43.0
San Francisco	559	22.0

It is apparent that in spite of the smallness of the island there are very sharp differences in rainfall between its various regions. The difference appears even more striking when we examine the seasonal distribution of precipitation:

Precipitation In Taiwan In MM. (1936)

	Jan.-April	May-August	Sept.-Dec.	(Oct.-Dec.)	Total
Taihoku (N. W.)	789	881	184	(108)	1,913
Keelung (N.)	1,503	571	1,102	(881)	3,175
Taichu (W.)	426	852	226	(.48)	1,503
Karenko (E.)	292	568	246	(161)	1,105
Tainan (S. W.)	159	1,268	41	(10)	1,468
Taito (S. E.)	232	706	192	(54)	1,132
Koshun (S.)	227	1,309	172	(47)	1,708

[7] It may be seen from this table that there is a marked difference between seasons. In all districts except Keelung, the May-August period brings most of the rain, while the September-December period, and to a less marked degree the January-April period, are dry. This fact is of extreme importance for Taiwan's agriculture."

"It means that Taiwan, and especially the agricultural region around Tainan where the plain is broadest, suffers periodically from a too heavy rainfall and from dry periods.(3)

> 3. Not only seasonal distribution of precipitation is important, but also its distribution by days and even hours, and this distribution is extremely unequal in Taiwan. In Koshun maximum daily precipitation was 240 mm. and in Taichu 310 mm. (12 inches), or in one day (probably in one or two hours) more than in the four months of September-December. This leads, of course, to flood conditions and extensive damage.

For cultivation to be successful in these conditions necessitates, on the one hand, special arrangements for the prevention of floods and for drainage and, on the other, for irrigation. Only with the help of irrigation can the rich soils of Taiwan give maximum returns. One cannot say that the Chinese neglected irrigation before the coming of Japanese administration. However, they were ignorant of efficient Western methods of controlling the rivers, and in many cases only these methods, applied by Japanese specialists, could give good results."

"As to the winds, in winter northeast monsoons blow from the continent and in summer southern monsoons from the sea bring rains and storms. Violent storms—typhoons—are frequent and extremely destructive. At Koshun storms were observed with a velocity of 86 miles per hour. Typhoons come either from the direction of the Philippine Islands, passing [8] through the eastern part to the northeast in the direction of Japan, or from the south, to the north through the island, and then towards China."

6: Kirchhoff--27 [3] U-4 (no date) 1895 Formosans
116, 132

Formosa is in the torrid zone, for even the north (Ki-lung) has an average temperature of 21.4° C., and an average variation of temperature of 14° (January 14.2°, July 28.2°). Lying in the Southeast Asiatic monsoon belt, the island occupies a very curious place with regard to the distribution of rainfall throughout the year. For the southwest monsoon of the summer alternates with the northeast monsoon of the winter, and the northeast monsoon, sweeping over the sea warmed by the Kuro-schio (which makes possible the continued existence of reef-building coral in the bays of Su-aô and Ki-lung) also brings rain, and indeed the principal rain, at least for the northeast coast, so that Ki-lung, for example, and perhaps also a large part of the island—the northern part, we may assume—has two rainy periods. One of these is in the winter and lasts until the spring, the other in late summer, lasting until late in the fall. This remarkable fact does not emerge when, like Wojeikof, only January is compared with July, the month with the lowest rainfall.

6: Kirchhoff--27 [4] U-4 (no date) 1895 Formosans
116, 132

Ki-ling has an annual rainfall of 3,050 mm., the heaviest rainfall occurring between January and May, and the next heaviest between August and October:

January	572 mm	April	292 mm	July	95 mm	October	206mm
February	301 "	May	302 "	August	219 "	November	130 "
March	272 "	June	113 "	September	384 "	December	164 "

But it would be a mistake if the greater rainy season were to be attributed to the northeast monsoon alone and the smaller to the southwest monsoon alone. The southwest monsoon predominates as early as May, and is much stronger in June and July; nevertheless these two summer months have only 7 rainy days each. August, with almost double the rainfall of July (with 95 mm.) on 16 days, is still under the sway of the southwest monsoon, while September, as all over the island, is the month during which the monsoons change.

The period from November to the beginning of May is given by Imbault-Huart as the rainy period for the town of Tam-sui. There as in Ki-lung the summer is oppressively hot; during the day the temperature is usually 30°; in the winter it sinks [28] rarely below 10°, and even in the neighboring mountains little snow falls.

On p. 7 of his report Hosie gives the following table, for four years at Tam-sui, of the rainfall and the extremes of temperature:

	1887	1888	1889	1890	1891	Average	Extremes in temp. 1887-91	
	Rain in mm.							
January	169	80	194	273	14	146	25.0°	5.0°
February	139	357	133	50	169	169	26.1	4.4
March	200	73	199	368	321	232	28.3	6.1
April	153	147	295	64	82	148	31.1	8.9
May	119	103	179	180	350	186	33.3	15.0
June	10	444	208	107	284	210	35.0	16.7
July	326	13	32	188	135	139	37.8	21.1
August	45	165	248	96	189	149	37.8	19.4
September	207	217	21	125	439	202	35.0	18.9
October	228	71	112	307	33	150	35.0	12.2

6: Kirchhoff--27-28 U-4 (no date) 1895 Formosans-2
116, 132

	1887	1888	1889	1890	1891	Average	Extremes in temp. 1887-91	
		Rain in mm						
November	56	70	237	52	118	107	30.6°	12.2°
December	44	172	64	104	60	89	27.2	5.6
Year	1696	1912	1922	1914	2194	1927	37.8	4.4

If we now compare the Ki-lung rainfall curve with that of Tam-sui, it appears that the latter town has a much more equable distribution of rainfall throughout the year, and the displacement of the chief maximum from January to March; December, in Tam-sui, appears as the driest month, the chief rainy season falling in spring rather than in winter. But here too the curve of rainfall sinks during the summer months as in Ki-lung, reaching the lowest summer level in July, just as it does there (though not quite so low a level as in December), and also reaching in September the highest level of the new rise that sets in in late summer.

While Tam-sui receives the heavy rains in the cool months, the closest mountains being hidden behind thick clouds, even the sun hardly appearing, in the southwest the situation is exactly reversed. Tai-nan has an agreeable, healthy climate in winter, especially in December and January, except that the northeast monsoon spreads a great deal of dust and sand from the great plain over the town (an indication of the dryness of the winter in this part of the island). But the summer brings tropical heat and tropical falls of rain, the latter in July and August especially;* for days on end the thermometer

*Heavy fall rains are also mentioned as occurring in the region of Kia-y, the mountain streams swelling so greatly that they often in places burrow out a new bed for themselves over stretches of the soft soil of the level ground at the foot of the mountains. (Imbault-Huart).

does not sink below 32 1/2°, the heat by day rises to 38°, and the sultry nights are hardly bearable.

"Temperatures permit the growing of many kinds of crops in all seasons, but it is mainly the uneven distribution and amount of the rains that set the agricultural season. In the southern part of the island rainfall is concentrated in the summer; the winter is extremely dry. In places without irrigation, only one crop of paddy rice can grow, and the time for seeding and planting is fixed. In the northern part, though there is no dry season, the low temperatures and frequent rain in winter are not suitable for paddy rice, and there is a longer time for intermediate crops and fallow. The typhoon season and the length of day are also factors controlling the farming rhythm."

8: Chen--446
116, 132, 133

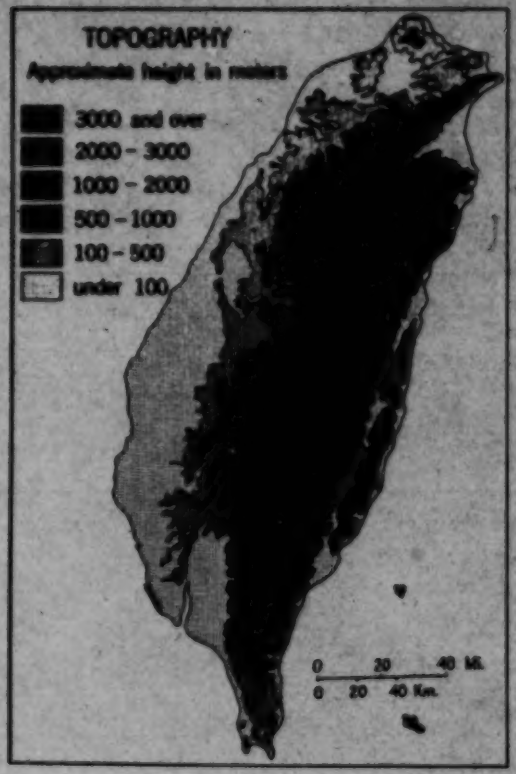


Fig. 2

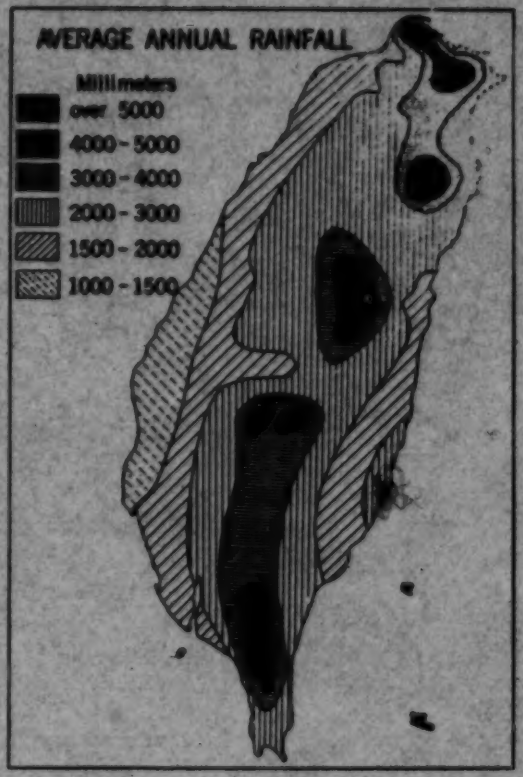


Fig. 3

8: Chen--454[2] N-3 (no date) 1951 Formosans
116, 132, 241, 312

"IRRIGATION

The general increase in per hectare production in Formosa in recent years is largely due to the progress of irrigation and additional fertilization, as well as to improvement of cultivation and seeding. Because of the great variation in rainfall and the location of the main agricultural region on the western coastal plan, where the winter is extremely dry and the dry season is long, irrigation is necessary. On the other hand, in summer, especially when typhoons pass over the island, the precipitous topography results in floods. The northeast corner, facing the northeast winter monsoon, has plenty of rain the year round; in fact, in many places the winter rainfall is greater than that of summer, and floods are not infrequent. Consequently, drainage and flood control are as important as irrigation."

9: Yamasaki--229 [3] N-5 (1896-1897) 1900 Formosans
116, 132, 654

Like the scientific investigation of Taiwan in general, the systematic examination of the climate also does not begin until the establishment of Japanese rule. In 1897 five meteorological stations were set up, in Taihoku, Taichū, Tainan, Kōshun and Hōko-tō. The organization of simultaneous and corresponding observations in these and other Japanese stations, as also in China and Korea, undoubtedly effected a new advance in East Asiatic climatology. Very carefully observed is the cyclone, which frequently every summer or fall begins in the neighborhood of Taiwan and gradually proceeds north to Japan, and in the regions it touches, precautionary measures are adopted, depending on the weather prospects.

9: Yamasaki--229 [4] N-5 (1896-1897) 1900 Formosans
116, 132

In the southern part of Taiwan there is naturally found, in view of its latitude, a tropical and sub-tropical climate. Apart from the geographic position, the climate of the island is determined chiefly by the influences of the warm Kurosiwo and the high mountain range, which runs along the whole island from north to south. In summer the temperature rises to 37° in Tainan, while in winter there is frost in the mountainous region and sometimes snow in North Taiwan. Heavy precipitations in North Taiwan and strong wind in Hōko-tō are peculiarities worthy of note. The material found in the following descriptions is taken chiefly from our recent observations.

9: Yamasaki--229-230 N-5 (1896-1897) 1900 Formosans-1-3
116, 132

Temperature. The following summary gives the average figures found in the five observation posts in 1897 and 1898.

	Average Temperature (Centigrade)				
	Taihoku	Taichu	Tainan	Kōshun	Hōkotō
January	16.2	16.5	18.2	21.3	16.3
February	14.7	15.6	17.7	21.1	15.8
March	17.9	18.9	20.5	23.5	18.2
April	19.3	21.1	23.0	24.9	21.3
May	25.1	26.9	27.6	27.5	25.9
June	26.4	26.8	27.5	27.0	27.1
July	27.8	27.1	27.8	27.3	27.7
August	27.3	26.7	27.4	26.9	27.2
September	26.5	26.7	27.9	27.0	27.4
October	23.4	24.3	25.4	25.8	24.7
November	20.5	20.9	21.8	23.5	21.6
December	16.0	16.5	17.9	21.0	17.5
Average	21.7	22.3	23.6	24.7	22.6

9: Yamasaki--229-230 N-5 (1896-1897) 1900 Formosans-2
116, 132

Average Maximum Temperature.

January	20.0	21.3	25.2	24.6	19.6
February	17.6	19.9	24.8	24.5	18.4
March	21.7	23.6	27.0	27.1	20.8
April	22.9	25.5	28.9	28.4	23.8
May	29.6	30.7	32.4	31.4	28.6
June	30.6	30.7	31.5	29.5	29.7
July	32.7	31.4	32.3	30.3	30.1
August	31.5	30.7	31.1	29.5	29.6
September	31.0	31.3	32.9	30.6	30.7
October	26.8	29.0	30.7	28.4	27.3
November	23.3	25.8	27.1	25.8	23.7
December	19.5	22.2	24.6	23.5	19.7
Average	25.6	26.8	29.0	27.8	25.2

[230] Average Minimum Temperature.

January	13.6	13.1	13.9	18.3	14.9
February	12.2	12.7	13.5	18.2	13.8
March	15.3	15.9	16.2	20.7	16.0
April	16.6	17.8	18.8	22.0	19.0
May	21.6	22.7	23.6	24.2	23.6
June	23.2	23.8	24.6	24.7	25.0
July	24.1	23.5	24.3	24.5	25.4
August	24.3	23.7	24.4	24.7	24.9
September	23.3	23.4	24.2	24.2	25.5
October	21.0	21.1	21.9	23.6	23.1
November	18.7	17.6	18.4	21.4	20.1
December	13.4	12.4	13.6	18.6	16.0
Average	18.9	19.0	19.8	22.1	20.6

The coldest month is February; only Kōshun can show an average temperature of 21.0° in December as compared with 21.1° in February. The average minimum is always found in February in all stations, and the absolute minimum temperature is 3.3° in Taihoku, 3.2° in Taichū, 3.5° in Tainan, 11.8° in Kōshun and 9.9° in Hōko-tō. The warmest month is July all over the island; but the maximum temperature is not limited to this month. In Taihoku and Taichū the average maximum temperature falls in July and at other stations in September. The maximum temperature varies between May and September. It rises to 34.6° in Taichū in May, 36.9° and 36.5° in Taihoku and Tainan, 33.4° in Kōshun in July, 33.5° in Hōkotō in September. The variation of temperature is greater in the north than in the south. In Taihoku the difference between maximum and minimum amounts to 33.2°, while in Kōshun it amounts only to 21.6°, where the lowest temperature in winter does not fall below 10°. The amplitude is also greater in winter than in summer. Taihoku can show the minimum temperature of only 3.5° in February, while the maximum in the same month is 31.3°.

9: Yamasaki--230 [2] N-5 (1896-1897) 1900 Formosans
116, 132

Barometric pressure and winds. The barometer reading is high in December and January and low in June, July and August. In winter, the pressure is higher in the north than in the south, while in the summer it is higher in the east than in the west. Observations reduced to sea level and 0° c., gave the following results.

	Average Barometric Pressure in:				
	Taihoku	Taichu	Tainan	Kōshun	Hōkotō
January	766.3	763.4	765.6	763.1	764.0
February	63.6	61.7	61.6	61.3	62.2
March	62.2	60.9	60.8	60.6	61.2
April	61.5	60.0	59.7	59.8	60.3
May	57.3	56.9	56.9	57.3	57.1
June	53.6	53.5	53.5	54.2	53.6
July	56.0	55.9	55.9	56.5	55.9
August	53.4	53.5	53.8	54.6	53.6
September	57.4	56.5	56.4	57.0	56.7
October	60.1	58.0	58.8	58.2	58.5
November	62.3	59.7	59.7	59.5	60.3
December	66.0	63.4	63.4	62.9	64.0
Average	759.9	758.6	758.6	758.8	758.9

Since the island lies in the monsoon region, the wind is very regular. From September to April north and east winds predominate. The direction of the wind varies in every station as a result of the topographical conditions. Thus we have east wind in Taihoku, north wind in Taichū and Tainan and northeast wind in Hōkotō and Kōshun. Between May and September the direction of the wind is rather irregular in every station, but the south wind predominates. In Hōko-tō, an isolated level island in the open sea, the direction of the wind is very regular and always changes from NNE to SW during a year. The average velocity of the wind varies between 2.9 m. per second in Taichū and 11.1 m. in Hōko-tō. The northeast monsoon is much stronger than the southwest monsoon, and in Hōko-tō we have always a strong wind, 10 m. per second during the period of the northeast monsoon. The strongest wind so far observed is that of September 30, 1898, in Hōko-tō, which had a velocity of 56.4 m. per second. The frightful cyclone or typhoon which springs up two or three times every year in the China Sea often begins to the east of Taiwan or the Philippines region and travels north along the east coast of Taiwan, with its centers about 2 degrees distant from the coast.

9: Yamasaki--230 [4] N-5 (1896-1897) 1900 Formosans
116, 132

Humidity and Precipitation. The latitude of Taiwan in itself is sufficient to raise expectations of great humidity. The monthly average is over 80%, and varies between 93% and 73%. On the driest days the humidity is only 31%. In winter it is greater in the north and less in the south, while in summer the opposite holds.

9: Yamasaki--230-231 N-5 (1896-1897) 1900 Formosans
116, 132

The time and the amount of precipitation on Taiwan are very remarkable. The north east monsoons of the winter, which blow over the warm current, the Kurosiwo, bringin with them much moisture, strike against the high mountains of northern Taiwan and fall down again on their northeast side. Consequently we have a rainy season in northern Taiwan during this monsoon. It is said that the precipitation in this region is the heavi in the northeast monsoon region, and especially in Kilung, a port at the foot of the moun tains on the island's north coast, it attained a height of 5238.4 mm. in 1898. An intere ing view is obtained when one sees from a distance, on the western side of the Central chain, the thick layers of cloud which rise from the east to the mountain crest but then move on only a little farther, since the warmer...air on the western side dissipates them again. The phenomenon resembles that of the "tablecloth " of the Table Mountain, in South Africa. In Taihoku, [231] which is on the other side of the range and is only 40 km. distant from Kilung, the precipitation is less than half as heavy as in the latter locality.

When the southwest monsoon has begun, the southwestern part of the island has heavier precipitation than the northeast. Tropical storms often occur, and the rainfall during them often attains considerable proportions. Thus Kōshun, during June, 1897, had 1,535.7 mm. But this was probably a rare exception. The whole western side of the island, as the following summary shows, received by far the heaviest precipitation during the summer, the maximum being in August.

9: Yamasaki--231 N-5 (1896-1897) 1900 Formosans
116, 132

Average Rainfall

January	71.7	35.8	9.5	10.9	11.3
February	207.0	159.9	132.8	83.0	78.6
March	71.1	43.2	36.6	48.0	21.4
April	156.3	82.9	43.9	16.5	54.5
May	184.2	96.8	53.6	46.9	46.8
June	229.0	475.0	535.5	1345.7	155.3
July	178.5	296.8	206.6	239.9	203.9
August	690.0	866.5	676.9	482.1	549.5
September	273.3	96.5	54.4	129.6	17.0
October	179.0	18.7	56.6	241.6	55.1
November	114.9	20.8	34.6	154.0	43.5
December	80.3	8.6	3.8	13.8	3.0
Whole year	2435.6	2201.7	1835.0	2911.8	1240.2

9: Yamasaki--231 [2] N-5 (1896-1897) 1900 Formosans
116, 132

According to the observations conducted over a period of five years by A. Hosie, the English consul in Tamsui, the average rainfall in this port amounted to 1,927 mm.*

* Alex. Hosie, Report on the Island of Formosa, presented to both Houses of Parliament, 1893, p.6.

10: Schumacher--223-224 T-1 (ca. 1896) 1898 Formosans
116, 132

The climate of Formosa has not always been so dangerous as it is nowadays but conditions have become much worse. If a change has been brought about it should also be possible to find means to render it more bearable again. The sudden drop in temperature during the early hours of the morning is, however, [224] most dangerous and this problem can be solved only by a suitable method of house construction and manner of living.

20: Alvarez--248 [4] (no date) 1927 Formosans
116, 132

"Its climate, changeable and rather hot, is however, healthy owing to the South-Western Monsoon that blows continually from May to September, and the North-Eastern Monsoon, from November to April. To this extremely favourable circumstance may be added the benign influence of the sea-current called Kuroshimo, which rushes along the shores of the island. The climate is moist owing to the exuberant vegetation of the vast virgin forests and the pathless wildernesses. The island is not unhealthy; nevertheless, there occur very frequently cases of malarial fever, to which one is exposed especially during the summer."

31: Hofmann--604-605 N-3 (1909) 1912 Formosans
116, 132, 164

The climate is mild and saturated with humidity; it has a soothing, lulling effect. The greatest number of rainfalls occurs in the north of Formosa (3,440 millimeters per year in Kilung), where they occur regularly throughout the year. In the south of the island there is a dry season during the winter months and a rainy season which begins about the end of May. It is, unfortunately, not possible to stamp out malaria altogether. This disease often occurs here in its most severe [605] form and is fatal after a short time. The agricultural districts, however, are dependent on the humidity which causes the miasma; for any visitor to the island, therefore, quinine is an absolute necessity.

31: Hofmann--612 N-3 (1909) 1912 Formosans
116, 132, 361

My stay in the region of the Tsou aborigines was longer and more rewarding than my visit to Taikokan. We started from the small village of Kagi approximately in the center of the island. We arrived there after a journey during hot weather, having traveled by train, on May 12th, 1909. We immediately become aware of the change in climate. While in the north there had been a great deal of rain and humidity, here there was drought; the humid northern winds which predominate in the spring do not penetrate to the center of Formosa. In Kilung and Tahoku the abundant rainfalls are evenly distributed throughout the entire year while in this region the rainy season begins at the end of May and lasts until October. The effect of these climatic differences may be seen in the vegetation; here there are far more xerophytic plants. In the north at this time of the year the rice fields are already green, while here the soil has not yet been plowed since the plants could not grow. There was not a cloud in the sky and we were exposed to the full heat of the sun. Kagi, a village which otherwise does not offer anything of interest, was shrouded in a cloud of yellow dust. In 1907 a violent earthquake occurred here; of the buildings of former times little has remained except the gates of the city. On Formosa all the cities in the Chinese region are enclosed by walls and ramparts (cf. Fig. 1); a European who visits these cities is reminded of the medieval cities of Europe.

31: Hofmann--615 [2] N-3 (1909) 1912 Formosans
116, 132

We spent the night in a small hut near the railway which was being built in Karapen, at an altitude of 1,080 meters, beyond the first mountain ridge. We arrived here in the afternoon; shortly afterwards it began to rain. The valley and the hill which we had passed during the day had been completely dry. From here on, however, as long as we remained above an altitude of 1,000 meters, there were copious rainfalls every day durin the hot part of the day; the rain never lasted very long, and the morning and evening were always clear.

31: Hofmann--627-628 N-3 (1909) 1912 Formosans
116, 132, 311, 249

The sugar industry on Formosa has increased considerably; this industry will become [628] still more profitable when the projected plan for a system of irrigation with artificial dams has become a reality. In this way the tributary of the southern Tamsui may be utilized and more soil than hitherto will be irrigated. Southern Formosa is affected by the drought every winter.

The bay and lagoon of Takao offer a beautiful sight. The lagoon is connected with the ocean by a narrow opening, hemmed in by coral reefs; large boats therefore cannot enter the bay. Work on harbor installations is still in progress; this is an ambitious and costly project, but it is a necessary step in establishing communication with the south. It will also be necessary to make the harbor safe, especially since the roadstead of Takao offers no protection even to large steamers during the frequent and violent typhoons. The most dangerous months for typhoons are June, July, and August. The direction of the wind, which may develop a velocity of 100 miles per hour, is from east to west. For those harbor installations which are made of wood, the Teredo navalis is extremely destructive. Pine wood may be destroyed by these worms within three months, while Chamaecyparis wood may last for one year. Timber which is used for buildings on land (for railways, telegraph poles, etc.) is destroyed by white termites, but if the wood is impregnated with tar, this forms a sufficint, though costly, protection. The bay within the lagoon is about 22 kilometers long and 5 kilometers wide at its widest point. Around the bay there are artificial sea gardens. Among the plants growing wild there are first of all pandanus groves, which probably form one of the most unusual features in the vegetation of Formosa; while in other regions of the island pandanus grows only in the form of shrubs here it is tree-like and forms a plant typical of coastal regions.

Another unusual form of vegetation of a purely xerophilous character is a species of

tropical Euphorbia Tirucalli (spurge); here it has hardly any leaves, since their place is taken by green branches. Its habitat is among the rocks on the beach, and it may grow as high as ten meters. [629] Finally, there are several species of mangrove along the level coast of the lagoon of Takao.

37: Steere--316 [2] S-3 (1873-74?) 1875 Formosans
116, 132, 311, 241

"The southern part of the island is in the tropics. There is much rain in the north part of the island, especially at Kelung. At Takao and Taiwanfu, it is dry from October to April, but it rains much sooner in the mountains to the east, the rains already beginning there in February. Rice is the principal crop cultivated upon the low level lands to the west, and there is much exported to China. The best lands produce three crops annually. Lands that are harder to irrigate are planted to sugar cane, and large quantities of sugar are exported in foreign vessels to Japan and Australia. Upon the first of March ten or twelve vessels were lying at the ports of Takao and Taiwanfu, all loading with sugar."

137 the relatively small bamboo forest along the western foothills and steppe, and shrubs over the low slopes of the mountains.

VI. CLIMATE

132 Latitude, ocean currents, topographic features, and of most importance, the monsoons determine the climate of Formosa.

Generally speaking, the main island is semi-tropical. It separates, at its southern end, the Kuro-shio (ocean current) which flows northward, and lies within the great Asian monsoon system which provides strong northeast winds in winter and less pronounced southwest winds in summer. The result is that the island is windy and has generally high temperature and precipitation. However, dry winters are experienced in the southern plains.

The warm and humid summer lasts from May until September, the mild winter from December until February. The highest temperature rarely exceeds 100°F in the hottest summer months, July and August; the lowest has never been below 35° F in the coldest month of January.

Average annual rainfall ranges from 50 inches on the low eastern coast to 250 inches

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD2

• 132 and more on exposed mountain slopes. Although the northeast has no distinct dry season, the southwestern parts of the island have a marked winter dry season.

Typhoons occur between June and October as a result of the tropical cyclonic storms which sweep out of the western Pacific. The tremendous winds are usually accompanied by torrential rains which may destroy buildings, cause floods, and damage agricultural crops and forests. During the fifty-year period 1897-1946, there occurred 71 typhoons, of which twenty-seven were highly destructive.

Distinct climatic characteristics are found in the seven regions divided by Cheng-hsiang Chen.[2] The regions are shown on the map in the following page and are described briefly below:

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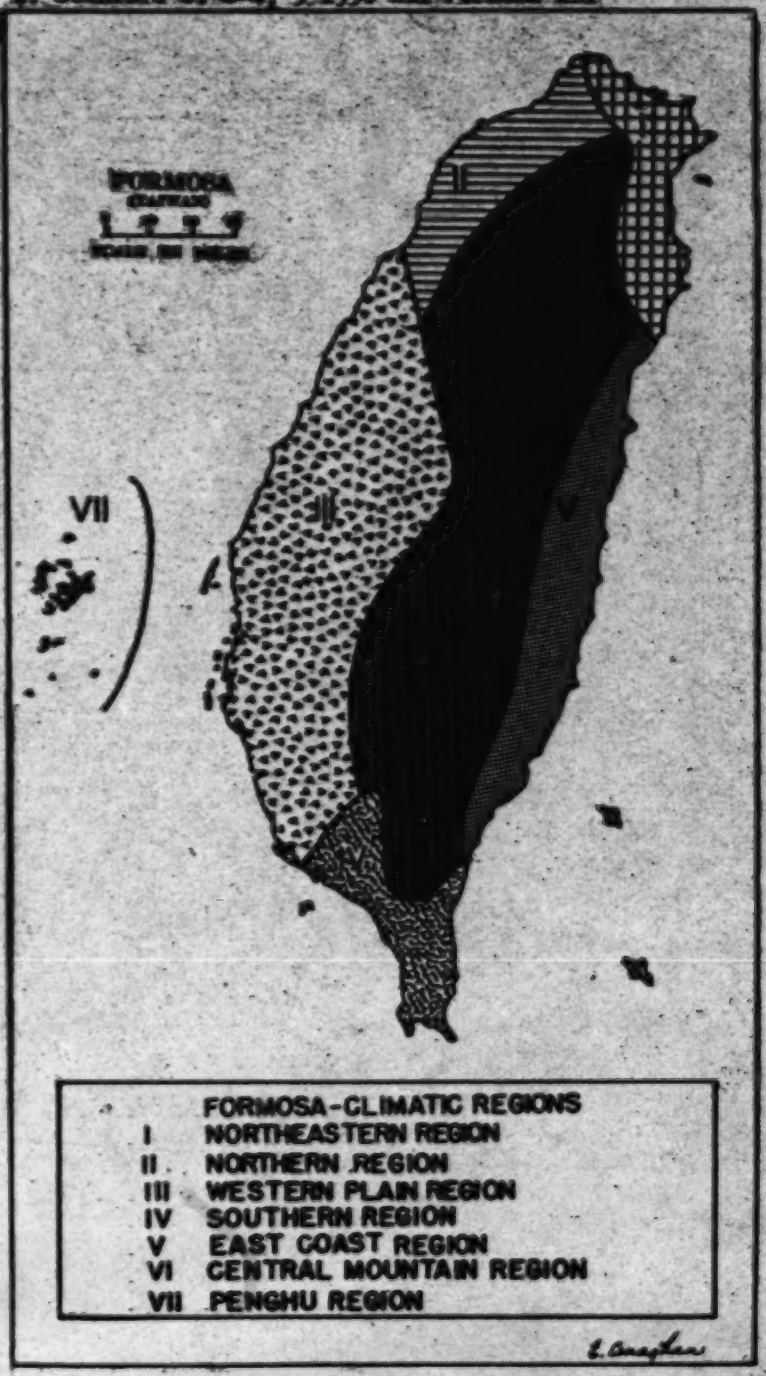
2. Cheng-hsiang Chen, op. cit., pp. 31-35.

Rules up to 05

1: Stanford B. 2-4, 5.1956 XIII Formosa ATI



[Facing p. 11]

Northeastern Region

• 132 This region covers the northern corner of the main island. The northeast winds blow from the sea during most of the year. Annual precipitation in Keelung is 114 inches, and there is an average of 213 cloudy days a year. On the mountain slopes, precipitation varies from 150 to 200 inches a year. The summer rains are heavy and short in duration; the winter rains are, more or less, a continual drizzle. The average temperatures for the hottest and the coldest months are 82.4° F and 59° F respectively.

Northern Region

This region encompasses the southwestern section of Taipei hsien and the entire Hsinchu hsien. The coolest winters of the island occur here on the lowlands. However, average temperature of the coldest month, February, is just below 59° F. Frosts are seen very rarely and snow is non-existent except in the mountains at high altitude. Hsinchu and the adjacent coast are subject to strong winter winds.

Western Plain Region

The region is composed of the Tainan Plain and the foothills to the east. Winters are

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

•132 warm and dry, with the average temperature varying from 60 to 80 degrees. The rainy period, created by the southwest monsoon, is concentrated in the summer months of May through August, bringing a monthly average rainfall of 8 inches.

Southern Region

Pingtung Plain and Hengtsun Peninsula constitute this region. It has a tropical climate. Annual average temperature is 75° F, and the highest temperature at Hengtsun in the summer reaches 90° F. Winters are usually dry, but sometimes there are destructive gales. Annual precipitation ranges from 60 to 80 inches, of which 90 per cent falls in summer.

East Coast Region

This region, comprised of the Taitung Range and the adjoining trench, has an annual rainfall of 60 to 80 inches, two-thirds of which falls in summer. Temperature of the coldest month, January, averages 60°F.

Central Mountain Region

The central mountain ranges are included in this region. The high altitude, 3,000 feet above sea level, and exposure to prevailing

•132 winds bring an annual precipitation of more than 120 inches. Frosts are frequent and the higher mountains are snow-covered during the winter.

Penghu Region

This region comprises the Pescadores Islands, and is subject to strong wind almost all year round. The average velocity of 15 miles per hour is recorded, but during December the velocity is as much as 20 miles per hour. The precipitation amounts to about 40 inches a year.

VII. POLITICAL DIVISIONS

631 On August 16, 1950, the administrative areas of Formosa were rearranged into five municipalities, 16 hsien, and Yangminshan Administration. The five municipalities are: Taipei, Tainan, Keelung, Kaohsiung, and Taichung. The sixteen hsien are: Taipei, Taoyuan, Miaoli, Changhua, Yunlin, Tainan, Pingtung, Hualien, Yilan, Hsinchu, Taichung, Nantou, Chiayi, Kaohsiung, Taitung, and Penghu (Pescadores).

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER I

The Growth of Population

101 In the last century and again in modern times, Taiwan has repeatedly become the object of rivalries among some of the most powerful nations of the world. Though its history has been a succession of disruptive incidents resulting from such contacts, by its size alone the island scarcely seems to merit the covetous attention that outsiders have given to it. It is not large—only 250 miles from north to [131] south, and about 90 miles across at the widest point. The area that it covers is only 14,000 square miles, or slightly less than that of the Netherlands. There is little in the way of precious minerals that would arouse the desire of industrial countries. It offers no great area into which other peoples can expand. It has only its significant location in the path of transportation routes off the coast of China, and a territory potentially rich in agricultural output. While the former of these has had the greater attraction to foreign nations, it is the latter that actually yielded—perhaps exceeded—the full measure of wealth that was expected.

•132 The topography and climate of Taiwan in the past have combined to make the island inhospitable to settlement. Being at the fringe of the tropics, the climate is hot and rainy, with marked changes of season and variations from one section to another. The greater part of its surface is not readily put to human use. Over half of this area consists of rugged mountains, rising steeply from a plain along the western coast and extending to the Pacific Ocean in the east. Heavy rainfall therefore runs off very quickly, creating torrential floods and occasional droughts in between. Large parts of the island are frequently swept by typhoons and shaken by earthquakes.

175 Within the span of recorded history, the difficulties presented by the physical environment never succeeded in discouraging human habitation. There were vague reports of residents there before A.D. 1000. When Taiwan first came officially to the attention of China, during the Ming dynasty, some tribes of primitives were known to be living near the western coast. Since the 16th century people swarmed to Taiwan from the relatively crowded parts of South China, and prospered there as agriculturists. The Japanese, who ruled the island from 1895 to 1945 and exploited its possibilities

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

like the railroad lines, were all built during the Japanese occupation.

The mountain ranges serve as a kind of climatic divide. The area north of the mountains, which includes the Taipei region, is known for its long rainy season and cold raw winters. In the area south of the divide, and especially around Taichung and the interior mountain region, the weather tends to be milder, with far less rain and many days of bright sunshine.

On the trip south from Taipei to Chang-hua City the train crosses several large rivers which originate in the interior mountains and flow west to the Strait of Formosa. The rushing torrents of water during and immediately after the rainy season dwindle to a trickle during the dry season, meandering through wide, sandy, and rocky river beds.

At Chang-hua City the traveler must leave the train for a bus headed southwest to the old port city of Lukang. Although the buses leave every fifteen minutes during the day, they are invariably crowded with people and their bundles of produce, fish, a chicken or two, or even building materials.

The thirty-minute trip in an old wooden Japanese bus is made entirely on dirt roads. The ride may be dusty or wet according to the season, but it is always bumpy and noisy. In the dry season strangling dust pours into the bus from all sides. During the wet season, there is always a possibility that the passengers will have to leave the bus and wade while the bus creeps slowly along over the flooded roadbed. Many menthol-distilling factories, brickworks, and small rice mills line the way. The bus must cross many small irrigation canals and maneuver around oxcarts. As the bus moves further away from Chang-hua City and approaches the seacoast area of Lukang, a change in the agricultural landscape, resulting from differences in irrigation systems, becomes more and more noticeable. In those places where there is still no irrigation system, there are large areas of dry fields.

After a half-hour wait in Lukang, the traveler boards another, similar bus for the trip to the village, which lies about three miles inland or southeast of Lukang. The uncomfortable fifteen-minute ride ends when the bus comes to a halt in front of the Hsin Hsing village store.

The houses in the village are constructed of bamboo, mud or fired brick, and plaster. The foundations and structural uprights are usually brick; the walls are a latticework of bamboo strips, filled in with plaster which is a mixture of mud and cow dung. The plaster filling is usually whitewashed. Sometimes the main supports are not brick but heavy bamboo poles. Newer houses, and the older houses of the wealthy, generally have roofs of cement tile, while the oldest and poorest houses have thatched roofs. Houses made of mud bricks are always thatched.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

F 361 Taiwanese villages are laid out in three basic patterns. Probably the most common is the nucleated or compact type: the dwellings form a compact cluster which is surrounded by the arable land of the village. The second is linear, laid out along a riverbank or road, and the third, the least common, is the scattered settlement whose houses are spaced out over a larger area, which sometimes makes it difficult to determine T 361 the exact boundary of the village. Hsin Hsing, like most of the villages in the area, is a compact cluster of dwellings surrounded by farmlands. One can walk completely around the central cluster in about fifteen minutes.

T [491] [312] The dwelling cluster is bounded on the southwest by the *hsien* dirt road which connects Lukang with the market town of Chi Hu (all of the villages in this immediate area lie on one or the other or both sides of this road) and on the northeast by an irrigation drainage stream which flows into the sea near Lukang. There are two villages quite close to Hsin Hsing. Lo Ts'e (now incorporated into Yung P'ing village) is along the road about three hundred yards to the northwest, and Ta Yu lies along the same road about eight hundred yards to the southwest. Like all the neighboring settlements, both are separated from Hsin Hsing by fields.

T 311 There are a few fields lying within the dwelling area itself. These are small, mainly garden plots, and are mostly on the outskirts rather than within the village. Hsin Hsing villagers own the fields across the road from the village as well as those between Hsin Hsing and the neighboring villages of Ta Yu and Lo Ts'e, but most of the fields operated by the villagers—either as owners or tenants—are usually not so conveniently located. Many lie to the west on the other side of the T [491] [487] [493] [231] road and as much as two or three miles away. Some can be reached only by dirt roads and by narrow paths between the fields. The villagers ride their bicycles as far as they can and walk the rest of the way, often carrying heavy farm implements. A boy might go along leading or riding a water buffalo.

T 243 312 Village agriculture is focused primarily on wet-rice cultivation. Hsin Hsing village is located in one of the principal agricultural areas of the island, the long flat west-central coastal plain. With the Strait of Formosa to the west and the interior mountains to the east of the area, there is a natural flow of water from the mountains to the lower lands and finally to the sea. The usually plentiful water supply is harnessed by an intricate network of irrigation systems which consist of rivers, dams, pumping stations—both publicly and privately operated—and artificial waterways and ditches which eventually carry water into the maze of fields.

F 132 The area is subject to great seasonal variation in both temperature and precipitation. Although it lies in the semitropical zone—being

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1•

just north of the Tropic of Cancer—the winters of this coastal area, unlike the interior, are cold and raw while the summers are extremely hot and humid. Winter temperatures seldom fall below the middle forties, but icy winds frequently blow with almost gale force across from the mainland and the Strait of Formosa. Although the area itself never has snow, on a clear January or February day snow-capped peaks of the high interior mountains to the east can be seen from the village.

As in most of Asia, rain is seasonal. Between 80 and 85 percent of the annual rainfall comes during the late spring and summer months (April to September) (Chen, 1950:5).[1] During the heaviest rains and the late summer typhoon season, roads as well as paddy fields are often flooded. In this particular area, frequently the rain alone makes it possible to transplant the rice seedlings, for the irrigation water is often late in reaching the Hsin Hsing area, lying as it does so far from the mountain headwaters. With the passing of the rainy season the weather is relatively dry for the remainder of the year, and all crops depend almost entirely on water from the elaborate irrigation system.

For two decades or more this area has been able to harvest three crops annually. In the irrigated areas two crops of rice are grown; sometimes a vegetable or some other crop is substituted. The third dry crop is usually wheat or sweet potatoes. On dry land, two or possibly three crops a year are grown as well. Such intensive cultivation has been made possible through a favorable climate, irrigation facilities, and an increased availability of chemical fertilizer. It has also come about partially as a result of the population increase, which has provided additional labor to work the available land and to exploit previously undeveloped lands.

Although most of the original inhabitants from the mainland settled on the relatively fertile coastal plain where Hsin Hsing is located, the land resources could not be fully exploited because of their small number. Today, this situation is reversed, and in spite of large-scale irrigation, land scarcity makes it necessary for parts of expanding families, and even whole households, to move to urban centers to find work. Land scarcity in the whole Hsin Hsing area is so severe that even villagers who remain there must go outside the village to earn a livelihood for their families or to supplement the family income. Although the problem may be unusually acute in Hsin Hsing village and in some neighboring villages, it must nevertheless be recognized that it is characteristic of a large part of Taiwan. If the population of the rural areas of the island continues to grow at its present rate, the land scarcity which is now so severe in the Hsin Hsing area will undoubtedly become a major problem for the greater part of the Taiwan countryside.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiw[illegible] Hokkien
Formosa AD1

NOTES

Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, i.e., only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 3.95–8.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 39.37–59.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chronicles, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1718), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1758), Wang Ying-k'eng (1764), Hsieh Chia-hsun (1807), and Chen Shu-chiu (1852) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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9: Yamasaki--224-225 N-5 (1896-1897) 1900 Formosans
116, 133

All these volcanoes are situated on the right side of the lower Tamsui-kei. Near the mouth of this river, opposite the harbor town of Tamsui, there rises up on the left hand side the isolated volcanic cone of Kannon-san. It is only 566 m. high, and its shape is not so complete that its crater can be made out exactly. The lava in all this volcanic region is only andesite, very similar to that on the [225] other Japanese islands. The lava of the Shichiseiton-san is a rather pumice-like, light brown amphibole andesite, while all the others consist of pyrozene andesite, with structures and colors that differ from each other, as is usually the case.

Older, unstratified rocks are very poorly represented on the island. Granite is almost unknown; but Dr. Ishii writes that a small piece of this rock was found by his colleague to the north of Karenkō. Granite, which is frequently used as a building material in towns of the interior as well as in many harbors, is imported from China. Serpentine was found in some small areas in East Taiwan. Diorite gravel was collected on the Taikokan-kei (upper course of the Tamsui-kei) and also on some tributaries on the left side of the Dakusui-kei.

Quite a number of hot springs have been found in different parts of the island, and not only in volcanic regions. They are indicated on the map (Plate 19). [MC: see source, page 298, plate 19, for map]

9: Yamasaki--225 [2] N-5 (1896-1897) 1900 Formosans
116, 133

The large plain of Taiwan forms the western part of the island. The alluvial soil is fertile and there are many towns and villages in all quarters of the plain. With regard to situation and nature we must separate the narrow northern part of this coastal land from the southern. The former is a plateau and consists in the main of rubble, clay and laterite. On the east coast we have also seen its origin, on one occasion, by the direct alteration of clay slate.

9: Yamasaki--225 [3] N-5 (1896-1897) 1900 Formosans
116, 133

A remarkable terraced table-land joins the northern plateau on the south and stretches in the direction of the meridian, from about 60 kilometers' distance from the Taikō-kei, to the Dakusui-kei. On its western side the table-land rises rapidly over the plain to between 200 and 500 m., while on the eastern side there is a much lesser and a gradual decline to the foot of the Tertiary hills. From east to west it thus has a long, cuneiform profile, and it consists of an extremely plentiful Pleistocene deposition of gravel, which is covered by laterite. I consider it to be the old coastal terrace. The tributaries of the Taito-kei flow through this territory [MC: the terraced tableland in the south] like a network. The soil is very fertile; but the town of Taichū (Taiwan-fu) situated here is notorious for malaria.

9: Yamasaki--225 [4] N-5 (1896-1897) 1900 Formosans
116, 133, 361

The middle and southern parts of the western coastal territory of Taiwan begin at the lower course of the Hōri-kei and stretch to the little town of Hōryō towards the south. The whole length of this plain is 220 km, and its greatest width is 48 km. It is heavily populated and has many towns, e.g. Kagi (Kia-ji), Taikō (Taikia), Unrin (Jünlin), Shōka (Tschang-hwu), Rokkō (Lokiang), Tainan (Tainanfu), Hōzan (Föng-schan), Takao (Takau), etc. In the north there is the small basin-shaped plain of Taihoku, watered by the Tamsui-kei and its tributaries. The capital of Taihoku (Taipei), with its commercial suburbs of Taitōtei (Tautuatea) to the north and Banka to the southwest, lies in the middle of the plain. There is also a small plain with the little town of Kōshun (Höngschön) at the southern end of the island.

9: Yamasaki--225 [5] N-5 (1896-1897) 1900 Formosans
116, 133

On the east coast we first find the so-called Capsiulan Plain in the neighborhood of the town of Giran (Ilan). Between the central shale range and the volcanic coastal chain the longitudinal valley already mentioned forms a narrow, long plain, which widens out in the north to form the plain of Kirai and in the south to form that of Pinan. Lengthwise, it stretches from Shinjō to Chipon.

Finally, mention will be made here of an interesting depression in the middle of the island, where the 121st meridian crosses the 21st parallel. Through it flows the upper course of the Hokkō-kei, a tributary on the left bank of the Taito-kei. Probably it was formerly a lake basin. We shall name it the Horisha Basin, after the little town of Horisha situated there. To the south of this, in a wonderful landscape, lies the largest inland lake on Taiwan, called Suisha-ko, and for a long time past known to Europeans as "Dragon Lake." On the eastern shore there rises the thickly wooded Suisha-san, 1896 m. high.

"Topographically, the island may be divided into two parts—an eastern mountainous region and a western plain. By elevation the whole area is divided as follows:

Elevation (in metres)	Area of the island (in sq. mi.)	% of total
100—500 m. (328—1,640 ft.)	2,900	21.0
500—1,000 m. (1,640—3,281 ft.)	2,960	21.4
1,000—1,500 m. (3,281—4,921 ft.)	1,560	11.6
1,500—2,000 m. (4,921—6,562 ft.)	670	4.7
2,000—2,500 m. (6,562—8,202 ft.)	370	2.7
2,500—3,000 m. (8,202—9,842 ft.)	180	1.3
over 3,000 (over 9,842 ft.)	100	.7
Total	13,810*	100.0

* 8,838,000 acres.

[5] Thus 21 percent of the total area of the island rises above one km. and 4.7 per cent—above two km. There are in Taiwan seventy-nine summits of the two parallel mountain ranges traversing the country from north to south, which rise above 3,000 m. Of these Mt. Niiaka (or Morrison), —rises to 3,950 m. (1) and Mt. Tsugitaka (or Sylvia)

1. 3,950 m., a figure given in Taiwan Jijo, equals 12,956 feet. However in the Japan Manchoukuo Year Book, 1939, as well as in some other books, its height is given as 14,500 feet.

to 3,931 m.; both of these (and several others) are higher than the famous Fujiyama of Japan. The ranges of mountains, rising one above the other over the western plain from sea level to a height of four km. over a short distance of eighty km. and then falling abruptly to the sea in the east, present a majestic and fascinating picture and justify the name given to Taiwan by the Portuguese—Formosa (Beautiful). In many places on the east coast magnificent cliffs form an almost perpendicular rock wall 500 to 150 m. high. Only one-third of the island is plain; the other two-thirds are hills, valleys and mountains, a fact which limits the area of cultivation. The mountainous eastern part, covered with thick tropical forest, has become a place of refuge for the aboriginal tribes."

4:Grajdanzev--7 [2] S-4 (no date) 1942 Formosans
116, 133, 376

"Because of topographical conditions, the rivers of Taiwan are short and swift, the longest being the Dakusui, 170 km. (105 miles) long, which is in the east and flows parallel to the coast. There are only five others longer than 100 km. As they descend rapidly from great heights to the plains, however, they are able to supply a huge amount of power for the production of electricity, an important factor in the prospective industrial development of Taiwan."

4:Grajdanzev--8 S-4 (no date) 1942 Formosans
116, 133, 731

"Situated in the Pacific belt of volcanoes, Taiwan has very many earthquakes, on the average 330 each year in various parts of the island, but few are of great violence. In the earthquake of March 17, 1906, 3,643 persons were hurt and 20,987 houses damaged; on April 21, 1935, 15,329 persons were hurt and 54,688 houses damaged."

6: Kirchhoff--25 [2] U-4 (no date) 1895 Formosans
116, 133

On the west coast [MC: of Formosa] the land is extending out into the sea with astonishing rapidity, so that the lagoons in the southwest frequently indicated on our maps became dry long ago. The site of the locality of An-ping, near the largest town on the island, Tai-nan (formerly Tai-uan-fu), formed a small island in the 17th century, according to contemporary Dutch maps, opposite the coast of the main island. Deposits made by the sea and the rivers will scarcely suffice to explain the addition of dry land to the consistently flat west coast, with sandbanks constantly arising afresh from the surrounding shallows; it probably depends, for the most part, on a slow but ceaseless uplift, for whose activity on the north coast we have the witness of von Richthofen (Zeitschrift der Deutschen Geologischen Gesellschaft 1860, Vol. 12, pp. 540 & 545). The east coast, mountainous almost everywhere, sinks steeply into the deep sea and shows no signs of growth.

The smaller western half of the island is for the most part low-lying, and is plain in part, but only to a breadth of between 32 and 40 km., and in part hilly country; the larger eastern half for the most part is filled with mountains.

The longest of the Formosan mountain chains is in the direction of the longitudinal axis of the whole land, that is from southwest to northeast. Generally one speaks of a "high central chain" said to run along the whole length of the island. But there is none of this extent. Only where the island attains its greatest breadth does there seem to be such a central chain, approximately equidistant from the two coasts and in the direction mentioned. It is designated by the name of Ta-schan ("Large mountain range") among the Chinese settlers (almost the whole of our nomenclature for the island coming from their language and not from that of the natives). Imbault-Huart was obviously systematizing far too much when he asserted that the central chain covered almost the whole island from north to south, the lateral chains joining it at right angles like fish bones, while the central chain broke up only in the north into several subsidiary chains equal among themselves and like crow's feet. Consequently he often uses the term "central chain" for the mountainous region filling all eastern Formosa. This is a misuse of the term. The other feature he indicates seems much more exact, [26] namely that the "central massif" (a very vague area of the "Ta-schan") consists of several chains of very unequal height throughout their lengths and divided by deep valleys, which present steep wall on the east coast and gradually sink down towards the western plain; in the north shorter and lower ridges running in various directions constitute the Formosan Switzerland (which has a very doubtful right to this name); along the coasts of the southern

tongue of land parallel lines of hills run along the coast to form two headlands between which there lies the bay of Kuei-leang, a much sought haven of refuge for ships during the northeast monsoon.

This latter description also corresponds rather better to the map Imbault-Huart provided with his book. On it the Ta-wu-man-schan ("Range of the Great Hero") comes closest to the notion of a central chain, for it represents a long-stretching chain in the position and direction already mentioned; these chains are said not to run at the same height, like walls, but to undulate greatly, varying between several thousand and a few hundred meters; the small Dragon Lake at the eastern base of the main chain is given a height of 1,000 m. The highest peak of the whole island, the Jü-schan ("Jade Mountain"), the Mount Morrison of the English, rises in a shorter eastern neighboring chain; since it remains covered with snow until late in the summer, it probably attains a height of at least 4,000 m.; it is credited with a height of 4,280 m. Farther to the north there follow tablelands "1,000 m. high," beyond which rises the majestic cone of the Thoa-sia, the Sylvia Mountain of the Europeans, to an alleged height of 3,766 m.* In

* According to the English coastal survey on the "Sylvia" (which gave its name to the mountain), the height is more than 13,000 feet, i.e., about 4,000 m.

the north, and close to the coast at the left side of the Tam-sui estuary, rises the Kuan-yn-soan (Soan is an alternate form of Schan ("mountain, Mountain range"), so often met with. So called from its resemblance to the sitting goddess Kuan-yn, it is surrounded by lower peaks, which are called Lo-han ("The Wise Men"), the retinue of the goddess. The Ta-tun Range rises higher on the right side of the Tam-sui estuary; it runs towards the northeast, and an S continuation of it is formed by the 1,000 m. high Ta-tun-soan, a volcano that apparently is not yet extinct; the crater at the peak, which is transformed into a lake in the rainy season, is 150 m. deep and about 300 m. in diameter; some decades ago it is said to have emitted a stream of sulphur to the accompaniment of earth tremors. Behind the Ta-tun chain the Tschao-soan ("Volcano Peak") rises quite isolated to a height of 1,330 m.; it has several extinct craters and is the highest peak in the north of Formosa, looking to the sea on one side and towards the Sylvia giant on the other. Along the northeast coast there runs the Ki-lung Range, with fantastic cliff shapes with obelisk-like and flattened tops, and through whose narrow gorges burble mountain streams; the bay of Ki-lung Harbor itself is formed by a gorge-like gap in this chain. The island of Ki-lung, which is a volcanic rock 200 m. high, stands like a watchman in front of the harbor entrance.

In the southwest of Formosa, the Chinese geographers include in the Ta-schan the Mu-kang-schan ("Forest Range"), a steep chain that rises into the clouds, and the

rampart-like Ta-kang-schan. Southwards from the latter lies the Siao-kang-schan ("The Small Range"), consisting of two mountains only, one an important landmark for sailors, when they wish to set out for Formosa from the coral Pescadores or Fisher Islands, the Pung-ho of the Chinese. In the neighborhood of the town of Fung-schan there rises the ridge to which the town owes its name ("Phoenix Mountain"); the Chinese see in it the shape of a flying phoenix.

Finally, in the southeast, there are two higher ranges: the Kuef-lef-schan (Kia-lo in the natives' language), between 1,200 and 1,300 m. high, and the Pi-nan-mi-schan, which is covered with firs.

6: Kirchhoff--26-27 U-4 (no date) 1895 Formosans
116, 133, 135

Slight and fragmentary is our knowledge of the soil composition and the geology of Formosa. The two coastal mountains at the mouth of the Tam-sui are trachytic, and the proof of considerable recent variations in elevation is given by layers of pebbles and mussel breccia on its slopes high above the actual sea level. The Ki-lung Range consists of sandstone with intercalations of extensive coal beds. The presence of Miocene and Pliocene Tertiary formations has also been shown, and particularly in the north of the island recent, indeed continuing volcanic activity. It still remains to be examined how much faith can be set on Chinese reports of "nightly gleams of fire" as phenomena of volcanic eruption, even in the mountains of the southeast. But Formosa, beyond any doubt, belongs to the great Eastern Asiatic Belt with still persisting volcanic phenomena. Deposits of sulphur and solfataras are found in considerable numbers in northern Formosa; in many places there steam forces its way hissing out of the ground, generally mixed with sulphur gases, at times as a steam hole. In addition to genuine geysers, [27] steam holes send up white pillars of vapor to a height of 8 to 10 meters from the fissures of the Tschao-soan.

6: Kirchhoff--27 U-4 (no date) 1895 Formosans
116, 133

Earthquakes are frequent, particularly towards the end of the year. The terribly destructive earthquake of 1782, accompanied by bad weather, lasted for 12 hours. The equally destructive earthquake of 1654 began with frightful shocks on December 14 and, with short intervals, lasted for three weeks, one witness assuring us that the ground trembled without ceasing for the three weeks, as could be easily seen from the oscillating of the water surface in filled vessels. According to Chinese statements, the district of Kia-y (in the southwestern part of the island) is now especially subject to earthquakes.

Formosa suffers from a shortage of large rivers that are always navigable; in Chinese all the Formosan rivers are called, not kiang or ho, but ki ("stream"). Most of them become a trickle in the dry season or dry up altogether, their beds then being used for land transport. Yet in the rainy season they carry such a mass of material in precipitation that their mouths are ever and again being blocked by shifting sandbanks. Consequently larger ships cannot travel up any river at all; even the keelless junks do not dare to risk crossing many of the bars; these are then crossed on curious bamboo rafts, called Katamarans.

The only better known river system is that of the Tam-sui, as Europeans say (in Chinese it is called Tan-tschui-ki, "Stream of Fresh Water"). It arises from the junction of the Tokoham and Sintiam Rivers and below this is navigable for larger junks; on the right it also receives the Ki-lung River, which has its source at the Ki-lung-schan and, in spite of its numerous rapids, is traveled on by curious boats with quite flat bottoms that are 10 m. long and 2 m. wide. *

* The branch of this river leading to the harbor of Ki-lung, and which looks like a bifurcation, does not exist, and was given on Imbault-Huart's map by mistake.

The name of Tan-tschui-ki is also borne by the only large river flowing towards the

south, and which enters the sea near Fung-schan. Near Tai-nan Ta-mu-ki makes its way to the sea through the stretch recently regained; it originates in several mountain brooks. But the largest river in the west is said to be the Niëu-tschao-ki which flows to the south of the town of Kia-y. It is quite broad, particularly towards the mouth, but is difficult of navigation because of its shallowness and many sandbanks. ** The

** Neither Imbault-Huart's map nor that of Hosie indicate this river.

rivers on the eastern side of the island are naturally only raging mountain streams.

Lakes are rare; yet the western low-lying land also possesses some, which we have not been able to enter on the map, owing to a lack of exact indications. There are also said to be small, cauldron-shaped crater lakes.

6: Kirchhoff--29 U-4 (no date) 1895 Formosans
116, 133, 136

After all this [MC: evidence of the similarity between the fauna of Formosa and the mainland] one will probably agree with Wallace's final conclusion that while Formosa is an island detached from China, this separation from the mainland must have occurred pretty early, though certainly during the Tertiary period. Further, not only did many species of animal on the island vary, the insular isolation preventing cross-fertilization with unaltered species, these varieties gradually becoming new species, but at the same time great changes were experienced in South China with respect to fauna, so that the relations to the Indian domain were more and more obliterated. It would be of value to subject this explanation to a more searching test, by means ,for example, of paleontological discoveries in the soil of southern China. The beetles and butterflies of Formosa also diverge from those of the Chinese mainland, while they are related to and in part identical with those of Hainan and the Malayan island region; but these creatures might have been transferred by the typhoons that frequently blow over the island from a southerly direction (Hosie, p. 6).

The more important localities in Formosa all arose as centers of the export trade, and are thus either harbors or at least are situated close to the coast.

The most remarkable degree of development has been attained by Tai-nan, formerly known as Tai-uan or Tai-uan-fu. It now lies more than 3 km. distant from the coast and away from the right bank of the Na-mu-ki. But as late as the 17th century the wide plain between the town and the sea, which is now traversed by creeks and in which there are many fishponds, was a stretch of the sea, and today it is still flooded every year by the southwest monsoon. At the place where nowadays the creek flowing westwards from the town widens out to form a broader stream, more resembling a river, there lies the rather higher ground that bears the village of An-ping, 2 1/2 km. from the town and close to the shore of this creek, which continues on in a southwesterly direction for another kilometer, offering anchorage to junks of shallow draught and finally joining the sea after traversing a shifting sandbank. This hilly ground on which is An-ping measures 1 km. from east to west and 1/2 km. from north to south; it still rises like an island amidst river arms and swampy plains, and is the already mentioned former coastal island of Tai-uan, its name then being given by the Chinese to the whole island of Formosa. At that time, when from 1630 to 1633, the Dutch built their fort of Zelandia, the longitudinal axis of the sandy islet (it was narrower also in those days) ran from southeast to northwest, forming the partial barrier against the open sea of a lagoon bay cutting more deeply into the body of the main island; in the north the entry

to the lagoon was always open, via a broader channel of the sea, and in the south a sandbank one could walk on at low tide already began to connect the isle to the main island.

6: Kirchhoff--35 U-4 (no date) 1895 Formosans
116, 133, 175, 361

On the eastern side of the lagoon of Tai-uan lay the small locality of Sakkam (in Chinese: Tsche-kan), a native village of about 100 houses. In front of this the Dutch erected another fort, called Provintia or Providentia, exactly opposite Fort Zelandia, so that the lagoon was dominated on either side. After the collapse of Dutch power in Formosa, Zelandia still remained the key to the entry of the lagoon, behind which little Sakkam had grown to be the most important trading center on the island. For this reason Koschinga made it his residence and the Chinese, when they took possession in 1683, made it the seat of government and consequently called it Tai-uan-fu. But the continued growth of sandbanks that gradually rose above sea level, to the west of Fort Zelandia, made this fort useless as a coastal protection, so that it was dismantled in 1874 and a new fort built of its materials 1 1/2 km. to the south, close to the present coastline. Fort Provintia, in which the consul Swinhoe saw the Chinese temple in 1863, and which was built as a protection against the maleficent influences of the wandering spirits of the hung maô ("redhaired," the Dutch), has also been demolished since that time. It had long before been absorbed in the big irregular rectangle of Tai-uan-fu.

6: Kirchhoff--35 [3] U-4 (no date) 1895 Formosans-1-2
116, 133, 361

It is therefore [MC: in view of the decline of Tai-uan-fu as a commercial city] natural that the greater part of the export trade of South Formosa should have gone over to Ta-kaô, 40 km. farther south, which has been connected telegraphically with Tai-nan since 1874. This small but important port is reached by passing between two precipitous cliffs that can easily be seen from far out at sea; on the left rises the Ape Mountain (of coral limestone) to a height of 400 m., and on the right there rises even more precipitously a cliff 120 m. high, called the Saracen's Head after the English cannonboat that surveyed the west coast of Formosa some decades ago. Between these two heights, which are occupied by forts, even smaller steamers can enter a bay which, however, is of very limited extent, and which is surrounded on either side by the installations recently constructed by the Europeans: immediately behing the fort at the foot of the Ape Mountain is the quay alongside which ships lay to, the customs, the English consulate and the dwellings of the foreign traders, while opposite (that is, behind the Saracen's Head) can be seen the hospital of the Presbyterian mission station, transferred from Tai-nan to Ta-kaô, the hospital doing a great deal of good, and the European warehouse. The very shallow lagoon, which stretches out from this harbor to the southeast, parallel to the coast, is separated from the sea by a sandy tongue of land (which first attached the Saracen's Head to the mainland). On this tongue of land is a fishing village with between 1,500 and 2,000 inhabitants, and called Ta-kaô after the harbor. Beyong the lagoon the glance passes over stocks of bamboo, palm and mimosa in the

foreground, and then over an intensively cultivated plain with small villages peeping from amidst the green sugar-cane fields, finally reaching the hazy blue mountains. In this coastal plain, which stretches out farther than the eye can see to the southeast, there lies the town of Fung-schan and, beyond the mouth of the Tan-tschui-ki, Pang-leaô, the center for the junk traffic of this southern region. When the southwest wind develops its full force, no vessel can lie to on this coast, which is most immediately exposed to this wind. The most southerly town on Formosa, which was founded quite recently, is Heng-tschun, the capital of the southern region of the same name, distinguished for its huge rice harvests. It lies at the foot of the western chain of the southern tongue of land.

6: Kirchhoff--35-36 U-4 (no date) 1895 Formosans
116, 133, 361

Rather farther inland is the group of towns of the North Formosan Tam-sui River region. The harbor [36] of Tam-sui consists only of the mouth of this river. The entry into the harbor over the constantly shifting sandbank, because of the strong surf this causes, is free of danger for steamers only in calm weather and when the tide is high. The channel of the river, which flows in a northwesterly direction at its mouth, is deeper on the right-hand side, while the bed is exposed at low tide on the left-hand side, for far more than half the width of the bed. Consequently all settlements are found on the right bank. Once the bar has been crossed there can first be seen, on the left, the Chinese fort, and then the former Dutch fort, built of red brick, where the English consul now lives, and after this the customs house and the open ground of Huuëi or Ho-be, which only the foreigners call Tam-sui after the river. Busy as the port may be, the spot really consists only of a narrow street along the stream in which only two people can avoid each other. But it is adorned by a Chinese temple born on stone columns and is well situated. Close to the locality there rise amphitheater-like the slopes used as a burial ground. Behind this the sides of the Ta-tun bears peanut and sweet potato fields on the lower parts, among which are strewn Chinese farmhouses, and from a height of 500 to 600 m. forests consisting of bamboo and tree ferns.

6: Kirchhoff--36 [2] U-4 (no date) 1895 Formosans
116, 133, 361

Bang-ka ceased to be a seat of administration since the foundation, in 1879, of Tai-pe (or Ko-ping) as the center of administration in North Formosa, in the densely cultivated plain between Bang-ka and Tua-tu-tia, and at almost equal distances from the two towns. The whole fruitful but marshy plain of the three towns has only unhealthy, brackish water, but it receives good water from the southeast from the mountains behind the village of Kieng-be, through an artificial connection that was laid down quite a long time ago.

Beyond this fertile plain there soon begins the still little known land of the "wild savages," the Tsche-huan. Here Sintiam and Tokoham are the most advanced posts of civilization. The two sources of the Tam-sui called after these towns rise in the wooded mountain regions not yet subject to China, but finally flow through rice, sugar-cane and sugar fields... The Tokoham River in particular forms a sharp line of cultural demarcation: to its left are vivid green tea plantations and rice fields along all the heights as far as the sea, and on the right stretches out dark primeval forest.

6: Kirchhoff--36 [3] U-4 (no date) 1895 Formosans
116, 133, 491, 493, 501

A much used road leads from Tam-sui to the most important port of Ki-lung. Although it is hardly half the distance as the crow flies, one travels 52 km. up the winding Ki-lung River on the flat-bottomed boats mentioned above (as in the Philippines the natives call them banka) manned by two rowers who are helped by a third for the stretch with rapids. A number of small localities border the river, whose lower course is so shallow that the rising of the tide in it can be distinctly seen. But then follows a series of rapids in the mountainous region. Travel by boat ceases where the river comes to within 5 km. of Ki-lung Port; one transfers to the sedan-chair used in Formosa, where there are no carriages, and via a pass 200 m. high one goes down the steep mountainside facing the sea to the . . . bay with its coal-bearing surroundings. Here, by way of exception, the entry into this natural harbor is without danger even for ships of greater draught, in spite of its being hemmed in by coral reefs, and the protection against storms in this bay amidst mountains is almost complete on all sides. Nevertheless no steamer can reach the town of Ki-lung, for the shore in front of this locality, which is situated at the back of the bay, is extremely soft, forming a morass at low tide traversed only by a narrow channel leading from the anchoring place. This softening is steadily increasing, for here as in the other Formosan ports the Chinese Government is doing nothing to prevent the junks' evil practise of dumping their ballast right in the anchorage.

7: Joest--56 E-5 (no date) 1882 Formosans
116, 133, 361, 504

Unfortunately, there are no large harbors on Formosa, or rather, there are none in those places where the Chinese companies have trading posts. Taiwanfu is situated two miles from the coast; the harbor, Amping, is situated at that point where Nova Zelandia was situated formerly, but even there landing facilities for passengers and goods are very poor.

7: Joest--56 [2] E-5 (no date) 1882 Formosans
116, 133

The entire western coast of Formosa has been raised; the process, which has been taking place for centuries, is slow but the differences may be clearly seen. In those places along the shore which are now dry the Dutch captains of former times anchored their ships; Nova Zelandia is now five miles from the sea, while formerly the waves had splashed against the walls of this fort, and on the marshy, sandy area of land formed since then there is now a fishing village. There is a dangerous coral reef in the harbor entrance at Amping and there are so many shoals that the passage is not navigable if there is even the slightest breeze; the passengers must land by means of small floats of a peculiar construction which the natives call Catamarans.

"LAND UTILIZATION IN FORMOSA*

* Owing to limitations of space, the text of this article has been considerably condensed from the author's original manuscript, and several tables have been omitted. Also, the difficulties of time and distance have prevented the author from seeing galley proof. --Edit. Note.

Cheng-Siang Chen

Land utilization in Formosa is severely handicapped by the topography. Forest-covered mountains rising to impressive heights form a central range, which extends like a backbone the entire length of the island. Only 36 per cent of the land is utilized, and only 24 per cent of this is cultivated.

According to the comparatively reliable statistics of 1947, the total area of utilized land is 1,290,132 hectares, of which 66 per cent is cultivated (paddy fields, 41 per cent; dry fields, 25 per cent). Considerable changes have occurred during the last 20 years or so Table I (1). The percentage of paddy fields has increased, and that of dry fields

1. All tables are based on data contained in the Taiwan

8: Chen--438
116, 133, 241, 311

Agricultural Yearbook, Dept. of Agriculture and Forestry, Taipei.

has decreased, as a result of the development of irrigation and drainage. The progress of economic forestation is reflected in an increase of the forested land; the growing popularity of cremation has reduced the burial ground. Land in railroads and highways has also increased, because of the expansion and development of communications."

8: Chen--439 N-3 (no date) 1951 Formosans
116, 133, 311

"The distribution of land use (exclusive of cultivated land) among the hsiens [EJ: i. e. the administrative districts of Formosa] is an index to their geographic characteristics. For example, 56 per cent of the irrigation ditches of the island are in Tainan, a percentage obviously related to the great Kianan irrigation system; and 70 per cent of the irrigation ponds are in Hsinchu, because the topography of the Taoyuan alluvial fan, in the northern part, makes it suitable for damming. Ninety-six per cent of the piscicultural ponds are in Tainan and Kaohsiung, because the waters off the southwest coast are shallow and there are many lagoons and narrow inlets that can be converted into piscicultural ponds; and 89 per cent of the salt fields are in Tainan, whose coastal plain, low, very dry, and with brilliant sunshine in winter, offers good natural conditions for saltmaking. And in Penghu hsien burial grounds occupy 10.3 per cent of the utilized land, both because the Pescadores Islands are the earliest-developed and most densely populated area and because the meager land is unsuitable for cultivation (more than 60 per cent of the inhabitants are dependent on sea fisheries for sustenance).

8: Chen--446
116, 132, 133

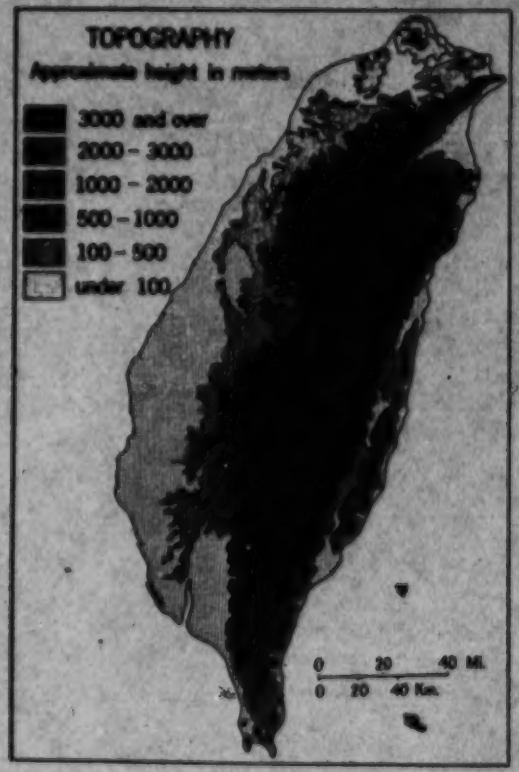

Fig. 2

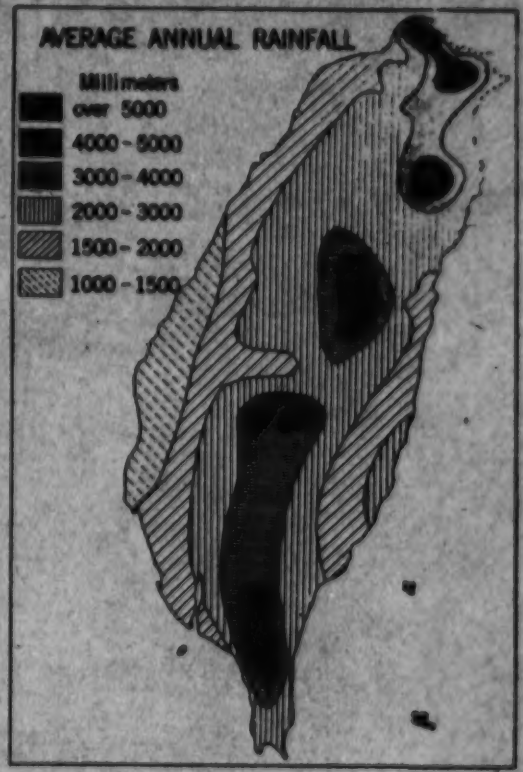

Fig. 3

9: Yamasaki--221-222 ; N-5 (1896-1897) 1900 Formosans
116, 133

The topography of Taiwan island is pretty regular and simple. The chief watershed extends longitudinally from Bitōkoku or Cape Pitaûat at the northeastern end through the island as far as the southern point of Garampi, but does not always follow the crest of the folded mountain range, which takes the same direction. This range—we shall call it the Niitaka Chain after its highest peak and the Central Chain from its position with regard to two other smaller chains—begins at [222] the northeast coast near Dom-Kaku (Cathedral Spire) and first turns WSW towards Setsu-san (Mount Sylvia, 3424 m.) on the watershed, and then along this to the south as far as the southern point. It is not a volcanic formation, as was formerly thought, but a folded range, consisting chiefly of old schists and crystalline limestone. About halfway along the chain there rises Mount Morrison (4145 m.), which we now call Niitaka-yama. Its peak consists of dark clay slate and it is the highest in the Japanese Empire.

To the west of the Central Chain and parallel to it by tertiary formation there extends a second mountain chain, which begins at Bito-Kaku (Pitao Point) and stretches beyond the 23rd parallel to the south. We call it the Kali Chain, after the second highest mountain, the Kali-san (2142 m.). To the northwest of Niitaka-yama a Plutonic elevation reaches a height of 2830 m. in the Tōkan-san.

The third mountain chain also dates from the Tertiary age and extends in the same direction as the other two a distance of 60 km. along the east coast from Pinan to Karenkō. It is separated from the chief chain by the longitudinal valley of the Karenkō, Shūkoran and Pinan Rivers. We call it the Taitō Chain (East Taiwan Chain).

Strictly speaking, the Niitaka and Kali Chains, like the strike of the strata, run from ENE to WSW in the north, and then gradually change to run NE to SW, and finally from north to south. Consequently the chief range forms a curve whose inner or concave side is turned to the Pacific Ocean, while on Honshū (the chief Japanese island), the steep concave side faces the Asiatic mainland. The eastern side or inner declivity of the main chain is very steep, and the foothills of the chain sink rapidly to the plain of Taitō (East Taiwan) or directly to the sea. From here the limestone layers that form a mighty zone on the upper part of the declivity are an imposing sight, and this is enhanced, when, as often happens, a bank of cumulus cloud floats quietly in the air beneath it. At the place on the east coast between Soō and Shinjō, where the chain ends, it appears as a splendid cliff which rises precipitously out of the Pacific to a height of not less than 1,100 m., and is doubtless one of the finest sights on the island.

The chain has many high peaks, most of them not yet climbed. Among these there rise, on the southern side of the plain, Kapsulan, and, in the northeast of the chain, Taihaku-san (1,052 m.), Taigen-san (1,182 m.), Taiko-san (1, 431 m.,) Jūsampun-san

(1,432 m.). To the southwest of them is seen the Setsu-san or Snow Mountain, which is known as Mount Sylvia on European maps and is 3,424 m. high. Farther to the south there follow, on the watershed, the Piroku-san, Gōkan-san and Nōkō-san. Situated to the west-southwest of these, one branch of the Kantōban-san reaches the main chain at the middle course of the Dakusui-kei, with a height of 3,017 m. The connecting mountain of Bun-sui-rei or Chūkai-rei, which leads over the chain from Linkihō to Basshishō, is 3,240 m. high. The enormous, circus-shaped limestone crag on the western part of the crest of Basshishō rises to a height of 2,148 m. The crest extends rather in a southwesterly direction with the high peaks of Shūkoran-san, Tandai-san, Gundai-san to Niitaka-yama. The last attains a height of 4,145 m. and is the highest peak on the island. Formerly it was named Mount Morrison, after an English captain. As the highest Japanese peak it was given its new name, which means 'new high mountain,' by the Emperor himself. The geological specimens brought back from the peak in 1896 by Lieutenant Saitō and Dr. Honda, who were the first to climb it, showed me that it, too, consists of the excellent black clay slate that forms the main ingredient of the Central Chain. A path leads from Chinran-kei, a lateral valley of the Dakusui-kei, over the eastern declivity of the Hattsūkan, to Bokusekikaku in the longitudinal valley east of the folded range.

Farther to the south there is another pass on the Pinan-shusan. This is 2,925 m. high, and the route from Ban-shoryō to Shinkaiyen leads over it. Chiponshu-san,

9: Yamasaki--222 N-5 (1896-1897) 1900 Formosans-3
116, 133

Gadōsan (2,760 m.), Mutō-san (2,912 m.) are other imposing peaks lying farther south in the chain. But then the highest place on the connecting mountain (Übergang) between Hōryō and Parōye is only 1,405 m. high. Here the island is only 30 km. broad, and to the south it becomes even narrower; at the same time the range sinks gradually towards the south, to the sea. The clay slate disappears and is covered with Tertiary layers, in which Riryū-san (1,224 m.) and Rōbutsu-san (693 m.) rise. The southern end of the island consists of a hilly, coral limestone landscape, in which the prominent mass of cliff Tai-seki-sen ("large stone point," 296 m. high) is well known.

With regard to geological structure, the deepest part of the main mountain chain of Taiwan consists of crystalline slate, stretching out in the form of a long, narrow zone at the eastern foot. Thanks to the geologist Dr. Ishii, who made a cross-cut through this zone on the Basshishō, we learn that the lowest layer of these archaic rocks consists of sericite schist. Over this is graphite chlorite schist, which is covered in its turn by chlorite schist. In addition actinolite schist and graphite schist are found as gravel. These stones must be classed among the Japanese "Sambagawa" layers.[223] Over them come the mightly layers of crystalline limestone and clay slate, which are held to be Paleozoic because of their petrographic nature, although so far no petrifications have been found in them.

The western side of the chain is not so steep as the eastern side, with the exception of the places where it is cut across by deep valleys such as the Dakusui-kei. The schist range gradually, by means of ever lower ridges, changes into a Tertiary range, and towards the west this in turn changes into a rather wide plain, whose coast is often bordered by dunes. This Tertiary range stretches from Bitō-kaku along the outer side of the main chain towards the south. The northern end of the chain is formed by the Tertiary mountainous region of Kilung, in the northern part of which the eruption of volcanic rocks occurred. It is divided into four mountain ridges by the three longitudinal valleys of the Kilung-kei and the two tributary streams of the Shinten. The height of the two middle subsidiary chains varies between 500m. and 800 m., while the peaks on

the southern subsidiary chain, which stretches west southwest from Sanshō-kaku often rise to over 800 m. When I arrived on the steamer in Kilung Harbor, my attention was first attracted by the curious formation of this young range. The surfaces of the declivities frequently coincide with the surfaces of the layers, and the shape of the mountains is very regular, resembling volumes that have been tilted and shoved next to each other. The chain continues to the southwest via Saiten-san, Sempitsu-san, Goshi-san or the Five Finger Mountain, so called because of its shape (1,044 m.), and Gyūkoki-san (1,575 m.) with a precipitous crag on to the well known Kali-san (2,142 m.). This last is an imposing mountain rising far above the ridge. The Tertiary Kali Range stretches farther to the south with projecting peaks 1,200 to 2,000 m. in height. The continuation of the range in the Taichū or Middle Taiwan is formed by the two high peaks of Shūshū-san (1,396 m.) and Tōkan-san (2,830 m.), which are separated from one another by the gap of the Dakusui-kei, the largest river on the island. The Tōkan-san probably forms a diorite island amidst these Tertiary formations* and is the highest

* For the rivers coming from the Tōkan-san contain diorite rubble.

peak of the Kali chain. Farther to the south the range stretches out to the delta region of the Tamsui-kei. Two tributary streams of the Tamsui-kei form longitudinal valleys along the chain.

Between this mountain range and the low-lying land is to be found the hilly Tertiary region. In the north the Tertiary mountains appear as the western preliminary chain of the Kali Range. It is separated from the main Kali chain by a long and narrow tectonic valley, bestrewn with many Chinese villages. The Kantō-san (831 m.) is the highest peak here. In Middle Taiwan these mountains are sometimes jagged and bare, as a result of strong erosion. The inhabitants of the plain generally call this hilly region and part of the Kali chain Zen-soan or "foreground mountains," and the old high chain Au-soan or "background mountains." Naturally the boundary is not precise.

The rocks found in this Tertiary layer are chiefly sandstone, clay shale and conglomerate, while limestone containing fossils is also found in some places in North Taiwan.

Various kinds of Tertiary sandstone are met with. That occurring in the Kilung Range is coarse-grained, rich in quartz and rather hard, for which reason it is much employed in North Taiwan as a building material. In it have been found Pecten, Arca, Ostrea, Yoldia, Xenophorus, Scalaria, Tellina, Echinoids and Asteclypeus. Orbitoides are also met with in the sandstone of the Gyūto-san on the Kōrō-kei.*

* The following comments have been made on the fossil remains in the limestone collection of Professor Kotō from Reisuikō, Shatokō and Shinbokai in North Taiwan by Messrs. R.B.Newton and R. Holland (The Journal of the Geological Society of Tokio, June 1900, Vol. VII; No. 81):
"The most surprising organism in these microscopic sections is the fossilized seaweed (Kalkalge) Lithothamnium (Dr. Yoshihara found this Lithothamnium limestone also on the island of Yayeyama in the south of the Riukiu group). It appears in large quantities in almost all specimens and is obviously identical with Lithothamnium (Cumulipora) Rosenbergii Martin, from the island of Timor, which is attributed to the Miocene period. The next species of importance is that which Dr. Kotō provisionally described as a species of Linderina. Together with Lithothamnium it forms the great bulk of the limestone cliff, but to classify it definitely is

difficult, on the basis of the specimens available. One of the microscopic sections does indeed seem to show the typical tubular structure of Linderina, and thus Dr. Kotō may indeed be correct in attributing it to this genus. Of the other foraminifera the following may be mentioned: Orbitoides (Lepidocyclina) Verbeeki, N. et H., Heterostegina (?), Miliolina, Gypsina, Textilaria, Pulvinulina, Micheliniana, Globigerina bulloides, Bigenerina, Valvulina (?)."

9: Yamasaki--223 [2] N-5 (1896-1897) 1900 Formosans
116, 133, 135, 314

It is worthy of note that the wealth of the island depends chiefly on the Tertiary mountains. The most important minerals, such as gold, soft coal and petroleum, are found here. The camphor trees also grow in this region, for the most part.

9: Yamasaki--223-224 N-5 (1896-1897) 1900 Formosans
116, 133

In the plain of South Taiwan we notice here and there some small hills, flattened, domed or tabular in shape, which are quite independent of the neighboring Tertiary hilly country. They are old coral reefs, whose geological period, Tertiary or Quaternary, has not yet been determined. Among them we have the Taikō-san (310 m.) Shōkō-san (240 m.), Hampei-san or Pwapen soan (228 m.), Atei-san (54 m.) and Hō-san or Foan-soan (147 m.). The Takao-san (323 m.) on the coast also belongs to this formation, and Shōryū-kyūtō or Lambay Island, which is about 10 km. from the mouth of the Tamsui-kei, also consists [224] of coral formations, so that it would appear that the hills mentioned are recently raised coral reefs.

The third range, which stretches along the eastern coast of Formosa—we have already called it the Tai-tō Chain or East Taiwan Chain—is also very worthy of note. The peaks in this range often rise to more than 1,000 m. The highest mountain , to the east of Kompo, attains a height of 1,550 m., while the next highest, to the southwest of Seikō-wan, is 1,440 m. high. This chain also consists of sandstone, clay shale and limestone of the Tertiary period, and, in particular, its chief constituents are volcanic agglomerate and tuffs. Above this stand some peaks of andesite lava. This agglomerate range is very steep everywhere, as is the rule in many other volcanic regions of Japan, and the detached blocks lying on the coast are often picturesque in appearance, as for example the giant sea-washed black cliffs in Sansendai, designated on maps as "Black Rock Bay." This range is doubtless a small volcanic range, which pushed through a break on the steep side of the central chain. It is thought that it was at first a volcanic island chain which was raised gradually by a secular movement until it became connected with the main island. And there are indeed many indications of this. Together with the tuffs, on top of each other, this agglomerate not only forms a massive complex of strata with the coral limestone beneath and the Tertiary sea sandstone, as can be clearly observed at the mouth of the Shūkoran-kei, but we also find a distinct terrace formation on this east coast, so that the precipitous coast rises in three or more steps. One also notices, on the northern side of the little bay of Sansendai, a coral reef 50 m. above the actual sea level. All these facts show us a tectonic uplift since the Tertiary period, which has not yet ceased.

In addition to this volcanic chain, [MC: Tōi-tō chain or East Taiwan chain] there is another notable volcanic group in North Taiwan, which also pushed its way up through Tertiary layers. In consists of some volcanic cones, among which some prominent peaks are to be found, the Taiton-san and the Shichiseiton-san or Paulon-soan, and consequently we call this group "the Taiton volcanic group." It forms the northern frontier of the Taihoku Plain. To the southeast it is surrounded by Tertiary hills, while in the north its declivities stretch out gradually and gently to the sea. The Taiton-san (1,045 m.), which is in the middle of the group and on the right bank of the Tamsui-kei, is a volcano, doubly conical in shape, whose ejections lie for the most part to the north. At its western foot lies the harbor of Tamsui, also on these layers of tuff. The volcano is no longer active; but the thick layer and the considerable extent of the lava stream and other ejections, which can be clearly seen at the northeast crags, reveal marked activity in earlier times. Another high volcano, almost perfectly conical in shape, is the Shichiseiton-san or Paulon-soan, which is 1,109 m. high. It forms a blunted cone and has a crater on top, surrounded by some small peaks of the broken crater wall. This volcano is not inactive like the preceding; there are many solfataras around it. I saw three of them on the western slope and one at the eastern foot. One of them, situated on the northwestern slope quite close to the peak and the Kimpoli Pass, forms a large horseshoe-shaped depression, which was not inappropriately described by the

term "side crater," and from which steam and sulphur gases are expelled with a loud noise. To the south of this volcano we find another, not so high as the preceding, but quite conical in shape, which is called Sabō-san, i.e. the "Cap Mountain" (711 m.).

9: Yamasaki--224 [3] N-5 (1896-1897) 1900 Formosans
116, 133, 135, 529

In the valley of Kōkei, between the three volcanoes described above, there is a large solfatara. It is situated exactly on the border between the volcano and the Tertiary hill whose slopes rise very steeply opposite the former and rather gently on the other side. Here we are doubtless confronted with a break in the Tertiary range through which the solfatara made its way. It has a considerable area, and many people work there gathering sulphur. Not far off there is a bog from which many hot sulphur springs rise. These springs flow out through a gulley and form a cheerful brook with some water-falls, and here a spa has been built. The surroundings of the Hokuto spa are very pleasant and attractive, and it is now the favorite recreation center for the citizens of the capital of Taihoku, who can reach it after a journey of one and one half hours.

9: Yamasaki--224 [4] N-5 (1896-1897) 1900 Formosans
116, 133

To the northeast of the Shichiseiton-san I saw another cone, the Kōshi-san (890 m.), which is probably an isolated volcano. I was told that there are two solfataras on its northern flank and a hot spring at the foot, near Kimpoli.

Let us now cast a glance at the island's coasts. Taiwan is but little indented and consequently, in comparison with other parts of Japan, it has a modest circumference. For every 1 km. of coast in Taiwan there are 29.5 sq. km. of area (almost as much as in the case of the chief Japanese island, where the relationship is 1 km. to 29.7 sq. km.), while in Kiūshū, which is almost as large as Taiwan, there is a surface area of 10.8 sq. km. only for every one kilometer of coast. In order to consider the coast in a convenient way, we shall first travel from Kilung Harbor along the east coast, then round the southern cape and along the west coast back to the point of departure. The harbor of Kilung lies at the northern end of the island and is the most important for intercourse and trade between Taiwan and the rest of Japan. The harbor bay (Ria) of Kilung is surrounded by Tertiary sandstone hills, and the shore shows many curious small erosional formations, comparable to [226] earth pyramids, which are also formed by the ocean waves, for example the large cave near Image Point.* The harbor is about 3 km. long

*The name "Image Point was given it by an American voyager with the Perry expedition, because of the shape of the earth columns.

and is more than 18 m. deep in the middle. Here at least ten large ships of over 1,000 tons can lie unhampered. But, on the other hand, only small craft, and that only at high tide, can go on to the slimy bottom of the inner part, for at ebb tide this is

uncovered. Unfortunately the mouth of the harbor opens too widely towards the ocean in the north, and is thus not protected against the rolling sea waves, particularly at the time of the northeast monsoon. Apart from this, Kilung is the best harbor on the island, and a project for its improvement has already been submitted to the Government, great hopes being placed on the plan's execution.

9: Yamasaki--226 N-5 (1896-1897) 1900 Formosans
116, 133

A precipitous coast extends from Kilung round the Sanshō Cape as far as the Kapsiulan Plain. But along the plain there stretch dunes which prevent the river waters entering the sea directly. So one can find a river which flows along the inside of the dunes and parallel to them. At the southern end of this stretch there is the small, but deep, bay of Soō (Suao). It is the only good recess on the island's east coast, for in time of storm three or four large steamers can lie quietly at anchor here. Between this harbor and Shinjō, in the Karai Plain, there rise giant crags to a height of more than 1,000 m. ...The shore of the Kirai Plain is also bordered by dunes, and here is situated the harbor of Karenkō or Hōrenkan, which is quite open to the sea and offers no protection from the high waves; even in fine weather it is not easy to enter this harbor. I myself waited in vain for two weeks for a steamer to take me back because of bad weather.

9: Yamasaki--226 [2] N-5 (1896-1897) 1900 Formosans
116, 133, 361

Southwards from Karenkō to Pinan along the foot of the coastal chain, the coastline first proceeds for a few kilometers along the first low hills; then there follows a steep stretch near Kororan, and again a low section with a steep edge lying farther back. The precipitous coast is wonderfully developed between the mouth of the Shūkoran-kei and Pinan. But at times we go through sandy beaches at the foot of the terraces, which are only a few meters high. There are three steps in the coastal terraces, with a total breadth of 300 to 1,000 m., and on this are found the villages and fields of the natives and also of the Chinese who have settled there. Many coral reefs can be seen on the shore.

9: Yamasaki--226 [3] N-5 (1896-1897) 1900 Formosans
116, 133

Seikōwan or Chokonwo is a small haven for small ships and fishing boats only, on the Sansendai Bay. It is quite round, with an average diameter of about 200 m., and is surrounded on all sides by coral reefs. Only a narrow exit to the sea permits sea traffic. On the dunes of the Pinan plain there is a large village of the same name. Thi is the chief locality of the Taitō or of East Taiwan. As for the value of the harbor, it does not differ greatly from that of Karenkō. From the end of the plain to Hachiyōwan, there then lies a far-stretching beach with a steep border. But one always proceeds along a narrow and unpleasant terrain covered with sand and gravel. At times we could walk along the coast only in the short interval between two consecutive waves. Here and there in between, clay slate cliffs sometimes project boldly into the sea. In some instances we had to clamber over the large pieces of rock that had fallen down from the slopes. The southernmost parts of the island consist of hills formed by coral limestone of the Tertiary period (?), and the coast itself is here and there bordered by new corals.

9: Yamasaki--226 [4] N-5 (1896-1897) 1900 Formosans
116, 133

The southernmost point of Garampi and another point called Guswa enclose the bay c
Nanwan or Kwaliang. On the west coast of the small Koshun Plain lies the not exactly
good but well-known harbor of Sharyō (Shajō). From there to the village of Hōryō or
again finds a long beach with a precipitous edge, which gradually flattens out to form a
level coast, then stretching out almost the whole length of the island's west coast.

9: Yamasaki--226-227 N-5 (1896-1897) 1900 Formosans
116, 133, 361, 503

When we proceed northwards from Hōryō, we find a harbor, Tōkō, at the mouth of the Tamsui-kei, a large river in southern Taiwan with a fertile basin. In the harbor, at least twenty large Chinese trading vessels always lie at anchor. Not very far to the north is a lagoon harbor, Takao, which is very famous, both because of its trade and also for the beauty and salubriousness of its location. Between the lagoon and the sea there stretches out a 12 km. long tongue of land, called Haisa ("sea sand"), on which are many fishermen's huts. At the northern end of the Haisa there rises up a crag, called Saracen's Head by the English, which was doubtless separated from the "Ape Mountain" opposite it by erosion of the sea waves. The Ape Mountain is joined by the higher Takao-san (327 m.), which is an important landmark for travelers. A narrow channel between these two hills forms the mouth of the bay and the harbor. Unfortunately the entrance to the lagoon, like the lagoon itself, is shallow so that only small steamers and junks can enter, while the [227] larger ships must anchor outside the harbor. All official buildings and foreign concessions lie beneath the Ape Mountain, while the shops of the natives are grouped opposite, at the foot of the Saracen's Head. This locality is usually called Kigo. Many mangrove trees can be found in the lagoon. They are not so large as those I later saw in Singapore. At some distance from the lagoon shore is the town of Hozan (Föngschan), in much the same position as Königsberg on the Danzig Haff. The two hills mentioned, Ape Mountain and Saracen's Head, consist of old coral reefs.

9, Yamasaki--227 N-5 (1896-1897) 1900 Formosans
116, 133, 501

Farther to the north [MC: of Takao] the level coast has many dunes. The large town of Tainan also stands on an old dune. The sea bottom of the corresponding harbor, Anping, is not deep, as is usual in this region, so that wide stretches of the coast are dry at low tide. The large ships anchor 4 km. distant from the wharf and the bamboo rafts peculiar to South Taiwan, and called Katamaran or Teppai, provide for communication between the ships and the land. In addition, the harbor is quite open to the sea: consequently all landing is sometimes suspended at the time of the southwest monsoon. But since, nevertheless, it lies in the neighborhood of the large town and the fertile plain, its commerce has come to occupy the first place in southern Taiwan. This region was known to Europeans from early times.

9: Yamasaki--227 [3] N-5 (1896-1897) 1900 Formosans
116, 133, 503

I have already referred to phenomena of elevation on the east coast; they are also to be seen on the west coast. Not only the presence of many old coral reefs and dunes in the Tainan plain, but other facts also offer proof of tectonic movement in quite recent times. On old Chinese maps we see that the harbor of Anping, which is now connected with the town of Tainan by a piece of level land, was situated on a small island almost until the beginning of the 18th century. It is also said that the Dutch ships, earlier, in the 17th century, lay to at the town wall of Tainan. This wall is now at least 8 km. from the actual anchorage.

There are many other harbors on the long sandy and slimy coast of western Taiwan. They are all unprotected against the southwest monsoon and offer an unsafe anchorage. But Rokkō (Lokiang) in particular is the trading center in the Taichū Plain, for it is nearer than other harbors to the Asiatic continent, and there are piled up in bulk the products of the blessed Taichū Plain. To the northwest of Tonshō one can sometimes see the low edges of Tertiary hills and of even more recent formations on the strand. The northwest coast shows a great development of the dunes. Farther to the north, at the mouth of the Tamsui-kei, there is the famous harbor of Tamsui or, in Chinese, Hobe. Unfortunately the harbor is not good, on account of the many sandbanks which are quite dry at low tide. But since the river basin is an excellent production center for tea and the capital, Taihoku, also lies only 20 km. distant from the river mouth, trade and intercourse with many Chinese ports are in full bloom, particularly with Amoy and Futschu. On the coast we also notice coral reefs, which some people use for lime-burning. Northeastwards from Tamsui stretch out the gradual slopes of the Taiton volcanic group, with low cliffs at the end. Passing round the northern point, which is called Fuki-kaku or Foki, we come to Kilung along the strand which has steep edges lying farther back, this having been our starting point.

9: Yamasaki--227-228 N-5 (1896-1897) 1900 Formosans
116, 133, 312, 505

The Tamsui-kei, which together with its two tributaries on the right-hand side, the Shinten and Kilung, flows through the fertile plain of Taihoku, is important not only for watering the fields but also in communications. At its mouth lies the harbor of Tamsui, already mentioned. From there there always travel many Chinese ships and river steamers 20 km. farther up the river to Tai-tō-tei (Tautuatea), which is the largest freshwater port of Taiwan and is quite close to the capital of Taihoku. The trading vessels [228] can travel another 20 km. to the southeast as far as Taikokan (Takoham), a small town on the border of the native territory. The surroundings of the town of Taikokan are well known for camphor and other forest products. So one can always see many small boats with these products traveling from there to Taitotei on the swift flowing Taikokan-kei. The largest tributary of Tamsui-kei is the Kilung-kei. It flows through a longitudinal valley in the Tertiary range of Sanshōrei, a famous battlefield and a difficult mountain pass. It is about 60 km. long and navigable over most of its extent. Along the upper course of the Tamsui-kei river there are gold fields and bituminous coal deposits. The port of Kilung also lies quite close to the side of a small hill on the river. Thus this small but voluminous river also has considerable importance for transport in this region, where the roads leading into the country are in a bad condition.

9: Yamasaki--228 N-5 (1896-1897) 1900 Formosans
116, 133

The Tamsui-kei of South Taiwan flows from the Central chain in a southern direction, through a large fertile plain on which rice and sugar-cane grow, to Tōkō, a port at its mouth. Small boats can travel pretty far up the river. Some smaller rivers in the southern plain and in the marshy region are navigable, but they have little importance in transportation.

The drainage channels on either side of the Central chain have their peculiarities, owing to the topographical conditions. The waters from the huge steep declivities of the eastern side form numerous but short transverse valleys. In the middle part of eastern Taiwan all the waters of these transverse valleys cannot flow directly through the meridian chain lying on the coast, but turn into the longitudinal valley between the two chains at a right-angle to north or south. The whole narrow Taitō Plain offers passage to these waters. The whole length of the plain is watered by three rivers flowing in opposite directions, their watersheds being only 200 m. above sea level. The river in the north is called Karenkō and the southern river Pinan, both of them having rather a large meadow plain at their mouths. The third, Shūkoran-kei by name, which is also the largest river in eastern Taiwan, has its source in the highest part of the Central chain. Like the Karenkō, it turns northwards into the Taitō Plain, flows along it for some distance and then breaks through the coastal range at Tsuibi and flows eastwards to the sea. The volume of water in this river is usually so small that the natives can drive their large buffalo carts right through the water. Only in the lower course of the Shūkoran-kei is some deep water to be found, on which there travel to and fro the curious little boats that can be carried on land by one adult. The river bottom is always covered by pebbles, with the sole exception of some streams on the northeast coast. The water is generally clear and flows swiftly.

9: Yamasaki--228 [3] N-5 (1896-1897) 1900 Formosans
116, 133

On the western side of the Central chain we notice that almost all the rivers reveal the peculiarity that the waters they have collected in their upper courses divide again after they enter the coastal plain and make their way to the sea in different branches. Thus we always find that the delta at the mouth of these rivers occupies a considerable extent of ground. The water level in these branches is usually very low and the whole area between them is covered with coarse gravel, which makes it very unpleasant for the traveler on the main routes there. In the rainy season, when streams rapidly swell into rivers, these beds frequently change, thus creating a great obstacle for intercourse between North and South Taiwan. The Hōri-kei, whose whole course is about 100 km. in length, has a gravelly area 10 km. wide on its lower course, and a much larger one at the mouth.

9: Yamasaki--228 [4] N-5 (1896-1897) 1900 Formosans
116, 103, 133

The largest river, the Dakusui-kei, has its source in a gorge on the southwestern slope of the Setsu-san (Mount Sylvia). Its clear, burbling water forms in the upper course, a longitudinal valley between the chains in front of and behind the highest range. Approximately in the middle of the island it turns west at a right-angle to its upper course. On the two steep sides of these transverse valleys one can find frequently landslides and falls of rock. Here the water, mixed with the fine particles of clay slate and schist, is very dark, so that the Chinese gave the river the name of Dakui-kei or "clouded water river." The dark grey, foaming water flows farther west to the neighborhood of Linkih where the tributary of Seisui-kei, or "clear water river" flows in on the left. From there it suddenly spreads out over the level plain of central Taiwan and forms a complicated, fan-shaped network of branches, of which the Seira-kei is the most important, continuing in a westerly direction to the sea. The distance between the northernmost and southernmost mouths is estimated to be about 40 km. This is certainly a very curious phenomenon on such an island as Taiwan.

9: Yamasaki--228-229 N-5 (1896-1897) 1900 Formosans
116, 133

Terrace formations are very widespread on the island, and it can often be seen how they originate along rivers. Along the Taikō-kei in the Taichū Plain I noticed four steps, while Dr. Inonye has written about the five-stepped terrace on the Nan-a-kei in southern Taiwan. Imposing layers of gravel are found everywhere on the plateau, proving that [229] in previous times the flowing water had an even stronger effect than today.

9: Yamasaki--229 N-5 (1896-1897) 1900 Formosans
116, 131, 133, 361 Pescadores

Apart from the chief island of Taiwan, there are various subsidiary islands. Among these the Pescadores are the most important. This group consists of about eighty islets and cliffs, situated to the west of Taiwan in the Formosa Channel, between lat. N. 23° and 24°. The Portuguese called these islands Pescadores (Fisher Islands) because of the extensive fishing which the Chinese have practised there for many centuries. The largest island is called Hōkō-tō (Penghu Island). It consists of basalt and coral reefs. On its western side a bay is formed by the two islands next in importance, Hakusa-tō (Pehoe Island), or "white sand island" and Gyo-ō-tō (Fisher Island). This protected area offers an important haven in the stormy China Sea. The chief locality on the largest island, Makō or Mekon, is a small harbor on this bay with about 3,000 inhabitants, to which there must now be added a small Japanese garrison. The harbor is deep and quiet; always to be found there are some steamers and Chinese trading junks, together with a large number of fishing boats. The island is flat and poor in flora. The highest elevation is only 48 m. high. Other islands worthy of note in this group are Kitsubai or "Bird Island" to the north and the Pachan (Rover) group with Pachan and Tsiang, the Kitsu group (East group) with Tōkitsu and Saikitsu and Taisho or "Junk Island" in the south.

9: Yamasaki--229 [2] N-5 (1896-1897) 1900 Formosans
116, 131, 133

To the southwest of Taiwan lies the small coral island of Shō-ryū-kyū-tō or Lambay Island, while to the east of Taiwan the three volcanic islands of Kashō-tō or Samasana, Kōtō-sho or Botel-Tobago and Sho-kōtō-to or Small Botel-Tobago are also counted with Taiwan. Kisho or "steep island," is a small island on the coast of the Kapsiulan Plain. At the mouth of the port of Kilung there are two islands, Sai-rō-to and Kilung-tō; the latter, consisting of volcanic rock, rises steeply from the sea. Farther to the north lie Agincourt and two other islets.

10: Schumacher--223 T-1 (ca. 1896) 1898 Formosans
116, 133

The torrential waters that come down from the mountains flow between Tamsui and Sin-tschu into the river system of the Tamsui which is controlled in various places and is nearly everywhere navigable for junks. In the rainy seasons the rushing Tyka river flows through hard areas of gravel between Sin-tschu and Gosche, but during the dry period its water is diverted into twenty-two shallow creeks and the bed of the river can be crossed on horseback without any danger. The sister-streams Ponkam and Lokkang flow from Tschang-hua to Kia-y; I assume their relationship from the fact that the right bank of the Lokkang and the left bank of the Ponkam are high and that they seem to constitute water-sheds. Between the Ponkam and Lokkang eighteen more or less connected river courses are found, e. g., we have here a system of crossing streams. In contrast to the Tyka they carry water at all times and, with the exception of the Ponkam, after rains they can be crossed on foot or on horseback; but in the rainy seasons they rise and flood all the intermediary land. Beyond Kia-y at almost completely regular intervals of ten kilometers smaller or larger independent creeks are found; neither are they torrential nor do they present special dangers or impediments. All these brooks and streams flow rapidly and partly forcefully over the firm, rocky ground.

10: Schumacher--226 [8] T-1 (ca. 1896) 1898 Formosans
116, 131, 133

Strategically Formosa is highly significant because from here insuperable obstacles may be imposed which would prevent passage through the Formosa canal.

On the other hand, Formosa does not have a single port which might serve as a base for maritime operations and which could shelter modern war-ships. Instead it has good natural fortifications which in the north protect the entrance to Kelung and Tamsui and, in the south, that to Takao. In addition the Dutch and the French have built forts in Amping. In case of war it might thus be possible to maintain traffic between Formosa and the Pescadores, or at least it will be facilitated to a great degree. And the Pescadores have a harbor which we should be inclined to judge one of the best and safest of the world.

12: Garnot--13 G-3 (1884-85) 1894 Formosans
116, 133, 311

While the region near Kelung is very hilly, covered with trees and quite sparsely settled the section around Tamsui is quite different. Red dunes that are overgrown with bushes slope gently down toward the sea and the last mountain spurs give space to large low plains, which are fertilized by the alluvial deposits carried by a number of streams. These broad deep rivers run from one large city to the next and they are dotted with a good many boats. You see fine rice and sugar-cane plantations all through this area.

The mountainous massif between Tamsui and Syauki point and Kelung is clearly delimited by the course of the Tamsui river, which rises east of Kelung in the vicinity of the Sam-Tiao peak. Little is known about the interior of this massif for it has scarcely been explored.

Subterranean forces have been most active in this part of the island. The high ridge running from northeast to southwest between Kimpaoli and Tamsui is an eruptive upheaval which has several volcanoes that are still active; two of them Taitun and Chow-Soan or Vulcan's Peak are over 1.100 meters high.

There are a good many sulphuric springs and some geysers in this region; five of the latter are at the foot of Chow-Soan and you can hear their explosions several miles away. Between Patchina and Kantow [14] a hot river empties into the Tamsui and in some places the water reaches a temperature of almost 100 degrees. There are frequent earthquakes. During the one that occurred on December 18, 1867 the sea withdrew from the harbor of Kelung while parts of Kimpaoli and Patchina were ruined. Tamsui also suffered a great deal from this earthquake which killed several hundred inhabitants of the city. The one on the 25th of September 1881 was also very violent and it lasted over a minute.

The Tamsui harbor is really only the enlarged estuary of the river. [15] It is the port of embarkation for all the Menka products and it has a population of 70,000. The entrance is blocked by a sandbar just two meters below the surface but as the tide rises from 2.10 to 2.60 meters ships that draw an average amount of water can cross it daily. Mountains rising to a height of 500 to 700 meters border the entrance to the estuary, which is marked by a beacon at the end of a rocky reef.

Several fishing villages are hidden in the little valleys along the coast: Alibong and Alilou, Kimpaoli and Masou. They are connected to the Tamsui valley by some mountain trails which have scarcely been explored and which are only known by hearsay.

12: Garnot--14 [2] G-3 (1884-85) 1894 Formosans
116, 133

Three rather important streams feed the river that empties in the Tamsui estuary. The one coming from the Sam-Tiao peak passes near Kelung, and it is the main outlet from the east. As far as Loan-Loan it is a torrent with rapids here and there, but sampans can navigate the water from this point on. It passes through Niaka, Locktou, Switenka, Sikowdjou and Sikkow; then a mile above Patchina it absorbs the Sintiam and Tokoham rivers which have almost as much water as it does.

12: Garnot--15 G-3 (1884-85) 1894 Formosans
116, 133, 503

Kelung is the center of a little coastal basin that has a radius of several kilometers. The watershed is very near the coast. Several more or less accurate maps that were drawn before the French occupation connected the Tamsui to the Kelung river at this point by a canal. As a matter of fact the watershed is more than 100 meters above sea level at its lowerst point near Loan-Loan.

The Kelung roadstead is wide open on the northern side [16] and it is very jagged... Palm and Bush islands are hilly and covered with underbrush; they do not offer much protection from the swell that comes from the northeast so it is difficult and dangerous for boats to anchor there. The roadstead can hold about twenty vessels. Its bottom is not too good for it consists of mud and pebbles. The real port is so choked by alluvial deposits that only junks which draw a very small amount of water can enter it. In the middle of the port there are two little islands covered with dense vegetation, Harbor Island and Turton Island, and they conceal part of the city from the roadstead.

Five valleys run out to it. The first one which terminates at the base of Mount Clement begins three kilometers northwest of it.

The next three merge at the back of the harbor in an estuary which they fill with their deposits; they have formed a muddy delta which holds part of the Chinese city. Although the valleys slope a good deal at first they soon flatten out as their floors have been gradually leveled by the alluvial sediments. The tide is felt for a considerable distance so it is possible for small boats to go up into them.

Finally in the east and on the other side of the roadstead there is another valley placed symmetrically to the one running to Mount Clement; it begins near the northern coast and extends to fort Neuf.

The brook which forms the thalweg cannot be navigated at all.

All of these valleys are covered with rice fields that are dotted with groves of bamboo

and areca trees. Fields of tea a[illegible] sweet potatoes adorn the slopes while the rest is carpeted with dense vegetation.

The Kelung region forms a very distinct massif whose waters flow to a central point at the back of the roadstead; its high summits often reach an elevation of 200 meters in a perfect tangle of ravines, crests and precipices which are covered with dense vegetation. On the other side there are high summits which are separated from the massif by deep valleys; to the east are the peaks called Sam-Tiao and Petao and you can see their rounded summits from Kelung in fine weather; in the south there are the lofty and unexplored mountains which send their waters to the Tamsui river, and in the west you find the long crest of the Taitun and Chow-Soan peaks.

This mountainous tangle is oriented in the same manner as the whole system so it runs from the northeast to the southwest.

The slopes rise in the form of inclined planes that drop steeply in the north or the west. They are so complex that they frequently tested the ability of the topographers of the expeditionary force.

20: Alvarez--248-249 (no date) 1927 Formosans
116, 133

"The Channel of Formosa is famous for its rough waters, being attacked by violent typhoons every year. The many disasters that have occurred on the coast of the island strike terror into the sea-faring people, who have to sail in that always agitated and violent sea of the extreme Orient.

There are no active volcances, [sic] though some of the mountains seem to offer signs of craters now extinguished, such as Mount Taitum, in the northern section, in the district named Kagi. Then also, in Central Formosa and in the southern part, is found the small but yet smoking crater called Rigyo [249] by the Japanese. Proofs of the volcanic soil of Formosa are, we believe, the numerous hot springs of high temperature, the sulphurous springs in the north, and, lastly, the frequent earthquakes."

26: Honda--469 N-3 (1896) 1897 Formosans
116, 133

Mt. Morrison is not only the highest mountain peak of the island of Formosa but of all of eastern Asia. It was first mentioned by an English Captain at the end of the last century and bears his name. But hitherto no one has climbed it since it is located in the midst of the mountain region inhabited exclusively by natives who often show themselves rather hostile. The absence of roads and villages is another factor weighing heavily against such an attempt. In clear weather the white peak of the mountain is visible from the town of Taiwan and the mountain serves seamen as a landmark over great distances. It is located at Lat. 23.5° North.

On the following day [EJ: of the journey toward Mt. Morrison] we marched for six hours to the village of Tom-bū. Our route was along a stream with steep banks; there were no paths or bridges and at times the water reached up to our stomachs. Tom-bū was the last human settlement. Here we had to pick up new provisions. We were able to get some chickens, sweet potatoes, and millet. We left behind a number of porters and all luggage that was not absolutely essential. With four aborigines, who knew the entire region well, we started the actual ascent of Mt. Morrison. After three hours and at an altitude of 5500 feet we found a hot spring on the bank of the river; the temperature of the water was 70° centigrade. Some similar hot springs gushed forth in the stream itself.

Up to this point large evergreen foliaceous woods prevail. But wherever the natives have burnt down the high grass the vegetation is limited to cork trees (Quercus variabilis Bl.), which indeed occupy large areas. [472] From here on we encountered coniferous woods; at an elevation of 6000 feet, they comprised giant Chamacypariae and Crypto-meriae, their trunks having a diameter from six to ten feet. At 7000 feet we reached the zone of splendid fir trees; some of the species had hitherto been unknown to me. The preceding two days of our march had been very strenuous because most of the time we had to wade through the water of a brook flowing between steep banks.

In the morning of the eighth day after a difficult ascent over barren slopes we reached

a grassy area at an altitude of 9500 feet; it sloped slightly to the south, measured several English square miles and constituted a watershed. The peak of Mt. Morrison rose before us in all its majesty. We made a big fire and spent the cool evening in a little valley. At 2 a.m., when the temperature was down to -3° centigrade, we started the final ascent. First we advanced on the north through Tsuga woods and then on the less steep south side with its pine forests; at times we were crossing grassy areas and finally moved along the high ridge itself; this ridge is crowned by several peaks and is covered with sharp rock fragments of argillaceous schists. We reached the summit at eleven o'clock; the cloudless sky allowed us the most splendid view over almost all of Formosa. Far in the east beyond numerous mountain peaks the ocean was visible. And once more the ocean appeared in the west at an even greater distance. We could see the villages of Taiwanfu in the west, and Tainan, Anping, and Takao in the south.

We took some photographs and finished our scientific observations when fog and strong winds forced us to start back. It was dark when we reached our base where we had left behind our luggage, the porters and our companions who had come down with fevers.

We did not have time to hunt deer or wild boars.... Some rain had fallen in the evening, and the water froze during the night so that we suffered a good deal as we were sleeping outside. The next morning all the Japanese had fevers; my temperature was up to 41.5°

centigrade and one of our native guides carried me on his back during the following three days. For this service I rewarded him with an old pair of pants since he had no use whatsoever for money.

I wish to stress the following points of our scientific observations:

1. The common notion that Mt. Morrison is of volcanic origin is erroneous. The main rock materials of the mountain and its environment are argillaceous schists and quartzite. The beds of the former strike with a dip of 70° from EN 10° to WS 10°. Therefore the northern slopes are much steeper than the southern slopes, and rock slides are frequent.

2. The height of the peak is not 12830 feet, as had been determined by means of trigonometric measurements from the sea, but our barometric observations showed that the height should be 14350 feet. It is likely that the peak itself, as seen from the ocean, may be hidden by another summit close to it.

3. At noon of November 21, our barometer stood at 453 mm and the thermometer at 4.5° centigrade with a relative humidity of 90%.

4. We did not find snow anywhere, not even in the rock fissures on the mountain. The notion prevalent among the Chinese of Formosa that eternal snow covers the mountain is due to the white quartz which from a great distance may be mistaken for snow.

5. The mountainland of Formosa by no means everywhere [473] consists of impenetrable virgin forest. The southern slopes of the mountains are often covered with extensive grass areas for which, in part, the fires started by the natives to facilitate hunting are responsible. Through the telescope from the peak, we have observed a good

deal of the mountain region, and have found that at the most forty per cent of the area visible from that position was occupied by forests.

6. Up to an altitude of 1700 feet, the lowland of Formosa is claimed by tropical vegetation among which ficus, pandanus, palm trees, and pineapple are predominant. From here to an elevation of 6000 feet above sea-level, we find sub-tropical evergreen foliaceous woods; camphor trees occur up to 6500 feet and the same is true of evergreen oak trees. At 6000 feet the region of coniferous trees begins; the species found are at first Cryptomeriae and Chamaesyparis then followed at 7000-8500 feet by firs (variety of Picea Glehni), and Tsuga diversifolia Maxim. at 8500-10, 500 feet. Finally from 10, 500 feet to the peak of Mt. Morrison, we find pine trees and juniperus and principally Abies Mariesti.

7. The abundance of water in the mountain lakes makes it possible to follow the watercourses into the region of the fir trees and the wood may be transported down the streams.

8. The exploitation of camphor on Formosa is still at a very primitive stage. If the methods of Kiushiu were employed production could easily be doubled.

9. The aborigines are by no means hunters. Only the chiefs and a few of their subjects go hunting. The main occupation of the people is agriculture. In particular,

sweet potatoes and millet are important products. In addition tobacco and a variety of pea are grown. The system of agriculture is communistic. Its advantages are that nothing is stolen because nobody is permitted to have private property. Both work and harvest are arranged on a cooperative basis.

10. The men are willing workers and like to use axes, which makes me believe that they would be good forestry workers.

The External and Internal Structure of Formosa.

The structure of Formosa has become known in its fundamental aspects. Until a short time ago, the knowledge was confined to limited information from peripheral points, especially from Takao in the southwest and Kilung and Tamsui in the extreme north. More detailed studies were begun by the Japanese after their occupation of the island. But they, too, encountered difficulties in their research due to the [965] hostility of the wild tribes in the mountains of the inland region and the eastern part and therefore detailed information is yet lacking on some points of importance.

The cartographical representation of the inland parts of the island is still quite incomplete. The coastal regions have been charted long ago on the maps of the British Admiralty. Besides, their flat character in the west was known and their steep topography in the east. Furthermore no one who has sailed along the east coast in clear weather has failed to realize the impressiveness of the rugged forms of the coastal line and the mountains visible behind them. Some of the highest peaks of these mountains were determined in their approximate height from the sea; the most important names are Mt. Sylvia and Mt. Morrison. These mountains are part of the mountain chain projected in an easterly direction and following the longitudinal direction of the island; from it lesser mountain ridges slope down to the low-lying west. That is the picture that until a short time ago found its expression on the available maps.

On the whole this picture has been proved correct by the Japanese explorations, as far as they go. But many detailed particulars have become known by a study of the geologic structure.

External Structure: One of the most important discoveries was that of the strange Taito trough, which sharply delimits the continuous massive of the older mountains on the east side along a completely straight line 155 kilometers long and oriented N 20° E. It is important to realize that it belongs to three river systems separated from one another by low passes (approximately 200 meters in height); two of the rivers pour out their waters at the two exits of the trough, whereas the third takes its way through the Taito mountain chain into which it has cut its narrow valley. This Taito chain is projected towards the east; it is 130 kilometers long and no more than 13 kilometers wide and reaches a maximum height of 1550 meters. It dates from the Tertiary Age and rises as a strange formation next to the old ridge. The settlements of Karenko (24° N) and Pinan (22° 45' N) mark the ends of this projected coastal mountain range. [966]

Between the Taito trough and a line west of it at a distance of fifty kilometers or more in some spots, which has approximately the same orientation, there rises the great mountain chain with its high crests which Ischii has called the Taiwan Mountains. The two dominant peaks, the Setsu-san (Mt. Sylvia, 3424 meters) and the Niitaka (Mt. Morrison, 4145 meters), are located on a line that also strikes N 20° E and passes through

the Kantaban peak (height, 3017 meters). Westward there follow Tertiary mountains. Here again, the orientation N 20° E is observed in the mountain range which Yamasaki calls the Kali chain; it does not serve as a watershed, but instead several rivers of the western slope of the Taiwan Mountains flow through it on their way to the coast.

The line of strike, mentioned N 20° E, is a basic feature of the structure of the Taiwan Mountains. This becomes even more obvious if we consider a factor which is always important for the judgment of mountain formations, namely the character of the small headwaters. Yamasaki has shown himself most conscientious in the charting on his map; the streams that have been definitely traced in their courses are carefully differentiated from those that have not been explored in all detail. It is easy to see that the valleys in the mountains, in so far as they adhere to a longitudinal orientation, strike N 15°-20° E; besides, a feature characteristic of the parallel structure may be observed, namely the connection by short transverse streams. This is very clearly shown by the main river of the island, the Dakusui-kei which crosses the connecting line between the two main peaks and takes its origin from headwaters which flow to both sides of this line in longitudinal valleys. A similar arrangement is found also within the Tertiary Mts. projected towards the west.

South of the Setsu-an, then, in the main section of the mountains, the orographical elements reveal the existence of a parallel structure. The total setup of the mountains, however, deviates, for the main watershed that connects the two principal peaks does

not follow the mentioned direction of strike, but extends in a slight arc, concave towards the west. This eastern regression, which in part obscures the parallel arrangement should probably be explained by the greater amount of precipitation on the west side. For at the time of the summer monsoon, southerly winds prevail whereas in the winter they are northerly and northnorth-easterly. It ought to be added [967] that even in case of equal amounts of precipitation on both sides, the more solid rocks of the east side would offer more resistance to the regression of erosion towards the west than the more destructible rocks of the west side would be able to muster in the easterly direction.

The northern part of the island differs from the structure just described. An east to west watershed extends under 24° 30' N from the promontory of Dom-kaku at the eastern coast by way of the Setsu, which it leaves slightly to the south, to the Kali-san. As far as they are known, the rivers of the northern side flow radially in relation to it, and their beds through the mountains which soon decrease very definitely in their elevation. This area is divided into strips, again arranged radially, all through the action of the streams.

In the attempt to construct the orographical main line of Formosa, either the high rib extending from the Setsu eastward to Dom-kaku has been taken as a starting point or the lower rib running northeastward and ending in Cape Santiau (the Sanschō-kaku of the Japanese). To it the cuspate watershed mentioned was added from the Setsu to the

Niitaka; from the latter mountain, the line was continued along the watershed, first S 20° W to the Nantaibu and from there meridionally to the southernmost promontory. Thus the idea of a mountain curve convex towards the west and slightly concave towards the east could develop.

Naturally the character of the divide line cannot be a decisive factor in a consideration of the morphology of the old mountain formations of Formosa because it has definitely been subject to erosive activity.

Internal Structure of the Older Mountains. Japanese geologists have determined definitely that the fundamental formation of the Taiwan Mts. is distinguished in its structure from the outer and later parts. In the east it ends almost abruptly at the straight line of the Taitō valley. If this line is continued beyond the two ends of the valley, it marks the approximate extent of the other parts of the eastern coast. Only in the north are two promontories slightly projected beyond it. Passing over more than two degrees of latitude from Paroye (22° 22') to [illegible] (24° 36') it marks the sharply defined eastern slope of the older mountains. Observations were made around Soō. The coastal strip with a length of 50 kilometers that extends from there to Schiyō by way of Cape Dom-kaku seems to be completely unexplored. It is renowned for its high and precipitous rocky descents that have an altitude of more than 1000 meters. Otherwise studies have been made of the entire line. [968]

The most valuable clue as to composition is found in a transverse member of the mountains which Ischii has charted between 23° 35' and 23° 48'. It starts at Bassi-schō in the Taitō valley and runs westward across the Bun-sui-rei pass that has an altitude of 3240 meters. But even previously, at an elevation of 3150 meters, the impressive ridge of the eastern side is reached; it stretches in great length and is formed by a thick layer of white crystalline limestone. Ischii started his observations at the foot and noticed a continuous western dip and mighty strata of sericite schists, graphitic-chloritic

schists, and chlorite schist (enumeration from the foot up). He calls this system of layers "crystalline schists" and puts it in parallel with some of the Archeozoic formations of southern Japan. Then follows the crystalline limestone and, above it, argillaceous schist in which the pass is found. Ischii assumes that these two formations date from the Paleozoic. Others are inclined to think of the limestone as belonging to the Archeozoic and the argillaceous schist as dating from the Paleozoic. No traces of fossils have ever been found. Argillaceous schist prevails completely in the entire western part of the section.

When we consider the mentioned formations of the strike we find that the crystalline schists constitute a continuous zone along the eastern slope of the mountains and strike parallel to it, or N 20° E. Northward they continue as far as the eastern mountains are known, i. e., as far as Schiyō and southward close to Pinan. But in the latter case a puzzling strip of argillaceous schist with a steep eastern dip (70-80°) is found adjoining. South of Pinan the only rock formations investigated have been argillaceous schist. Yamasaki crossed several promontories of this type at the east coast.

Ischii claims that the argillaceous schist of the mountain heights describes first an anticline and later on a syncline. Over great distances the mountains are composed of this rock. The high peak of the Niitake (1) is made from it and southward it is known as

1. In 1896 Lieutenant Saitō and Dr. Honda climbed this mountain. They

> brought back some rock specimens which Yamasaki identified as argillaceous schist. But Ischii found diorite in the environment of the mountain and granite close to Mt. Setsu, so that it is possible that the peaks may bear a definite relation to the occurrence of the eruptive rocks.

far as the parallel of Horyō (22° 22' N).

The results of later investigations are available concerning the composition and age of the "argillaceous schist formation." According to reports in Geology of Japan, the lowest rock materials are phyllite, quartzite, metamorphic [969] sandstone and crystalline limestone and the thick strata of argillaceous schists are not found until the very top. Higher up, sandstone intercalations are found in it and in the report the possibility is weighed that these upper formations may be Mesozoic. The difficulties of differentiating them accurately from the Tertiary are stressed.

In so far as the strike of the layers in the Taiwan mountains have been investigated and reported, they confirm the agreement with the strike assumed for the outer part of the mountains in the central and southern parts of the island. Some deviation in direction is found in the north. For the great precipitous descents at the Cape Domkaku, in spite of the fact that the line of descent is parallel to the direction of strike mentioned, have been

recognized as a transverse disruption of the strata which make up the mountain section that ends in them; this is a feature that very clearly distinguishes them from the slopes leading down to the Taito valley. Studies, however, seem to have been confined to the northern part of the mountains in the region of the triangular coastal plain of Giran. Here, near the small anchor bay of Soō, the strike of the layers is ENE-WSW whereas in the Geology of Japan, which was published later, it is E-W, with northerly folds. Yoschiwara has also visited the spot. In addition to the schists, he observed pyroxenite formations of the type characteristic of the lowest part of the Paleozoic Chichibu layers in Japan. In addition he claims that from here on everywhere in northern Formosa the direction of the strike is east to west.

The study of the deviating structure of the mountain section that ends with the Domkaku contributed a good deal to the assumption of a curved mountain chain concave towards the east. For the opinion now was that the mountains strike WSW around Soō, that there was a turn to the SW farther west, and that at the Setsu there was another change to the approximately meridional orientation of the watershed. The location of the Setsu, however, (W 10° S of Soō and at a distance of 55 kilometers from it) is not in agreement with this assumption, although it can easily be brought in line with the later ideas of an east-western strike. Then we are justified in the thought that we are here dealing with mountains of a structure different from that of the Taiwan Mts., that they [970] strike westward past the Setsu and that they may be interpreted as a

continuation of the Ryukyu curve.

The basic ideas are vital for a definite answer to the question and important for the morphological interpretation. But the regions beyond the borders of the Giran plain and the transitional zone from here to Kilung are inaccessible due to the fact that the land is inhabited by aboriginal tribes, therefore information is lacking. In so far as anything is known, the factors are not in favor of the assumed turn, but rather support the idea of a meeting of two different mountain curves that are harmonically in line with the structure of eastern Asia. A substantiation for this argument can be found in the fact that in the fundamental structure of the meridional mountains, the dip is exclusively to the west whereas in the case of the equatorial mountains it is always towards the north. In the mountain curve that is concave towards the east, we would have to expect the directly opposite dip in both instances.

Towards the north, the width of the equatorial mountain section seems to be slight. Ischii thought that the argillaceous schists extend northward as far as Tōi and that formations of this rock material found in the latter place date from the Mesozoic.(1) Yoschiwara

1. Tōi is located twelve kilometers north of Giran.

discovered Tertiary fossils in them, however. According to his own studies, the boundary between the Tertiary and the older schists lies south of Giran. In his opinion

the Tertiary takes the form of steep folds oriented east to west and accordingly the parts of the island north of about 24° 40' would belong to the Tertiary.

The younger encrustations: As far as we know, the older mountains constitute a ridge approximately fifty kilometers in width, narrowing somewhat in the southern part and oriented from S 20° W to N 20° E; in the north a transverse unit is added in a manner which cannot be clearly analysed. The continuous mass is encased in a mantle of younger formations that have been attributed to the Miocene and are interrupted only at some points of the eastern side. The younger strata have been disturbed and in the direction of the coasts they are in part hidden by later formations. In the northwest and in the Taitō chain they show intrusion or displacement by volcanic rock materials.

The pure Tertiary is confined to the Taitō chain, the mountain ridge that has previously been mentioned as having a length of 130 kilometers, and a width of no more than 13 kilometers, and as rising to a maximum elevation of 1550 meters between the Taitō [971] valley and the sea. It is said to consist of rocks dating from the Neogene. Sandy and clayey layers are followed by some of gravel; above them, in turn, appear volcanic tuffs and conglomerates; the peaks are of an andesite and are probably the remnants of old volcanoes. In various places incalcations of coral limestone point towards coastal formations. Above the present beach where corals are still found, Yamasaki observed three beach terraces. Together they have a width of 100-300 meters and it is here that the few human settlements of this area are found. Yamasaki also observed a coral reef fifty

meters above the sea.

In the narrow southern spur of the island which the Japanese call the Koschun peninsula, the Tertiary is represented by clastic rocks of lesser steepness. The maximum altitude is 1224 meters. Independent and apparently superimposed at a later time are coral reefs which constitute rugged hills up to 296 meters in height, and the two southern foothills.

The Tertiary is developed best on the west side of the island. The long twin rivers at first flow parallel to one another S 20° W, and later join and continue as the Tamsui-kei in the south: they have cut their beds into Tertiary mountains that in some places exceed 1300 meters in height. In its continuation, the northern half of the island contains the Kali mountain chain; it is 1200-2000 meters high and also strikes S 20° W-N 20° E. According to Yamasaki even the Tokansan with its altitude of 2830 meters, from which diorite rubble is washed down, is encased by Tertiary rocks.

In the west, this high Tertiary zone is followed by a Tertiary hilly region--in the northern part it is separated by a longitudinal valley with Chinese settlements--which continues to boast elevations up to 830 meters. The entire Tertiary land of the west side consists of clastic rock formations and is folded in the direction of strike mentioned. Fossils that could be identified have not been found here, nor on the south and east side.

Westward the Tertiary region is followed by the slopes leading down towards the coast; the formations are attributed to the Quaternary. South of Tainan reef, mountains of coral

limestones are included in it; the highest of them is the Takao-san (323 meters) on the coast near Takao. Farther north these features are not found. The large lowland area that claims more than one third of the total width of the island in some places between the twenty-third and the twenty-fourth parallel North, is a stepped plateau. It consists mainly of gravel deposits thought to be Diluvian in date and reaches a height up to 500 meters. [972]

The most intensive explorations have been carried on in the Tertiary region of the northern part of Formosa. For here coal seams near the popular port of Kilung have aroused industrial speculation and, besides, the occurrence of marine fossils in clayey incalcations have been of interest. Yamaschita found eight coal seams in the complex of layers which was in the main composed of coarse sandstones and shales; he was able to distinguish two anticlines and three synclines, all oriented from west to east.

The interpolated layers of limestone are up to ten feet thick. The fossils contained in them have been studied by Newton and Holland, who stress the Lithothamnium rosenbergii Martin which occurs also in the Miocene of Timor and on the island of Ischigaki. Other fossils did not refute this dating. Yoschiwara supplements these studies by his own observations near the east coast. As I stated previously, he found the boundary of the Tertiary south of Giran, and believes that everything north of this latitude dates of the Tertiary and that the mountains are composed of folds striking west-east.

On the other hand, Yamasaki and reports in the Geology of Japan speak of a

southwestern-northeastern direction of strike in this part of the island, and of a turn of the Kali mountain chain in the same direction.

In the very north, the structure of Formosa includes a group of volcanoes which have previously attracted attention. The mountains are composed of andesites and their tuffs; they are located on both sides of the lower course of the northern Tamsui river, mainly in the north. They reach altitudes of 800-1100 meters and exhibit some solfataric action. A connection with the other group of volcanoes cannot be recognized.

The relief of the bottom of the ocean around Formosa is only superficially known since soundings have been limited. On the west coast a good deal of new land has appeared, and here the bottom slants down in a straight line. The flat bottom that has a consistent depth of fifty meters extends furthest just off the delta of the Dakusui-kei. Shallow water is found from here to the Chinese coast. The Pescadores Islands, basalt formations, rise from it and are separated from Formosa by a somewhat [973] deeper channel, although it does not exceed 200 meters. The submarine slope in the east is more pronounced and soon soundings for 1500 meters and 1900 meters did not reach bottom. But the few depths that could be charted on this side indicate that up to the 200 meter line this zone has in some places the fairly considerable width of 20 or thirty kilometers; this is especially true of the region of the steepest descent between Schiyō and Soō and from there to Cape Santiau.

Conclusions about the Relation of the Riukiu Curve to Formosa.

1. According to the available information, the basic structure of Formosa seems to consist of two parts:
   a. The Taiwan Mountains. On the whole, their various mountain units, and their inner strata (with the exception of the section of the watershed) strike N 20° S-S 20° W. These mountains are composed mainly of rocks defined as Archean crystalline schists and a complex of layers predominantly of argillaceous schists thought to date from the Paleozoic. The dip is westward. Not until a western point is reached does the cross-section show a change from anticline to syncline and reveals a structure of great folds.
   b. Mountains extending from Cape Dom-kaku by way of the Setsu to the Kalisan; the strike is E-W and the rocks have been recognized as being of the type of the Paleozoic Chichibu layers. The dip is northerly.
2. The Tertiary mantle corresponds to these two directions of strike. South of the parallel of the Dom-kaku in the Tertiary formations of the west and east side, the strike is always parallel to the structure of the Taiwan Mountains. On the peninsula in the south, the formation seems to be less steep as it lies over the ended-up bed of argillaceous schist. North of the Dom-kaku line Yoshiwara and his assistants observed a strike that was W-E in all instances, but other men claim

that they also found a strike SW-NE.

3. The directions of dip in the old formations of the Taiwan Mts. point towards a thrust ESE whereas in the Dom-kaku chain the thrust was from north to south.
4. The Dom-kaku chain is located in the continuation of the outer curve of the Riukiu Islands and is a component part of it. This curve [974] is broken in the Sakischima group neighboring Formosa and is disturbed in the directions of strike of the inner structure, although the curved line is maintained. The Taiwan Mountains disappear in southern Formosa. There are no signs of a continuation towards the south. But the mountains are so massive that they must be thought of as the lonely remnant of a larger curved folded mountain ridge which, by analogy with all other curved mountain formations of eastern Asia, faced the Pacific with its outer side.
5. The volcanic inner curve of the Ryukyu islands continues westward in the ridge of the Dom-kaku chain. Here the Agincourt Islands and the volcanic group in the west of Kilung belong to it. In back of the Taiwan Mountains the only volcanic formations are the Pescadores; their main axis is again oriented NNE or more accurately N 15° E.
6. The Ryukyu Curve and the fragment of the curve contained in the Taiwan mountains have one characteristic in common, namely that on the outer side a zone of tertiary sediments is piedmont to it. That means that in both cases the basic

structures on the front side are found at a relatively great depth. But it is not possible to decide whether these are areas of marine abrasion on which debris washed down from the mountains was deposited and gradual subsidence went hand in hand with it, or whether the down warping was along fault lines. The latter is more probably on Formosa because volcanic formations are found in the Taitō Mts. In the case of the Ryukyu Curve, they have been observed only in the old volcano of Nosoko on the island of Ischigaki.

7. Later displacements have been of the same type in both curves. The Tertiary formations must have risen at least to their present height above sea level, and erosion must have given them a shape approximating that which they exhibit nowadays. Subsidence followed and the corals formed the reefs at that time, which later were exposed when a renewed vertical shift followed.
8. The Ryukyu Curve and the Taiwan curve fragment are distinguished from the curved formations of the mainland by their concordance of the inner structure and lines of down warping in the parts corresponding to the meridional component. [975] Exactly like the Japanese curve they appear, therefore, as mountains in which the outer shape bears a causative relation to the folding thrust from the inside to the outside. But as a rule only more or less curved tension faults could be recognized with some certainty and they were discordant to the directions of strike of the inner structure.

9. The idea that the structure and tectonic lines of the southern Kiuschiu remained without any influence on the shaping of the Ryukyu Curve but that the later processes of dislocation in its northern part exerted considerable influence on the outer appearance of the southern Kiuschiu, finds its analogy in the relation of the Ryukyu Curve to Formosa. For in the Taiwan Mts. no traces of morphological influence by the processes responsible for the tectonic lines of the Kiuschiu can be recognized. On the other hand, the dislocations which produced the final shape of the Taiwan Mts. and found their most characteristic expression in the delimitation of the old mountain stock by the straight Taitō valley have also broken up the Ryukyu Curve; they separated the Dom-kaku mountain section on Formosa from it and probably caused the disturbances which occurred only in the Sakischima group of the Ryukyu Curve.
10. Thus the factual material increases which allows us to make some conclusions as to a number of the manifold curved mountain formations of eastern Asia north of the 22nd parallel (i. e., with the exception of the Annamite Curve): the normal structure of the parts of every curve that belonged to the equatorial component was completed before the structure of the parts located in the meridional component. When the two were joined to constitute a curve, tectonic processes were active and gave the normal shape to the meridional unit by means

of later longitudinal downthrusts and disruptive longitudinal faults. They also had effect on the equatorial unit of the curve that originally was adjacent in the north and as abnormal dislocations they resulted in unusual transverse members and transversal dismemberment.

31: Hofmann--604 [2] N-3 (1909) 1912 Formosans
116, 133, 231, 241, 311, 342

We travelled from Taihoku by train for 1 1/2 hours until we came to the small village of Toyen. Here the land is almost level and has been utilized to the fullest extent. The extensive rice plantations were green and threw into relief the picturesque houses of the Chinese; these are solid brick houses with a curved roof reminiscent of Buddhist temples. In the canals, for which the tributaries of the Tamsui are utilized, there are numerous tame ducks. In the small ponds one may see grey water buffalo, a domestic animal which occurs in large numbers of Formosa. It cannot be compared to European cattle as regards its usefulness in agriculture, and so far attempts to domesticate it have not been successful. Many times I saw the patient Chinese peasants threatened by the buffalo or saw that the animal had broken loose. Next to the rice fields there are extensive tea plantations. This is the region where the famous Oolong tea is produced. There are also banana and pineapple plantations on a smaller scale. The houses are surrounded by slender bamboo trees, and everywhere one may see betel palms, a tree which grows everywhere on Formosa.

31: Hofmann--605 N-3 (1909) 1912 Formosans
116, 133, 311, 314

From Toyen we travelled for 14 kilometers on a small vehicle on tracks (52 centimeter gauge); two Chinese coolies served to propel the car. We stopped at the steep bank of the Tamsui; the river rages far below, washing over the reddish-brown, muddy banks veined with large, round rocks. The rest of the way we went on foot or were carried in a sedan; the coolies were strong enough to carry these anywhere, always at the same regular pace. Every foot of land here has been utilized. Here and there we saw Acacia catechu trees; the sweet smell of their small, fragrant blossoms penetrated everywhere. The acacia, a small tree barely 10 meters high, is also important for tanning; this tree predominates in the plains of northern Formosa. Towards evening we came to Taikokan. (1) Our chief objection on this journey was to study the camphor production

1. The spelling of place names is based on the Japanese pronounciation; the Chinese use a somewhat different system of names.

of the Japanese Mitsui Company. The company had obtained a concession in the forested regions bordering on the territory of the aborigines. We did not succeed in this at first, since the region around Taikokan is a Chinese agricultural district.

On the following day we advanced [EJ: from Karapen] about 18 kilometers and reached an altitude of approximately 1,400 meters. When we had reached our destination, a point which the Japanese had called Funkiko and which was to form the end station of the [616] future railway, the thermometer stood at 19° Celsius and the aneroid at 1,420 (corrected at sea level). Our way took us through depressions and over elevations. The mountains, which consist of schist, are broken up into numerous steep and narrow ranges. Here and there sandstone lies exposed; in most places, however, the ground is completely covered with vegetation. In the northeast the Tauzan (Devil's Mountain) drops down abruptly. This is an isolated limestone mountain with barren slopes; it has a height of 2,800 meters. Here the vegetation is entirely different from that we encountered on the previous day. Before we entered the subtropical forest of Lauraceae trees we were struck by the beautiful tree ferns (Fig. 3), which attain a height of 10 meters or more, and the large banana trees growing on the mountains (Musaceae) with their huge leaves. Both of these plants, in contrast to the dry bamboo forests, demand a high degree of moisture both in the soil and in the atmosphere while they cannot grow where there are strong air currents. On these elevations there is not even a breeze, which is all the more striking since the valley of Kagi, barely 20 kilometers distant in a direct line, is frequently ravaged by violent typhoons. Everywhere we saw banana leaves which were unharmed; these leaves would be easily torn if there were a strong wind. It is a remarkable fact that typhoons are limited to the lowest regions while above

an altitude of 100 meters they do not occur. Although tree ferns and Musaceae, which usually occur in groups, do not take up much space in a limited region and often grow between other trees in the forest, forests of fern and palm trees must be considered characteristic of Formosa. They form perhaps an example of Tertiary flora; according to a theory now accepted by geologists Tertiary flora; which demands a constantly humid, rainy and foggy climate which is at the same time warm and not windy, once predominated on the earth.

On the second day of our journey we again passed through beautiful Lauraceae forests; the most attractive scenes, however, were reserved for the third day, when we covered the distance from Funkiko to Goten (2, 220 meters). On that day we crossed two mountain ridges so that we could reach the plateau of the Arisan mountain [617] by the shortest possible route. The region between 1, 000 and 1, 800 M. is covered with foliaceous forests; here as everywhere else camphor trees grow only singly, while evergreen oaks, Quercus gilva, acuta, etc., predominate, as well as Pasania cuspidata. Cinnamonum pedunculatum, Machilus Thunbergii. All the foliacious trees here are evergreen. There are huge tree trunks overgrown with epiphytic plants; the tops of the trees form an almost impenetrable roof so that neither rain nor sun is admitted here. The average height is over 30 meters. In this hothouse atmosphere there are numerous lianas which grow to great heights and develop strong aërial roots the size of an arm; they are suspended from the tops of the trees on which they live.... The lower

arboreal flora has its habitat among the tree tops. There are large white orchids and ferns, and on the long branches of the crown and the sides of the Lauraceae trees there are groups of hart's tongues. All of these plants... are engaged in a continual struggle for light. Our coolies were very careful not to step into the shrubs along the paths, where a dangerous venomous snake with green coloring has its habitat.... The densest part of this forest is found in the depressions and on the lower slopes. In the higher regions the forest is less dense and there is more light for the plants to develop so that even those on the ground are not hindered in their growth. There are various types of shrubs, among which the Fatsia, with its large digital leaves is especially striking. Gradually the Lauraceae grow further and further apart and less tall. At an altitude of about 2,000 meters conifers begin to appear, first singly and gradually growing taller and more numerous. These consist of species of Chamaecyparis; the evergreen foliaceous trees take the place of underbrush while these predominate. [618] After the gigantic proportions of the jungle through which we had just passed we did not immediately become aware of the size of these trees, which have stood for so many centuries. It was not until we took measurements that we realized that these must be among the tallest trees anywhere in the old world. There are some which grow as tall as 60 meters. The largest of the Chamaecyparis formosensis have a diameter of six meters;

they are about 52 meters high and furnish 280 cubic meters of timber. (cf. Fig. 4). A single tree thus offers more timber than a hectare of old pines in central Europe.

The largest trees may be found in the vicinity of Goten, which is to be the end station of the railway, where the Japanese have already built several houses. Here there is a wide, almost level depression with a deep layer of humus which is protected from the wind on all sides; this is an ideal habitat for the conifers, and the trees here are probably as large as those in California. Since 1907 a meteorological station has been set up in Goten...

We spent several days exploring the jungle area around the Arisan, an area comprising 10,000 hectares in all. At a level of 2,400 meters and above the Cupressi predominate. Here the trees do not attain the heights quoted above, but the average height is over 40 meters and the forest is so dense that one cannot see more than a few feet away. One elevation, which has been named Manzaisan, has an altitude of 2,670 meters and is overgrown with reeds; from here one has a good view of the surrounding mountains. There is a thick fog below so that we cannot see the route we had taken the previous day; in front of us, however, lies the imposing peak of Mount Morrison, which, according to the aneroid, has a height of 4,340 meters. The highest point visited by us in this region was the peak of the limestone mountain, Teufelsberg, with an altitude of 2,800 meters. Here the view is obscured by the dense forests.

35: Collingwood--135 D-2 (1866) 1867 Formosans
116, 131, 133, 361

"On the 13th June, 1866, I visited Sano Bay, on the east coast of Formosa, in H. M. S. Serpent, Commander Bullock, proceeding thither from the harbour of Kelung. The object of this visit was chiefly the verification of some supposed dangers in the harbour, which is spacious and not difficult of approach, and, although little frequented, is of importance as the only available harbour upon the whole east coast of the island. Our visit acquired additional interest from the fact that there was believed to be a village in the bay, occupied by the aborigines of the island, whom we were anxious to meet with. We found four villages in the bay: the first and smallest upon the northern side was a mere hamlet of Chinese fishermen, consisting of half-a-dozen cottages upon the hill-side, their boats drawn up on the beach in front. Passing by this, we proceeded up the harbour, and anchored near a sandy beach, beyond which we could see some roofs of houses. All the rest of the bay had a desolate and lifeless appearance, the lofty hills sweeping down to the water's edge, generally densely wooded, and presenting an aspect of wildness, which accorded well with our belief that they were inhabited by the still savage aborigines of Formosa."

42: Schetelig--387 T-2 (no date) 1868 Formosans
116, 133

Above all else I desired to become acquainted with part of the west coast, so I hired a junk to transport all of us, with all our belongings, to the Caponlan Plain, the only piece of land suited for agriculture on the whole northeast coast. This plain stretches out for some miles from north to south and is everywhere dominated by steep and inaccessible sandstone cliffs some 2,000 to 3,000 feet high which form the last spurs of the Central Range. We remained for some days in this very fertile colony which, however, is cut off from the rest of the world.

42: Schetelig--387-388 T-2 (no date) 1868 Formosans
116, 133, 504

The harbor of Sawo is deep, in places 10 fathoms deep; It is protected on the south, west and north, but entry is rendered much more difficult by many sandstone rocks. The place itself appears to be hewn out of the rock, for on all sides the mountains sink precipitously into the sea, and even the small valley in which the village of Sawo is situated is only about 1/4 of a German mile long and much narrower. [388] Behind, in rapid succession, steep mountains rise up, the first chain already rising to a height of 2,000 feet.

42: Schetelig--388 [2] T-2 (no date) 1868 Formosans
116, 133

I had convinced myself personally, by means of several excursions, of the isolated position of Sawo and of the impossibility of finding any connection with the interior. One must picture the land as rising precipitously from here to the highest point on the island. The mountains, up which I went to a height of 3,000 feet, are covered with primeval forest, particularly with camphor wood. Like all mountains in northern Formosa they consist of graywacke and coal-bearing clay schist, and because of their great steepness they give use to quite insignificant but very cold streams.

42: Schetelig--391-392 T-2 (no date) 1868 Formosans
116, 133, 609

In one house of this kind in Tokscham, the fortress of an old and immensely wealthy leader, we met with the greatest hospitality that it is possible to show strangers, and from here we made excursions to the camphor forests of the interior as well as up the extremely curious river valley to the south.

Here it is still possible to trace the successive stages that distinguish the history of the formation of the river. On either side the river is surrounded by a plateau some 600 to 700 feet high, and from this various terraces go down to the river itself and show, even today, that formerly the bed must have been extremely broad and deep, though now the water , which the Chinese lead away on all sides to their fields, is rarely more than a few feet above the point of lowest water level, as we found it [392]. So large does the area of evaporation of a once swift and deep stream become owing to the efforts made in cultivating fields and maintaining meadows.

42: Schetelig--392 T-2 (no date) 1868 Formosans
116, 133, 311

The following brief remarks will be made concerning the distribution of heights and plains in the north of Formosa. I have shown that within one day it is possible, from the meeting point of the three chief streams in the Manka Plain, to reach the foot of the mountains in almost every direction. A further day's journey brings one right into the mountains, but generally one is still within the frontiers where Chinese colonists are to be found, and then, after crossing the first and second ridges, one enters the primeval forests. If one considers that, from our observation point near Takau in the middle of the northernmost third of the island and on the upper course of the Tamsui River, 400 feet above sea level, the nearest ranges are 200 to 300 feet high, that from there in a southerly direction mountains up to 5,000 feet high were measured by us and, finally, that the central connecting point of the Central Range, formerly thought to be 12,000 feet, is now known to be more than 13,000 feet with the surveying of Mount Sylvia, and that this highest point on the island is only 2 to 3 miles to the south; considering all this, it becomes clear that everything lying in between must be mountainous, and steep at that, with no tablelands or cultivated plateaus. Yet all the land lying to the north of the lower course of the middle stream, or that which is situated round the Kilung River, is of surprising fertility, as is also the already mentioned Manka Plain which, strangely enough, is irrigated not by the Tamsui River itself but by one of those admirable Chinese artificial systems of irrigation that brings the water from distant mountains.

131 The total area of Taiwan Province covers 13,880 square miles with a coastline of 970 miles. The main island of Formosa is 250 miles long and 60 to 80 miles wide, comprising an area of 13,800 square miles, with a coastline extending 710 miles. The strategic Pescadores, lying between the China Mainland and Formosa and 25 miles from the latter, guard the Formosa Strait and give shelter to distressed vessels caught in the storms that rage often during the course of the year.

II. TOPOGRAPHY

133 About two-thirds of the main island is composed of rugged foothill ranges and massive mountain chains, of which more than thirty summits exceed 10,000 feet above sea level. Only about 35 per cent of the land is under an elevation of 100 meters (328 ft.). The mountains, towering along the eastern coast of the island, run roughly from northeast to southwest. A low flat coastal plain, extending from north to south, occupies the western third.

The major part of the main island is formed by a tilted mass of earth and rock which extends along the central mountains and slopes steeply to the east and more gradually

1: Stanford U. S-4,5 1956 AD1 Formosa AD1

●133

[Facing p. 3]

•133 to the west. The Central Range, the T'zu-kao-shan Range, and the A-li-shan Range form this tilted block. The Ta-tun group of volcanic peaks occupies the northern extremity; the Taitung Range forms the narrow downfaulted block separated from the Central Range by the Taitung Trench (rift valley).

The main island's strata are mainly formed by sedimentary rock and are vulnerable to erosion. The erosion is intensified by the frequent torrential storms. It is not rare to find swift streams in the midst of steep valley cliffs in the mountainous areas and disastrous seasonal floods on the plains.

The main island lies in a Pacific volcanic belt, but none of the northern mountains or the coastal mountains is active at present. The frequent seismic activity found is believed to be caused by the gradual uplift of the Asiatic Continental Shelf, as a result of which the eastern section of the main island is often heavily affected by earthquakes.

45:Stanford U. S-4, 5 1956 AD1 Formosa
AD1 AD2

133

Major Mountains of Formosa*

Name	Elevation (meters)	Location
Yü (Mt. Morrison)	3,950	Nantou, Chiayi, Koahsiung
Ta'u-kao (Mt. Sylvia)	3,931	Miaoli, Taichung
Tung-tz'u-kao	3,884	Nantou, Kaohsiung
Hsiu-ku-luan	3,833	Nantou, Hualien
Pei-hsin-kao	3,833	Nantou
Nan-hsin-kao	3,815	Kaohsiung
Nan-hu-ta	3,797	Taipei, Taichung, Hualien
Kuan	3,667	Kaohsiung, Taitung

* Adapted from China Handbook 1953-54, Taipei, 1953, p. 343.

133 The rivers have short courses and rapid streams. The longest river is the Cho-shui, only 107 miles long. The rivers are usually shallow except in the rainy seasons. The upper streams generally run through steep canyons, but on the plains numerous branches are formed. Because of the mountain floods, rivers on the western plain rise during the summer; in winter, the dry season, river beds are sometimes exposed.

There are two important lakes on Formosa, namely, Jitsugetsutan[1] [Sun-Moon Lake, or Lake Candidus] and Shan-hu Lake [Chia-nan Irrigation Reservoir]. The former is a natural lake found in the geographical center of the island at an altitude of 2,700 feet. The island derives a major portion of its electricity from the waters of this lake. Shan-hu is an artificial lake damming the Chia-nan River at an altitude of 210 feet. It is located just below the Tropic of Cancer.

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1. This is Jih-yueh-t'an in Chinese. However, this Japanese name seems to be more widely accepted in current literature on Formosa than the Chinese name.

45:Stanford U. S-4, 5 1956 ADI Formosa
~~AD1~~ AD1

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Important Rivers of Formosa*

Name	Length (km.)	Area (square km.)	Course of Drainage (counties)
Cho-shui	170	3,114	Nantou, Changhua, Yunlin
Lower Tan-shui	159	3,310	Kaohsiung, Pingtung
Tanshui	144	2,705	Hsinchu, Taoyuan, Taipei
Tsent-wen	137	1,212	Chiayi, Tainan
Ta-chia	124	1,272	Taichung

* Ch'en Cheng-hsiang, T'ai-wan T'u-ti Li-yung [Land Utilization of Taiwan], Taipei, National Taiwan University and Joint Commission on Rural Reconstruction, 1950, p. 6.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

III. COASTLINE AND MARINE FLOOR

•133 The long coastline of the main island has very few indentations. The east coast is precipitious, with a fault shoreline connecting Hualien and Suao. For all practical purposes, it has no natural harbor except Suao Bay on the northern coast. The west coast is marked by wide tidal flats and is generally swampy. The sea is so shallow that sea-going vessels have to keep almost out of sight of land and can find ingress only at a few river mouths. These approaches, however, are often choked with sand bars. Kaohsiung, the southern port, is situated in a long lagoon called Kaohsiung Bay. The northern coast is winding, with many inlets. Keelung Harbor is a deep indentation there.

The main island sits on the southeastern part of the China Continental Shelf. Formosa Strait is shallow; the depth is generally under 300 feet and not exceeding 700 feet at the deepest point. However, the sea deepens abruptly along the east coast; it drops to a depth of 13,000 feet only 31 miles offshore.

IV. SOILS

134 Three distinct types of soil are found in the mountainous area, and two types of alluvial soils exist in the plains.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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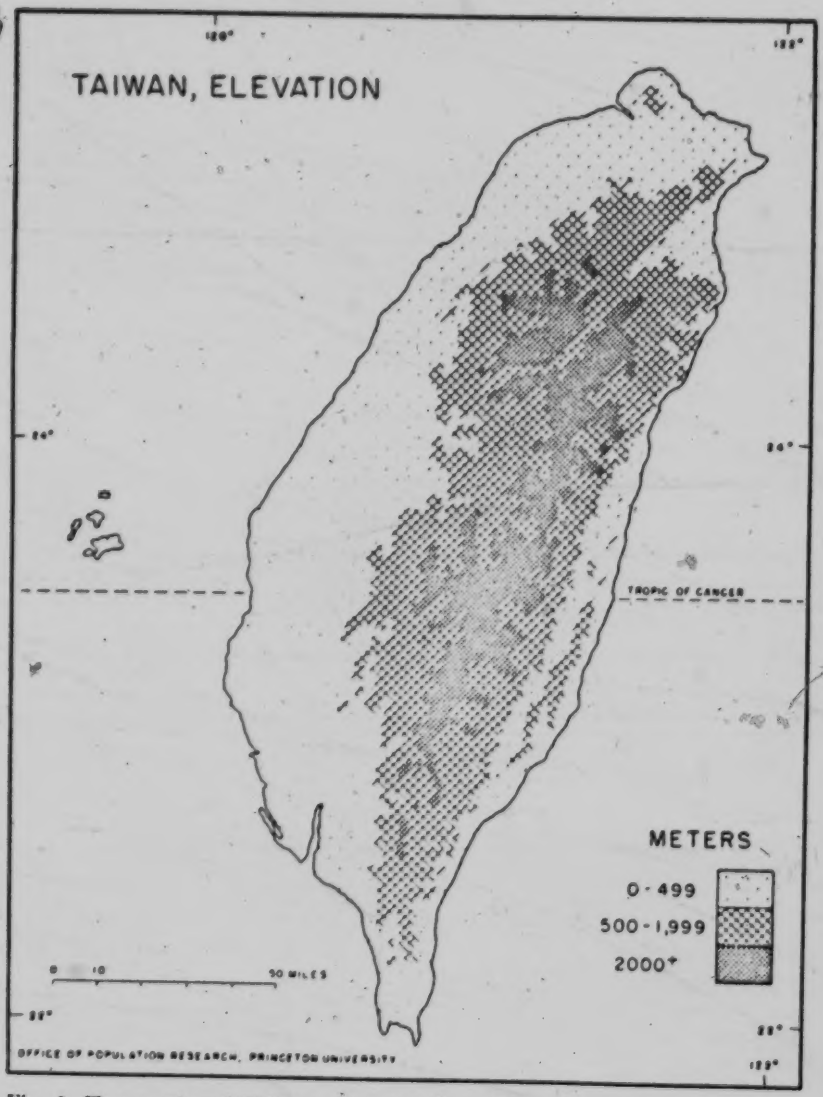

Fig. 1. Topography of Taiwan. (Adapted from Taiwan Provincial Government, Department of Communications, *A Map of the Main Roads of Taiwan*, February, 1950.)

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lives of the population. This aspect of Taiwan's history, and of "economic development" in general, receives a surprisingly small share of attention as compared with questions of technological advance.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
People's Republic of China AF18

F P.R.C. 121 369

some insights into what is now taking place on the Chinese mainland. For many of the changes now taking place both in Taiwan and on the mainland are primarily due to the same cause—the encroachment of urbanization on a traditionally agrarian culture, whether enforced by the Japanese, the Nationalist Chinese, or the Chinese Communists.

T 121

FIELD METHODS AND PROBLEMS

In the selection of a research site, I looked for a Taiwanese village with several attributes. These were that the inhabitants be of mainland origin, preferably descendants of early emigrants from the province of Fukien; that the village have agriculture as its primary means of livelihood; that it have a moderate-sized population, preferably between five hundred and one thousand inhabitants, to facilitate the achievement of familiarity with most of the people and with all aspects of village cultural life; that it be fairly traditional both culturally and socially and as typical as possible of the general villages in that area; and that housing be available inside the village for me, my wife, and our interpreter. It was also important that the village not be too near a major city, and yet not be geographically or culturally isolated from the main flow of Taiwanese life; it had to be identifiable as a definite community.

And, of course, it was important that the villagers be receptive to having a foreign observer move into the village.

It is no easy task to search for a village in which to carry on research in an unfamiliar country. The island of Taiwan, which on the map appears to be minute, is actually 250 miles long from north to south and 90 miles wide; it has an area of 13.8 thousand square miles.

F [133] [131] T F 121 654 648

At the start of my search, I talked with the staff of the Joint Commission on Rural Reconstruction (JCRR), a Chinese and American agency which plays an important role in rural development in Taiwan. They briefed me on the cultural and geographic areas of rural Taiwan, and we decided that the *hsien* (counties) of Chang-hua, Taichung, and Yun Lin (all on the west-central coastal plain of Taiwan) offered the best possibilities for a suitable village. The next step was to travel by jeep within this area with JCRR field agents to visit many different kinds of villages and make a final choice. The interpreter, whom I hired at that time to live and work with my wife and me in the village, was a companion on these excursions. (For a discussion of translation methods and the use of the interpreter in the field see Appendix 1.)

T 124

T 121

During the time we were investigating the many villages, we also visited local Farmers' Associations and *hsiang* (district) public offices. We held many long discussions with local officials to get additional

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

like the railroad lines, were all built during the Japanese occupation.

The mountain ranges serve as a kind of climatic divide. The area north of the mountains, which includes the Taipei region, is known for its long rainy season and cold raw winters. In the area south of the divide, and especially around Taichung and the interior mountain region, the weather tends to be milder, with far less rain and many days of bright sunshine.

On the trip south from Taipei to Chang-hua City the train crosses several large rivers which originate in the interior mountains and flow west to the Strait of Formosa. The rushing torrents of water during and immediately after the rainy season dwindle to a trickle during the dry season, meandering through wide, sandy, and rocky river beds.

At Chang-hua City the traveler must leave the train for a bus headed southwest to the old port city of Lukang. Although the buses leave every fifteen minutes during the day, they are invariably crowded with people and their bundles of produce, fish, a chicken or two, or even building materials.

The thirty-minute trip in an old wooden Japanese bus is made entirely on dirt roads. The ride may be dusty or wet according to the season, but it is always bumpy and noisy. In the dry season strangling dust pours into the bus from all sides. During the wet season, there is always a possibility that the passengers will have to leave the bus and wade while the bus creeps slowly along over the flooded roadbed. Many menthol-distilling factories, brickworks, and small rice mills line the way. The bus must cross many small irrigation canals and maneuver around oxcarts. As the bus moves further away from Chang-hua City and approaches the seacoast area of Lukang, a change in the agricultural landscape, resulting from differences in irrigation systems, becomes more and more noticeable. In those places where there is still no irrigation system, there are large areas of dry fields.

After a half-hour wait in Lukang, the traveler boards another, similar bus for the trip to the village, which lies about three miles inland or southeast of Lukang. The uncomfortable fifteen-minute ride ends when the bus comes to a halt in front of the Hsin Hsing village store.

The houses in the village are constructed of bamboo, mud or fired brick, and plaster. The foundations and structural uprights are usually brick; the walls are a latticework of bamboo strips, filled in with plaster which is a mixture of mud and cow dung. The plaster filling is usually whitewashed. Sometimes the main supports are not brick but heavy bamboo poles. Newer houses, and the older houses of the wealthy, generally have roofs of cement tile, while the oldest and poorest houses have thatched roofs. Houses made of mud bricks are always thatched.

9: Yamasaki--225 N-5 (1896-1897) 1900 Formosans
134, 164

The tributaries of the Taito-kei flow through this territory [MC: the terraced tableland in the south] like a network. The soil is very fertile; but the town of Taichū (Taiwan-fu) situated here is notorious for malaria.

9: Yamasaki--225 N-5 (1896-1897) 1900 Formosans
134, 361

The large plain of Taiwan forms the western part of the island. The alluvial soil is fertile and there are many towns and villages in all quarters of the plain.

20: Alvarez--249 (no date) 1927 Formosans
116, 134

"The soil of the island is most fertile. Rice can be cultivated everywhere, tea in the northern section, sugar-cane especially in the centre and the south, and in the mountains, grows the famous camphor-tree, which yields valuable profit. As far as this natural product is concerned, Formosa is considered to be the richest emporium in existence."

III. COASTLINE AND MARINE FLOOR

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IV. SOILS

•134 Three distinct types of soil are found in the mountainous area, and two types of alluvial soils exist in the plains.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

134 In areas above 9,800 feet elevation podsols (generally associated with coniferous forest cover) and slightly podsolized alpine soils are found. Grey-brown and yellow podsolic soils are found on the mountain slopes between 6,500 and 8,500 feet. In the foothill areas less than 6,000 feet above sea level, lateritic soils -- yellow, light red, and deep red, depending upon the altitude at which they are found -- constitute a major part of the soil.

Alluvial soils, important for agricultural use, cover an area of about 3,300 square miles, or 24 per cent of the island's surface, and are found principally in the southwestern part of the island. Small tracts of alluvial parent materials are widely scattered throughout lowland Formosa. In the middle and northern plains are generally acid alluvial soils; alkaline alluvial soils spread over the southern plains, Taitung Trench, and Yilan Plain.

V. VEGETATION

137 Most of the mountains are heavily forested. About 68 per cent of the main island is covered with three dominant plant formations -- broad-leaved evergreen forests, mixed forests of broad-leaved deciduous trees and conifers, and coniferous forests. Two minor types of vegetation are seen on the foothills,

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~
AD1

Annex "A," Subparagraph 3a',
Economic Background

GENERAL STRUCTURE OF ECONOMY

Two-thirds of Formosa is mountainous and one-third is lowland. The mountains are rugged and covered with dense forests, but most of the lowland is well suited to the production of commercial crops. Though the Tropic of Cancer passes through the island, its climate is mild, with moderate temperatures and abundant rainfall. Two major crops a year are usual and a third crop of vegetables often increases the total yield. The soils are generally fertile, but frequent inundation and heavy year-round cropping cause excessive leaching. To maintain fertility, large quantities of fertilizer become a necessity.[1]

135 Mineral resources do not appear to be abundant. However, since much of the mountainous regions has not been thoroughly

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1. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop. Chiao-min Hsieh and Alice Taylor, "Formosa" Focus, N. Y., April 1955, p. 5.

4:Grajdanzev--108 S-4 (no date) 1942 Formosans
116, 135, 316

"Gold mining was carried on in Taiwan before the Japanese occupation, but gradually, as the best areas were worked out, the amount of gold produced declined and remained low up to 1931, when the depreciation of the yen and the consequent rise in the price of gold made mining more profitable. At the same time the introduction of machinery in modern enterprises decreased costs and, as a result, in five years (1931-36) the value of gold produced was tripled. Since 1936 no data have been published, though the discovery of new ore deposits was mentioned in the newspapers (1). Placer gold is mined in

1. In the February 1940, issue, of Keizai Chishiki it is reported that in October 1939, in the eastern part of the island in the valley of the Takkiri (Keikoku), placer gold was discovered by a mining engineer. This placer deposit was estimated to contain one billion yen worth of gold. However, as early as 1907 Yokobori estimated the value of gold in placers and ores in Taiwan at four billion yen.

Taihoku and Karenko provinces, while ores containing gold in conjunction with silver and copper are found only in Taihoku province."

4:Grajdanzev--108 [2] S-4 (no date) 1942 Formosans
116, 135

"Coal is produced in two northern provinces only—Taihoku and Shinchiku. It is low-grade bituminous coal with heating power varying from 7,480 to 6,160 calories and with a sulphur content of 1.2 per cent to 4.45 per cent. One field in Taihoku contains as much as 64.8 per cent of volatile matter. The layers are from two to three feet thick, and reserves are estimated to amount to 400 million tons. This is less in proportion to the population than in Japan, but considerably more than in the Philippines. Only a part of island is geologically surveyed, so it may be that the estimate will be altered after the resources of the island have been more fully investigated."

4:Grajdanzev--109 S-4 (no date) 1942 Formosans
116, 135, 315, 382, 177.31 Japan
636.31

"Since 1908 the Taiwan government-general and the Japanese navy have paid special attention to oil production in Taiwan, but up to now this branch of mining has been more productive of subsidies to oil producers than of oil itself. It was mentioned above that in 1936 the value of oil produced in Taiwan was ¥312,000 and that of gasoline, ¥456,000. However, in the 1937 budget of the government-general ¥1,005,000 was earmarked as subsidies for oil producers and prospectors. Daily production of oil in the last few years has been about 5,000 American gallons."

4:Grajdanzev--109 [2] S-4 (no date) 1942 Formosans
116, 135, 171, 315, 354

"From the local point of view the production of natural gas is more important[than that of oil--analyst]. The region richest in gas is Kinsui in Shinchiku province, and the gas is used for the production of benzine and carbon-black, as a fuel for sugar mills, and for domestic use. However, in 1937 only 7,411 families had gas facilities (as compared with 2,233,136 in Japan proper)."

4:Grajdanzev--109-110 S-4 (no date) 1942 Formosans
116, 135, 315

"Recently manganese ore was discovered in eastern Taiwan and plans were pushed for the production of magnesium from [110] sea water, but no concrete data are available as to the character of the deposits or the output."

6: Kirchhoff--26-27 U-4 (no date) 1895 Formosans
116, 133, 135

Slight and fragmentary is our knowledge of the soil composition and the geology of Formosa. The two coastal mountains at the mouth of the Tam-sui are trachytic, and the proof of considerable recent variations in elevation is given by layers of pebbles and mussel breccia on its slopes high above the actual sea level. The Ki-lung Range consists of sandstone with intercalations of extensive coal beds. The presence of Miocene and Pliocene Tertiary formations has also been shown, and particularly in the north of the island recent, indeed continuing volcanic activity. It still remains to be examined how much faith can be set on Chinese reports of "nightly gleams of fire" as phenomena of volcanic eruption, even in the mountains of the southeast. But Formosa, beyond any doubt, belongs to the great Eastern Asiatic Belt with still persisting volcanic phenomena. Deposits of sulphur and solfataras are found in considerable numbers in northern Formosa; in many places there steam forces its way hissing out of the ground, generally mixed with sulphur gases, at times as a steam hole. In addition to genuine geysers, [27] steam holes send up white pillars of vapor to a height of 8 to 10 meters from the fissures of the Tschao-soan.

6: Kirchhoff--33 [5] U-4 (no date) 1895 Formosans
116, 135, 317

Among the minerals, there should first be mentioned the sulphur of North Formosa. The sulphur is broken into blocks or it is cut out of sulphurous earth by melting.

Petroleum is obtained in various spots, but is inferior. According to old Dutch chroniclers, gold was formerly mined in the northeast; it is also said that, in the trenches dug to receive it, quantities of gold were obtained at the foot of the hills in this region, when the August rains had swelled the rivers. The river of Su-aô actually carries down from the mountains particles of gold in the sand. Other regions of the island have also proved to contain gold recently. Thus, in the southern part of the country, near Liang-tschian (within the territory still left to the natives), a landslide caused by heavy rains is said to have revealed a considerable quantity of gold. Most surprising was the discovery of goldbearing river sand while building a railroad bridge over a tributary of the upper Ki-lung, in 1890. At once thousands of Chinese hastened thither who had learnt goldwashing in California or Australia; and in the course of the last years the stones carried down by the Ki-lung have been most industriously exploited by these goldwashers, and it would appear with considerable success. But in the fixed rock no gold has been discovered there (Hosie, pp. 23 ff.).

But much greater profit is promised by the extraction of coal, which is met with far and wide in extensive beds, both in north and south (Hosie, p. 21). Up till now the only extraction of importance has taken place in the beds that can be traced along the northeast coast, on the right side of the Ki-lung River, through the Ki-lung Mountains as far as the mountain spurs of Pi-taô. The coal mines there lie close to the coast near

6: Kirchhoff--33 [6] U-4 (no date) 1895 Formosans-2
116, 135, 316

the port of Ki-lung, and provide, in part, a very good anthracite; formerly the coal was extracted only in Chinese fashion in galleries that sank diagonally, but since 1875 machines have been used.

9: Yamasaki--223 [2] N-5 (1896-1897) 1900 Formosans
116, 133, 135, 314

It is worthy of note that the wealth of the island depends chiefly on the Tertiary mountains. The most important minerals, such as gold, soft coal and petroleum, are found here. The camphor trees also grow in this region, for the most part.

9: Yamasaki--224 [3] N-5 (1896-1897) 1900 Formosans
116, 133, 135, 529

In the valley of Kōkei, between the three volcanoes described above, there is a large solfatara. It is situated exactly on the border between the volcano and the Tertiary hill whose slopes rise very steeply opposite the former and rather gently on the other side. Here we are doubtless confronted with a break in the Tertiary range through which the solfatara made its way. It has a considerable area, and many people work there gathering sulphur. Not far off there is a bog from which many hot sulphur springs rise. These springs flow out through a gulley and form a cheerful brook with some water-falls, and here a spa has been built. The surroundings of the Hokuto spa are very pleasant and attractive, and it is now the favorite recreation center for the citizens of the capital of Taihoku, who can reach it after a journey of one and one half hours.

9: Yamasaki--228 N-5 (1896-1897) 1900 Formosans
135

Along the upper course of the Tamsui-kei river there are gold fields and bituminous coal deposits.

9: Yamasaki--233 [7] N-5 (1896-1897) 1900 Formosans
116, 135, 175

Important minerals found in Taiwan are gold, coal and sulphur. The chief sites are in North Taiwan, particularly in the surroundings of Kilung. Gold is found in two form as river-gold and in veins. It was first dound in Kilung-kei in 1890 by a Chinese workman who had formerly been in a Californian mine and who was occupied in constructing a railroad bridge over the river. From this time on, thousands of gold-washers have visited a long stretch of the Kilung-kei about 16 km. from its upper course at the Sanshōrei to the Shichito railroad bridge. Later gold deposits were also discovered in the mountains of Kyūfun-san and Kinkaseki, in the Zuihō region lying to the east of the port of Kilung. We learn through Dr. Ishii, the Taiwan Government geologist, that the met is found in Kinkaseki in the zone of contact between Tertiary layers, in the main sandstone and slate, and the projecting volcanic rock, while in Kyūfun-san there are veins that are traversed by Tertiary layers. In addition gold-bearing sand was also found near Shinjō and in the Shūkoran-kei on the east coast.

9: Yamasaki--233-234 N-5 (1896-1897) 1900 Formosans
116, 135

There is a good deal of coal in the Tertiary Kilung mountainous region; but unfortunately its quality in general is not good. Many deposits can be seen on either side of the Kilung-kei. Denryōkō, Shikyakutei and Sanshōrei are the chief centers in this region, and here the quality of the coal is good compared with other places. There are three deposits in Shikyakutei, the thickest of which measures [234] 1.3 m. The Denryōkō deposits also consist of three beds, the thickest being 3 m.; but they gradually become narrower towards the west. To the north of this region are found the Nai and Gaihokusan, the Kakyaku and Kimpoli deposits, among which the Kakyaku fields belonging to the Imperial Navy have four deposits, the thickest of these being about 1.7 m. The continuation of the northern layers stretches out farther to the west in Kilon, on the tableland of Tōshiyen, while continuations of the Sanshōrei layers can be found only near Shinten to the south of Taihoku. The coal-bearing layers are always Tertiary sandstone and slate, as in other regions of Japan, and their line of strike goes from the northeast to the southwest. There are anticlinal and synclinal layers, and their angle of descent is often very great, being as much as 85°.

9: Yamasaki--234 N-5 (1896-1897) 1900 Formosans
116, 135

Sulphur comes from various solfataras in the Taiton volcanic group,...For the most part it comes from the large solfataras of Hokutō (Patau), Dairyūkō on the western declivity of the Shichiseiton-san, and Taikōshi, to the south of Kimpoli. The other five solfataras also yield small quantities. The total production varies between 300,000 and 420,000 kilograms annually.

9: Yamasaki--234 [2] N-5 (1896-1897) 1900 Formosans
116, 135

Petroleum. It is known to occur in various places. In Gyūtōkō, 15 km. to the southeast of Byōritsu (Mioli), where the middle course of the Kōrō-kei forms a gorge through the chain of Tertiary layers, it appears on its bank. Formerly 36 kilograms were obtained here every day. In addition it is found in two wells in South Taiwan, near Kōnaishō and Hōryō, 12 km. to the north of Banshoryō.

10: Schumacher--225 [10] T-1 (ca. 1896) 1898 Formosans
116, 135, 214, 823

In the north of Formosa, sulphur is cut in large blocks. In the center of the island (Kagee) considerable coal seams are found and the same is true of the northern region around Kelung. The Su-ao river carried gold dust together with rubble as it flows down from the mountains, but the Chinese do not attribute special importance to the gold of the stream. Their interest in camphor is much greater.

12: Garnot--20 [2] G-3 (1884-85) 1894 Formosans
116, 135, 361

Kelung is important because it is near some coal deposits; it and Port-Coal which lies several kilometers to the east are the ports of embarkation for the mineral.

These deposits are about one league east of the city and about two kilometers south of the villages of Gia-Kow and Petao in the mountainous massif which borders the Kelung basin on this side.

The enormous elevation of the plateau is almost completely carboniferous. Coal comes practically to the surface and in certain spots you find it as soon as you begin to scratch the vegetable surface.

31: Hofmann--604 N-3 (1909) 1912 Formosans
116, 135

In the vicinity of Taihoku, the most interesting features are the harbor of Tamsui and the Onsen sulphur springs near Hokuto. From there we went on an expedition which was to take us to the extreme boundaries of that section of the mountain region which could still be considered fairly safe.

37: Steere--316 [1] S-3 (1873-74?) 1875 Formosans
116, 135

"The beds of coal which is found in great abundance at Kelung, at the north end of the island, are apparently in these superficial strata of sandstone. There has been considerable volcanic disturbances toward the north end of the island, and there are large boiling springs of mineral water and jets of steam bursting out in a valley a few miles east of Tamsni. Sulphur is deposited in great quantities, and the Chinese have manufactured it at some time. Petroleum is found flowing from the earth near Onlau toward the north end of the island, and we saw signs of coal on our way out from Posia to the east of Changwha. Gold is said to exist in the island, but this does not seem to be authenticated. There is a curious outcrop of limestone at Takao, near the south end of the island, comprisihg Ape's-hill, Whale's-back, and several smaller ridges connecting these and extending them. The dip of this outcrop is toward the southeast, almost opposite to the general dip of the strata in that part of the island. The rock is a porous limestone with many eaves and crevices in it. There is much fossil coral and a few shells that appear to be of the same age as those found in the sandstone. Whale's-back is thrown up at an angle of about 45° in a great level plain of alluvium, and appears like a great broken piece of ice that has been thrown up and frozen fast in its place."

42: Schetelig--386 T-2 (no date) 1868 Formosans
116, 135, 501, 505

I decided to visit Kilung first. On the journey thither by water we saw the now celebrated sulphur springs in the so-called Hell Valley. In addition to the plentiful sulphur springs, they have high pressure water vapor impregnated with SH, and also bring up a mass of clay similar to the contents of the mud volcanoes. From this the Chinese obtain large quantities of sulphur by simply boiling it off. The surroundings of the river become ever more beautiful once one has left the broader part of the lower Tamsui course and has passed through the so-called Manka Plain (Manka is the name of the chief town of the district of Tamsui-Ting). Gently rising and luxuriantly coated clay schist hills come down almost to the river bed, while in the distance picturesquely grouped and precipitous sandstone mountains offer a varied picture to the eye. But soon hard work is called for, for the rapids, which now occur in great numbers, can be passed only with difficulty and our crew stand up to their shoulders in water to shove the loaded vessel over the pebbles, while the traveler must also quite frequently jump out in order to lighten the boat and to help. Other boats sweep down past us at a great speed for the most part laden with hemp, indigo, potatoes or coal. On the seaward journey the force of the water does all that is necessary, and the skillful Chinese has equipped the boat only with a rudder at the back and, remarkably enough, in front also, in order to steer round the rocks without danger. Before coming to Kilung one crosses the watershed, a small height of some 200 to 300 feet, which sinks sharply towards Kilung and the sea.

42: Schetelig--386-387 T-2 (no date) 1868 Formosans
116, 135, 177, 361, 439

Kilung is a Chinese town with walls and gates. It is open to European commerce and is distinguished for the by no means inconsiderable beds of coal in the neighborhood and by the traces of a Spanish fort. For as, in the south near Taiwan-fu and in the north near Tamsui, quite substantial remains of Dutch strongholds are to be found, similarly the Spaniards, [387] during their brief period of settlement in the 17th century, seem to have made Kilung the chief point for their operations.

42: Schetelig--392-393 T-2 (no date) 1868 Formosans
116, 135, 314, 433

Among the products of the country I mention those of special interest for Europeans; coal, camphor and sulphur, for indigo and hemp are sent to the Chinese market only. No great quantities of sulphur are found, but more could be obtained nevertheless by the improvement of the methods used. Camphor alone makes a treasure chamber of the island of Formosa. It is known that the Laurus camphora is found only in Japan and Formosa, and there only in some districts. Since only trees of a particular age can be used for obtaining the valuable resin, and since every time, unfortunately, the whole tree with trunk and branches is thrown into the subliming pot, one can foresee a time when camphor will go up in price in geometric progression [393] and when finally production will become so small that not even Germany alone can be provided with it. This matter of camphor production seems to me to be of no means inconsiderable economic importance...

42: Schetelig--393 T-2 (no date) 1868 Formosans
116, 135, 316

Coal is found everywhere in narrow beds that are almost always horizontal and lie between graywack and clay schist. It is not of the first quality and is of light specific gravity, but when mixed with English or Australian coal it provides a fairly satisfactory fuel. Of the galleries I visited, some were 600 paces long before one reached dimensions of 6 to 7 feet vertically and 20 to 40 feet horizontally. Statements have also been made about precious metals that are said to occur in Formosa. I myself have seen nothing of the kind, but before all else I wish to stress the fact that the value of precious metals does not depend on their inherent worth alone, but on the location and the surroundings.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3a',
Economic Background

GENERAL STRUCTURE OF ECONOMY

Two-thirds of Formosa is mountainous and one-third is lowland. The mountains are rugged and covered with dense forests, but most of the lowland is well suited to the production of commercial crops. Though the Tropic of Cancer passes through the island, its climate is mild, with moderate temperatures and abundant rainfall. Two major crops a year are usual and a third crop of vegetables often increases the total yield. The soils are generally fertile, but frequent inundation and heavy year-round cropping cause excessive leaching. To maintain fertility, large quantities of fertilizer become a necessity.[1]

135 Mineral resources do not appear to be abundant. However, since much of the mountainous regions has not been thoroughly

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1. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop. Chiao-min Hsieh and Alice Taylor, "Formosa" Focus, N. Y., April 1955, p. 5.

135 explored geologically, the situation with respect to mineral resources could be changed considerably in the future. Bitumous coal is abudant in the northern part of the island, and some high-grade coking coal has been recently discovered at Nanchuang near Miaoli. Large reserves of copper and sulphur and some gold veins are located in the northeast part of the Taipei area. Pyrites in limited quantities are mined in the north, primarily for use in the fertilizer industry. Limestone and glass sand are also available for building purposes. But such ores indispensible to industrial development as iron, bauxite, lead, zinc, tin, and magnestie[2] are scarce or non-existent on the island and must be imported. As much of the rock formation on the island is petroliferous, large oil and natural gas fields may be discovered in the future, but as yet petroleum finds and development have been insufficient to offset reliance on foreign sources of supply.

241 The economy of Formosa is essentially agrarian; although only one-fourth of the total land area is arable, most of the population is engaged in farming. Ever since the Dutch

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2. Mercury and manganese ores are found in the mountains near Yilan.

II. MINERAL RESOURCES [16]

135 Although many of the mountainous areas in Formosa have not been fully explored, the island does not appear to be rich in mineral resources nor are those that are known available
328 in quantity. Formosa does produce coal, some
316 gold, copper, petroleum, salt pyrite, and
317 sulphur. Some coal and salt is exported. All of the other minerals are for domestic consumption. Smaller quantities of mercury, manganese, asbestos, mica, and gypsum are also produced. Bauxite, necessary for the aluminum industry, and gypsum, used in cement production, are imported, since they are not found in sufficient quantities on the island.
316 The production of the various mining industries
433 in 1953 and 1954 is given below.

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16. Statistical information in this section, unless otherwise specified, is in large part from Taiwan Economic Data Book, Vol. 3, Taipei, 1955, by Foreign Operations Administration, MIssion to China.

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PRODUCTION OF MINING INDUSTRIES 1953-54 */

	1953	1954
Coal (1,000 metric tons)	2,393	2,100
Crude petroleum (kiloliters)	2,830	5,571
Natural gas (1,000 cubic meters)	30,925	28,962
Sulphur (1,000 metric tons)	3	6
Pyrite (1,000 metric tons)	23	25
Gold (kilograms)	772	670
Silver (kilograms)	651	624
Copper (1,000 metric tons)	13	10
Salt (1,000 metric tons)	162	369
Gypsum (1,000 metric tons)	6	3
Mica (1,000 metric tons)	24	20

*/ China Annual 1954, Vol. 3, p. 48.

135 Estimated reserves of selected minerals are given in the following table. It would appear, from this brief survey, that Formosa possesses limited mineral resources and few of the mineral requirements of modern industry.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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ESTIMATED MINERAL RESERVES */
(In Metric Tons)

	Quantity	Area located	Content
Coal	670,000,000	Keelung, Taipei, Hsinchu, and Chunan	-
Gold ore	5,000,000	Keelung	Au at 3.1 grams/MT
Copper ore	5,900,000	Suao and Hualien	Au at 1.3 gr/MT Cu 0.72 %
Sulphur	700,000	Taipei	S 30-45 %
Pyrite	5,380,000	Keelung and Hualien	-
Manganese	300,000	Suao	Mn 24-35 %
Iron sands	200,000	Tanshin	-
Asbestos	90,000	Hualien	-
Dolomite	2,000,000	Hualien	18-24 %
Crude oil	89,000 (cu.meters)	Chhuangkeng, Chinshui, and Miaoli.	-

*/ FOA Mission to China, Taiwan Economic Data Book, Vol. 3, 1955; Bank of Taiwan, T'ai-wan chih Ti-hsia Tsu-yüan [Underground Resources of Taiwan], Taipei, 1950, p. 171.

A. Coal

135 316 The coal mines of Formosa form a belt, roughly northeast-southwest, in the northwestern section of the island. Although relatively abundant, the coal is generally low-grade bitumen; only a limited quantity is suitable for cooking purposes. Annual production is about 2,000,000 metric tons; the estimated total reserve is 670,000,000 metric tons, most of which is located near Taipei Basin. More than 80 per cent of the coal produced is for domestic consumption. The remainder is exported.

B. Petroleum

315 Crude oil production is limited, and supplying only about one per cent of the island's requirement. There are five refineries on the island; Kaohsiung Refinery is the largest. The other four refineries are small in scale, located near oil fields in Miaoli, Chuhuangkeng, Chinshui, and Chutung. Kaohsiung Refinery, equipped with three crude distillation units, one thermal cracking and reforming unit, and one vacuum distillation unit, as well as auxiliary plants, is capable of processing 25,000 barrels of crude oil a day. The principal products are motor gasoline, jet fuel, kerosene, diesel fuel, heavy fuel oil, and asphalt. Geology experts generally agree that Formosa has ample oil reserves for domestic needs. Further exploration and the drilling of additional wells will contribute to increased production.

4:Grajdanzev--8 [3] S-4 (no date) 1942 Formosans
116, 136

"The island is less rich in fauna. There are cattle and water buffalo, although it is impossible to say whether they are native or imported, but few horses; birds are relatively rare, and there is an abundance of snakes, of which thirteen species are poisonous. Mosquitoes are very prevalent, a mosquito net being a necessity. In spite of the efforts of the Japanese physicians, malaria continues to be a scourge of the island."

6: Kirchhoff--28-29 U-4 (no date) 1895 Formosans-1-2
116, 136

The fauna of Formosa, as far as mammals and birds are concerned, was thoroughly investigated by Robert Swinhoe, English consul in China, who died at an all too early age in 1877. Wallace has already made use of Swinhoe's results in studies of animal distribution. The fauna of Formosa especially, it appears to me, prove that this is among the detached islands. While it does possess a number of species found there alone (14 of the 35 mammals, 43 of the 128 species of birds), these, too, are as a rule closely related to species living on the Asiatic mainland or in the other islands of South-east Asia, and a large number of species both of animals and plants is common to these lands and to Formosa. Yet one is struck by a phylogenenetically very interesting fact! the Formosan fauna reveal much closer relations to Hither and Farther India, the Malayan Archipelago and even to Japan, than to China, which lies so near. The black bear of Formosa is the Ursus tibetanus or at least its close relative; the prettily marked dove of the island, [29] Palumbus pulchricollis, is the wood dove of the Darjeeling region of the Himalayas. Of the felines, the island has Felis chinensis in common with China, but F. Viverrina (the Asiatic wildcat) in common with the Himalayas and Malacca, F. macroscelis with Siam and the Malayan Archipelago. The orange-colored tree civet cat (Helictis subaurantiaca), which is found only in Formosa, resembles the Himalayan species (H. nipalensis) more than the Chinese (H. moschata). Swinhoe's goat antelope (Nemorhoedus) has its nearest relatives in Sumatra and Japan. The Formosan deer, also called after its discoverer Swinhoe, most closely resembles the Schka deer

of Japan, called Cervus Sika by the zoologists, while the island's wild pig also resembles the Japanese one. The pretty little Formosan flying squirrel (Sciuropterus haleensis) also points to a Nepalese relationship, and the island ape, (Macacus cyclopsis) which is not unlike the orang-outang, and after which is named the steep coral cliff at the entrance to the bay of Ta-kaô harbor, is closer to the Indian M. rhesus than the M. sancti Johannis of South China. There are said to be no parrots on the island.

6: Kirchhoff--29 U-4 (no date) 1895 Formosans
116, 133, 136

After all this [MC: evidence of the similarity between the fauna of Formosa and the mainland] one will probably agree with Wallace's final conclusion that while Formosa is an island detached from China, this separation from the mainland must have occurred pretty early, though certainly during the Tertiary period. Further, not only did many species of animal on the island vary, the insular isolation preventing cross-fertilization with unaltered species, these varieties gradually becoming new species, but at the same time great changes were experienced in South China with respect to fauna, so that the relations to the Indian domain were more and more obliterated. It would be of value to subject this explanation to a more searching test, by means ,for example, of paleontological discoveries in the soil of southern China. The beetles and butterflies of Formosa also diverge from those of the Chinese mainland, while they are related to and in part identical with those of Hainan and the Malayan island region; but these creatures might have been transferred by the typhoons that frequently blow over the island from a southerly direction (Hosie, p. 6).

9: Yamasaki--233 [3] N-5 (1896-1897) 1900 Formosans
116, 136

Our zoological knowledge of Taiwan is limited for the most part to the investigations of Swinhoe more than 30 years ago, for the Japanese accounts in this domain of natural history have not yet appeared. 31 species of mammals are known and about 150 bird species. The largest beast of prey is a black bear (Ursus Formosanus Sw.), which is close to the Japanese Kuma (Ursus Japonicus Schl.). In one village on the upper reaches of the Dakusui-kei I saw a chief wearing a cap made of the neck-piece of this bear. The fox (Canis vulpes) is also widespread, as in Japan. Flying foxes and bats, squirrels and other rodents are also found. In the woods there is a species of monkey (Innuus speciosus), and a species of wild boar (Sus taivanus) occur in large numbers. There are also many deer (Cervus Swinhoii), very similar to the Japanese Cervus sika, and also antelopes. The hides and antlers of the deer play a big part among the mountain dwellers as articles of barter. Of the tropical genus of the pangolin (Manis), the short-tailed Manis has been known for centuries.

9: Yamasaki--233 [5] N-5 (1896-1897) 1900 Formosans
116, 136, 262

Fish naturally play an important part in the diet, especially among the dwellers on the coast. Among the many species of the Taiwan Sea that are favored, the Harder (Mugil cephalus) is to be named before all others. In the winter months the inhabitants of the southwest coast are kept very busy catching it. It is about 3/4 m. long and not only its flesh but also its milt provide an article of diet esteemed by both Chinese and Japanese. In the markets at Tainan and Takao I saw the following species of fish also: Pagrus sp., Peristethus orientalis, Trigon pastinaka, Tachiurus lepturus, Thynnus pelamys (bonito), Trachurus sp., various mackerels, flat-fish, squid, etc. Among freshwater fish Cyprinus carpio (carp), Cerassius auratus (crucian), a species of trout (Plecoglossus altivelis) and Anguilla bostmiensis (eel) are the most important. There are also various species of valuable crustaceans. The king crab (Limulus) is also found in the sea near Taiwan, close to Kilung, especially, and its shell, which is used for ladles, can be bought everywhere. On the southeast coast I have often seen large turtles and their old shells are also found on the shore.

13: Anonymous--26 U-3 (no date) 1941 Formosans
116, 136

"The mammals so far discovered are more than 60 in number, while the species which appear to be peculiar to the island number 45, the majority of them being considered only varieties of the species found in the Oriental and Palaearctic regions. The species not found anywhere outside of the island are Formosa flying fox (Pteropus formosus), Formosa macaque (Paradoxuris larvatus), etc. The squamata are represented by a single ant-eater (Manis pentadoctyla).

Of birds we find more than 330 species and sub-species, of which 33 are common to the island, China and the Philippines, and about 87 belong to peculiar forms. One of the most notable species is the Mikado pheasant (Neocalophasis mikado) which lives in the central and eastern mountainous parts, 6,000-9,000 feet above the sea level. More than 65 species of reptiles and amphibians are known to inhabit the island, and very frequently to be met with is Trimeresurus gramineus, a poisonous snake, which is of an almost uniform green colour and widely distributed in tropical districts.

The insect fauna is exceedingly rich and varied. We are acquainted with about 319 forms of butterflies, most of which are known from the tropical countries.

Of freshwater bivalves and land snails we find such species as Corbicula maxima, C. fulmenea and Dolicheulota formosensis, Formosana taiwanica, Tortaxis matsudai, etc."

37: Steere--315-316 S-3 (1873-74?) 1875 Formosans
116, 131, 133

"The Island of Formosa lies about eighty miles from the main land of China, and is two hundred and fifty miles in length and eighty or ninety in breadth. Physically considered it is made up of a lofty range, or system of ranges, of mountains on the east-side, with a rocky and precipitous coast on the Pacific, and rich level plains on the-west, extending down to shallow seas in the Formosa channel, with immense sand flats, which are uncovered at low tide, and are apparently rapidly rising and adding to the cultivable lands. Several of the mountains are over twelve thousand feet in height, and the whole range from east of Takao for a hundred miles to the north must stand at near eleven thousand feet. In January, 1874, this whole extent was covered with snow, and it is probably so covered every winter. The highest mountains when visited were very steep, and were composed of slate rock with veins of quartz from an inch to several feet in thickness. The bases of the mountains and the foot hills are generally composed of coarse, friable sandstone, containing tertiary fossils. There are numerous plateaus among the foot hills and below them, evidently the remains of ancient plains that are now left far above the great plain below, the rivers having [316] cut down through to a lower level. Many of these plateaus are tilted out of level apparently by the rising of the mountain chain behind them, and the foot hills are evidently thrown up in this way, especially those east of Taiwanfu that were like great furrows in the general direction of the mountain range, the strata of sandstone of which they are composed being tilted at an angle of 20°, but growing greater toward the mountains."

37: Steere--319-320 S-3 (1873-74?) 1875 Formosans-1-3
116, 133, 361

"The first journey made was from Taiwanfu north following General Legendre's track to Kagee. From here we left his track on the left and turned toward the mountains. After one day's travel we entered the mountains by the bed of a stream, and then we traveled a day and a half through a mountainous country partly covered with timber, with here and there a Chinese village. This country seems to be a sort of neutral ground, and all were armed for the last six or eight miles before reaching the lake of Tsuisia. We passed through a wild country covered with timber, where there was said to be much danger from savages, and only large bands of armed men passed. We found a fresh water lake, surrounded by cultivated lands, and with three villages of Trin-whan. An old Chinaman, living upon a small island in the lake, owned most of the lands, and had begun the cultivation of tea. There was a very high and steep mountain at the distance of a few miles, directly to the east of the lake. The lake has several species of eels and of fish, the latter mostly of the Siluridal. From the lake, a day's march, most of the way through rough, mountainous country, brought us to the valley of Posia or Polisia. There were many beautiful tree ferns seen on this trip and camphor trees. The valley of Posia is six or seven miles in diameter, and is not all cultivated yet, as rice cannot be carried up such a distance to market, and the inhabitants only cultivate for their own use. There are several beautiful streams flowing through the valley, which, when they unite at the bottom, are well deserving the name of a river. The settlement of Posia seems to be very near the situation of a town on

Legendre's map called Ou-gitang. We inquired in vain for this town, and came to the conclusion that it was imaginary. Posia is surrounded on all sides by mountains that are covered with timber. We saw several species of oak growing here with a pine and a wild apple, which the Lek-whan gather and boil for eating. There is also much camphor-wood, but distance to market makes it impossible to use it as yet. From Posia we went a day and a half's journey almost due east up a roaring stream that forms part of the river at Posia. For the first ten or twelve miles the rock was mostly sandstone, and on the north side of the stream the timber was composed of dwarf pine and oak, with no undergrowth but coarse grass. On [320] the south side, the mountain, though just as steep, was covered with almost tropical vegetation, among which were tree ferns, wild plantains, rattans, etc. As we went farther up, the vegetation became more scanty on both sides. We found the savages cultivating the steep hill sides, the rock now being slate and quartz. At last we reached the water-shed, having followed the stream we were upon to its heads, while we could see the country descending on the east toward the Pacific. Most of the country here seemed to have been under cultivation at some time, and had grown up to a second growth of timber, twenty and thirty feet in height, of a species of alder, closely resembling the one called tag alder in the United States.

Upon our return to Posia we started out toward the coast with a large band of Lek-whans as guides and guard. We followed the river for the first day through a rough,

but rich and timbered region. At night we camped on the river, and near a fine valley, where there were still walls of houses and remains of ditches for irrigation, made by a body of Lek-whans, who settled there some twelve or fifteen years before. They were harassed so determinedly by the savages that they had to desert the settlement. Soon we broke out of the mountains, having left the river on the right. There were several guard-houses, with soldiers guarding the ravine we came down from inroads of savages. We hove here in sight of Changwha in the distance, and of the goat-plain, but we turned to the north and stopped at the Lek-whan town of Toasia. They have rich rice fields about here, and the country is very productive, but they are in debt to the Chinese. From Toasia, a day's journey took us to Laisia, part of the way being over a dry plain that had once been part of the great valley, but had been left high and dry by the streams cutting through to a lower level. Laisia lies in a beautiful valley among the hills and plateaus. There are two small villages, a few yards apart. On my journey toward Tamsni, I passed large quantities of camphor, most of it cut and lying on the ground, a short distance to the north of Laisia. The timber has been cut by the Chinese for the best part to be sawn into planks; the rest will lie until it is packed up and carried away to be distilled for the camphor. Between Laisia and Tamsni I passed many places fitted for the cultivation of tea. After reaching Tankiang, I followed General Legendre's track for the rest of the way."

4:Grajdanzev--5-6 S-4 (no date) 1942 Formosans
116, 132, 137

"Situated as it is in the tropics, Taiwan has high temperatures with small variations from year to year, and relatively small fluctuations from month to month.

Average Yearly Temperatures In Taiwan At Sea Level

	Centigrade			Fahrenheit		
	1931	1932	1936	1931	1932	1936
Taihoku (north)	21.6	21.6	21.7	70.9	71.9	71.2
Taichu (middle)	22.1	22.1	22.1	71.8	71.8	71.8
Koshun (south)	24.3	24.3	24.4	75.7	75.7	75.9

Source: Japan-Manchoukuo Year Book and Taiwan Jijo.

The average annual temperature in Manila is 26.6°C. and in Hongkong 22.2°C. January temperature in Koshun is a little above that of Miami, Florida, and the July temperature is the same. Taiwan at low levels thus resembles Florida and is considerably warmer than California. Tropical fruits can [6] ripen in Taiwan and it is possible to raise two crops of rice from the same field and in some cases to grow a third crop also, usually of some vegetable. Land may be used much more intensively than in Japan. Frost is very rare in Taiwan (2) while snow is unknown, even on the mountains.

2. The lowest temperature observed was -0.2 C (31.6 F) at Taihoku and -0.1 C (31.8 F) at Taichu."

4:Grajdanzev--8 [2] S-4 (no date) 1942 Formosans
116, 137

"The vegetation is luxuriant and tropical in character. The island is rich in sweet-scented and bright flowers, especially orchids, while in its forests one may see banana, black ebony, camphor oak, maple, palm, cork, oak, tree ferns, persimmons, pineapples, soap trees, tallow trees, etc. Higher in the mountains are found gigantic cryptomeria, red cedar, spruces, hinoki (Thuya obtusa), and pines; still higher the trees give place to short grass."

"The present distribution of forests and waste lands (i.e. formerly forest or which can be afforested) may be seen from the following table:

Forest Area in Taiwan, December 1936
(1,000 ko)

	On the plains	In the aborigines' territory	Total
State: forests	399,086	1,312,562	1,711,648
waste land	195,529	308,137	503,666
Public: forests	12,112	...	12,112
waste land	3,529	...	3,529
Private: forests	219,095	1,568	220,663
waste land	45,131	...	45,131
Total: forests	630,293	1,314,130	1,944,423
waste land	244,189	308,137	552,326

The Japan Year Book say: 'Reckless cutting of trees was done by Chinese immigrants and this . . . resulted in the devastation of forest districts.' But it is surprising to find that the forest area on the plains (excluding waste land) is about three-quarters of the area under cultivation. However, the exploitation of this tremendous area — 2,496,749 ko or about 5.8 million acres — leaves much to be desired. According to official

statistics. the total value of forest products in 1936 was only ¥15.1 million—much less than the value of fishery products or only two per cent of the gross value of the island's production. This sum was made up of the following items: [89] timber, ¥5.6 million; charcoal. 1.9 million; bamboo, 1.7 million; [illegible]wood, 2.7 million; and others 3.2 million. If these figures are correct, then of the 2,496,749 ko, one ko brings on the average only six yen, or less than half that in Japan."

6: Kirchhoff--28 [2] U-4 (no date) 1895 Formosans
116, 137

In general the flora of Taiwan is related to that of the Indo-Malayan region, and more distantly probably also to that of South China. Formosa is an evergreen land, the generally warm and humid air in the mountains feeding a thicket that can be penetrated only with difficulty; it is a land of palms, tree ferns and bamboo. The banana, i. e. the Musa textilis of the Philippines (Hosie, p. 6), thrives in the south at least, and also the Pandang, quite a number of tropical fruit trees, the climbing palm Calamus Draco, which festoons the thickets of the east in particular, and the betel-nut palm, both of them being found in the Malayan Archipelago and on Hainan, but the latter being unknown on the Chinese mainland (Hosie, pp. 5 ff). Even round the Dragon Lake one can see lofty palms raise their feathery crests; but the king of the Formosa forests is the camphor tree (Cinnamomun Camphora) with its imposing, oak-like form and its shiny, dark green leaves. In addition to this no fewer than 65 various species of building wood are counted in the forests. Indigenous are also the important fiber plant Boehmeria nivea, the so-called China nettle, a near relative of our stinging nettle, and the beautiful Araliacee Fatsia papyrifera, whose stem turns into wood and grows to the height of a man within one year, and which bears a chain of long-stalked leaves on its crest divided like hands, and whose unusually plentiful pith provides the valuable material for the manufacture of Chinese pith paper (incorrectly called rice paper).

6: Kirchhoff--32 [2] U-4 (no date) 1895 Formosans
116, 137, 241

As well as indigo, there are grown ginger and plants providing oil, both sesame and peanuts (Arachis hypogaea), and also melons, pineapple, bananas and the South Asiatic tree fruits such as mango and the giant lemons or grapefruit (Citrus decumanus). The Chinese nettle (Su-mo in Chinese) need not be planted any more than the Fatsia papyrifera, since it grows wild in abundance, the latter especially on the mountains round Tam-sui.

9: Yamasaki--231 [3] N-5 (1896-1897) 1900 Formosans
116, 137, 313, 342, 501

As the name of Formosa shows, we find all over the island very heavy tropical vegetation.

Bamboo. This grows everywhere on inhabited plains and hills. The useful species become much thicker and larger than in Japan. It is used for many purposes. In the mountains the inhabitants build their huts of it, and in South Taiwan the fishermen build of it their boats and Teppai or Takamalan. These latter are curious sailing boats with raft-like bottoms of bamboo stems laid beside each other.

9: Yamasaki--231 [4] N-5 (1896-1897) 1900 Formosans
116, 137, 276

The betel-nut palm (Areca Catechu L.) is a common tree in the plains. Especially in South Taiwan it is planted in gardens. Slices of the fruit mixed with slaked lime and leaves of the betel-pepper are used on Taiwan, by both Malays and Chinese, as a stimulus and offer an agreeable refreshment, when placed in the mouth.

Ficus retusa L. and Ficus Wightiana Wall, are also found extensively on the island. In one pass between Teroso and Hachiyowan in South Taiwan I saw a dense wood of Ficus retusa, together with Calamus Rotang L., much intertwined. The first mentioned species of fig, with its far-spread aerial roots, also grows much on the tongue of land near Takao. Pan dangs (Pandanus odoratissima) is found extensively in the plain, particularly in the region of the coast. The tree fern (Cyathea spinulosa) is also found all over the island. The coniferous type of tree ends in North Taiwan. Here, as far as the Hachimantōge on the Hokkō-kei, there are still found beautiful woods of a pine very similar to the Japanese Pinus densiflora. One often encounters Acacia Rhichii in the woods and fields and along the routes. At first glance, from a little distance, it looks like an osier. The coral tree (Erythrina indica L.) flourishes in the plains. In general the primeval forests in the mountain ranges of Taiwan are very dense and impenetrable. Most trees are covered by uncountable varieties of parasites and various climbing plants wind around them. Where there are no trees there is a brush consisting of bamboo, banana palms or tree ferns. In clear patches, there are grass bushes of Kaya (Eulalia and Imperata species) over 3 m. high, which are often so thick that it is difficult to traverse them. In lagoons near Takao one finds the mangrove woods so typical of tropical regions.

9: Yamasaki--231 [6] N-5 (1896-1897) 1900 Formosans
116, 137

Concerning the flora of the woods, Dr. S. Honda, who climbed the highest mountain, Niitaka-yama, has made the following important observations:*

*Mitteilungen der deutschen Gesellschaft für Natur-und Völkerkunde Ostasiens in Tokio. Vol. VI, No. 60, July 1897.

"The Formosan lowland belongs, from sea level to a height of 1,700 feet (520 m.), to the area of tropical vegetation, and consists chiefly of Ficus, Pandanus, palms and pineapple. From here up to 6,000 feet (1,830 m.) there extends a sub-tropical evergreen forest, the camphor tree being found up to a height of 6,500 feet (1,980 m.); in addition we find evergreen oak species. From 6,000 feet (1,830 m.) there begins the coniferous region, first of all with Cryptomeria and Chamäcyparis and then, between 7,000 and 8,500 feet (2,130 to 2,590 m.), with pines (a variety of Picea Glehni), between 8,500 and 10,500 feet (2,590 to 3,200 m.) with Tsuga (Tsuga diversifolia Max.) and finally, from 10,500 feet up to the peak of the Morrison (3,200 to 4,145 m.) with species of fir and juniper, and chiefly Abies Menziezii."

9: Yamasaki--232 [7] N-5 (1896-1897) 1900 Formosans
116, 137

Many species of edible fruits are found. Bananas (Musa chinensis) are found everywhere. Pineapple (Ananassa sativa Mill.), Euphoria longa, Mangifera, are tasty tropical fruits. Among the Citrus genus the large Citrus decumana L. (Yua) plays the chief part, C. nobilis and C. medica being also found. I have seen persimmon (Diospyros kaki) in the aboriginal village of Hōgō in the Central chain.

9: Yamasaki--232 [8] N-5 (1896-1897) 1900 Formosans
116, 137, 248, 286

The pineapple (Hōri or Unrai) is an important plant for Taiwan, not only for its fruit, but also because the leaves have fine fibers from which thin summer clothing is woven. The fine cloth used for this is called Unrai-pu or "pineapple cloth." The most important textile plant of the island is, however, the China-grass (Boehmeria nivea Hook.), Tschuma in Chinese and Karamushi in Japanese, its fibers being exported in large quantities. It is also one of the chief articles of barter for the aborigines in the mountains. In Holisha I saw a large quantity of China-grass fibers, which had been taken there by the natives living on the upper course of the Dakusui-kei.

9: Yamasaki--232 [9] N-5 (1896-1897) 1900 Formosans
116, 137, 289

A curious and noteworthy plant growing on the island is the Fatsia papyri fera Miq. (Tsungtsau in Chinese and Tsūsō in Japanese). The Chinese cut out of the snow-white pith of Fatsia papyrifera Miq. thin strips like paper with such extraordinary skill that, from a cylindrical piece of pith about 3 cm. in diameter and 6 cm. long, they can make a strip about 5 m. long with one continuous cut starting from the surface and parallel to the axis. The dry strips of pith paper are then dyed various colors and worked into beautiful artificial flowers for the coiffure. To call this pith paper "rice paper" is no less wrong than to use the name "rice broom" or "root broom" for articles made from the panicles of the durra (sorghum vulgare).

9: Yamasaki--232-233 N-5 (1896-1897) 1900 Formosans
116, 137, 314

Camphor (Chang-nau or Nau in Chinese, Shōnō in Japanese) plays the most important part among the forest products, in fact the island is the largest provider of it. The camphor tree (Cinnamomum camphora Nees.) or, as one also says, the "king of the Formosan forests," is found in abundance in the luxuriant virgin forests of the northern half of the Kali chain and the neighboring regions of the Central Range, up to a height of 2,000 m. The trees attain an imposing height and sometimes, [233] with a diameter of 3 m., are between 40 and 50 m. high.

26: Honda--469 [2] N-3 (1896) 1897 Formosans-1-2
116, 122, 137

... I felt an urge to explore the hitherto unknown mountainous part of the island of Formosa. In the fall of last year the Imperial Government finally asked me to make a study of the forestry of that region. I departed at the beginning of October, 1896, and after seven days I landed in Kelung, the northernmost port of the island; we had briefly stopped at the Liukiu Islands in the course of our voyage. Together with four companions I set out on my march through the western slopes of the almost central mountain chain; we were headed south. Beautiful evergreen woods - ficus and palm trees, camphor trees, bamboos, fig trees, pineapple, banana trees and cinnamon trees - covered the western spurs of the mountains where several Chinese villages are still found. Towards the east, however, in the direction of the mountain ridge the population is exclusively native. As the elevation increases, the vegetation changes. The tropical appearance is lost and Crypto-meriae, pine-trees, and firs are reminiscent of the temperate zone. Fortunately the Chinese have not yet deeply penetrated into the mountain regions, for they certainly do not know any such thing as consideration of the forest. Wherever they go war is made on the forest with fire. The Chinese inhabit bare plains where nothing but bamboo groves are visible; they are planted close to the dwellings. Incalculable damage has already been done by barbaric devastation. After a journey of ten days we arrived in Ling-ki-ho, a place inhabited by Chinese where I encountered the last Japanese guards. From here on to Mt. Morrison there are no Chinese settlements. I

was unable to find horses anywhere although I needed them badly, nor were mules or donkeys available.

On the first day (November 13) we advanced from Ling-ki-ho 24 kilometers toward Mt. Morrison through hilly or cultivated land. On the second day we marched on through grass three meters in height or through bamboo woods which in the valleys were replaced by banana woods. As we climbed higher, we soon reached the evergreen foliaceous woods. In the past they had apparently occupied areas now claimed by bamboos and banana trees. But the leafy woods could not maintain themselves when they were attacked by fire, and thus had to give way to the bamboos. In places where the bamboo forests were frequently subjected to fire, vegetation is limited to the bothersome kaya grass (Imperata arundinacea, Cyr.). In the foliaceous woods most of the trees are fig or camphor trees occupying large areas in many instances and mixed with palm trees and creepers. Here the vegetation is extremely luxuriant. The camphor trees reach a circumference of up to ten meters and a height of 50 meters. Ferns twenty meters high fight their way up between the trees, giant aerial roots hang down, and often we were at a complete loss facing the impenetrable confusion of the thicket. This virgin forest detained us for two days. I noticed that unfortunately many of the huge camphor trees had been hacked at by men in search for camphor and that they had died as a consequence of this treatment. As a result many of the giant trees had fallen or had been blown over by the wind. Only about five percent of a tree had been used for the exploitation of camphor and then thousands of trunks of precious wood had simply been left to rot. Of

course we immediately tried to stop such devastation and waste by strict regulations, but so far we have not yet the necessary personnel to create order in these dangerous parts of the country. In many cases the dead giants of the forest necessitated detours and we lost much time. We spent the second night in a lonely hut that must have been erected by camphor collectors.

26: Honda--471-472 N-3 (1896) 1897 Formosans-1-3
116, 133, 137

On the following day [EJ: of the journey toward Mt. Morrison] we marched for six hours to the village of Tom-bū. Our route was along a stream with steep banks; there were no paths or bridges and at times the water reached up to our stomachs. Tom-bū was the last human settlement. Here we had to pick up new provisions. We were able to get some chickens, sweet potatoes, and millet. We left behind a number of porters and all luggage that was not absolutely essential. With four aborigines, who knew the entire region well, we started the actual ascent of Mt. Morrison. After three hours and at an altitude of 5500 feet we found a hot spring on the bank of the river; the temperature of the water was 70° centigrade. Some similar hot springs gushed forth in the stream itself.

Up to this point large evergreen foliaceous woods prevail. But wherever the natives have burnt down the high grass the vegetation is limited to cork trees (Quercus variabilis Bl.), which indeed occupy large areas. [472] From here on we encountered coniferous woods; at an elevation of 6000 feet, they comprised giant Chamacypariae and Crypto-meriae, their trunks having a diameter from six to ten feet. At 7000 feet we reached the zone of splendid fir trees; some of the species had hitherto been unknown to me. The preceding two days of our march had been very strenuous because most of the time we had to wade through the water of a brook flowing between steep banks.

In the morning of the eighth day after a difficult ascent over barren slopes we reached

a grassy area at an altitude of 9500 feet; it sloped slightly to the south, measured several English square miles and constituted a watershed. The peak of Mt. Morrison rose before us in all its majesty. We made a big fire and spent the cool evening in a little valley. At 2 a.m., when the temperature was down to -3° centigrade, we started the final ascent. First we advanced on the north through Tsuga woods and then on the less steep south side with its pine forests; at times we were crossing grassy areas and finally moved along the high ridge itself; this ridge is crowned by several peaks and is covered with sharp rock fragments of argillaceous schists. We reached the summit at eleven o'clock; the cloudless sky allowed us the most splendid view over almost all of Formosa. Far in the east beyond numerous mountain peaks the ocean was visible. And once more the ocean appeared in the west at an even greater distance. We could see the villages of Taiwanfu in the west, and Tainan, Anping, and Takao in the south.

We took some photographs and finished our scientific observations when fog and strong winds forced us to start back. It was dark when we reached our base where we had left behind our luggage, the porters and our companions who had come down with fevers.

We did not have time to hunt deer or wild boars.... Some rain had fallen in the evening, and the water froze during the night so that we suffered a good deal as we were sleeping outside. The next morning all the Japanese had fevers; my temperature was up to 41.5°

centigrade and one of our native guides carried me on his back during the following three days. For this service I rewarded him with an old pair of pants since he had no use whatsoever for money.

I wish to stress the following points of our scientific observations:

1. The common notion that Mt. Morrison is of volcanic origin is erroneous. The main rock materials of the mountain and its environment are argillaceous schists and quartzite. The beds of the former strike with a dip of 70° from EN 10° to WS 10°. Therefore the northern slopes are much steeper than the southern slopes, and rock slides are frequent.

2. The height of the peak is not 12830 feet, as had been determined by means of trigonometric measurements from the sea, but our barometric observations showed that the height should be 14350 feet. It is likely that the peak itself, as seen from the ocean, may be hidden by another summit close to it.

3. At noon of November 21, our barometer stood at 453 mm and the thermometer at 4.5° centigrade with a relative humidity of 90%.

4. We did not find snow anywhere, not even in the rock fissures on the mountain. The notion prevalent among the Chinese of Formosa that eternal snow covers the mountain is due to the white quartz which from a great distance may be mistaken for snow.

5. The mountainland of Formosa by no means everywhere [473] consists of impenetrable virgin forest. The southern slopes of the mountains are often covered with extensive grass areas for which, in part, the fires started by the natives to facilitate hunting are responsible. Through the telescope from the peak, we have observed a good

deal of the mountain region, and have found that at the most forty per cent of the area visible from that position was occupied by forests.

6. Up to an altitude of 1700 feet, the lowland of Formosa is claimed by tropical vegetation among which ficus, pandanus, palm trees, and pineapple are predominant. From here to an elevation of 6000 feet above sea-level, we find sub-tropical evergreen foliaceous woods; camphor trees occur up to 6500 feet and the same is true of evergreen oak trees. At 6000 feet the region of coniferous trees begins; the species found are at first Cryptomeriae and Chamaesyparis then followed at 7000-8500 feet by firs (variety of Picea Glehni), and Tsuga diversifolia Maxim. at 8500-10, 500 feet. Finally from 10, 500 feet to the peak of Mt. Morrison, we find pine trees and juniperus and principally Abies Mariesti.

7. The abundance of water in the mountain lakes makes it possible to follow the watercourses into the region of the fir trees and the wood may be transported down the streams.

8. The exploitation of camphor on Formosa is still at a very primitive stage. If the methods of Kiushiu were employed production could easily be doubled.

9. The aborigines are by no means hunters. Only the chiefs and a few of their subjects go hunting. The main occupation of the people is agriculture. In particular,

sweet potatoes and millet are important products. In addition tobacco and a variety of pea are grown. The system of agriculture is communistic. Its advantages are that nothing is stolen because nobody is permitted to have private property. Both work and harvest are arranged on a cooperative basis.

10. The men are willing workers and like to use axes, which makes me believe that they would be good forestry workers.

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

31: Hofmann--613-614 N-3 (1909) 1912 Formosans
116, 137, 245, 283

From Kagi we went to Chikutoki; on that stretch the land is level and the railway has already been completed. This region was also still dry, and the natives had not yet tended the fields. A feature characteristic of tropical vegetation is the abundance of palm groves (betel palms); the trees have an average height of seven to eight meters. The Chinese and Malayans chew betel nuts as a stimulant. The vegetation in the river-beds, most of which are dry at this time of the year, is more copious. The plant most frequently found, which is also cultivated artificially, is the large Nephelium longana (called Ryugan by the Chinese and Japanese) the fruits of which are very tasty. There are also large, old Ficus trees, including several varieties of palm trees (Phoenix humilis), Passiflora (Carica Papaya), Anona squamosa, etc; all these are representative of tropical flora. On the barren slopes there are Pandanus tectorius with leaves like pineapple trees; this furnishes a fiber which is used for hats resembling panama hats. The flora on the whole is rich in textile, especially fibrous plants. There are, first of all, the rattan palms with prickly leaves. The tough fiber of this palm is an excellent substitute for hemp and is used for all sorts of household utensils everywhere on Formosa. I did not see artificial plantations of this palm anywhere, however, [614] the Chamaerops excelsa is planted everywhere by the Chinese as a textile plant. The Liquidambar formosana is also planted artificially in this region; the leaves are used as feed for silkworms and the Japanese government expects to develop a successful industry of this plant.

31: Hofmann--614 -615 N-3 (1909) 1912 Formosans-1-2
116, 137, 361

From Chikutoki we started to ascend the mountain; where the ground was fairly level we used sedan chairs made of two bamboo poles in which we sat in a half squatting, half lying position. Four strong Chinese were able to carry my weight, 78 kilograms, with no difficulty. They were able to climb ascents of 20 to 30 at the same steady pace. The carriers in back change about every fifteen minutes.

After an ascent of about five hours, at a height of about 600 to 700 meters, we found that the landscape had changed considerably. We went through bamboo forests, more dense and more extensive perhaps than anywhere else on the Japanese islands; forests like these are not found, so far as is known, anywhere else on Formosa. In an area of about 10,000 hectares the vegetation consists entirely of bamboo trees; these grow so close together that there is no space for other plants to develop. The average height of the bamboo trees is not more than 13 meters. Whether these bamboo forests represent the original vegetation or whether they have taken the place of leafy trees which were destroyed by a forest fire cannot be determined. The fact that they are spread over a large area supports the assumption that the vegetation is original and has a xerophilous character. The forests of bamboo trees grow on dry, low elevations composed of sandstone which are exposed to the sun; at the level at which they grow there are dry and rainy seasons. At a height of about 1,000 meters there are rainfalls of short duration with an intensity characteristic of the tropics almost every day; at this level bamboo trees no longer predominate. Chinese settlers have penetrated as far as the bamboo

forests, however, and from this it might be concluded that the original jungles were destroyed by the fires of the colonists [615] and that new shoots of bamboo took their place by a natural process. This has happened several times on the Japanese islands. On the other hand the settlements are sparse and do not penetrate very deeply into the region of the bamboo forests. The numerous places where trees have been burned down, which are also found in the sections entirely inhabited by the aborigines, are overgrown with stiff, tall reed plants, Imperata and Miscanthus which because of their dense growth prevent the growth of trees at least for the near future. It is well known that bamboo trees grow to their full height within one year. Since it has many uses, bamboo often takes the place of timber; for that reason the Chinese exploit the forests around their settlements since for their purposes bamboo alone is sufficient.

31: Hofmann--615-618 N-3 (1909) 1912 Formosans-1-4
116, 133, 137

On the following day we advanced [EJ: from Karapen] about 18 kilometers and reached an altitude of approximately 1,400 meters. When we had reached our destination, a point which the Japanese had called Funkiko and which was to form the end station of the [616] future railway, the thermometer stood at 19° Celsius and the aneroid at 1,420 (corrected at sea level). Our way took us through depressions and over elevations. The mountains, which consist of schist, are broken up into numerous steep and narrow ranges. Here and there sandstone lies exposed; in most places, however, the ground is completely covered with vegetation. In the northeast the Tauzan (Devil's Mountain) drops down abruptly. This is an isolated limestone mountain with barren slopes; it has a height of 2,800 meters. Here the vegetation is entirely different from that we encountered on the previous day. Before we entered the subtropical forest of Lauraceae trees we were struck by the beautiful tree ferns (Fig. 3), which attain a height of 10 meters or more, and the large banana trees growing on the mountains (Musaceae) with their huge leaves. Both of these plants, in contrast to the dry bamboo forests, demand a high degree of moisture both in the soil and in the atmosphere while they cannot grow where there are strong air currents. On these elevations there is not even a breeze, which is all the more striking since the valley of Kagi, barely 20 kilometers distant in a direct line, is frequently ravaged by violent typhoons. Everywhere we saw banana leaves which were unharmed; these leaves would be easily torn if there were a strong wind. It is a remarkable fact that typhoons are limited to the lowest regions while above

an altitude of 100 meters they do not occur. Although tree ferns and Musaceae, which usually occur in groups, do not take up much space in a limited region and often grow between other trees in the forest, forests of fern and palm trees must be considered characteristic of Formosa. They form perhaps an example of Tertiary flora; according to a theory now accepted by geologists Tertiary flora; which demands a constantly humid, rainy and foggy climate which is at the same time warm and not windy, once predominated on the earth.

On the second day of our journey we again passed through beautiful Lauraceae forests; the most attractive scenes, however, were reserved for the third day, when we covered the distance from Funkiko to Goten (2, 220 meters). On that day we crossed two mountain ridges so that we could reach the plateau of the Arisan mountain [617] by the shortest possible route. The region between 1, 000 and 1, 800 M. is covered with foliaceous forests; here as everywhere else camphor trees grow only singly, while evergreen oaks, Quercus gilva, acuta, etc., predominate, as well as Pasania cuspidata, Cinnamonum pedunculatum, Machilus Thunbergii. All the foliacious trees here are evergreen. There are huge tree trunks overgrown with epiphytic plants; the tops of the trees form an almost impenetrable roof so that neither rain nor sun is admitted here. The average height is over 30 meters. In this hothouse atmosphere there are numerous lianas which grow to great heights and develop strong aërial roots the size of an arm; they are suspended from the tops of the trees on which they live.... The lower

arboreal flora has its habitat among the tree tops. There are large white orchids and ferns, and on the long branches of the crown and the sides of the Lauraceae trees there are groups of hart's tongues. All of these plants...are engaged in a continual struggle for light. Our coolies were very careful not to step into the shrubs along the paths, where a dangerous venomous snake with green coloring has its habitat.... The densest part of this forest is found in the depressions and on the lower slopes. In the higher regions the forest is less dense and there is more light for the plants to develop so that even those on the ground are not hindered in their growth. There are various types of shrubs, among which the Fatsia, with its large digital leaves is especially striking. Gradually the Lauraceae grow further and further apart and less tall. At an altitude of about 2,000 meters conifers begin to appear, first singly and gradually growing taller and more numerous. These consist of species of Chamaecyparis; the evergreen foliaceous trees take the place of underbrush while these predominate. [618] After the gigantic proportions of the jungle through which we had just passed we did not immediately become aware of the size of these trees, which have stood for so many centuries. It was not until we took measurements that we realized that these must be among the tallest trees anywhere in the old world. There are some which grow as tall as 60 meters. The largest of the Chamaecyparis formosensis have a diameter of six meters;

they are about 52 meters high and furnish 280 cubic meters of timber. (cf. Fig. 4). A single tree thus offers more timber than a hectare of old pines in central Europe.

The largest trees may be found in the vicinity of Goten, which is to be the end station of the railway, where the Japanese have already built several houses. Here there is a wide, almost level depression with a deep layer of humus which is protected from the wind on all sides; this is an ideal habitat for the conifers, and the trees here are probably as large as those in California. Since 1907 a meteorological station has been set up in Goten...

We spent several days exploring the jungle area around the Arisan, an area comprising 10,000 hectares in all. At a level of 2,400 meters and above the Cupressi predominate. Here the trees do not attain the heights quoted above, but the average height is over 40 meters and the forest is so dense that one cannot see more than a few feet away. One elevation, which has been named Manzaisan, has an altitude of 2,670 meters and is overgrown with reeds; from here one has a good view of the surrounding mountains. There is a thick fog below so that we cannot see the route we had taken the previous day; in front of us, however, lies the imposing peak of Mount Morrison, which, according to the aneroid, has a height of 4,340 meters. The highest point visited by us in this region was the peak of the limestone mountain, Teufelsberg, with an altitude of 2,800 meters. Here the view is obscured by the dense forests.

The bay and lagoon of Takao offer a beautiful sight. The lagoon is connected with the ocean by a narrow opening, hemmed in by coral reefs; large boats therefore cannot enter the bay. Work on harbor installations is still in progress; this is an ambitious and costly project, but it is a necessary step in establishing communication with the south. It will also be necessary to make the harbor safe, especially since the roadstead of Takao offers no protection even to large steamers during the frequent and violent typhoons. The most dangerous months for typhoons are June, July, and August. The direction of the wind, which may develop a velocity of 100 miles per hour, is from east to west. For those harbor installations which are made of wood, the Teredo navalis is extremely destructive. Pine wood may be destroyed by these worms within three months, while Chamaecyparis wood may last for one year. Timber which is used for buildings on land (for railways, telegraph poles, etc.) is destroyed by white termites, but if the wood is impregnated with tar, this forms a sufficint, though costly, protection. The bay within the lagoon is about 22 kilometers long and 5 kilometers wide at its widest point. Around the bay there are artificial sea gardens. Among the plants growing wild there are first of all pandanus groves, which probably form one of the most unusual features in the vegetation of Formosa; while in other regions of the island pandanus grows only in the form of shrubs here it is tree-like and forms a plant typical of coastal regions.

Another unusual form of vegetation of a purely xerophilous character is a species of

tropical Euphorbia Tirucalli (spurge); here it has hardly any leaves, since their place is taken by green branches. Its habitat is among the rocks on the beach, and it may grow as high as ten meters. [629] Finally, there are several species of mangrove along the level coast of the lagoon of Takao.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

134 In areas above 9,800 feet elevation podsols (generally associated with coniferous forest cover) and slightly podsolized alpine soils are found. Grey-brown and yellow podsolic soils are found on the mountain slopes between 6,500 and 8,500 feet. In the foothill areas less than 6,000 feet above sea level, lateritic soils -- yellow, light red, and deep red, depending upon the altitude at which they are found -- constitute a major part of the soil.

Alluvial soils, important for agricultural use, cover an area of about 3,300 square miles, or 24 per cent of the island's surface, and are found principally in the southwestern part of the island. Small tracts of alluvial parent materials are widely scattered throughout lowland Formosa. In the middle and northern plains are generally acid alluvial soils; alkaline alluvial soils spread over the southern plains, Taitung Trench, and Yilan Plain.

V. VEGETATION

137 Most of the mountains are heavily forested. About 68 per cent of the main island is covered with three dominant plant formations -- broad-leaved evergreen forests, mixed forests of broad-leaved deciduous trees and conifers, and coniferous forests. Two minor types of vegetation are seen on the foothills,

•137 the relatively small bamboo forest along the western foothills and steppe, and shrubs over the low slopes of the mountains.

VI. CLIMATE

132 Latitude, ocean currents, topographic features, and of most importance, the monsoons determine the climate of Formosa.

Generally speaking, the main island is semi-tropical. It separates, at its southern end, the Kuro-shio (ocean current) which flows northward, and lies within the great Asian monsoon system which provides strong northeast winds in winter and less pronounced southwest winds in summer. The result is that the island is windy and has generally high temperature and precipitation. However, dry winters are experienced in the southern plains.

The warm and humid summer lasts from May until September, the mild winter from December until February. The highest temperature rarely exceeds 100°F in the hottest summer months, July and August; the lowest has never been below 35° F in the coldest month of January.

Average annual rainfall ranges from 50 inches on the low eastern coast to 250 inches

Already, there can be no doubt, the Chinese constitute the larger part of the population, for since the 17th century ever new droves have immigrated from Fu-kien and Kung-tung, and these have greatly increased, owing to the early marriages and the large numbers of children. The vigorous and enterprising tribe of the Hakka, from the latter province, has preserved its individuality on Formosan soil; its members are distinguished by their fine ironwork, and provide the natives with their knife blades and long flints. In North Formosa the Chinese settlers' wide open, sparkling black eyes attract attention, in contrast with the narrow slit eyes of the Chinese which are here quite general, otherwise; this is the result of unions of Chinese immigrants with native Malay women.

An important third element must still be mentioned. This is the Pepo-huan (also called Sek-huan or Schek-huan, i. e. "half savages"). The Pepo-huan are those Formosan Malays who accepted the fate of dependence on the Chinese intruders and gradually became Chinese in customs and outlook, without there being any mixture of blood. Yet they are distinguished physically as well as culturally from free natives living in the mountains (probably as the least numerous of the three elements making up the population of Formosa), the Tsche-huan or Tschin-huan, i. e. "complete savages," as they are called by the Chinese, who greatly fear their passion for hunting Chinese heads.

4:Grajdanzev--9 [2] S-4 (no date) 1942 Formosans
116 , 144, 174

"Before the 16th century the island was peopled almost exclusively by tribes of Malayan or Polynesian origin, related to the primitive tribes of Mindanao and Borneo. These numerous tribes, separated from one another by high mountains and impassable subtropical forests, were not only disunited, but waged constant war among themselves. As a consequence they could not present a common front to invaders and finally were either conquered or driven into the mountain fastnesses."

Annex "A," Subparagraph 1p,
Sociological Background

HEALTH AND SANITATION IN FORMOSA

I. FOOD AND HOUSING

A. Diet and Food Supplies

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The main diet of the Formosan people consists of rice and vegetables. A moderately active male adult generally consumes one catty (600 grams of 1.321 lbs.) of rice a day, the amount comprising over 75 per cent of his daily requirements of 24,000 to 28,000 calories.[1] A survey conducted by the National Defense Medical College showed that rice supplied 82 per cent and vegetables 7.5 per cent of a soldier's daily caloric requirement, and rice alone provided 64.5 per cent of his protein need.[2] The proportionate nutrient value of food consumed by civilians is probably quite similar. Some poor families, unable to afford rice, rely wholly or in part on sweet potatoes as their staple food. To a considerable extent, rice is supplemented with flour by a part of the immigrant population from the Mainland. Rice, sweet potatoes, tea, sugar, fruit,

1. The caloric content of rice is calculated on the basis of 350 calories per 100 grams of rice.

2. S.C. Hsu, "Nutritional Study of Processed Soybeans," Chinese American Economic Cooperation, Taipei, June 1952, pp. 56-59.

146 and vegetables are produced in plentiful supply on Formosa. The diet of the people generally is 262 considered adequate in proteins, minerals, and vitamins, except B2, but the protein is poor in quality, only about 10 per cent of it being derived from animal sources. Fish furnishes about 50 per cent of all animal protein consumed on the island;[3] other principal sources are pork and poultry. Dairy products have a low place in the dietary habits of the people, except for infants whose mothers cannot provide breast-feeding.

B. Housing Conditions and Problems

362 Of the problems of food, clothing, and shelter, the latter still poses a serious problem, but the food and clothing problems have been fairly well met. The housing situation remains critical despite the assistance of the government and U. S. agencies in instituting various housing programs and improving housing conditions during the last few years. Much progress has been made in this area, and the day when every citizen occupies adequate housing may not be too far off.

Formosan dwellings may be divided into three main types. A typical good urban dwelling is built of reinforced concrete with kiln brick walls, new tile roof, and cement floors and is equipped with electric lights and running water. A typical good rural house has mudbrick walls, thatch roof, and dirt or cement floor, the water supply comes

3. Economic Co-operation Administration, Economic Development on Formosa 1951-52, Taipei, 1953, pp. 39-40.

241 433 demands of domestic consumption. Surplus rice is exported each year, and the supply of vegetables is considered adequate. Meat is expensive, and the ability to buy meat [262] determines socio-economic position in Formosan society. Data on dietary habits, 146 433 caloric requirements, and so forth are not available, probably because extensive surveys have never been conducted on the island. There is no way of ascertaining basic food requirements to maintain a desirable nutritional level.

433 The Provincial Food Bureau has estimated the per capita rice requirement for civilians to be 143.4 kilograms, and for the military, 308 kilograms. (These figures do not provide for surplus storage, waste, spoilage, or seeds.) Rice requirements for the next ten years may be estimated as indicated in Table 4. Note that the size of the military force on Formosa is assumed to remain constant (600,000).

48: Chen E-4 (no date) 1955 ADl Formosa ADl

181 matters of sanitation, and at times on matters of agriculture. With the passage of
178 time, experience lead them to compare their traditional way of life with that imposed by the colonial government. Some of these ways were found to be not too bad, some even adoptable. This kind of change in attitude through hard experience was fairly significant. By this, people realized for the first time that there were another ways of life besides their traditional one, and that some elements were worthy of adoption. Once the people began to adopt the new way of life, change began to speed up. From the following instances we can see that change in the attitude of people became conspicuous after the 1920's. We have discussed the influence of war and peace, the prevalence of epidemics, and the development of transportation on the attitude of the people (§ 7, 8, 12). Here the change of attitude concerning medical treatment and agriculture will be discussed.

178 Since treatment of illness touches the innermost part of life, it is only natural that
744 conservative people do not dare to allow an unfamiliar doctor with strange ways of
156 treatment to approach them. For Taiwanese, who had been accustomed to the traditional Chinese medicine and folk medicine, doctors of western medicine, particularly with their injections and operations, were dreaded. During the early years of the Japanese rule there was a prevalence of cholera. Colonial officers compelled the people to take the preventive injection. Great consternation arose among the people, and many of them, particularly young girls, escaped and hid, in order not to have the dreaded injection. In the old city of Tainan a young girl of a wealthy family was escaping in a palanquin, but unfortunately she was caught by a Japanese police on the way, and forced to take the injection. Perhaps because the shock was too great, she died in a short time. Another young girl who took the injection killed herself after she went home, because it was a dreadful shame for a young girl of high standing to expose a part of her body to the public gaze. When a person died, his family had to have a medical certificate in order to get permission for burial. In 1906 90% of the medical certificates were issued by doctors of Chinese medicine, and certificates issued by doctors of western medicine constituted only 10% of the total. The proportion of
[75] the latter increased gradually, attained to 45% by 1917 (11:1917, p. 29). By 1920, the number of doctors of western medicine already exceeded those of Chinese medicine, and by 1935, 90% of medical certificates for the dead were issued by doctors of western medicine. Thirty years after 1906, doctors of Chinese medicine and doctors of western medicine had changed positions completely. By 1935, people did not object to injections and operations any more. On the contrary, they even believed blindly in injections, and asked for an injection when they saw a doctor. This was a remarkable change in attitude.

178 Farmers are tenaciously conservative in their work. In Taiwan, farmers originally
241 used only compost and night-soil, and did not use any commercial fertilizer. When a sugar corporation started to promote the cultivation of sugar cane, they bought commercial fertilizer from Japan, and distributed it free of charge to farmers. Once a

15: U.S. Navy--21 [5] (no date) 1944 Formosans
116, 157, 167, 625, 177.18 Japanese
636.18

"The Japanese are exceptionally thorough and successful organizers, and have brought under their own control the economic life of the island. The police force and many of the urban commercial people came originally from Southern Kyushu and Shikoku, and speak the local dialects of those regions. The Japanese of the metropolitan areas in the homeland speak frankly of the hardness and unattractiveness of the colonial Japanese character in Taiwan."

37: Steere--318 S-3 (1873-74?) 1875 Formosans
116, 131, 311, 161, 563, 157

"The Pescadores are a group of low flat islands between Formosa and the mainland. They seem to be composed almost entirely of basaltic rock, which is partly columnar in many of the cliffs. There is iron ore found upon Fisher's island. The rock of the island is barely covered with soil, but nearly their whole surface is cultivated during the south-west monsoon, in sweet potatoes, pea-nuts, and millet. The inhabitants are estimated at eighty thousand, and there are said to be thirty towns and villages. The town of Makang, which is the largest, probably has twelve or fifteen thousand inhabitants. Its harbor is good, but the entrance is intricate. The Chinese live generally in houses made of coral rock that is frequently cut into blocks. They are descendants of the Fuh-kienese, and are all fishermen. They have considerable trade with the mainland and with Formosa in dried fish and in hogs, which are fattened upon pea-nuts, and in pea-nut oil. The feet of all the women are small, though their hard and laborious life must make this custom troublesome enough. I saw one small-footed woman ploughing and driving the buffalo, though the wind was blowing a gale at the time, so that we could hardly stand before it. The islanders are a rough and uncivilized race, accustomed to hardships, and the charges of piracy and wrecking made against them, are, without doubt, true. They are the boldest of fisherman, and during the warm monsoon, are almost amphibious. I was there in January, when the weather was cold and the wind and sea high, but when they found that I wished coral and shells, they procured me large quantities living. The islands make a good place for shelter for Chinese junks

40: Kirk--24-25 S-2 (no date) 1941 Formosans
116, 157, 185, 177. 18 Japanese

"The Japanese are ambitious and aggressive; the Formosan Chinese are good natured and easygoing. The general opinion seems to be that Japan will succeed in its policy of assimilation, although old-timers whisper that the Formosan temperament is outwardly docile, but inwardly rebellious, and often finds ways of getting what it wants [25] in spite of official regulations. This control by force, combined with the passive temperament of the people, makes open resistance extremely unlikely, but as one Formosan told the writer, 'Many reforms are changes in outward appearance only. They do not transform the spirit within.'

It is probable that many specially qualified Formosans who have accepted the 'New Order' in Taiwan will find increasing opportunity to participate in the 'reconstruction' of China under Japanese rule; for the Taiwan plan of administration may by extended to the mainland in pursuit of a 'New Order' for South China."

Table 8. Taiwan Birth Rates and Death Rates */
(per 1,000) +/

Year	Birth Rates	Death Rates	Rate of Natural Increase
1920-24 aver.	41.8	25.8	16.0
1930-34 aver.	45.5	20.6	24.9
1935-39 aver.	44.7	20.2	24.5
1948	39.7	14.3	25.4
1949	42.4	13.1	29.3
1950	42.5	11.3	31.2
1951	49.9	11.6	38.3
1952	46.6	9.9	36.7
1953	45.3	9.5	35.8

*/ United Nationa, Statistical Office, Statistical Yearbook 1954, New York, 1954, pp. 36, 41.

+/ Excluding tribal aborigines in all cases and foreign nationals after 1949.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

eating, while continuing to push more food on him. When old people talk, even though the younger people may consider their words pure nonsense, they merely smile and agree. When the evening is over there is usually some young grandchild waiting to lead the old man back over the dark paths to his house.

Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

ILLNESS, DISEASE, AND MEDICINE

As has already been shown in Chapter 2, the tremendous increase in population on Taiwan is a reflection of the great reduction in the death rate, which results, primarily, from the lower incidence of fatal diseases. The control of disease has been effected by such factors as public health programs which have helped eliminate diseases like cholera and malaria, an increase in the number of Western-style doctors, an increased reliance on Western medicine and medical techniques, and somewhat better sanitation as a result of education of the public and governmental enforcement of health standards.

It was during the Japanese period that Taiwan saw the advent of Western-style doctors and medicines, especially in the 1930's. However, they were few, and their practice was limited mainly to the wealthy. The benefits of their knowledge, therefore, and the everyday use of Western-style medicines did not reach many of the rural people. During this period the rural people continued to rely primarily on Chinese doctors and herbal medicines, as well as magical cures effected by shamans and healing priests. (The magical techniques are discussed more fully in Chapter 8.) However, public health measures introduced by the Japanese government to combat epidemic diseases did benefit

"In an investigation of the population statistics of the island several questions should be borne in mind: (1) What changes in the racial character of the population have taken place since the occupation of the island by the Japanese? (2) Is there any substantial difference between native and Japanese living conditions as reflected in vital statistics? (3) What changes in the occupational distribution of the population have taken place? (4) What is the condition of the aboriginal tribes? Finally, the investigation of Taiwan's population may furnish an important clue to the riddle of population trends of China. As is well known a census of the modern type has never been undertaken in China, and current vital statistics are non-existent. All information we have is based on more or less bold guesses and on a few samples which represent only a drop in the sea of the Chinese population. However, here in Taiwan we have a quite compact Chinese population of more than five million with a normal age and sex composition, agricultural in character, living according to the customs of their fathers and forefathers. The first census was taken in Taiwan in 1905, fifteen years earlier than in Japan proper. Since that time we have the results of several censuses and current vital statistics of satisfactory value. Demographers should not pass over these results, and yet, so far as is known to the author, they have been neglected (just as were the results of investigations in the Liaotung peninsula) in Chinese population studies. [23]

The estimated total population for 1898 was 2,613,400, but this is only a guess for at that time the government did not control the whole area of the island. The following fi-

figures will bear out this point.

	Births	Deaths	Rates per 1000 Births	Deaths
1898	31,688	20,305	13.7	8.8
1900	57,564	48,981	21.0	17.8
1902	75,750	76,306	26.1	26.3
1904	99,395	94,636	33.5	31.9

If these figures are correct, the birth rate in Taiwan increased 2 1/2 times and the death rate four times in six years, an absolutely inconceivable situation. But the tendency is quite clear; the government was more and more successful in the enforcement of rules of registration. Later on we shall see the same phenomenon in agricultural statistics.

The results of the censuses of the population, are as follows:

	Absolute figures (thousands)	Index 1905=100
1905	3,039.8	100
1915	3,479.9	114
1920	3,655.3	120
1925	3,933.4	131

	Absolute figures (thousands)	Index 1905=100
1930*	4,592.5	151
1935*	5,212.4	171
1936†*	5,452.0	180
1937†*	5,609.0	185
1938†*	5,747.0	189

*Including aborigines, who were not registered in preceeding censuses because they had not yet been pacified. This makes the later figures appear about 100,000 larger than they would be on the same basis.
† Official estimates.

From this table it appears that the population of Taiwan in thrity-two years increased by eighty-five per cent. Such a rate is high, for over the same period the population of Japan proper increased by only fifty per cent.

The pressure of population on resources in Taiwan is evidently very great. Population density in 1937 was about 157 per sq. km., i.e. greater than of Italy or Germany and [24] as great as that of Japan proper in 1925. Since the rate of natural growth of the Chinese in Taiwan is considerably higher than that of the population in Japan, the time is not far distant when the density of population in Taiwan will equal the density in Japan Proper."

4:Grajdanzev--29 S-4 (no date) 1942 Formosans
116, 161, 511

"Native and Japanese Standards of Living as Reflected in Vital Statistics

The high absolute and relative rates of growth of population in Taiwan are extremely interesting and may be illustrated in the following way: in 1937 245,000 children were born in Taiwan—one-third the number of children born in Great Britain and one-fifth of those born in Germany, although the total population of Taiwan is but one-seventh and one-twelfth respectively as great as that of those countries. In other words Taiwan's future population will be much larger than the present figure suggests. If every year about 100,000 persons reach an age of eighteen now, in twenty years their number will almost double. If the islanders are to retain the same standard of life, agricultural and industrial production should increase at the same rate as population and if they are to raise this standard agricultural and industrial production should grow at an even greater rate. This rapid growth of population—more than 130,000 additional mouths each year—raises grave issues for the authorities. As we shall see later, this problem has not been solved and indeed is unlikely to be solved under conditions existing on the island."

4:Grajdanzev--43 S-4 (no date) 1942 Formosans
116, 161, 178, 241

"The average increase of area under cultivation by 7,000 ko each year must be compared with the annual increase of the population of 130,000 to 140,000 persons; for each ko increase in cultivated land there is an increase of twenty persons. It is thus quite evident that the increase of cultivated area is lagging behind the increase of population. The same idea may be expressed in another way: since 1904 the population of Taiwan increased 1.92 times, whereas the cultivated area increased only 1.37 times.

Improvement in the situation may be brought about (1) by cultivating areas now uncultivated; (2) by turning areas now producing one crop into double-crop areas chiefly through irrigation; (3) by increasing yields and substituting crops bringing high income per unit of area for crops bringing low income; (4) by shifting the population from agriculture to industry and importing foodstuffs to feed the growing population. Let us now consider these possibilities in turn, with the exception of the fourth, which will be examined later."

4: Grajdanzev--44 . S-4 (no date) 1942 Formosans
116, 161, 433, 464, 471

"Two thousand yen per ko (2.4 acres) is an apalling [sic] price where the daily wages of a worker are about one yen per day, and it prevents the landless from having a chance to become owners of land. However, the phrase 'population pressure' is not used here in the Malthusian sense. The question is not one of food--the island produces twice as much as the islanders consume--but of employment. Openings in industry are few; independent industrial enterprise is almost impossible because a plant worth a few hundred or thousand yen cannot compete with a modern factory. The only occupation left is that of the farmer--a customary occupation for the majority of the islanders. The rise in land values is a symptom of the growing difficulty of finding employment, and not of a growing scarcity of food."

6: Kirchhoff--30-31 U-4 (no date) 1895 Formosans
116, 161, 177.63 China
636.63

The whole of Formosa, belongs only to the Chinese "sphere of interest," together with the islands off its coast. In reality only the western side is ruled by the Chinese, the north and, recently, a narrow strip of land along the eastern coast. Within this ruled region the Chinese Government is said to have carried out a census of the inhabitants, but [31] to have treated the results as an official secret. The assertion, made for a long time past, that Formosa has 3 million inhabitants, has thus practically no basis whatever. If this estimate were correct, it would enable one to conclude that the density of population attained the not inconsiderable figure of 90.

9: Yamasaki--221 [7] N-5 (1896-1897) 1900 Formosans
116, 161

In 1897 the first census of Taiwan showed a population of 2,584,365 inhabitants, excepting the savage natives.

20: Alvarez--248 [3] (no date) 1927 Formosans
116, 161

"According to the official census of 1919, the population of the island was 3,341,217, the greater part of them living in the western plains, which comprise about the third part of the whole surface of the island."

31: Hofmann--605-606 N-3 (1909) 1912 Formosans
116, 161, 241

The agricultural population [606] contrasts favorably with the migrant workers in the cities. Their agricultural methods are well organized, although it is true that they are based on experience rather than theory. A further testimony to the industry and diligence of the Chinese is the fact that in this field the Japanese cannot compete with them.... There are no Japanese farms on Formosa, although there is still enough land for this purpose. The island is thickly populated; there is an average of 86 inhabitants per square kilometer.

37: Steere--317 S-3 (1873-74?) 1875 Formosans
116, 161, 563

"The Chinese population of Formosa is estimated generally at about three million, but this seems to be rather an under estimation of the real population. The most of them are from the province of Fuh-kien, which lies opposite, and many of them are descendants of the rebels, who took possession of the island with Koxinga. They are considered a turbulent race, and a rebellion happens as often as once in ten years, at least. They almost universally bind the feet of their female children, and child murder is not at all rare among them. At Tamsni, two little girls were picked up from the little jetty belonging to Dodd & Co., one of them still living, and it is not rare at all to find them wrapped in straw lying along the banks of the river, where they have been left by the tide. There are also quite a number of people called Hak-kas, who are supposed to come from the province of Canton. They speak a different language and live in separate villages, and they allow the feet of their females to grow to their normal size. The Hak-kas are especially numerous toward the north end of the island, though they are found nearly the whole length, occupying generally the lands near the mountains and most exposed to the savages."

37: Steere--318 S-3 (1873-74?) 1875 Formosans
116, 131, 311, 161, 563, 157

"The Pescadores are a group of low flat islands between Formosa and the mainland. They seem to be composed almost entirely of basaltic rock, which is partly columnar in many of the cliffs. There is iron ore found upon Fisher's island. The rock of the island is barely covered with soil, but nearly their whole surface is cultivated during the south-west monsoon, in sweet potatoes, pea-nuts, and millet. The inhabitants are estimated at eighty thousand, and there are said to be thirty towns and villages. The town of Makang, which is the largest, probably has twelve or fifteen thousand inhabitants. Its harbor is good, but the entrance is intricate. The Chinese live generally in houses made of coral rock that is frequently cut into blocks. They are descendants of the Fuh-kienese, and are all fishermen. They have considerable trade with the mainland and with Formosa in dried fish and in hogs, which are fattened upon pea-nuts, and in pea-nut oil. The feet of all the women are small, though their hard and laborious life must make this custom troublesome enough. I saw one small-footed woman ploughing and driving the buffalo, though the wind was blowing a gale at the time, so that we could hardly stand before it. The islanders are a rough and uncivilized race, accustomed to hardships, and the charges of piracy and wrecking made against them, are, without doubt, true. They are the boldest of fisherman, and during the warm monsoon, are almost amphibious. I was there in January, when the weather was cold and the wind and sea high, but when they found that I wished coral and shells, they procured me large quantities living. The islands make a good place for shelter for Chinese junks

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD1

Annex "A," Subparagraph 1c,
Sociological Background

POPULATION OF FORMOSA

I. INTRODUCTION

161 The population of Formosa [Taiwan] in 1955 is estimated[1] at about 10,400,000, including about 7,500,000 Formosa-born Chinese (hereafter Formosan Chinese, as distinguished from Mainland Chinese), about 2,000,000 Chinese civilians from the Mainland, 700,000 military personnel and troops, and about 200,000 non-Chinese tribes of aborigines. The latter are composed of seven linguistically distinct tribes believed to have come originally from Malaya, the Philippines, New Guinea, and Kwangtung Province. The Formosan Chinese are descendants of Mainland Chinese who migrated from Fukien and Kwangtung provinces chiefly during the eighteenth and nineteenth centuries.

II. ETHNIC GROUPS

162 563 The population of Formosa may be divided into two distinct ethnic groups: the aborigines and the Chinese.

A. Aborigines

Prior to 1600, Formosa was sparsely populated by so-called aborigines, referred to by the Japanese as "savages" and by the Chinese government as "mountain tribes" or "brethren of the mountains," whose habitations ranged

[Footnote 1 next page.]

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD2

000 upon them fled to the mountainous interior.

B. Formosan Chinese

161 The Formosan Chinese are often called "Taiwanese," a term which refers to those who were born in Formosa prior to 1945. When the surviving general of the Ming Dynasty, Cheng Ch'eng-kung, who is known to the Western world as Koxinga, took refuge in Formosa in 1662, the Chinese population was estimated at 100,000. During the eighteenth and nineteenth centuries, immigrants from Fukien and Kwangtung province increased the population to more than 2,600,000 by 1898, according to figures published at that time by the Japanese government on the island. In 1953, the population was estimated at about 7,500,000. There are about five Fukienese descendants to every one of Cantonese descent. The Fukienese are thought to be clever and gentle and the Cantonese are thought to be aggressive and industrious.

C. Mainland Chinese

The influx of Mainlanders to the island following the evacuation of the Central Government to Taipei in 1949 brought the Mainland Chinese population on Formosa to about 2,000,00[2]

2. Mutual Security Agency Mission to China, Economic Development on Formosa, 1951-52, Taipei, 1953, p. 9.

161 They have come from various provinces on the Mainland and are composed of government employees, professionals, and technical personnel.

III. PATTERN OF SETTLEMENT AND DENSITY

311 In the early days of settlement, Chinese immigrants first cultivated the fertile land and plains of the coastal areas from which the aborigines had been driven. The inhospitable and inaccessible nature of the mountains protected the aborigines from continued exploitation but also served to contain them.

About ninety per cent of the total population now occupies the coastal lowlands; the remainder, among them the aborigines, is scattered over the central mountain area which comprises two-thirds of the island's total area. The people from Kwangtung, arriving later than the people from Fukien, settled in the foothills and cultivated rice terraces. The Fukienese inhabit most of the lowland and urban areas.

161 The average density of the population is 610 persons per square mile.[3] However, 2,500 persons must share the amount of food produced on one square mile of cultivated land (nutrition density).

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3. Statistical Abstract of the Republic of China, Executive Yuan, Directorate-General of Budgets, Accounts and Statistics, Taipei, 1955, p. 28.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD1

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Table 1. Population Density and Nutrition Density of Selected Countries
(per square mile)

Country	Year	Population Density	Nutrition Density
Formosa	1953*	610	2,500
Japan	1950	586	3,534
Belgium	1948	727	2,200
United States	1949	51	188

* Calculated from Statistical Abstract of the Republic of China, 1955, p. 28; Natural Resources Section, General Headquarters, Supreme Commander for Allied Powers, as quoted in Norman Wycoff, "An Outline of Demographic Conditions and Prospects on Taiwan," Chinese-American Economic Cooperation, Vol. I, No. 5, May 1952, p. 44.

Stanford U. S-4, 5 1956 ADI Formosa ADI

[Facing p. 71]

Reduce AC to BC

45:Stanford U. S-4, 5 1956 AD 1 Formosa .
~~AD-1~~ AD1

161 The accompanying figure shows that the most heavily populated areas lie in the Taipei Basin and in the plains of Taichung and Tainan. In 1953, Taipei City had a density of 3,600 persons per square mile; the density for Kao-hsiung was 1,100. The least-populated hsien of Taitung has only 12 persons per square mile.[4]

IV. COMPOSITION OF THE POPULATION

A. Age Composition

162 Formosa's average population is young. As of 1953, population under the age of fifteen comprised 42.2 per cent of the total and those under forty years of age comprised 82 per cent of the total.[5] Old people have never made up a large share of the population. Improved medical facilities in the past decades have reduced infant mortality and helped to maintain the youthfulness of the population. The birth rate has been constantly high. The changes in age composition for the last twenty years are shown in Table 2. An age structure of this sort is costly to society; there are few to support many -- as was the case in 1953, when each group of one hundred persons between the ages of fifteen and sixty-four, the most productive working years, had to support eighty others, although not necessarily all of the hundred were employed.[6]

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4. Ibid.

5. United Nations, Statistical Office, Demographic Yearbook, 1954, New York, 1954, p. 127.

6. Ibid.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

369 40 per cent of the district's agricultural
596 production; in 1937, they accounted for only
563 17 per cent of the total yield.[1]

The aborigines in the mountainous regions of Formosa make a living from slash-and-burn agriculture and hunting. Some of the aboriginal tribes (the Bunun, the Tsou, the Paiwan, and the Yami) follow the patriarchal, extended family pattern. Others (the Atayal and Saisett) have a nuclear family organization -- each member of the family fulfills a definite role fixed by tribal custom. Aborigine women ordinarily do more farm work than Chinese women. Until recently few children from native tribes attended school, and until recently few aborigines ventured outside their tribal regions.

B. The Urban Family

369 The population of Formosa has been
161 increasing rapidly. The rate of increase is greatest in the urban areas. Each of Formosa's four largest cities -- Taipei, Kaoshiung,

1. Arthur F. Raper, Rural Taiwan - Problem and Promise, Taipei, 1953, p. 120.

369 Tainan, and Tiachung -- has more than
161 doubled in size since 1937.[2] The cities of Keelung, Hsinchu, and Hualien have grown almost as rapidly. The rapid increase in urban population is traceable, in part, to the number of young Formosans who have deserted the rural areas for further education and more profitable economic opportunities.

369 The patterns of living of the urban population differ in many ways from those of the rural population. The size of the average household is smaller. The houses themselves are small, overcrowded, and usually contain no more than two generations, parents and children. Crime in urban areas has increased substantially.[3] On the other hand, educational facilities in the cities have improved. The people of Formosa are becoming more aware of the importance of education. Urban families send their children to vocational schools or high schools whenever it is financially possible. During the past fifteen years, the rate of industrial expansion has been rapid, although not rapid enough to provide
005 work for the fast-growing population. The

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2. Arthur F. Raper, et. al., Urban and Industrial Taiwan - Crowded and Resourceful, Taipei, 1954, p. 2.

3. The number of urban crimes reported
(continued next page)

to interfere with the dection campaign of the candidates, obstruct the casting and counting of votes, and hamper the performance of duties by those in charge of the election affairs."[14] Generally speaking, the elections were conducted in an orderly manner. No report of election "irregularities" has appeared in newspapers. Mr. Hsü Fu-lin, acting chairman of the Democratic Socialist Party, in answer to the query of an American newspaper correspondent, said that there had been no discrimination against the candidates of his party during the election campaign. A British newspaperman observed that "if Formosan elections cannot be regarded as free by the standards of the West, they have nevertheless been considerably more democratic in character than anything yet known in the Far East outside Hong Kong. The secret ballot prevails, but no candidate fundamentally opposed to the regime would have the temerity to stand for election."[15]

[161] The Civil Affairs Department of Taiwan Provincial Government reported the population of Taiwan Province to be 8,438,016 at the end of 1953. This number included 741,016 foreign-born (Mainlanders) but excluded military

14. A General Report Made by Governor O.K. Yui before the Fifth Session of the Provisional Provincial Assembly of Taiwan on Dec. 14, 1952, Taipei, Dept. of Information, Taiwan Provincial Government, 1954, p. 31.

15. H. Maclear Bate, Report from Formosa, London, Eyre & Spottiswoode, 1953, p. 23.

Annex "A," Subparagraph 3a",
Economic Background

LAND REFORM

I. LAND TENURE BEFORE REFORM

423 162 For many years the most crucial problem confronting Formosa, as is the case with most countries on the continent of Asia, has been that of too many farmers and not enough land. There has been an enormous growth of population in the past half-century. For lack of industrial development, over 51.93 per cent of the total population in Formosa is engaged in farming.[1] The agricultural [161] population grew[2] from 3,318,235 in 1944 to 4,381,816 in 1953. Only 24.7 per cent of the land in Formosa is arable.[3] As is always the

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1. Taiwan Agricultural Yearbook, 1954 Edition, compiled by the Provincial Department of Agriculture and Forestry, Taipei, October 1954, p. 1.

2. Ibid., p. 25.

3. Ibid., p. 8. The total area of Taiwan Province, including the Pescadores and adjacent small islands, is 3,707,658 chia (or 35,961 square kilometers) and the total area of public and private cultivated land is 903,273 chia (or 8,082 square kilometers) in 1953. (Chia is the unit of measurement of land on Formosa; one chia is equal to .9699 hectare or 2.3968 acres.)

IV. TAIWAN AND KOREA

THE HERITAGE OF THE JAPANESE EMPIRE

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The preceding chapter showed that although the population problem of Japan Proper is clear-cut, its solution is conjectural. It is the problem of population growth from a current 80 million to a future 100 million or possibly 125 million. It is the problem of an industrial people too numerous to subsist on the products of their own land. Demographically, the Japanese people are in midtransition from the familial values of the rice lands of Asia to the individual values of a Western urban milieu, i.e. from mortality-dominated to fertility-controlled rates of population increase. The Japanese Empire bequeathed more than 80 million Japanese to a land and a culture ill-prepared to maintain them. It also stimulated population growth in all the conquered areas without developing the material base to sustain such growth or the psychological changes to terminate it. Taiwan had 2.6 million inhabitants in 1896 and 5.9 million in 1940. Korea had 14.8 million in 1912 and 24.3 million in 1940. The subject peoples of the Empire as a whole numbered 21.8 million in 1920 and 32.1 million in 1940, an increase of over 10 million or 48 per cent within 20 years.

The process that generated this growth was the same throughout the Empire: the decline of mortality within a social and economic setting that preserved intact the high fertility of the peasant East. This was a necessary by-product of political control and economic development. Today's people, whose numbers have already doubled or trebled, still face a long period of growth checked only by mortality.

Asian imperialism had its positive aspects. The defeated Japanese left to their former colonies the improved agriculture, the incipient industrialization and the roads, railroads and buildings in which the forced savings of the Empire had been invested since the initial conquest of Taiwan. The Japanese also left great university plants to which some "natives" had gone, a more widely diffused literacy than that prevalent elsewhere in the Far East and a substantial number of workers with industrial experience.

The peoples temporarily united under the rule of the Japanese had long histories behind them. They face divergent futures. The Japanese period was an interlude, but the political domination was so complete and the

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development plan so uniform that similar demographic consequences resulted from the occupation and similar population problems plague the future. Moreover, for the period of Japanese rule there are censuses and vital statistics of unusual accuracy, for Japan's statistical system was always among the paraphernalia of her export. Hence it is possible in each instance to secure a minimum picture of the population when the Japanese came, to trace its expansion during their rule and to assess the magnitude of the population problem bequeathed to the future.

The description of the demographic impasse of Taiwan precedes that of Korea, for Taiwan is a striking demonstration of demographic principles and problems. Its Chinese people contributed the labor force for the most successful of Japan's colonies. As death rates dropped lower and lower, the population increase approached that geometric pattern which Malthus believed to be the potential of human reproduction. A long series of censuses and vital statistics document this expansion of a Chinese people under almost optimal conditions for population increase. An analysis is sobering, though, for there was only China's ancient pao-chia system to record the demographic aspects of the fluctuations in economy, public health and political cohesion that followed the Japanese withdrawal and the re-establishment of Chinese suzerainty.

177 Polynesian peoples inhabited Taiwan for centuries, and perhaps for millenia, unable to develop any effective political organization but sufficiently warlike to prevent the infiltration of peasants from the Mainland. In the sixteenth century the Portuguese came to the Ilha Formosa but did little more than give it the name. The Dutch, who ruled from 1624 to 1661, reported an immigration of Chinese sufficiently strong to be troublesome. This was a period of crisis in China, for the Manchus had replaced the Ming Dynasty in the North and were pushing southward. The exodus of Ming civilians and soldiers across the narrow waters to Taiwan increased until there was a sufficient concentration of strength to capture the Dutch fortresses. In 1683 Taiwan became a district of Fukien Province, a tiny segment of the great Empire of the Manchus.

161 177 The patterns of demographic and economic development that made modern Taiwan evolved in the two centuries of Manchu suzerainty. Population growth was appreciable as immigrants from the crowded provinces of Fukien and Kwantung re-enforced the natural increase of the earlier settlers. By the latter part of the nineteenth century, when Japan had awakened from Seclusion and was ascertaining the areas available for Empire, Taiwan was considered a prize worth acquiring. Three million Chinese peasants were occupied in the production of rice, sugar, camphor, oilcake and other tropical products. "Incidents" occurred, war ensued and the Treaty of Shimonoseki gave Taiwan to the Japanese in 1895.

ECONOMIC DEVELOPMENT

177 433 The economic development of Taiwan required the expansion of health and sanitary facilities that would permit the residence of Japanese and guarantee the expansion of a cheap and docile labor force to produce the agricultural surpluses that were the goal of conquest. The achievement of military and, ultimately, civilian control necessitated roads and transport facilities. These were built before products were available for movement to the coast and shipment to Japan. The cultivated area was expanded, great irrigation systems built, techniques improved, more efficient varieties of rice and sugar developed and fertilizers introduced. Numerous agricultural experiment stations insured the necessary research, while hundreds of Japanese men in the field supervised the productive process from the initial preparation of the soil to the final processing and marketing. The Chinese had

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,000 physicians were registered as engaged in private practice or public service. There were about 800 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per cent in this 35-year period and virtually all 161 241 177

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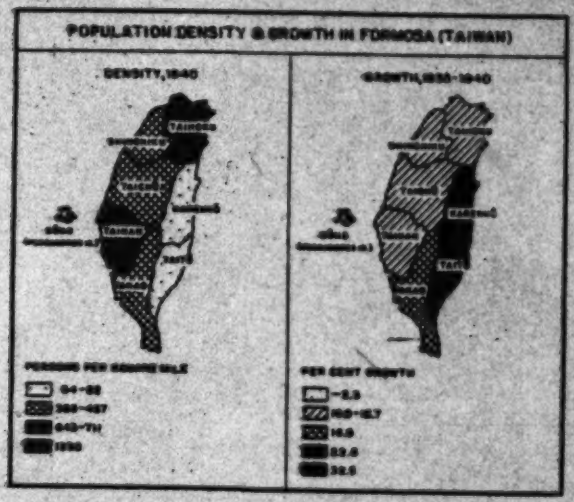

Taiwan, Population Density (1940) and Growth (1935-1940)

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Peasant Scene in Southern Taiwan

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 378 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 1463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

48: Chen E-4 (no date) 1968 ADI Formosa ADI

POPULATION GROWTH AND SOCIAL CHANGE IN TAIWAN

CHEN SHAO-HSING

The original title of this paper was "Population Change and Social Change in Taiwan". Owing to the limitation of space, it had to be divided into two parts. With the consent of the author, the first part is being printed under the above title; the part on population change will be printed in next number.—Editor.

I. INTRODUCTORY REMARKS

1. *Significance of the Study of Taiwan's Population.*

121 As universally admitted, the population problem is one of the most important problems of the present world. Since one fifth of the world population is Chinese, the study of Chinese population is an urgent task. But, sorry to say, we still have no population census, and though there are some population statistics, all are fragmentary and only for a short period of time. Because of these circumstances, "Taiwan is the only place where it is possible to study the processes of change of a Chinese population over a substantial period of time on the basis of excellent data" (Notestein's preface to G. W. Barclay's Colonial Development and Population in Taiwan, p. v. See No. 1 of the main references enumerated on the last page of this paper. Hereafter, the quotation will be abbreviated as follows, 1: p. v.). The study of Taiwan's population will tell us how a part of Chinese population has changed under a specific set of circumstances, and thus enable us to estimate the potential population change in China. This is the reason why the several millions of people on this little island are worthy of our consideration.

2. *Characteristics of the Data of Taiwan's Population.*

161 In order to promote an effective colonial administration, the Japanese started complete surveys of land and population in the early years of their occupation of Taiwan. During the half century of Japanese occupation (1895–1945), there were population figures of the whole island for 48 years from 1896 to 1943. The statistics from 1905 to 1943, that is from the year when the first census was taken to two years before the Japanese surrender, are especially trustworthy, judged by G. W. Barclay as "complete" and "correct", and Taiwan's statistical system was "a paragon even among those of the technologically advanced nations in the world" (1: p. 145, p. 164). For administrative reference, the population of Taiwan was registered according to different ethnic stocks, and by this we can trace the change of a part of the Chinese population under certain specific circumstance. The subject of this paper is not to treat the population of Taiwan as a whole, but to analyze how a part of Chinese population has changed in

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

Taiwan[1].

Before the Japanese occupation there was frequent migration between the China mainland and Taiwan. After the Japanese occupation, the fundamental policy of the colonial government was to cut off the relation between China mainland and Taiwan. Thus the entrance of mainlanders to Taiwan and the departure of Taiwanese to the mainland was strictly controlled. After the restoration of Taiwan to China in 1945, especially since 1949, many people came to Taiwan from the mainland, and the populations factors have changed greatly. During the half century of Japanese occupation the Chinese population in Taiwan was a "closed" population (1: p. 12), its change was almost wholly caused by natural increase, and the influence of migration was insignificant. It seemed that Taiwan was kept as a laboratory for experimentation on Chinese population change, and this is a very valuable condition from a demographic point of view. 161

Besides dependable data of population statistics, there are statistical data of administration, industry, communication and transportation, hygiene, and education, etc., which will enable us to trace the interrelation of population change and social change. Usually, statistical records begin after a society has attained some degree of development, and the data of the initial stages of modernization are not easy to find. Besides, neglect of birth and death registration is unavoidable in early statistics. Thus even when there are statistictical records, dependable data are hard to get. Taiwan is an exception in these points. Since statistical records were taken by the colonial government under strict police control, dependable statistics from the initial stages of modernization are available, which will enable us to make a study of a complete processes of population change and social change. "It is", as pointed out by Notestein, "if not the only case, then certainly one of the very few cases in the world" (1: p. v.). 161 178 127

Social change in western Europe took place from within, developed by inner necessity, and the change was from the base to the top. Social change in Taiwan was different from this, as pointed out by G. W. Barclay. In Taiwan the Change was started and pushed by the colonial ruler. It was passive in character, and was from the top to the bottom. There are many areas in the world which were occupied as colonies in former times, and their social change shows the same trend as that of Taiwan. The study of social change in Taiwan will help us to understand the colonial type of social change. 178

By the time of the Japanese occupation (1895), the islands of Taiwan and Hainan had about same size of population, around two and a half million. Fifty years thence, the population of Hainan remained almost the same, but the Taiwanese population had 161

Note 1: Hitherto the population of Taiwan was treated as a whole in most articles and books. In a paper by the present writer: "Sociological Study of Mortality in Taiwan", published in 1947-48 (main references, No. 6), a different standpoint was adopted, Chinese population in Taiwan was the subject of the analysis. Two books by G. W. Barclay published in 1954 also adopted the same standpoint.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

161 increased one and a quarter times[2]. What is the reason for the remarkable contrast between these two islands? It is an interesting and significant problem, and the analysis contained in this paper should shed some light on it.

II. POPULATION GROWTH IN TAIWAN

162 ### 3. *Ethnic Composition of Taiwan's Population.*

As soon as the Japanese occupied Taiwan, they started a survey of the population, and as early as 1896 there were population figures of the whole island. Though the figure was not accurate enough, it was not incompatible with figures obtained by the first census in 1905, and we can say the survey was fairly dependable. In October, 1905, the first census was taken, and an accurate figure of total population was obtained for the first time. The total population was 3,123 thousand, 94% of it was Taiwanese (that is Chinese in Taiwan, transfered to Japan by the Manchurian government), 0.26% was the mainlander (that is Chinese who came to Taiwan after the Japanese occupation, and who were treated as overseas Chinese by the colonial government), 3.62% was aborigine, 1.90% was Japanese. The total population of Taiwan from 1896 to 1943 by ethnic stocks is given in table 1. During this period, the proportion of Taiwanese was always more than 90%.

Table 1. A: Taiwan's Total Population and its Ethnic Composition, 1896-1943.

Year	Total	Taiwanese	Mainlander	Aborigine			Japanese	Korean	Other Foreigners	Taiwanese Competing Population	Taiwanese Static Population	Total Competing Population
				Total	Living off Reservations	Living on Reservations						
Column	1	2	3	4	5	6	7	8	9	10	11	12
1896	2,587,6[illegible]	2,577,194					10,584					
1900	2,846,108	2,707,322	5,160	95,597			37,954		75			
1904	3,079,6[illegible]	2,915,984	5,917	104,334			53,365		92			
1905	3,123,302	2,942,366	8,223	113,196	36,752	76,443	59,618			2,979,018	3,055,461	3,046,859
1910	3,299,493	3,064,409	14,840	122,106	41,724	80,382	98,048			3,106,223	3,186,605	3,219,111
1920	3,757,838	3,436,071	24,836	130,310	45,762	84,548	166,621			3,481,833	3,566,281	3,673,290
1930	4,679,066	4,259,523	46,691	140,553	54,399	86,154	232,299			4,313,922	4,400,076	4,592,912
1940	6,077,478	5,523,912	46,190	158,321	62,386	95,935	346,653	2,259	93	5,586,296	5,682,233	5,981,543
1942	6,427,932	5,827,867	50,429	162,031	63,991	98,040	384,847	2,692	76	5,891,848	5,989,888	6,329,862
1943	6,585,841		52,020			100,397	397,090	2,775	89	6,033,470	6,132,867	6,485,444

Figures of 1905-1930, column 3 included the figures of other foreigners (col. 9). Before 1930, Korean (col. 8) was included in Japanese (col. 7).

Data: 1896-1904, from 13, No. 8: Table 31; 1905 after, from 14.
Column 1, 3, 7, 8, 9, 11 from 14: Table 45; Col. 2=11-4; Col. 4, from 14: Table 53; Col. 5=4-6; Col. 6=11-10 (The figures of Col. 5 and 6 can be found in "Household Registration of the Aborigines", published by Government-General). Col. 10, 12, from 14: Table 96.

Note 2: BAKER, J. E.: The Balance between Population and Production. Pub. by Chinese Association for the United Nations, 1951.

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The population figures of Taiwan are sometimes confusing. Often we can find different figures of total population or Taiwanese population for the same year. This table will clear up the confusion. From the administrative point of view, those people living in Taiwan and with Japanese nationality were registered as Taiwanese. This is the figure of col. 11; in fact, it is the total of Taiwanese and aborigines (11=2+4). The figure of Taiwanese (excluding aborigines) was enumerated in earlier statistical records, but was dropped out after 1905. Strictly speaking, the figure of Taiwanese in col. 2 still included some acculturated aborigines. In the seventh census of 1940 for instance, the number of acculturated aborigines was 58,160. Though the larger part of the aborigines were living in the reservations, some of them were living outside of the reservations. The former were comparatively backward, and their vital statistics were rather incomplete, and thus were omited from vital statistics. According to the inclusion or exclusion of aborigines living in reservations (col. 6), there are two kinds of population totals: when col. 6 is included, it is the total static population (col. 1); when col. 6 is excluded, it is the total computing population (col. 12). As aborigines were included in Taiwanese population in statistical records, there are also two kinds of totals for Taiwanese population: when col. 6 is included, it is the Taiwanese static population (col. 11); when col. 6 is excluded, it is the Taiwanese computing population (col. 10).

Table 1, B: Index of Increase of Taiwan's Total Population and its Main Ethnic Groups, 1895-1943.

	Total		Taiwanese		Mainlander	Aborigines			Japanese	
						Total	Off Reservation	On Reservation		
1896	100.00		100.00						100.00	
1900	109.98		105.02		100.00	100.00			358.88	
1904	119.01		113.14		114.67	109.12			504.20	
1905	120.69	100.00	114.16	100.00	159.36	118.40	100.00	100.00	563.28	100.00
1910	127.50	105.64	118.91	104.15	267.59	127.72	113.52	105.15	936.37	164.48
1920	145.21	120.31	133.39	116.78	481.31	136.31	124.51	110.60	1,574.27	279.49
1930	170.82	149.61	165.39	144.77	904.86	147.02	148.01	112.70	2,194.82	389.64
1940	234.86	194.52	214.34	187.74	865.15	165.61	169.74	125.49	3,375.34	591.47
1942	248.46	205.80	226.12	198.07	977.30	169.46	174.11	128.35	3,636.12	645.52
1943	254.50	210.86			1,008.13			131.33	3,751.79	666.05

4. Population Growth.

The population growth of the half century under Japanese occupation was tremendous. The total population during the 48 years from 1895 to 1943 increased one and a half times, increased 1.1 times during the 39 years from 1905 to 1943. The increase of Taiwanese population during the 47 years from 1896 to 1942 was 1.26 times, and almost doubled during the 38 years from 1905 to 1943 (cf. Table 1, B). A comparision with

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161 other parts of the world will help us to understand the implication of the rate of increase. The population of England, Scotland and Wales doubled during the first half of the 19th century, and increased 80% during the second half of the same century. In Sweden, the increase in the same periods were 48% and 47% respectively (16: pp. 12–13). The population of Japan proper almost doubled during 64 years from 1872 to 1935 (19: p. 27). It took half a century for Britain and more than sixty years for Japan to double its population, but only 38 years for Taiwan (Taiwanese population). However we must keep in mind that, the population growth here compared took place in Britain a century earlier, and the size of population compared is markedly different. Thus it is not a comparision under the same conditions, but still the quick population growth in Taiwan is an undeniable fact.

A comparision of population growth during the same period of time will give us a more concrete idea. Population growth of selected countries during 21 years from 1920 to 1940 was compiled by the National Office of Vital Statistics of the United States. A selection of the representative countries from the data with the figure of Taiwanese is given in Table 2.

Table 2: Percentage Change in Total Population Size: Selected Countries, 1920–1940.

Countries	Percentage of Increase	Countries	Percentage of Increase
France	1.0	Korea	40.9
Sweden	7.9	Netherlands East Indies	42.8
Belgium	12.5	New Zealand (Maoris)	42.9
Spain	21.5	Union of South Africa (Non-Europeans)	54.1
Egypt	26.9	Taiwan (Taiwanese)	60.4
Japan proper	30.6	Malaya	65.6
Ceylon	33.8	Honduras	72.0
Mexico	37.1	Dominican Republic	94.9
Panama	39.6	Palestine (settled population)	134.0

Source: 22: p. 11.

There are four areas with an higher rate of growth than Taiwanese, but the rate of natural increase of these areas in 1940 were all lower than the Taiwanese[3], and their high rate of growth was caused by immigration. So, during 1920–1940, from the standpoint of natural increase, population growth of the Taiwanese seemed to be the hightest in the world.

The annual rate of natural increase of Taiwanese was around 2.5% in 1940. Supposing that this rate of increase will continue, then what will be the future population? It will double about every 28 years. It will increase to 450 million within one

Note 3: The rate of natural increase in 1940: Malaya, 20.6 per 1,000; Honduras, 21.0 per 1,000; Palestine (settled population), 20.2 per 1,000; the figure of Dominican Republic is uncertain (22: p. 21). The rate of Taiwanese was 24.0 per 1,000.

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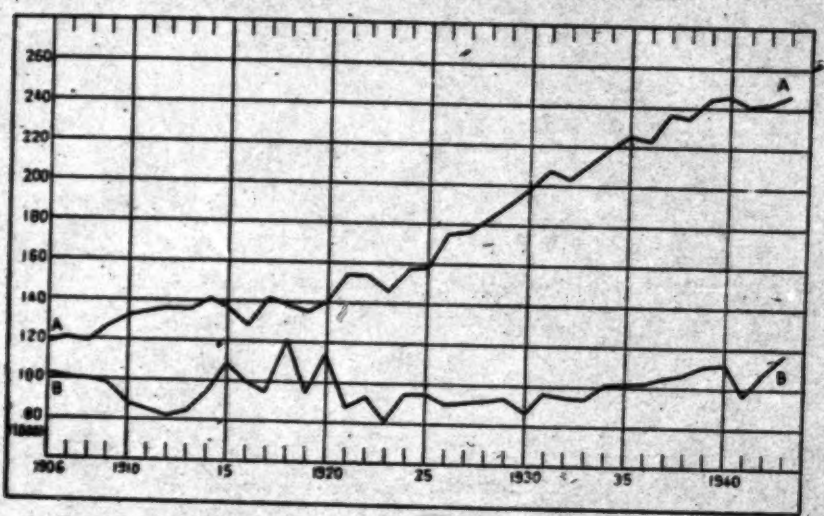
century and a half, and will attain the figure of present world population within two and a half centuries (1: p. 13; 2: p. 45; 4: p. 73-74). As a matter of course these suppositions assume that the present conditions will continue, and that a change of conditions will cause population growth to show another aspect. With regard to the estimation of future population, Sun-Ken Quo has a different point of view based on a different perspective (3). 161

5. *The Cause of Population Growth.*

Natural increase and immigration are two causes of population growth. Since the colonial government strictly controlled the emigration of Taiwanese to the mainland and the immigration of mainlanders to Taiwan, migration was quite insignificant for the population growth of Taiwanese, and 96% of its total growth was the result of natural increase[4]. 161 167

Now, how was this natural increase achieved? From Figure 1 we can see that between 1906 and 1943 the annual number of deaths of Taiwanese did not show any remarkable change, it remained around one hundred thousand. In contrast with this, 163 165

Fig. 1: Number of Births and Deaths of Taiwanese, 1906-1943



A: Births B: Deaths

Source, 14: Table 96

Note 4: The total of the annual increase of Taiwanese population between 1906 and 1943 was 3,078,406 (14: Table 48, 3). (The Taiwanese population in 1905 was 3,055,461, the increase between 1906 and 1943 was 3,078,406, and the grand total of these two figures, 6,133,867 was the Taiwanese population in 1943. 14: Table 48, 2 cf. Table 1, A, column II of this paper). Total of the annual natural increase of the Taiwanese between 1906 and 1943 was 2,947,956 (14: Table 96), was 95.76% of the total increase. Total annual increase other than natural increase of the same period was 130,452, and occupied only 4.24% of the total increase.

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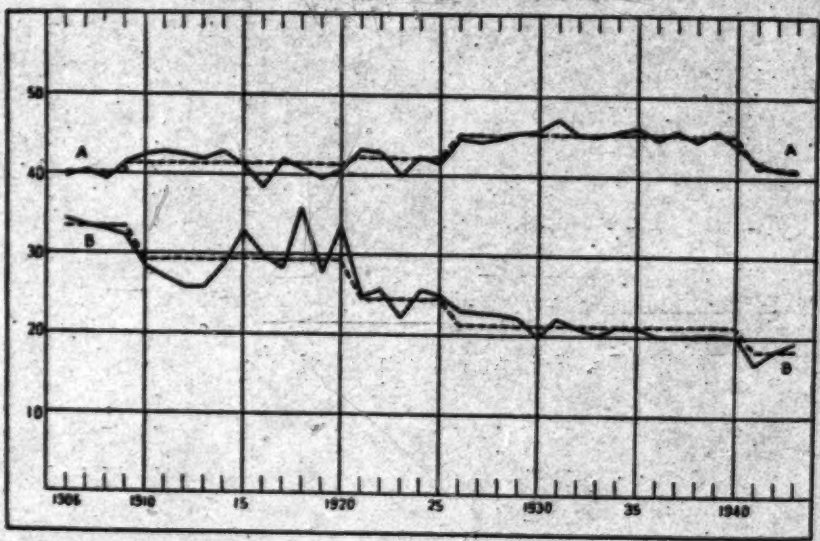
163 the number of births has increased markedly, it was around 120 thousand by 1906, it
165 had doubled to around 240 thousand by 1943. The number of deaths remained about the same and the number of births was doubled; this was the cause of Taiwanese population growth.

Analyzing the rates of birth and death, the situation will be clearer and easier to
161 grasp. Though the number of births was doubled between 1906 and 1943, the birth
163 rate remained almost the same, around 40 per thousand. Though the birth rate has remained the same, the number of births has increased in accordance with the increase
165 of population. Despite the annual increase of population, the number of deaths has remained almost unchanged. This indicates a decline in the death rate (cf. Fig. 2). The death rate of Taiwanese was 34.4 per 1,000 in 1906, it dropped to 18.4 per 1,000 by 1942, a decline of 16 per 1,000. The birth rate remained almost the same and death rate dropped 16 per 1,000. This is the cause of Taiwanese population growth. The result is clearly shown in the amount of natural increase. The space between line A and line B of Figure 1 represents the amount of natural increase, and the space between line A and line B of Figure 2 represents the rate of natural increase (cf. Table 3). Decline of death rate was the key factor of the Taiwanese population change during the half century under Japanese rule.

Figure 2: Birth and Death Rates of Taiwanese, 1906-1943



Rate per 1,000 population

A: Birth rate B: Death rate (The dotted lines represent the average rate of each period.)

Source, 14: Table 64

6. *Population Change and Social Change.*

From Figure 2 we can observe the trend of the death rate between 1906 and 1943. The graph naturally divides into five periods each with its characteristic type of change

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161 163 165 161 178

as indicated in Table 3. The birth rate also shows the same periodical tendency. It is very significant that there is an intimate interrelation between population change and social change in each period, and we even may infer that population change is the index of social change. This will be analyzed in subsequent sections. The average rates of birth, death, and natural increase (Table 3) and main features and changes of each period will be clear from the following table.

Table 3: Five Periods of Taiwanese Population Change.

Period	I	II	III	IV	V
Years	1906-09	1910-20	1921-25	1926-40	1941-43
Number of years	4	11	5	15	3
Average Birth Rate (per 1,000)	40.25	41.40	42.08	45.24	41.10
Average Death Rate (per 1,000)	33.35	29.37	24.61	21.20	18.23
Average Rate of Natural Increase (per 1,000)	6.90	12.03	17.47	24.04	22.83

First Period (before 1909): Wide spread epidemics and malaria, frequent revolts of the people against the Japanese characterize this unstable period. The birth rate was high (more than 40 per 1,000), but the death rate also high, more than 30 per 1,000 on an average, and the fluctuation was remarkable and frequent. The rate of natural increase was about 7 per 1,000.

Second Period (1910-1920): Epidemics were wiped out by the end of this period, the prevention of malaria had started. The uprisings of the Taiwanese were suppressed around 1915, the revolts of the aborigines were largely mitigated by 1920, and comparative social stability was more or less attained. Political, cultural and social movement of the modern type began for the first time after World War I, and took the place of armed uprising. The Japanese colonial policy had changed somewhat. Birth rate increased slightly, death rate declined to an average of around 30 per 1,000, and the rate of natural increase rose to 12 per 1,000.

Third Period (1921-25): Vigorous cultural and social movement marked this era. This was a period preparatory to the following period of expansion. Transportation was improved, mobility of people increased. Agricultural products and processed agricultural products increased, the productivity was raised, and the consumption of daily necessities increased slightly. The attitude of the people began to change, they began to adopt new ways of life more readily. Use of mechanical facilities gradually increased, and the number of doctors of western medicine exceeded the number of physicians who practiced Chinese medicine. The spread of primary education was promoted. The birth rate increased again, the death rate was 4.8 per 1,000 lower than the foregoing period, and the rate of natural increase rose 5.5 per 1,000.

Fourth Period ([illegible]). During this period there was a tremendous increase in the output of agricultural products, [illegible] the peak production during the Japanese rule. The hydroelectric plant of Sun Moon Lake was completed in 1934, and industry

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was much promoted by it. Prevention of malaria was successful to a large extent, the activities of preventive hygiene being started by the 1930's. There was reduction in the number of cases of diarrhea, enteritis, and tuberculosis. Infant mortality began to decline. The birth rate rose to a peak, the death rate declined again, and the fluctuations became fewer and of lesser extent. The rate of natural increase attained a peak of 24 per 1,000. Age composion changed, the proportion of infants and children increased markedly.

Fifth Period (1941–1943): The value of industrial products exceeded the value of agricultural products, and the quick tempo of urbanization began. The birth rate began to decline, and death rate continued to drop, to around 18 per 1,000; the rate of natural increase declined slightly. Infant mortality declined further. In comparision with 1906, the average expectation of life of Taiwanese at birth in 1940 was 13 years longer for males and 16.7 years longer for females.

Objectively considered, there were improvements in Taiwan during the half century of Japanese rule; and it is evident at the same time that under the scheme of colonial administration, the improvements were limited in character. The specific character of this social change can be traced in the population data. In order to let her colony carry out its function, in order to make it a good supplier of rice and sugar which Japan urgently needed, various kinds of basic establishments and developments had to be accomplished, such as the wiping out of epidemics, prevention of endemics, basic sanitation, development of transportation, primary education etc. In order to make her colony a good market for manufactured products, the purchasing power and the level of living of the people had to be raised somewhat. But if the "improvement" was pushed too far, it would enable the people to resist and revolt, so it must be kept within certain limits. The Japanese were quite clear on these points, and developed the island within the colonial scheme. The results were successful, even to the extent of Taiwan being called the "ideal colony". Here is the fundamental character of social change in Taiwan. Some data will help us to understand the situation concretely.

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Though the death rate of Taiwanese had declined, its tempo was slow, and still remained very high in comparision with the death rate of Japanese in Taiwan. In the early years of occupation, the death rate of Japanese in Taiwan was tremendously high, but declined quickly and steadily, and with the passage of time the rate was not only lower than in Japan proper, but even attained the level of the most advanced western countries. To take the death rate of 1925 for instance, it was 24.84 per 1,000 for Taiwanese, 20.27 per 1,000 in Japan proper, but was as low as 11.34 per 1,000 for the Japanese in Taiwan. Though it is somewhat higher than Australia (9.2 per 1,000) and Netherlands (9.8 per 1,000), it is still lower than Sweden (11.7 per 1,000), England and Wales (12.2 per 1,000). The age composition of the Japanese in Taiwan was specific, [162] there were more youths and adults in its population, and no doubt this was one of the causes of its low death rate. But even after the difference of age composition was

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corrected, the standardised death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[3]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertiliser and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertiliser increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more than twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyse the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 3: Tachi, M.: Lecture on Population Problems, Tokio, 1943, p. 201.

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[182] 669 people were forced to sell their land cheaply to sugar corporations. The influence of the revolution lead by Dr. Sun Yat-sen on the mainland was also felt. After 1916, the uprisings were suppressed by a forceful police system. Since 1921 the revolts of the aborigines have been largely mitigated.(6) After the 1920's peace was generally preserved in Taiwan, and the resistance of the people changed gradually from revolt by force to organized political and social movements.

000 Peoples' attitudes are much influenced by peace and war. Disturbances do not give the people the needed security of life and property. They must keep a cautious and watchful attitude at all times. It is impossible to invest the surplus of their production for the extension of their business. They have to exchange the surplus of production for gold and silver, and bury it under the ground for safety. Direct and immediate self-sustainance was their main daily concern, and the idea of future development was unfamiliar to them. This society is approximataly the same as the "militaristic type of society" defined by Herbert Spencer, and no development can be expected from it. In peace time people need not spend their time and energy defending themselves against thieves and bandits. They can concentrate their strength on their work. They can extend their business and gradually plan for the future. Again, we may use Spencer's definition and classify this state as an "industrial type of society". Once 178 established, its development will be accelerated. In Taiwan, after peace and order 648 were established by the colonial government police system, production was extended, and the population gradually increased.

The various kinds of social change in Taiwan were basically influenced by the colonial policy of Japan. Before World War I the policy was typically colonial. After the war, the spirit of democracy permeated the whole world. In Japan, serious social problems broke out. Democratic and Socialistic movements likewise became widespread. Social movement of the modern type among students and young people broke out in China at about the same time. Under the influence of both China and Japan, political, social, and cultural movements started in Taiwan for the first time around 1920. At first the colonial government tried to suppress them by force, but the current was too strong and the government had to change its policy somewhat. From around 1930, the policy of assimilation was adopted, and there were some improvements in administration. Though the improvement was limited in character, it had a fairly significant effect on Taiwan, and its results were reflected in population data. From [161] 1926 on the system of modern Taiwan was generally molded, and after that date population growth was speeded up.

Japan started her invasion of Manchuria in 1931, intruded in northern China in 1937, and then struck Pearl Harbor in 1941. As the war for expansion was extended, Taiwan was considered a strategic base, and the colonial policy had to change again.

Note 6: Yasuihara, T.: Taiwan under Imperialism. 1929, Tokio, pp. 241-242. Shiomi, T.: "Police System and Economy of Taiwan under Japanese Rule". Quarterly of the Bank of Taiwan Vol. 5, No. 4, 1953, Taipei, pp. 259-261.

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Hitherto the development of chemical production, heavy industry, and consumer goods industries on Taiwan had declined, but now they were earnestly promoted. This gave another impetus to social change.

8. Elimination of Epidemics

After the occupation of Taiwan, two things troubled the Japanese most: the revolts of the Taiwanese and epidemics. One branch of the Japanese expeditionary army landed on the Pescadores on March 21, 1895. By mid-May, fully 1945 people out of 6,190 were afflicted by cholera, and 1,247 died. Another branch of the expeditionary army landed on Taiwan at about the same time and was also stricken with cholera, malaria, dysentry, typhus, pneumonia, and beri-beri. Only one fifth of the total army was free from illness by the end of September (5: Vol. 2, No. 12). During the early years of the Japanese occupation epidemics spread widely, and thus, elimination of epidemics was the first administrative task for the new rulers of Taiwan.

Plague, cholera, and small-pox were three serious epidemics in Taiwan. Plague broke out in Hongkong in 1894, invaded in Taiwan two years later, and had spread to many places during the next twenty-two years. During this time more than thirty thousand people were inflicted, and twenty-four thousand died. It was wiped out in 1917 (5: Vol. 2, No. 12). The activities of extermination and prevention by police power were conspicuous. They included the isolation of patients, destruction and burning of contaminated houses, extermination of rats, quarantine at sea ports etc. Though the means adopted were harsh and cruel, they were effective. Cholera was not as serious as plague in Taiwan. A greater prevalence of cholera occured in 1902, 1912, 1913, and 1920. After 1921 the preventative arrangements were more or less completed and by the cooperation of the people and the public health system, the occurence of cholera could be closely controlled.

During the early years of Japanese occupation small-pox was a serious problem. With the enforcement of vaccination, it began to decline after 1903. Since then, except for a greater prevalence in 1918–1920, small-pox has not been a menance in Taiwan (5: Vol. 2, No. 12).

Plague was wiped out in 1917. Cholera and small-pox were under control by 1920. Since then there has been no serious problem of epidemics in Taiwan. Incidentally, the cattle pest which ravaged Taiwan from 1896 and killed more than forty thousand head of cattle, was also exterminated in 1920.[7]

Whether or not a society is menaced by epidemic is always a significant social fact. We may say that freedom from epidemics is the first step toward modernization. In Taiwan, the course of this change can be traced in the data of population change. Before 1920 the death rate was high, and it also fluctuated frequently, and the extent of fluctuation was great. This is a sign of the uncertainty of life. In fact, living in a society where epidemics constantly spread, one could not estimate in the morning what would be happen before nightfall. Fatalism, such as shown in the saying "man proposes,

Note 7: Animal Resources of Taiwan, published by the Bank of Taiwan. 1952, p. 172, p. 256.

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164 but God disposes", "Der Mensch denkt, und Gott lenkt", "Der Mensch schaltet, Gott
164 waltet", was fostered under such circumstances. In Taiwan there was a saying: Confucius did not accept an invitation for the next day, since he didn't know whether he would be still alive in the evening or not. Under these circumstances, the attitude of the people is always "looking backward", and planning for the future will be laughed at as utopian. Once epidemics were wiped out, the death rate not only lowered, but its fluctuation became more infrequent and of lesser extent. This is a sign of more stability of life, and thus the traditional fatalism gradually dies out. The attitude of the people changes from "looking backward" to "looking forward", and planning for the future becomes a realistic idea. Ancestor worship and all kinds of cult and ritual are the main concern of people who are always looking backward, but for the peole who are looking forward, the upbringing and education of the younger generation is the most important.

9. Prevention of Endemic Disease

164 Malaria was the main endemic of Taiwan. Though epidemics are disastrous enough, their prevalence is intermittent, and the extent of their devastation is not necessarily very large. In contrast, malaria creeps in slowly, destroys vitality and attacks human life directly and indirectly. From the time of the Japanese occupation (1895) until 1916, about one tenth of all the deaths in Taiwan were caused by malaria, and during this period it was always the first or second in rank among the leading causes of death. Unaccustomed to the climate of Taiwan, the Japanese in Taiwan had to pay a heavy toll to malaria. In 1899 for instance, one quarter of the total deaths of Japanese in Taiwan were caused by malaria. In 1907, under the supervision of a professor of
165 medicine, prevention of malaria was started by a camphor manufacturing corporation
164 in a village of southern Taiwan, and some results were obtained. Preventative activity by the government-general was started at Feito, a town near Taipei, in 1910. As it was found effective, the regulations for the prevention of malaria were enacted in 1913, and were enforced through the system of police and paochia. The area of prevalence was designated, inhabitants within the area were compelled to have a blood test, and the patients were compelled to take medicine. The use of mosquito nets, drainage, and other sanitary works were enforced. The means adopted were harsh, but the result was good. The malaria death rate began to decline after 1916, considerable improvement has been made since 1925, and as a result the crude death rate was lowered. (cf. Fig. 11).

10. Activities of Preventive Hygiene

The devastation from epidemics and malaria was great, and thus the activities for their prevention were begun first. Some simple facilities for patients of leprosy and mental disease were also provided in earlier years. Other diseases, such as tuberculosis, venereal diseases, trachoma, and parasitic diseases, did not show any serious devastation, and they were not considered as serious problems by the government. The administration in Taiwan was mainly an imitation of that in Japan. What they had

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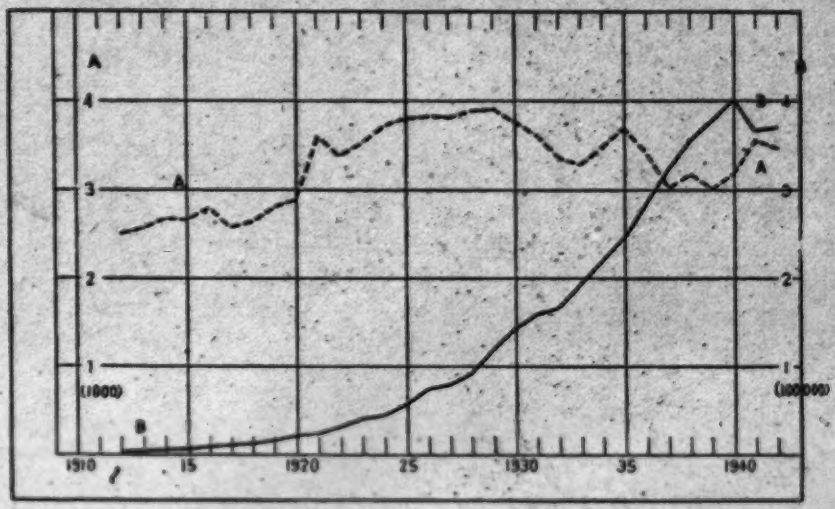
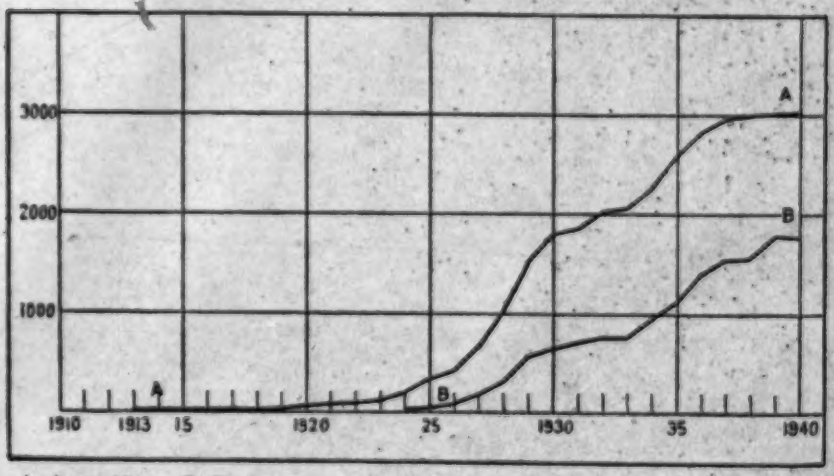
161 During the early years of Japanese occupation,
163 the difference in the rates of birth and death in different localities was remarkable.
165 As time passed, the development of different localities was gradually equalized, so the

Fig. 4 Number of Rickshaws and Bicycles, Taiwan, 1913-1942



A: Rickshaws (unit: 1,000) B: Bicycles (unit: 100,000)
Source, 14: Table 457

Fig. 5 Number of Automobiles and Trucks, Taiwan, 1913-1943



A: Automobiles B: Trucks
Source, 14: Table 457, 465

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rates of birth and death were more and more equalized. The difference between the highest and the lowest birth rate among different localities was 13.4 per 1,000 in 1906, but had fallen to 8.5 per 1,000 in 1935; the difference between the highest and the lowest death rate among different localities was 32.6 per 1,000 in 1906, but it was only 8.9 per 1,000 in 1935 (see Table 4, cf. 1: p. 169).

Table 4: The Highest and the Lowest Birth Rate, the Highest and the Lowest Death Rate of Different Prefectures of Taiwan in Selected Years (Rate: per 1,000 population)

		1906		1935				1906		1935	
Birth Rate		Whole Province	39.3	Whole Province	45.2	Death Rate		Whole Province	34.0	Whole Province	20.5
	The Highest	Nanto Prefecture	47.7	Tainan Prefecture	48.1		The Highest	Chiai Prefecture	52.9	Taitung Prefecture	34.4
	The Lowest	Yanzuika Prefecture	34.3	Taipei Prefecture	39.6		The Lowest	Hainchu Prefecture	20.3	Penghu Prefecture	15.5
	Differece		13.4		8.5		Difference		32.6		8.9

Source: 10:1906, 1935.

13. *Agriculture and Industry*

To get primary agricultural products and processed agricultural products, especially rice and sugar, which Japan needed urgently, was one of the main policies of Japan in Taiwan. The colonial government had spent much of time and money for the promotion of the production of rice and sugar. They made various kinds of surveys, researches, and experiments, used the system of police and pao-chia for enforcement, and as a result, the outputs of rice and sugar had increased tremendously.

Among the various types of production in Taiwan, agriculture and manufacturing were the two main types, and the proportion occupied by forestry, fishery, and mining was rather small. In 1912, the value of the total output of all types of production amounted to 146,374 thousand yen. Among these, the proportion of agriculture was 63%, manufacturing was 32%, and the total of three other types (forestry, fishery, and mining) was only 5%. By 1942, manufacturing had developed fairly well, its production value had exceeded that of agriculture. The value of the total output of all types of production in 1942 was 1,515,627 thousand yen. Agriculture's share of this was 42%, manufacturing was 46%, and the total of three other types was 12%. Agriculture and manufacturing, the two main types of production, were again represented by rice and sugar respectively. The proportion of the value of rice to the total value of agricultural products was 59% in 1912, and 39% in 1942. The proportion of the value of sugar to the total value of manufactured products was 79% in 1912 and 42% in 1942. Considering these facts, it seems not unproper to take rice and sugar as representative of Taiwan production.

From figure 6 we can see, that in comparision with the increase of acreage of cultivation (line A), the increase in the output of rice (line B) was tremendously high.

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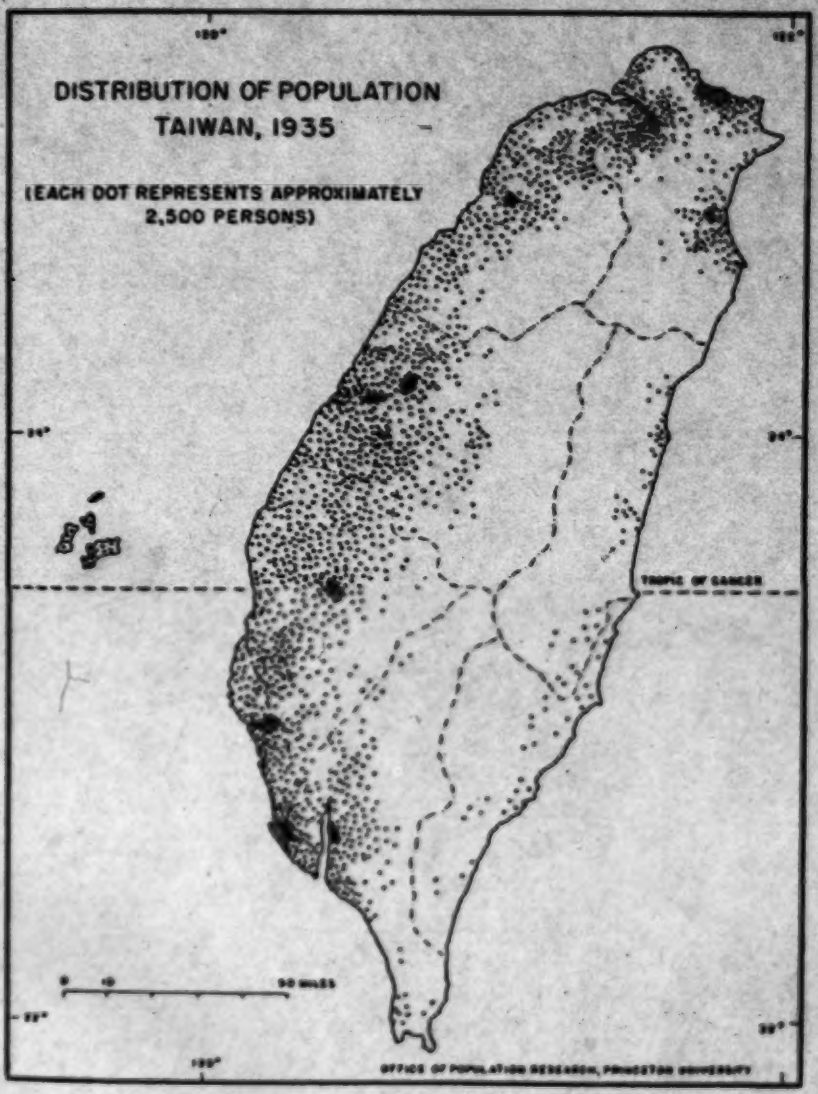

Fig. 2. Distribution of Population in Taiwan, 1935. All nationality groups.

The Japanese and Statistics of the Population

The only trustworthy information that we have about the numbers and kinds of people in Taiwan at any time is the evidence of the censuses taken by the Japanese. They conceived and established

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659 tually born in Taiwan (see Table 1). Almost none under 25 years
167 of age in 1920, or under 35 in 1930, were recorded as having been
born outside. Some who were older at these two dates had been
162 born in China, but they were very few and were probably living in Taiwan at the time of annexation. These figures imply that migration after 1895 was probably confined to people who were appropriately registered by nationality, and counted as *aliens* in census enumerations.[8]

Hence the census category of "Taiwanese" was defined so as to exclude migrants to and from the island. This is significant to know, for it means that Taiwanese counted in any census after 1905 were exactly the survivors of those who had been counted before (plus those who had been born in the meantime). It also means that the population of Taiwanese was for statistical purposes a "closed" population—one which neither gained nor lost people by migration. All change in the size of the Taiwanese population was therefore due to "natural increase," or the balance between births and deaths. One can thus speak precisely of population "growth" in Taiwan, without reference to migration as a complicating factor.

Half a Century of Rapid Growth

• 161 The total population, and the sub-total of Taiwanese, are shown in Table 2 as counted on October 1 of each census year, along with the annual geometric rates of growth that are implied at each intercensal stage. Every year showed an increase. The only setbacks were between 1915 and 1920, when the island suffered three near-epidemic attacks of disease. Even over this relatively poor span the average yearly rate of increase was close to one per cent. The original population of 1895 was more than doubled by 1945; when the vital statistics were discontinued in 1943, there were nearly six million Taiwanese.

[8] By evasion of the law some Chinese might conceivably have slipped into Taiwan and passed themselves off as Taiwanese. A further acquaintance with the regulatory system in later chapters, however, will make this appear most unlikely.

There is evidence of another sort that the Taiwanese were not diminished by removals to the mainland. Briefly, detailed testing of the validity of birth and death statistics has shown that practically all persons born in Taiwan were later accounted for in a census enumeration, or as registered deaths if they failed to survive. Practically all who were enumerated in one census were similarly accounted for at later dates. During the 1930's, Japanese permitted small numbers of Taiwanese to leave the island for special purposes. The effect of these departures was very small, and raises no difficulty in dealing with the data of earlier years. Thus, if there was emigration, it too was clandestine and very small.

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TABLE 2

GROWTH OF POPULATION IN TAIWAN

Total Population and Taiwanese Enumerated at Successive Census Dates and Average Rates of Growth for Taiwanese

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Year	Total Population (All Groups)	Taiwanese Population	Per Cent Annual (Geometric) Rate of Growth
1905	3,039,751	2,973,280	
			1.12
1915	3,479,922	3,325,755	
			0.83
1920	3,655,308	3,466,507	
			1.71
1925	3,993,408	3,775,288	
			2.22
1930†		4,218,663	
1930‡	4,592,537	4,313,681	
			2.48
1935	5,212,426	4,882,945	
			2.42
1940	5,872,084	5,510,259	
			2.42
1943		5,962,000*	

* This figure represents the Taiwanese enumerated in 1940 plus their registered natural increase from the census of 1940 to the end of 1943.
† Excluding Aborigine Territory.
‡ Including Aborigine Territory.
Sources: *Statistical Summary*, Table 57.
Census of 1930, Statistical Tables, Table 2.

These figures are significant also because of acceleration in the *rate* of growth, for it increased together with the number of people. Over the entire census period growth averaged 1.76 per cent per year. By 1940 Taiwanese were increasing at close to the rate of 2.5 per cent per annum. Compounded continuously, this latter rate would have enabled Taiwanese to increase twofold every 28 years, and twelve times in a full century.

Natural increase of such dimensions is exceptional. Such growth in itself implies that some change has taken place in the organization of human activities. It necessarily reflects a situation that could not have continued long, and that cannot persist forever. In the world

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161 at large, for example, the increase of people that has populated most of the earth's surface has progressed steadily only in a few centuries of sweeping changes. It has maintained an average yearly rate of half of one per cent, only one-fifth that of the Taiwanese. At their more recent rate of increase, they could supply the entire world's present population in less than 250 years.

Growth at this pace, for all its associated virtues in the saving of life and postponement of death, can be a costly way of expanding the membership of a society. It imposes on the adults the burden of supporting more dependent children than would otherwise be required. Consequently, at any particular time growing populations contain large proportions of young children and infants.

162 The increase of Taiwanese left this kind of mark on their age composition. By 1940, they had passed through 50 years of growth almost unbroken by periods of high mortality. The age structure, both of males and of females, was one that expanded steadily at each lower age to a broad base of infants at the bottom (see Fig. 3). The progression was almost smooth, with few irregularities in between.

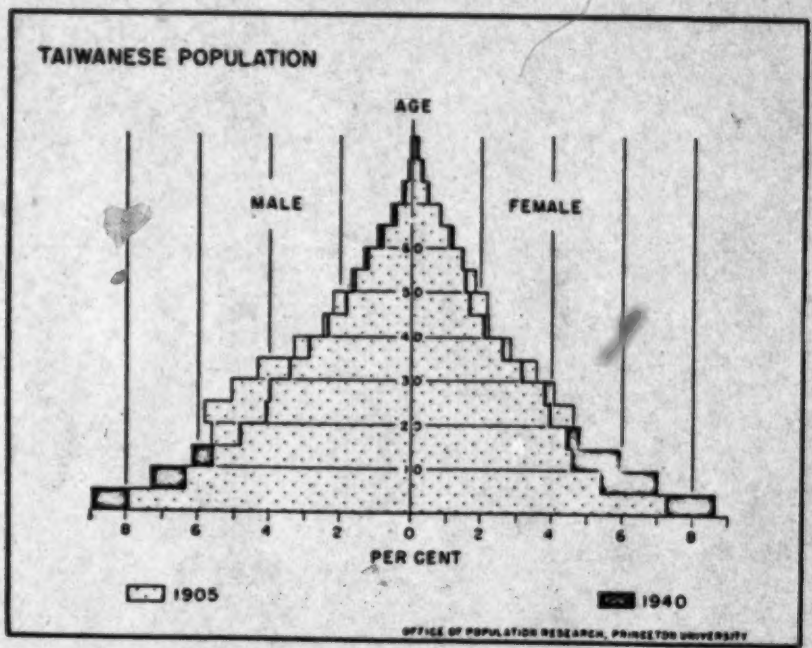

Fig. 3. Age Composition of the Taiwanese Population, 1905 and 1940.

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THE GROWTH OF POPULATION

In 1905 there were only a little more than half as many Taiwanese as in 1940. Their distribution in different ages presumably had not been subject to this past influence of steady growth. It nevertheless had many of the indications of potential expansion. Births were at high levels in relation to the numbers of adults. Through the effects of high and erratic mortality, many never reached maturity. 161

The inroads of past deaths had been far more irregular and generally more severe than in the population of 1940. As reflected in the dearth of persons from 5 to 20, for example, the turbulence that prevailed in Taiwan from 1890 to 1905 must have taken a heavy toll of infants and young children, and possibly prevented many others from being born. Even so, the population of Taiwanese in 1905 was an extremely youthful one. Provided that the supply of new infants each year would continue undiminished, it needed only an energetic set of measures for the control of mortality in order to produce the growth that ensued.

Because in most census tables "nationality" was adopted to classify the population, the Taiwanese must be considered for most purposes as a single group. It was not, however, a completely homogeneous category. It contained the remnants of the aboriginal inhabitants, and people from many different parts of China. Those of Fukien origin were predominant; their ancestors had made up the largest portion of all the migrants to Taiwan. The majority who reported ancestry in Kwangtung were descendants of the earlier Hakka migrants. These two principal classes of Chinese had begun to mix by intermarriage, which explains the lesser gain in those of Fukien origin by 1935. But during the great natural increase of Taiwanese they both grew almost evenly.* 162

The aborigines had ceased to be an important part of the population by 1905. No longer able to contest the seizure of their lands and destruction of hunting grounds, they had retreated to the mountains of Taiwan where most succeeded in avoiding Chinese influence. It took many years before they were finally subdued by the Japanese. The statistical information about the aborigines is incomplete and cannot be compared from one date to another, and we must all but ignore them in discussing the rest of the Taiwanese. Paradoxically,

* Already by 1905 the boundaries between these two groups were less pronounced than they once had been. Separate tables of the population in that year according to principal language spoken showed a certain amount of mixture between the two. The remarkable fact is that they remained as distinct as they did.

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the Japanese undertook primarily in anticipation of long-term benefit, without being able to justify its initial cost for many years. In terms of kilometer-tons of freight carried, the railroad made only partial use of its physical facilities until late in the colony's existence.[33] This sort of schedule was also followed in establishing a system of improved roads and trails over the island. In both cases, Japanese had to bear the burden of ambitious engineering projects when they could least afford it, for basic transportation networks are more valuable as networks than they are piecemeal.

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Public irrigation was a project closely tied to agriculture, and followed a different timetable (see Fig. 7). After 1895 there was no large

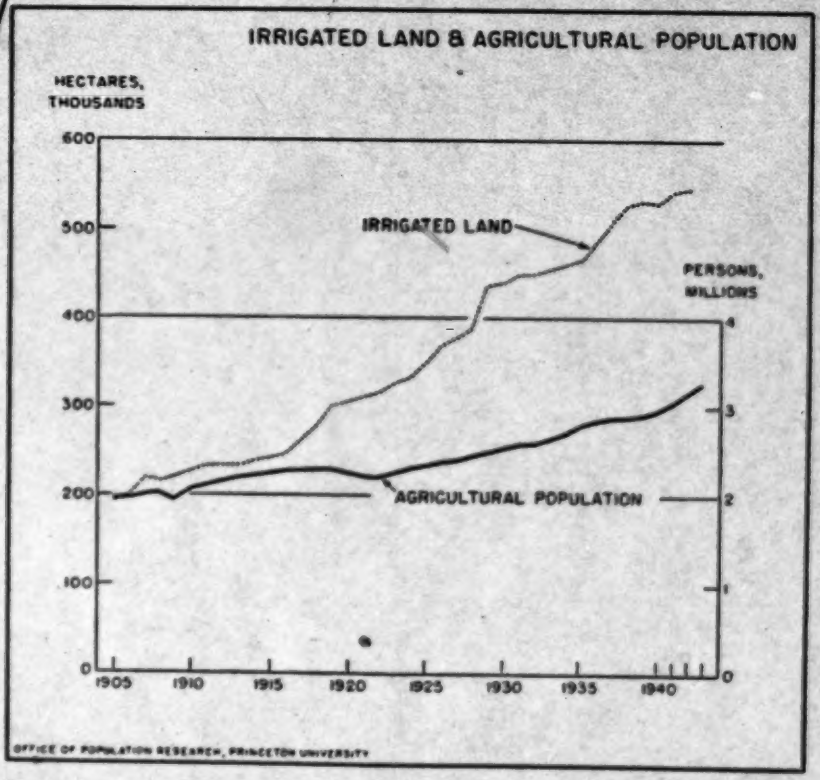

Fig. 7. Expansion of Irrigation and Agricultural Population in Taiwan, 1905-1943.

[33] Then it suddenly became overtaxed with cargo connected with the war, stemming from industrial growth and from Taiwan's role as a military base. See OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement* (1944), p. 60.

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659 631 tory—was put under special control (though it nominally fell inside some part of each prefecture). This area must be considered as a separate division of the island. Its actual conditions and the quality of its population data are distinct from the remainder. Japanese were secretive about their treatment of the Aborigine Territory, and we have little information about it that is dependable.

These civil divisions were the outcome of some experimentation in government administration. The scheme just described was put into essentially its final form in 1920. Accordingly, most comparisons involving internal boundaries cannot be carried back beyond that year.

The Distribution of Total Population and of Migrants

.161 In 1930, the population of Taiwanese was divided among the Prefectures as indicated in Table 19. Data in this form do not readily

TABLE 19

TOTAL POPULATION OF TAIWAN, 1930

By Prefecture, Inside and Outside the Aborigine Territory

(All Ethnic Groups)

	Area of Regular Administration			*Aborigine Territory*		
Prefecture	*Population*	*Density: Persons Per Sq. Km.*	*Density As % of Average For Total Island*	*Population*	*Density: Persons Per Sq. Km.*	*Per Cent*
Taipei	896,380	328.0	141	17,151	9.4	4
Hsinchu	641,479	243.9	105	23,232	11.8	5
Taichung	990,571	279.3	120	24,975	6.5	3
Tainan	1,155,287	233.9	100	4,359	9.0	4
Kaohsiung	601,547	210.5	90	31,772	11.1	5
Taitung	46,182	46.2	20	12,619	5.0	2
Hualien	72,555	53.7	23	14,304	4.4	2
P'enghu	60,124	473.9	204	—	—	-
Total Island	4,464,125	232.7	100	128,412	7.6	3

Source: *Census of 1930, Statistical Tables*, Table 11.

reveal relative concentration and dispersion of people. The real centers of population, if we disregard for a moment the dense settlement in the largest cities, were in portions of Taichung and Tainan

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Prefectures, and in Taipei. A thin belt of level land along the east coast was only freshly settled; people were extremely sparse in the interior region (see also Fig. 2). Separating the Aborigine Territory removes the greatest variation in terrain and land use. On this basis the more populous sections of the island can be roughly distinguished, though only in terms of Prefectures (which were not evenly settled throughout). To facilitate this comparison, the density of total population (per square kilometer) in each Prefecture is expressed in the final columns of Table 19 as a percentage of the density over the entire island with the Aborigine Territory excluded.

One can get a quick glance at the total effects of migration by examining the disposition of people among the smallest civil divisions at two separate dates. This information is prepared, for the years 1920 and 1935, in Table 20. The intervening period covers

TABLE 20

TAIWAN. TOTAL POPULATION BY SIZE OF CIVIL DIVISION, 1920 AND 1935

Excluding the Aborigine Territory

Size of Civil Division	1920 Population	1920 Civil Divisions	1935 Population	1935 Civil Divisions
	A. Numbers			
Under 10,000	765,772	116	1,244,749	130
10,000-20,000	1,980,510	141	2,262,691	118
20,000-30,000	409,149	19	606,831	22
30,000-40,000	166,543	5	119,785	3
40,000-50,000	47,921	1	469,151	7
Over 50,000	239,342	2	384,973	2
Total Island	3,609,237	284	5,088,180	282
	B. Per Cents			
Under 10,000	21.2	40.8	24.5	46.1
10,000-20,000	54.9	49.6	44.5	41.8
20,000-30,000	11.4	6.7	11.9	7.8
30,000-40,000	4.6	1.8	2.3	1.1
40,000-50,000	1.3	0.4	9.2	2.5
Over 50,000	6.6	0.7	7.6	0.7
Total Island	100.0	100.0	100.0	100.0

Sources: *Census of 1920, Descriptive Report*, Appendix, Table 8.
Census of 1935, Statistical Tables, Table 3.

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fifteen years of uninterrupted growth in the island's population. This is a short span, but it is the longest one for which appropriate figures exist. Before 1920 the territorial divisions were not the same, and for the census of 1940 no full reports have been published.

Apparently, from Table 20, the fact that there were more people in 1935 made little difference in their mode of settlement. At both dates more than two-thirds of all people (here including Taiwanese and all other groups) were living in places of less than 20,000 in size. Some of the larger civil divisions shifted upward from one group to a higher one; this is to be expected from the mere fact of general population increase. What is surprising is that the biggest cities—and as late as 1940 Taiwan boasted only three larger than 100,000—failed to advance substantially over the rest of the island. Subsidiary centers of less than 50,000 population made the most headway in relation to other places. A certain amount of administrative reorganization enters into these figures, since evidently a few of the minor units were split up into still smaller ones. But these changes were confined to units of the smallest size, and did not encompass many people. Viewed in entirety, migration therefore did not have a marked effect in redistributing the population growth that was in progress among the Taiwanese.[5]

Economic activities had changed so little, however, that migratory movements could hardly have been large. Besides, no large areas of new lands were available to farmers after 1900. Most of the additional space brought under cultivation since that time was converted to agricultural use within the settled area. Expansion of agriculture along these lines did not open opportunities of wider settlement.[6] In the absence of empty lands, there was little for peasant farmers to gain in changing residence unless they also changed their livelihood. In general, if they remained agriculturists it was advantageous also to remain in localities where they were well known, where their families were well established, and where they did not suffer the invidious treatment commonly accorded to strangers.

[5] Differences in natural increase, which might have hidden the effects of some migration in these figures, bore almost no relation to the differences in actual population growth between civil divisions.

[6] The exception to this rule was the rugged east coast of Taiwan. There the authorities brought in "colonists," first Japanese and later Taiwanese, to establish special settlements in the limited plains area for cultivation of sugar and other crops. Though making up a large part of the population later found in this region, this migration was small and of a very special nature.

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TABLE 23

TOTAL SURVIVING MIGRANTS BETWEEN PREFECTURES, AND THOSE WHO WENT TO CITIES*

Taiwanese Enumerated in 1930 Whose Place of Residence Was Different from Place of Birth

	A. By Prefecture of Destination Resident in Prefecture, Born Elsewhere			B. By Prefecture of Origin Born in Prefecture, Resident Elsewhere		
Prefecture	Number Who Migrated	% In-Migrant of All Persons Resident in Each Prefecture	% of the In-Migrant Who Went to Cities	Number Who Migrated	% Out-Migrant of All Persons Born in Each Prefecture	% of the Out-Migrant Who Went to Cities
Taipei	30,191	3.9	38.9	28,665	3.6	19.2
Hsinchu	7,917	1.2	11.7	91,360	12.4	16.3
Taichung	41,287	4.2	12.2	16,569	1.7	20.6
Tainan	31,893	2.9	32.0	19,950	1.8	27.4
Kaohsiung	40,683	6.8	38.6	9,719	1.7	26.0
Taitung	7,415	13.8	—	2,066	4.3	3.4
Hualien	25,650	35.6	—	1,681	3.5	6.1
P'enghu	544	1.0	—	15,570	21.9	74.7
Total Island	185,580	4.3	23.5	185,580	4.3	23.5

* People living in boats are excluded.
Source: *Census of 1930, Prefectural Volumes*, Table 30 in each.

Movement to Cities: The Rate of Growth

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These census materials above all emphasize one important fact: cities were the outstanding recipients of people from the rest of the island. The data regrettably can be used to demonstrate the case in only a limited way. The limitations are, however, of a nature that make this testimony an understatement—the total number of migrants to cities was much larger than merely those who had crossed the borders of a Prefecture. Lacking further data directly for the people who moved, we may find out more about them at their destinations as members of the urban population in Taiwan.

Since these several cities took such a large share of all migrants, they must have grown more rapidly in population than the rest of the island. The Municipalities were only a part of all the cities and towns in Taiwan, for the distinction was one of administrative convenience. Not all had equally developed economic services. They are

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a makeshift way of distinguishing urban places from rural Districts. Many subsidiary market towns, for example, must be overlooked for lack of data.

But in a population that was predominantly rural, these cities were the most "urban," the farthest removed from traditional peasant agriculture. Under the watchfulness of the Japanese, a town could not enlarge its economic importance for the rest of the island very far before it was given regular municipal administration. Hence we may treat them as representing the most extreme departures from rural conditions to be found in Taiwan, and can proceed to find out how far they deviated from the rest.

In 1932, two more cities were raised to municipal rank. The earlier and later population figures for all nine that were Municipalities in 1935 have been sorted out from the respective census reports, and appear in Table 24. It is clear that the cities of Taiwan were not great metropoleis. These nine were the largest, and many Westerners would regard only the foremost among them (Taipei) as being urban. One cannot gainsay their importance to Taiwan: they differed consistently enough from the rest of the island not to be lightly dismissed.

One distinction that is obvious in Table 24 is in the rate of growth. Though the cities varied considerably among themselves, every one increased its Taiwanese inhabitants more than the entire island did. Most cities maintained steady rates of growth, and therefore tended to keep their differences with the others.

The data are condensed and plotted on a logarithmic scale in Fig. 19, so as to contrast the rates of increase of city and non-city Taiwanese and Japanese. The inequalities in growth stand out clearly. Those cities that were expanding more slowly are likewise the ones that had relatively fewer migrants in the data above. They did not outgrow the non-city population by much of a margin, either in Taiwanese or Japanese. The differences in increase persisted over the entire recorded period, and carried over into the later years of accelerated economic growth. Indeed, from these data on population redistribution one could scarcely guess that the tempo of economic life had changed after 1935. Whereas these same cities had held 10 per cent of all Taiwanese in 1920, they contained only 14.7 per cent as late as 1940. For all their growth, cities did not greatly surpass the increase of all Taiwanese.

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TABLE 24

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POPULATION OF TAIWANESE AND JAPANESE IN NINE MAJOR CITIES AT SUCCESSIVE CENSUS DATES, 1915-1940*

	1915	1920	1930	1940	Ratio: 1940/1920
TAIWANESE					
Taipei	98,495	108,107	147,620	221,602	2.0
Chilung		33,692	51,337	69,578	2.1
Hsinchu		28,951	39,361	51,060	1.8
Taichung	18,444	22,250	39,431	64,884	2.9
Changhua		32,810	40,747	54,741	1.7
Tainan	56,297	62,115	76,073	122,173	2.0
Chiayi		31,392	47,615	80,828	2.6
Kaohsiung		27,153	45,288	96,588	3.6
P'ingtung		18,420	28,917	46,961	2.6
Total, All Cities		364,890	516,389	808,415	2.2
Total Taiwanese		3,466,507	4,313,681	5,510,259	1.6
JAPANESE					
Taipei	37,974	45,211	67,687	91,550	2.0
Chilung		11,898	18,541	24,815	2.1
Hsinchu		2,649	5,102	7,504	2.8
Taichung	6,817	8,817	13,214	16,300	1.8
Changhua		786	1,977	2,977	3.8
Tainan	9,708	12,140	14,955	16,654	1.4
Chiayi		5,445	8,575	9,960	1.8
Kaohsiung		8,840	15,437	28,336	3.2
P'ingtung		3,112	4,814	6,747	2.2
Total, All Cities		98,898	150,302	204,843	2.1
Total Japanese		164,266	228,281	312,386	1.9

* Cities not yet formed before 1935 have been reconstituted for previous years according to their 1935 boundaries from the detailed census tables. Cities changed after 1935 have been adjusted to 1935 boundaries.

Sources: *1915 Population Register* } (Both of these volumes contain the census figures for minor civil divisions.)
1920 Population Register }
Census of 1930, Statistical Tables, Tables 1 and 2.
Census of 1940. (Figures secured from the Gazette of the Taiwan Government-General, April 22, 1941.)

Japanese on the whole had stronger preferences for the same cities [illegible] Taiwanese. But the functions of urban growth were not the same in the two groups. Taiwanese moved to cities as the most promising alternative to farming. Japanese, coming from outside to city and countryside alike, held technical and professional positions in

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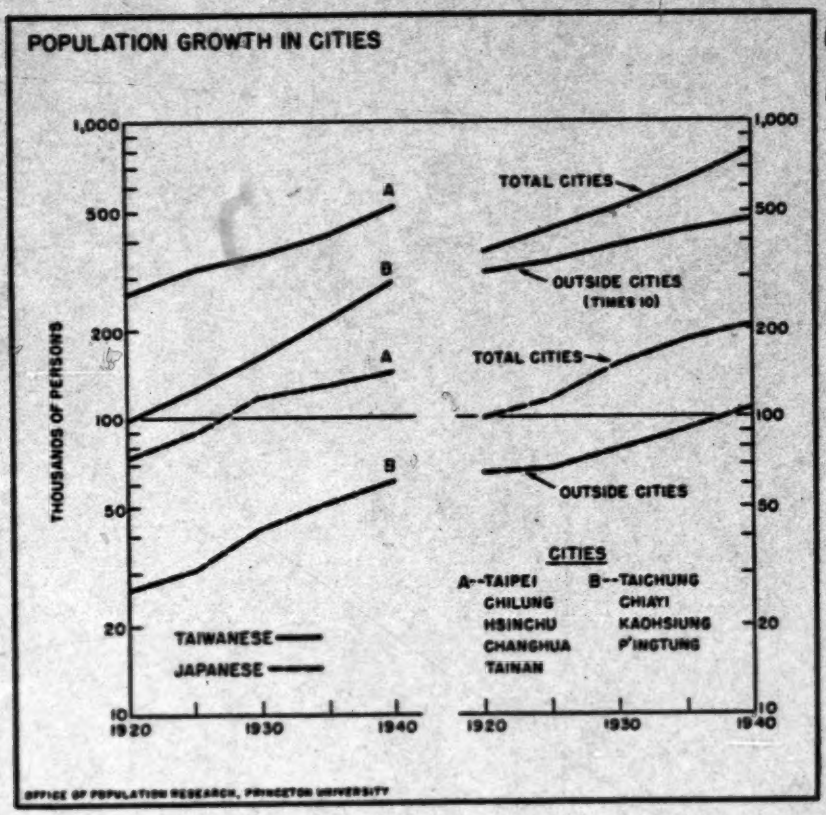

Fig. 19. Growth of Population in Major Cities of Taiwan, 1920-1940. Taiwanese and Japanese.

both places. They certainly esteemed urban more than rustic life; but work of a similar nature was also available to them outside the cities. For them the place of residence had less influence on their type of livelihood.

Ethnic Composition of Cities

The growth of cities depended on only a small part of all Taiwanese to supply the necessary migrants. It was not so with the Japanese. In a sense, the majority of them were migrants, having been born outside of Taiwan. More important, however, nearly two-thirds of all Japanese took up residence in cities and presumably stayed there (see Table 25). They found an urban setting most advanta- 563 162

CHAPTER IX

The Fertility of the Taiwanese

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JUDGED by appropriate standards, the Japanese made an impressive success of improving health in Taiwan. In less than 50 years they transformed the island from a turbulent and pestilential area into a place where the major hazards to existence in former times were removed. It was a place where the Japanese themselves could live more healthily on the average than their countrymen did in Japan.[1] Measured in any conventional way, mortality among the Taiwanese was sharply reduced. Its decline was as rapid as almost any other contemporary case for which there is a record.

Like the economic program of the Japanese, the health program was carefully designed to function through the society that existed in Taiwan, and not to reform it. Therefore, the policies that made deaths less prevalent in the population did substantially nothing to the incidence of births. The result was the growth of population described in Chapter I, which doubled the number of Taiwanese in less than half a century.

Improvement in mortality would not have had this consequence if it had not been for the high level of fertility among the Taiwanese. Birth rates, as illustrated in Fig. 21, remained about the same throughout this period, fluctuating from year to year, perhaps even rising slightly from the beginning.[2] Though the fertility of Taiwanese was not the highest that has been recorded, and their mortality was far from the lowest, in conjunction these two factors created a natural increase that became as rapid as any yet known.

Steady high fertility produced more than a steady flow of births. While death rates fell and birth rates persisted at former levels, the total annual deaths stayed at almost the same number and the births that occurred each year mounted sharply (Fig. 21). Many people remained living who previously would have died, and thus had opportunity to give birth to children who otherwise would never have entered the world.

[1] See Taiwan, Government-General, Research Bureau. *Life Tables of Taiwan, 1926-1930* (First Issue) (1936). The health of Japanese in Taiwan may appear better than it actually was, for their deaths were not always registered in Taiwan. Many were recorded back at the legal residence of their families in Japan.

[2] The trend takes on a slightly different appearance when measured in different terms, as we shall presently see.

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THE FERTILITY OF THE TAIWANESE

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Regrettably there is very little actual knowledge of the early demographic situation in Taiwan that preceded this development. Poor records are most often characteristic of such conditions, for the same factors that stand in the way of promoting longevity also inhibit modernization in other respects. But ignorance of the details need not prevent us from ascertaining broadly what was the state of affairs that formerly prevailed. It is certain, for example, that the early population of Taiwanese regularly suffered heavy attrition by mortality. As late as 1906, at least 35 deaths were still occurring per thousand in the population. If this was the case after ten years of pacification, conscientious civil administration and preliminary sanitation measures by the Japanese, then the usual level of mortality before must have been even higher.

The Taiwanese on the island before 1895 were already a firmly established population, and no longer relied on immigrants to replenish their numbers. In age composition the population was a settled and not a transient one (see Fig. 3). If the decade or so preceding the first census had not presented unusually high risks of death, the age structure would have been almost the same in 1905 as it was in 1940. Even so, it was marked by large proportions of infants and young children, indicating steady and high fertility in the past. Though we have given migration credit for most of the population growth in Taiwan before 1895, there is every sign that fertility continued there at the same rate that was customary on the mainland.

Chinese culture from the earliest known times has been faced with mortality that was proverbially high. As a normal state of affairs, this imposes certain requirements if a population is to continue in existence. For example, barring large migration, enough births must regularly be produced to offset the risks of dying. Failing this, a population would also fail to survive. Prolonged high mortality thus helps to develop social institutions that encourge high fertility.

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Sufficient numbers of births, however, are not forthcoming due to this necessity alone. Their supply is ensured in countries of high fertility through elaborate features of social organization. Custom and moral precept in such societies create firm sentiment in favor of the obligations and continuity of family relationships. They furnish powerful incentives to bring forth abundant offspring. There are strong and subtle pressures toward marriage of young men and women. Family life receives great emphasis, and becomes the center of numerous activities that give it additional weight. When a wide

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

161 enough range of social functions is carried on in family units, individuals cannot readily participate in the society except as family
182 members. Their contacts with the rest of the society may come to depend on ties of kinship, lacking provision for being conducted on other terms.

Familial institutions have always been one of the most prominent elements in Chinese society. The culture of China is dominated by a morality that systematically urges and abets the production of progeny. We have already seen the by-products of this situation among the Taiwanese. The organization of livelihood, the inheritance of occupation, the immobility of the rural population and the character of migration to cities all reflected the influence of family relationships in the decisions of individuals.

At the same time, events under Japanese rule undeniably altered many of the conditions of life in Taiwan. In fifty years of selective exposure to modern innovations, Taiwanese were showing the effects of this contact, though none of these effects—except the gains in longevity—could be called spectacular. It now remains to be seen whether these developments had created more than superficial social changes, and had begun to exert any influence on fertility.

The Course of Fertility in Taiwan

163 Due to its peculiar nature in Taiwan, the system of vital registration recorded the numbers of Taiwanese births with a high standard of accuracy. Births were registered by the same system as were deaths, which has been described in some detail in Chapter VI. It functioned as part of a more comprehensive scheme of control; this scheme in turn owed its effectiveness to the ingenious way that it was fitted into local solidarities and backed by police power. Since the system recorded deaths accurately and since the figures it helped to compile in census enumerations were practically complete, the tests illustrated in Chapter VI indicate that few live births went unregistered.

By this token the data for births are nearly as valid as were the figures for deaths. In other respects, however, they are less adequate. It is not enough for the study of fertility to know the numbers of births that occurred. The significant event is in reality parenthood rather than the birth itself—we do not search for the motives of a child in entering the world, but of its parents in bringing about the event. Accordingly, some information is needed about the circumstances of birth, and in particular about the characteristics of parents. Though Taiwan's Research Bureau issued copious data each year

1:Gallin E-4,5 (1957-1958) 1966
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121 eastern part of the mainland to Taiwan had been going on for several
167 hundred years, beginning in the 1600's and virtually ending about
177 1900 when it was almost-completely stopped by the Japanese regime.
178 Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 During the Japanese occupation of Taiwan, except for the period
179 just before and during World War II when they attempted to Jap-
178 anize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese population has been significant. The combination of relatively efficient gov-
[744] ernment, orderliness of life, and public health measures, together with
[20] an extensive system of communications on a relatively small island has
[16] greatly facilitated rapid population increase on a stable land base and
[369] a rapidly increasing growth of urban centers.

Out of these developments, the most significant changes for the rural
369 population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and with this an increased spread of urban influences or at least their
[167] effects into the rural villages. These increasingly significant extensions

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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just north of the Tropic of Cancer—the winters of this coastal area, unlike the interior, are cold and raw while the summers are extremely hot and humid. Winter temperatures seldom fall below the middle forties, but icy winds frequently blow with almost gale force across from the mainland and the Strait of Formosa. Although the area itself never has snow, on a clear January or February day snow-capped peaks of the high interior mountains to the east can be seen from the village.

As in most of Asia, rain is seasonal. Between 80 and 85 percent of the annual rainfall comes during the late spring and summer months (April to September) (Chen, 1950:5).[1] During the heaviest rains and the late summer typhoon season, roads as well as paddy fields are often flooded. In this particular area, frequently the rain alone makes it possible to transplant the rice seedlings, for the irrigation water is often late in reaching the Hsin Hsing area, lying as it does so far from the mountain headwaters. With the passing of the rainy season the weather is relatively dry for the remainder of the year, and all crops depend almost entirely on water from the elaborate irrigation system.

For two decades or more this area has been able to harvest three crops annually. In the irrigated areas two crops of rice are grown; sometimes a vegetable or some other crop is substituted. The third dry crop is usually wheat or sweet potatoes. On dry land, two or possibly three crops a year are grown as well. Such intensive cultivation has been made possible through a favorable climate, irrigation facilities, and an increased availability of chemical fertilizer. It has also come about partially as a result of the population increase, which has provided additional labor to work the available land and to exploit previously undeveloped lands.

Although most of the original inhabitants from the mainland settled on the relatively fertile coastal plain where Hsin Hsing is located, the land resources could not be fully exploited because of their small number. Today, this situation is reversed, and in spite of large-scale irrigation, land scarcity makes it necessary for parts of expanding families, and even whole households, to move to urban centers to find work. Land scarcity in the whole Hsin Hsing area is so severe that even villagers who remain there must go outside the village to earn a livelihood for their families or to supplement the family income. Although the problem may be unusually acute in Hsin Hsing village and in some neighboring villages, it must nevertheless be recognized that it is characteristic of a large part of Taiwan. If the population of the rural areas of the island continues to grow at its present rate, the land scarcity which is now so severe in the Hsin Hsing area will undoubtedly become a major problem for the greater part of the Taiwan countryside.

1:Gallin E-4,5 (1957-1958) 1966
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With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

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The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

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The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

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1:Gallin E-4,5 (1957-1958) 1966
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the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in populati[illegible]re were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

1:Gallin E-4,5 (1957-1958) 1966
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greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

1:Gallin E-4,5 (1957-1958) 1966
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F 175 648 has brought a change in regime to Taiwan. This is known as the "Restoration." At the outset the Taiwanese people welcomed the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been killed in the war in Southeast Asia. The other villagers from Hsin Hsing who had surrendered or been taken as prisoners while working in Japanese labor groups were returned to Taiwan in ships. The return of these men to the land was followed by a general population increase, and in the Hsin Hsing area this quickly aggravated the problem of land scarcity; tenancy became a greater problem than ever before. Families could neither buy nor rent enough land to support themselves adequately, and, in addition, the war period had brought about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

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Tn 175 423 [648] [241] [434] Tn [161] After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

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LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

1:Gallin E-4,5 (1957-1958) 1966
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Villagers also have relationships beyond the village through economic, educational, and religious activities, and especially through matrilateral and affinal relatives.

THE POPULATION AND ITS ECONOMIC BASE

In 1958, the population of Hsin Hsing village was listed in the census records of the Pu Yen Hsiang office as 657 persons in 115 households.[6] A look at the available population records for Hsin Hsing and the twenty-two villages of Pu Yen Hsiang indicates a rapid but steady population growth for the area, which is in line with the trend in the rest of Taiwan. Population statistics for the village are available only for the period after 1955. Nevertheless, interviews with older people and reference to national statistics indicate that the population of Hsin Hsing village and the surrounding area was sparse in the early part of the twentieth century. There seems to have been a substantial population increase in the relatively prosperous late 1920's and 1950's, and especially in the postwar period after social order had been re-established. But, apparently starting in the late 1940's and especially in the 1950's, village population growth leveled out as the continuing increase was siphoned off by out-migration.

With regard to the national population growth figures, Barclay notes that "over the entire census period (1905–1943) growth averaged 1.76 percent per year" (1954b:13). In the first two decades of the century the natural increase of the population was about one percent. "By 1940 Taiwanese were increasing at close to the rate of 2.5 percent per annum" (Barclay, 1954b:13).[7] For more recent years the average annual rate of population increase in Taiwan (1953–1956) was 3.8 percent per annum (United Nations, 1957:114–115).[8] The average annual rate of population increase for mainland China for this same period (1953–1956) was 2.2 percent per annum (United Nations, 1957:114–115). Of Taiwan, Barclay writes that "Natural increase of such dimensions is exceptional. Such growth in itself implies that some change has taken place in the organization of human activities" (1954b:13).

This steady rise in rate of population increase cannot be the result of a rise in the Taiwanese birthrate. Over these years the Taiwanese birthrate shows a decline. The prewar birthrates in the 1930's were in the middle forties per thousand persons. In the immediate postwar period, apparently as a result of a continuing high degree of economic and political dislocation, the birthrates dropped to the high thirties. For the first half of the 1950's the rates were again up almost to the middle forties per thousand, but with a falling trend so that the 1957 and 1958 figures show less than forty-one births per thousand persons.

1:Gallin E-4,5 (1957-1958) 1966
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and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:53; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tsu* villages were quite powerful and frequently the de facto govern-

1:Gallin E-4,5 (1957-1958) 1966
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ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

1:Gallin E-4,5 (1957-1958) 1966
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124 picture of life rather than ethnographic-type studies of any one area.
127 During the Japanese period in Taiwan (1895–1945), Japanese police,
175 administrators, and academic researchers also made extensive detailed studies in Taiwan. These works, such as the *Taiwan Sin Fu* (1916–1917), also were usually composite studies. But these more often dealt with specific aspects of Taiwanese (Chinese) life, such as: family, civil law, economics and agricultural processes, religion and magic (frequently viewing the local people as superstitious and backward), and general customs and habits of the Taiwanese. In these studies, the researchers frequently used scattered illustrative material drawn from either the cities and/or the rural areas of Taiwan.

Thus, a number of the Chinese and Japanese studies are generally valuable for providing a picture of early conditions for some general areas and on many specific subjects in Taiwan. They are, of course, also valuable for comparative purposes. Unfortunately, rarely, if ever, do any of them furnish any ethnographic or contextual picture of Taiwanese life for any particular area in Taiwan, and especially not for the area of Hsin Hsing village. This has meant, therefore, that the available material has been of only limited value in the historical reconstruction of life in the immediate area of Hsin Hsing. It is also unfortunate that either during or after World War II, the historical records for Hsin Hsing and its immediate area which, during Japanese times, were usually kept in the district police station were apparently destroyed or lost.

[4] *Pu Yen Chuang Yen Ke Chih*, no author, Ta Chen 15 or 1925, handwritten in Japanese with additions made in Chinese after the war. Found in the Pu Yen Hsiang Public Office. This source notes that in the Pu Yen area only about 600 *chia* of land were irrigated in the early 1900's. But by 1922 there were 2,100 *chia* of land irrigated, and in 1923 another irrigation system, the Er Pao Chen, was added.

[5] Barclay discussed how Taiwan was built up economically as a colonial area of Japan.

Tn [6] Demographic figures for the whole island of Taiwan are based on local statistics from district public offices such as the Pu Yen Hsiang office.

127 The 1958 village population figures, the most recent ones cited in this
161 section, differ from those 1959 figures used in the material in Chapter 5 on
162 social organization. Figures from the earlier date are used in this section because they are the ones most comparable with the census figures available for the Asiang and all of Taiwan. On the other hand, the 1959 figures were the only ones specific and complete enough to be useful for the breakdown in social organization and family.

F Tn [7] These population growth rate figures are for Taiwanese only; aboriginals
161 are not included.

Tn [8] This population growth rate figure is only for Taiwanese and mainlanders in Taiwan; aboriginals are not included.

161 [9] Based on a discussion in May, 1969, with Professor Chen Shao-hsing, soci-
114 ologist and demographer at the National Taiwan University. Some of the
702 social factors affecting the birthrate and the trends in population growth will be examined in the chapters on social organization and especially on life cycle.

"However, it would be a mistake to overemphasize these uprisings. Life was not easy under the conditions described above, but it was better than in Fukien and a definite development was taking place. Before 1600 hardly a thousand Chinese lived on the island; in the middle of the 18th century there were, according to Luchow, two and a half million. This may be an exaggeration, but it is a fact that at the end of the 19th century there were three million Chinese in Taiwan, engaged mainly in the cultivation of rice and sugar. About four hundred vessels were then plying between Taiwan and the mainland exchanging the produce of the island for that of China and in 1893, for example, 21 million lbs. of tea. 5.3 million lbs. of camphor and 98 million lbs. of sugar were ex-[16]ported. Taiwan rice played an important part in the economy of Fukien, as did oilcake, which was used as fertilizer. Taiwan sugar made up a great part of the sugar consumed in North China, and her camphor was a not unimportant item in China's foreign trade. This brief inventory is very important because it shows that the present-day character of Taiwan is not the creation of its present rulers, but is the result of a long historical process, though the progress under Chinese administration was slow in comparison with later developments."

4:Grajdanzev--24 S-4 (no date) 1942 Formosans
116, 162, 311

"As may be seen from the following figures, the population of Taiwan is very unequally distributed:

Province	Area (sq. km.)	Population (thousands)	Density per sq. km.
Taihoku (N.)	4,594	1,101	240
Sinchiku (N.W.)	4,570	766	167
Taichu (W. center)	7,382	1,251	170
Tainan (W.)	5,421	1,422	262
Takao (S.W.)	5,721	795	139
Taito (S.E.)	3,515	77	22
Karenko (E.)	4,628	124	27
Pescadores	126	68	539
Japan proper (1938)	379,000	72,223	191

Two eastern provinces are comparatively thinly populated, while Taihoku and Tainan have a density greater than the average for Japan. However, the actual distribution is even more unequal than these figures suggest. for almost every province consists of two parts—a coastal plain which is extremely densely populated, and the hilly and the mountainous hinterland where the density is very low. This is not to say that the latter is incapable of development; indeed the development of these areas is one of the greatest problems confronting the government."

4:Grajdanzev--24-25 S-4 (no date) 1942 Formosans-1-3
116, 162, 168, 656, 177.16 Japan
636.16

"Racial Composition of the Population

Since Taiwan is a colonial territory, it is of more than ordinary interest to study the evolution of the racial composition of its population.

After more than forty years of Japanese domination the island thus remains Chinese in character. In 1938 Chinese made up 94 per cent of the population, while the Japanese, who constituted about 2 per cent of the total in 1905, now made up 5.3 per cent. Presumably this figure does not include Japanese soldiers stationed in Taiwan. At the time of the occupation [25] of the island the Japanese entertained high hopes for Japanese immigration

Racial Composition of The Population of Taiwan (1905-1938)

	Oct. 1, 1905 Census		Oct. 1, 1935 Census		Dec. 31, 1937		Dec. 31, 1938	
	Thousands	%	Thousands	%	Thousands	%	Thousands	%
Chinese	2,979.0	97.8	4,990.1	93.86	5,261.5	93.85	5,392.8	93.88
Japanese	59.6	1.93	271.4	5.12	229.3	5.33	308.8	5.37
Foreigners*	8.2	.27	54.1	1.02	46.2	.82	43.4	.75
Total	3,046.9	100.0	5,315.6	100.0	5,609.0	100.0	5,747.0	100.0

* Almost entirely Chinese who are citizens of the Republic of China.

Note:—For 1935, 1937 and 1938 'Chinese' includes also aborigines, numbering about 140,000.

into Taiwan. Climatic conditions are suitable, the density of the population at that time was relatively low and there was no doubt that the island could support much larger numbers than were there. Subsidies were granted to settlers in general and to fishermen in particular and it was thought that in this way the island would be speedily 'japanized.' The results of the first seven years had already brought disappointment:

	Total Japanese arrivals	Total Japanese departures	Remainder
1898	13,214	3,078	10,136
1899	20,743	7,903	12,840
1900	20,995	11,291	9,704
1901	17,841	14,054	3,787
1902	13,821	11,478	2,343
1903	15,892	13,149	2,743
1904	11,564	12,155	591

After the rush of the first three years, when the Japanese administration of the island was organized and many persons were needed for the governmental apparatus, the number of immigrants fell sharply. As was shown above, the growth of the Japanese population

on the island was not due to immigration alone, but also to natural increase. After subtracting this natural increase, the average annual number of immigrants is only 4,000 to 5,000."

4:Grajdanzev--26 S-4 (no date) 1942 Formosans
116, 162

"Below we give births, deaths and natural increase for Japanese and Chinese on the island for the last few years (in absolute figures and rates per thousand of population).

	1933		1934		1935		1936		1937	
Japanese	No.	0/00	No.	0/00	No.	0/00	No.	0/00	No.	0/00
Births	7,979	31.1	7,718	29.4	7,999	29.6	7,918	28.1	8,538	28.5
Deaths	2,747	10.7	2,959	11.3	2,951	10.9	2,955	10.5	2,873	9.6
Natural increase	5,232	20.4	4,759	18.1	5,048	18.7	4,963	17.6	5,665	18.9
Chinese										
Births	211,737	45.4	219,189	45.8	225,980	46.1	223,961	44.6	237,090	45.9
Deaths	94,975	20.3	101,270	21.1	102,905	21.0	102,149	20.3	105,199	20.4
Natural increase	116,762	25.1	117,919	24.7	123,075	25.1	121,812	24.3	131,891	25.5

Source: Taiwan Jijo.

Compared with the annual natural increase of the Japanese of 5 to 5.5 thousand, the annual increase of the Chinese is 120 to 130 thousand, or 25 times as great. Even if we include immigration, the Japanese colony is increasing yearly by only 8 or 9 thousand as compared with the Chinese increase of 120 to 130 thousand. Under such conditions there is nothing astonishing in the fact that the population of the island is essentially Chinese in character after forty-five years of Japanese rule and, furthermore, there is no possibility of making it Japanese either through free or subsidized immigration."

4: Grajdanzev--29-30 S-4 (no date) 1942 Formosans
116, 162, 563

"Now let us return to the ratios of births and deaths given in [30] the preceding pages. For 1937 the birth rate for the Chinese was 45.9, for the Japanese 28.5; the death rate for the Chinese was 20.4, for the Japanese 9.6. One possible explanation of this striking difference might be that the age and sex distribution of the Chinese and Japanese on the island is quite different, or that there were more Japanese men than women and that these were represented chiefly by middle-aged groups. But such an explanation breaks down in the face of the facts. There are in Taiwan 111 Japanese males per 100 Japanese females, as compared with 105 Chinese males per 100 Chinese females--too small a difference to account for the difference in birth rates. We have unfortunately no age statistics for Taiwan's population which distinguish between Japanese and Chinese population. However, the following calculation will throw some light on the age composition of the Japanese on the island: in 1937 the Japanese population of Taiwan constituted 0.41 per cent of the population of Japan proper, and Japanese children of school age in Taiwan amounted to 0.393 per cent of the children of school age in Japan proper. The proportion of Japanese juvenile population in Taiwan is therefore almost the same as in Japan. The only possibility of a significant difference in the age structure of the two groups may be that there are proportionately fewer aged Japanese in Taiwan than in Japan, but on the whole the age composition of the population approximates that of Japan."

"The real explanation of the striking difference in birth and death rates is that the Japanese and the Chinese on the island form two separate groups, the living conditions and customs of which are completely different. But the figures reveal more than this. The birth rate of the Japanese in Taiwan is only slightly below that of the Japanese in Japan Proper, while the death rate of the Japanese in Japan is 17.0 (1937) and in Taiwan only 9.6 To some degree this may be explained by the fact that there are a smaller number of aged Japanese on the island, but this alone is not sufficient. It is well known that in the same population different social classes have different death rates. The social composition of the Japanese [31] on the island is such that they are better off than the Japanese in Japan, to say nothing of the Chinese in Taiwan, whose death rate is more than double that of the Japanese. The Japanese on the island live under better sanitary conditions, are better fed, have better medical treatment and more leisure than the masses of the Chinese. This does not mean, of course, that the death rate of the Chinese is stable: it is falling, and this fall, typical of all colonial countries similarly situated, is probably due to improved methods of combatting epidemic diseases.

Death Rates In Some Tropical Colonies
(per thousand)

	1911-13	1921-25	1926-30	1931-35	1937
Taiwan	...	24.0	22.0	20.6	19.3
Palestine	...	23.7	24.3	21.0	15.0 (1938)
Philippines	19.1	18.9	19.7	18.5	18.8
Ceylon	31.8	27.8	25.1	24.7	21.7
Straits Settlements	40.0	28.9	30.7	24.7	21.3

As regards mortality, Taiwan is in about the same position as other colonies, a fact which suggests that living conditions are comparable to those in any other colony named above."

4:Grajdanzev--32-34 S-4 (no date) 1942 Formosans-1-5
116, 162, 171, 463, 563

"Even in advanced countries occupational statistics are not precise, and in the colonies they are far less reliable. Nevertheless, if one wants to determine only the general characteristics of the population, occupational statistics for Taiwan reveal something. The following table divides the population into such broad categories as 'occupied in agriculture and forestry', 'occupied in industry and mining', etc. The division is given for the whole population and also, for the Chinese and the Japanese separately. The year taken is 1930, because no later figures are available, but it will be shown later that no great changes have taken place since that time. Unlike Korea, where the members of the family who do not take part in work are included in the same occupational group as that of the head of the family, in Taiwan they are registered as having 'no occupation'.

Occupational Statistics For Taiwan, 1930
(in thousands)

	Agriculture and forestry	Fishing	Industry and mining	Trade	Communication	Public serv. & prof.	Others	No Occup.	Total
Japanese	4.4	1.6	15.2	18.1	9.1	37.6	4.5	137.7	228.2
Natives	1,191.7	26.8	144.2	151.0	49.8	37.4	67.6	2,645.1	4,313.6
Total (incl. others)*	1,197.1	28.6	173.6	178.3	63.1	76.0	73.4	2,802.4	4,592.5

* Includes 'foreigners', chiefly Chinese from China proper.

The same table is given below in percentages, taking the number of those occupied as 100 For the sake of comparison corresponding figures for Japan proper for the same year are given: [33]

Occupational Distribution Of Taiwan
(percentages, 1930)

	Agric. and forestry	Fishing	Industry and mining	Trade	Communications	Public serv. & prof.	Others	Total occupied
Taiwan								
Japanese	4.8	1.8	16.8	20.0	10.1	41.5	5.0	100.0
Natives	71.4	1.6	8.6	9.0	3.0	2.2	4.1	100.0
All, incl. others	67.0	1.6	9.7	10.0	3.5	4.2	4.1	100.0
Japan proper (1930)	47.7	1.8	20.0	15.1	3.7	6.9	4.5	100.0

In a condensed form this table indicates to us the most important problems of Taiwan. Taking the native population, we see that almost three-fourths are occupied in agriculture. Forestry as a rule serves only as subsidiary occupation to agriculture. At the same time only 8.6 per cent are occupied in industry and mining, and this also includes those occupied in domestic industries where the productivity of labor is almost as low as in Chinese agriculture. At the same time there are more persons occupied in trade in the broad sense than in industry (9.0 and 8.6 per cent respectively) while only three

per cent are occupied in transportation. This illustrates the low level of economic development of the country. In this respect comparison with Japan is interesting. Only a few decades ago Japan herself was at about the same stage of economic development as China. Now, we see that less than half of her population are engaged in agriculture and 20 per cent in industry and mining.

The occupational statistics prove once more that there are two distinct groups in the population; 41.5 per cent of the Japanese, as compared with only 2.2 per cent for the natives, are occupied in public service and the professions, i.e. they form the backbone of the administrative services of the island. We shall see later that only the lowest positions in these services are open to the Chinese. Almost 17 per cent of the Japanese are occupied in industry, and they occupy all the key positions. About 18 per cent of them are occupied in trade and 10 per cent in communications. Comparison with figures for 1905 indicates furthermore that no substantial changes have taken place since then. [34]

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Chinese					
1905	75.5	6.1	8.2	1.4	8.8
1930	73.0	8.6	12.2	2.2	4.1

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Japanese					
1905	*	23.5	32.5	37.8	6.2
1930	*	16.8	30.1	41.5	11.6

* Included in 'other occupations.'

More than 75 per cent of the Chinese were occupied in agriculture in 1905, and 73 per cent in 1930; there was a slight rise in the number occupied in industry—from 6.1 to 8.6—and a more pronounced increase of those occupied in trade. As is well known, trade is the refuge of the unemployed and under-employed and its rapid growth as compared with other professions is hardly a sign of strength.

In twenty-five years the number of Japanese occupied in government administration rose from 37.8 per cent to 41.5 per cent. The fall in the percentage of those occupied in industry may be due to the fact that in the period from 1896 to 1905 very many Japanese were obsessed with the idea of making money in Taiwan in the shortest possible time. Since then the potentialities of the island have become better known, large business organizations have squeezed out the independent ventures. In any case these figures illustrating the changes in Taiwan in twenty-five years do not show that with the passing of time the occupational composition of the Chinese and of the Japanese of the island tends to become similar. If data were available for each occupation showing how many Japanese

and how many Chinese are in important executive positions and how many in subordinate positions, the gap would appear much wider. Unfortunately, direct data are not available, but we shall see later that there is no indication that the division is becoming less sharp.

4:Grajdanzev--38-40 S-4 (no date) 1942 Formosans-1-4
116, 162, 171

"It was mentioned above that an investigation of Taiwan's population statistics might throw some light on the population of China and that it is strange that demographers have not used the results of the six censuses that were taken on the island. We cannot analyse this question in detail here, but our results will point to some divergences from those obtained by Dr. Buck in his most extensive study of land utilization in China. (1)

1. J. L. Buck, Land Utilization in China, Chicago, 1937.

According to Buck's investigation, the average-sized [39] family in China is 5.3, with 6.3 persons per family in double-cropping rice areas. The following figures show that, contrary to the experience of most countries, the average size of family in Taiwan shows a tendency to grow:

	1905	1915	1920	1925	1930	1935
Persons per family:	5.2	5.3	5.2	5.5	5.7	5.8

Whether this increase is due to the improved technique of census-taking or to the change in the definition of family we do not know. If this increase really took place, it may be a symptom of deterioration of standards of living: young people cannot find employment, have no chance to establish their own homes, and are compelled to continue to live with their families."

Besides Taiwan, censuses were taken in Kwantung territory, (of South Manchuria) but they do not have the same value because the sex and age composition of the population there is not normal: many people are settling there without families, and leaving their wives and children in their native villages.

Comparison Of The Sex Ratios Of The Population (Men=100) (2)

2. In this and in the following tables the whole population of Taiwan and of Kwangtung, and not only its Chinese part, is taken, because no separate data are available, but this cannot make a substantial difference for Taiwan because there the Chinese make up 94 per cent of the total population.

	China, acc. to Buck	Taiwan census, 1935	Kwantung census, 1935
Women	92	96	66

It is clear that Kwantung is not normal in this respect, but comparison of Taiwan and China, as recorded by Buck, shows that females were probably underestimated in Buck's investigation: in Taiwan the difference in numbers is not great.

Age-Distribution Of The Population
(Percentages)

	China acc. to Buck	Taiwan census, 1935	Kwantung census, 1935
Under 10	25.0	31.1	22.0
10-19	19.3	20.4	19.6
20-29	17.0	17.3	23.6
30-39	13.8	12.3	15.8
40-49	11.4	8.3	9.7
50 and over	13.5	10.9	9.3
Total	100.0	100.0	100.0

[40] Comparison of these columns shows that in Kwantung territory the age distribution of the population is not normal--there are too few children and too many adults in the age groups between twenty and thirty-nine, and therefore we omit Kwantung from further investigation. But a comparison of China and Taiwan suggests that children were underestimated in Buck's investigation.

Comparison Of Crude Birth And Death Rates (3)

3. The figures for Taiwan are averages for ten years (1927-36), and include the whole population. The corresponding figures for the Chinese population only (five-year average for 1933-38) are as follows: birth rate, 45.8; death rate, 20.6

Birth rates		Death rates	
China (Buck)	Taiwan	China (Buck)	Taiwan
38.3	44.6	27.1	20.7

In Taiwan the death rate is lower and the birth rate higher than in China. The difference in respect of death rates is quite probable because the medical service in Taiwan cannot be compared with the more primitive conditions in China, but the lower birth rate in China is much less probable.

Birth rate per 1,000 married females, between the ages of 15 and 44 years is 207 in Buck's investigation, but for Taiwan in 1935 it is 297—a difference too great to be attributed to chance. All this demonstrates once more the importance of a study of Taiwan's censuses for those who are interested in the demography of China."

116, 127, 162

"First of all, the total number of those occupied in agriculture should be known. It may be given as the number of families—the easiest and perhaps the best way for certain purposes, because in countries where agriculture is the most important economic activity it is usually the family which works as a unit. Another way is to give the number of active persons occupied in agriculture. This method is good for comparison with the number of persons occupied in other economic fields where the family does not play any part in production, but its application to agriculture encounters certain obstacles: it is not easy to determine the number occupied because some members of the family are only partially employed in agriculture and some only seasonally (e.g. children in harvesting). Finally, the total number of persons dependent on agriculture may be given—farmers and members of their families not occupied elsewhere. Current statistics in Taiwan use the first and the last methods; they give the number of families occupied in agriculture and the 'agricultural population'. The census statistics give the number of persons actively occupied [73] in agriculture or, as it is often expressed, the number gainfully employed in agriculture. Unfortunately, these statistics are not consistent. It was shown above that, according to the census of the population taken in 1930 (the latest in which the question of occupation was asked), 71.4 per cent of the Chinese and 67 per cent of all the population gainfully employed were occupied in agriculture and forestry. But forestry as a principal occupation gives work to very few; it is mostly a sideline occupation for the

farmer, and its part in the economy of Taiwan is very small. If one takes into consideration the fact that the families in rural localities have more children per family than families in the cities, then the 'agricultural population' in Taiwan should constitute about 70 or 75 per cent in 1930. Since that date no revolutionary changes have occurred."

"Industry has expanded relatively rapidly, but even in 1935 there were only 67,255 workers in industrial enterprises employing more than four workers each or having a prime-mover. Nevertheless, according to the current official statistics which follow, 'agricultural population' of Taiwan formed only about fifty per cent of the population in 1938.

Changes in Agricultural Population in Taiwan

	1935	1937	1938
Total families (1,000)	897.6	...	...
Families occupied in agriculture (1,000)	419.9	427.4	...
Agricultural families as % of total	46.7	...	...
Total population (1,000)	5,212.4	5,609.0	5,747.0
'Agricultural population' (1,000)	2,790.3	2,880.4	2,896.4
'Agricultural population' as % of total	53.6	51.3	50.4

As early as 1935, according to this table, the families occupied in agriculture made up only 46.7 per cent of the total, while the agricultural population made up 56.3 per cent in that year and only 50.4 per cent in 1938. According to the census statistics, in the 25 years between 1905 and 1930 the Chinese population occupied in agriculture fell

only from 75.5 per cent to 73 per cent of the total Chinese population, while the current statistics show a fall of 3.2 per cent (of the total population) in three years. Even before 1935 the number of [74] agricultural families showed a definite lag as compared with the growth of total population, as may be seen from the following table.

Comparison of Changes in Total Population and in Agricultural Families in Taiwan*

Year	Total population (1,000)	Index of growth	Year	Agricultural families (1,000)	Index of growth
1905	3,039.8	100	1903	383.1	100
1925	3,993.4	131	1924	390.2	102
1930	4,592.5	151	1929	407.7	106
1935	5,212.4	171	1935	419.9	109
1937	5,609.0	185	1937	427.4	111
1938	5,747.0	189	1938	424.5	111

*The years given for each category do not always coincide because of absence of data: we have taken the years for which the information could be found.

In thirty-three years the population of Taiwan increased by eighty-nine per cent while on the basis of these figures the number of families engaged in agriculture, increased

by only eleven per cent. Such changes are of course quite possible. The agricultural population might send its 'surplus' to cities, where they may find employment in industry, commerce, public services and so on. But as was mentioned already, the number of workers in industry was very small in 1935 and there is no indication that it has increased considerably in the last three or four years. The difference between sixty-five and fifty per cent is, in absolute numbers, about 900,000 persons, or between 500,000 and 550,000 gainfully employed persons--quite a considerable figure for even a great country."

4:Grajdanzev--74-75 S-4 (no date) 1942 Formosans
116, 162, 361

"Let us now consider some indirect evidence. In 1938 the urban population (i.e. of towns and cities having 10,000 and more inhabitants), made up 35.8 per cent of the total and the rural population 64.2 per cent. But in Taiwan, just as in China and Japan, towns with a population of 10,000 to 30,000 are mainly agricultural. Only cities with 50,000 inhabitants and over have few farmers (chiefly producers of vegetables on the outskirts of the city). In 1938 the population of the cities of over 50,000 in Taiwan amounted to 17.2 per cent. Thus [75] there is nothing in these statistics that contradicts our assertion that the agricultural population of Taiwan must amount to at least 65 per cent of total. But if one accepts the official figure of 50 per cent, it means first that there are no farmers in towns and cities with populations above 10,000, and secondly that about one-quarter of the rural population are not farmers, which seems hardly probable."

4:Grajdanzev--75 S-4 (no date) 1942 Formosans
116, 162, 178, 421, 651

"According to official statistics the number of payers of the agricultural land tax increased from 2,099,000 on January 1, 1938, to 2,112,000 on January 1, 1939—an increase of 13,000. How can this increase be explained when the number of families engaged in agriculture fell by 2,900? We must therefore conclude, either that official statistics are inaccurate, or that a rapid proletarization of the agricultural population is going on. It may be—although this is only a hypothesis—that the official statistics do not include sub-tenants, a very numerous class in Taiwan. But whatever the cause, the statistics give a distorted picture of land relations on the island."

4:Grajdanzev--124-125 S-4 (no date) 1942 Formosans-1-2
116, 162, 205, 563

"On several occasions it has been pointed out that in Taiwan there are two groups of the population, Japanese and Chinese, with quite different levels of income. Let us compare these.

Use of Communication Facilities by the Japanese and the Chinese in Taiwan in 1938

	Total sent (1,000)		Per capita	
	By Japanese	By Chinese	Japanese	Chinese
Letters etc.	50,879	30,957	165.0	5.7
Parcels	681.2	174.0	2.20	0.032
Telegrams	1,736.2	366.1	5.560	0.068
Telephones	15,510 (units)	6,741 (units)	0.05010	0.00125

Source: Taiwan Jijo, per capita figures calculated.

It is clear that the average used in the table on page 123 are misleading, for the bulk of the letters, parcels, and telegrams are sent by the small group of Japanese living in the island, just as most of the telephones are used by them. On the average a Japanese sends 29 times as many letters, 69 times as many parcels, 82 times as many telegrams and has 40 times as many telephones as does a Chinese. An important [125] part of the letters, telegrams and telephones naturally serve official functions. It is now clear why the net-

4:Grajdanzev--124-125 S-4 (no date) 1942 Formosans-2
116, 162, 205, 563

work of post offices and telegraph offices is growing so slowly--65.4 per cent of all the Japanese on the island live in nine cities and 83 per cent in 57, all of which are well supplied with these facilities."

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress. The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

6: Kirchhoff--31 U-4 (no date) 1895 Formosans
116, 144, 162, 563

Already, there can be no doubt, the Chinese constitute the larger part of the population, for since the 17th century ever new droves have immigrated from Fu-kien and Kung-tung, and these have greatly increased, owing to the early marriages and the large numbers of children. The vigorous and enterprising tribe of the Hakka, from the latter province, has preserved its individuality on Formosan soil; its members are distinguished by their fine ironwork, and provide the natives with their knife blades and long flints. In North Formosa the Chinese settlers' wide open, sparkling black eyes attract attention, in contrast with the narrow slit eyes of the Chinese which are here quite general, otherwise; this is the result of unions of Chinese immigrants with native Malay women.

An important third element must still be mentioned. This is the Pepo-huan (also called Sek-huan or Schek-huan, i. e. "half savages"). The Pepo-huan are those Formosan Malays who accepted the fate of dependence on the Chinese intruders and gradually became Chinese in customs and outlook, without there being any mixture of blood. Yet they are distinguished physically as well as culturally from free natives living in the mountains (probably as the least numerous of the three elements making up the population of Formosa), the Tsche-huan or Tschin-huan, i. e. "complete savages," as they are called by the Chinese, who greatly fear their passion for hunting Chinese heads.

7: Joest--55 [8] E-5 (no date) 1882 Formosans
116, 162

There is no reliable information about the number of Chinese inhabitants on the island; in the city of Taiwanfu there are more than 200,000 inhabitants.

TABLE IV-- FARM FAMILIES AND SIZE OF FARMS
(*In cha*[a])

DATE	TOTAL	-0.5	0.5-1	1-2	2-3	3-5	5-7	7-10	10-20	20+
Oct. 1920	423,278	127,998	96,933	100,403	45,563	33,342	10,362	5,101	2,997	579
%	100	30.23	22.87	23.72	10.76	7.84	2.43	1.24	0.78	0.13
Apr. 1939	436,593	111,805	90,007	113,117	57,521	41,749	13,129	5,938	2,796	531
%	100	25.61	20.62	25.91	13.17	9.56	3.01	1.36	0.64	0.12

[a] 1 cha = 0.96992 hectare.

"SIZE OF FARMS

The agricultural population of Formosa is constantly increasing, though the percentage has fallen a little. But the area of cultivated land cannot be extended; consequently, the farms are generally very small, as in the provinces of China proper; moreover, the inheritance system breaks up the farms and further reduces the average size. From 1936 to 1945 the total area of cultivated land in Formosa averaged 846,552 hectares, the number of farm families 448,474; thus each farm family had only 1.89 hectares of cultivated land. Although this seems larger than the average farm on the mainland of China, Formosan farm families average 6.7 persons, as compared with 5.4 persons on the mainland.

In 1939 more than 85 per cent of the farm families had less than the three hectares estimated necessary to maintain a comparatively reasonable standard of living (Table IV); and at present, because of the usurpations and annexations of the landlords, about 46 per cent operate farms of less than one hectare, of which 26 per cent are less than 0.5 hectare. The poverty in rural districts and the hard life of farm families are plain. Those who operate farms of more than 10 hectares are less than 1 per cent of the total number of farm families."

9: Yamasaki--225 [6] N-5 (1896-1897) 1900 Formosans
116, 162, 361, 563

The Capsiulan plain is naturally not so heavily populated as the western plain, yet on its fields and meadows the more cultivated Amis, a branch of the Malayan race, enjoy an unclouded existence.

15: U.S. Navy --22-23 (no date) 1944 Formosans
116, 162, 361

"A first-hand observer, in 1903, stated that there were about 500,000 Hakka people on the island in 1901, most of whom were settled in the Shinchiku area between Byoritsu and [23] Nanto. There were a few settlements southeast of Takao and some on the east coast near Taito. The latest estimate available (1928) placed the number of Hakka at 'about 700,000'. It may be reasonable to assume the present number of Hakka people to be at least 1,000,000.

Villages in which the Hakka element dominates are Koro, Taiko, Gyubato, Gosei, Tokatsukutsu and Rokko."

15: U.S. Navy --23 (no date) 1944 Formosans
116, 162, 609, 563, 484

"The Cantonese. The people of Cantonese origin have always remained rather distinct and have been considered as foreigners. They numbered 'about 100,000' in 1930. As a group they have become identified with small-scale banking and wholesale trading. They have maintained their contacts with the mainland, and, when travel was possible, many spent part of each year at Canton."

15: U.S. Navy --23 [2] (no date) 1944 Formosans
116, 162, 361

"The Fukien Chinese. The Formosans whose ancestors came from the Fukien coastal area have settled throughout most of the arable lowlands and foothills. They represent, roughly, three-fourths of the total population and hence through sheer weight of numbers exercise considerable influence in the total economy."

15: U.S. Navy --25 [2] (no date) 1944 Formosans
116, 162, 191, 177.19 Japanese
636.19

"The percentage of Japanese-speaking Formosans is said to have increased from .4 percent in 1905 to 8.5 percent in 1930, to 37.8 percent by 1937 and to be over 45 percent at the present time.

Table 20: Numbers of Formosan men and women who speak Japanese.

	Men	Women	Total	Percentage of total Formosan population
1905	10,801	469	11,270	.4
1915	50,143	4,194	54,337	1.6
1920	87,897	11,168	99,065	2.9
1930	394,677	70,750	365,427	8.5
1937	---	---	---	37.8
1938	---	---	---	41.9
1939	---	---	---	45.6 "

15: U.S. Navy--31 [7] (no date) 1944 Formosans
116, 162, 241, 177

"Approximately 53 percent (2,880,410) of the population of Taiwan was engaged in agriculture at the end of 1937. The remaining 47 percent was engaged chiefly in trade and commerce.

In 1937 the number of persons employed in industry had grown to 87,244, an increase which reflects the rapid expansion of industrial enterprise. The distribution of labor was then as follows:

Table 24: Distribution of Labor in Industry

Industry	No. of Persons Employed	Percentage
Food (including sugar and pineapple processing workers)	48,615	55.6
Chemicals	4,988	5.7
Textiles (including hemp processing)	4,000	4.5
Mining	4,214	4.7
'Others'	25,427	29.5
	87,244	100.0"

"The races who share among themselves the whole of the hilly parts and plains of Formosa are three in number:

(I) The Japanese, new-comers, intruders, yet the masters of the island to-day, number about a hundred thousand souls.

(II) The Chinese, owners of the island for more than two centuries, constitute the main part of its population. They call themselves hok-lo (2), viz., 'good' 'plain', and

2. This name is applied by the Khe-lang to other Chinese of Formosa. It seems to take its origin from the fact that when the Hak-kas, persecuted everywhere in the Celestial Empire, arrived at the South of Fokien, they were welcomed there. Henceforth they appear under the name of 'thankfulness' that had been given to them by the inhabitants of that province. This, indeed, did not prevent at all the fact that until the arrival of the Japanese the Khe-lang and Hok-lo were living in continuous shie [sic] with each other. The Hok-lo of southern Fokien, whose dialect, with slight differences, is the same as that spoken in Formosa, call Khe-lang, viz., guests, those, to whom, in the dialect of Canton, in China, is applied the nickname Hak-kas, viz., terrible guests.

this name is applied also to the Chinese born and brought up in the 'Prefecturas' of Chiang-chin, Choan-chin and Anke, in southern Fokien. They number more than two

millions. They call Khe-lang their neighbours, who proceed from Canton and the 'Sub-Prefecturas' of Chiau-an and Tin-chiu, likewise situated in Fokien, where their ancestors are still living and their brothers well known under the name of Hak-kas. The terrible civil war that followed the downfall of the Ming Dynasty in China compelled most of the partisans of the Mings to leave their native soil. The Hak-kas, who had suffered most from persecutions, crossed the strait and established themselves in Formosa. At present they constitute the third part of the population of the island. They number about 800,000 souls.

(III) Finally, there are the genuine aborigines, who were masters of the island for many centuries before the Chinese and Japanese made their way from their native countries and reached Formosa. They are divided into two classes, viz., Pepo-huan and Che-huan. The former once occupied the vast plains which at present are inhabited by the Chinese invaders. Subdued by them, the tribes now called Pepo-huan in time adopted not only Chinese fashions, but also the Chinese language. Several northern branches still retain their mother-tongue, the old customs, manners and traditions. But their number is very limited to-day. They are named Che-huan, viz., 'savages' by the Chinese. They are hillmen, with their own peculiar language, and number about 121,500 souls, according to the official report of December, 1910."

3F: Hofmann--606 N-3 (1909) 1912 Formosans
116, 101, 162

In the region of Taikokan I was struck by the fact that the Chinese women did not have crippled feet. From this it is clear that the Chinese living there do not belong to the largest of the tribes, the Hoklos, among whom it is the custom to maim the feet; they belong to the smaller tribe, the Hakkas. It should also be stressed that, while two thirds of the population today is Chinese, there were no Chinese on Formosa until three hundred years ago.

42: Schetelig--388 T-2 (no date) 1868 Formosans
116, 162, 186, 463, 609

The population of Sawo, which is cut off from all communication by land with the rest of the island (except with the Caponlan Plain), is consequently made up of the dregs of the Chinese population. Since agriculture is impossible, they belong to a genus of seaman such as exists only in China, for on occasion they can transform themselves into pirates, shore robbers, camphor wood thieves or mandarin's soldiers, as required. Sawo is a place with an evil reputation even among the Chinese.... Shortly after we had arrived camphor agents landed and, although they were extremely polite to us on the surface, they nevertheless looked at us suspiciously for they thought that their secret trade might be unfavorably influenced by us. These persons then stirred up the inhabitants against us and spread the rumor that we were traveling in the interests of a foreign government, the Prussian Government, and they hampered us in all our movements. The web of intrigue that was thrown around us was extremely finely spun, and every day there were new troubles and new affronts; for the Chinese, when he is evil, observes the principle that evil must be profitable to him, or it is not worth the trouble. Finally, after they had tried in vain to starve us out, for we were well supplied, we had to forego water transportation. The boats and junks were hidden from us and we were compelled to travel by land over the ridge of hills to the north to the plain of Caponlan, since we could not leave behind the instruments, etc. Fortunately there were five of us and we were all armed, for among these rogues a single man would have perhaps had a hard time.

42: Schetelig--390 T-2 (no date) 1868 Formosans
116, 162, 578

So, while it is possible to get to know the land in its original form on a journey up the middle course of the Tamsui River...a journey up the southern arm gives one a view of the old, original colonial system of the Chinese on Formosa. First we travel along the road from Tamsui to the southern locality of Taiwanfu, consequently covering well trodden ground. But this region of the western plain was the first that the Chinese developed, after the occupation 200 years ago and, accordingly, it is here that we found Chinese law and Chinese customs in their greatest purity. Worthy of note, at the same time, are the number of Chinese dialects and consequently of Chinese provinces that are represented here. Here the Fokien Chinese live in colonies beside their sworn enemy, the Hakka, from the province of Kwangtiang, and the Hoklo, the sugar-cane cultivator of Swatau, while between them all, hated by all and getting the better of them all, there wanders the sly Cantonese, the merchant, scribe, land owner or camphor agent. We kept on our way in the old fashion and did not unload our baggage until the boats sat motionless on the stone rubble of the rapids. This happened near the old fortress of Tokscham, the possession of a wealthy and influential Chinese family which has been in residence here since the earliest period of Chinese colonization.

103 name of the town of origin. For example, Hsin-pai-kung means new Pai-kung. This case is parallel to that of the Scotch highlanders of Inverness who named their village New Inverness when they emigrated to Georgia. Tongan-ts'o is an example of a place name (Tung-an) with a suffix, which means the hamlet of the people of Tongan, a district on the Mainland. This is also an indication of the character of early settlements of the Chinese in Taiwan. When people moved to a new place, they naturally settled near their kinsmen. If kinsmen were too few, they settled with people from their town. In other words, blood relationship and locality are the principles of social cohesion at a certain stage of social development.

3. Towns of Origin of the Taiwanese.

162 While most Chinese in Formosa came from south China, there is a marked difference in the localities of their towns of origin. According to a survey made by the Japanese colonial government in 1926, of 3,752,000 Formosa Chinese, 83 per cent came from the province of Fukien, 16 per cent came from the province of Kwangtung, and the remaining one per cent were from other provinces. The Fukienese who comprised 83 per cent of the total may be further broken up as follows: 45 per cent from the prefecture of Chuanchow (Ch'üan-chou), 35 per cent from the prefecture of Changchow (Chang-chou), and three per cent from other prefectures. People from Chuanchow (45 per cent), people from Changchow (35 per cent), and Cantonese (the so-called Hakka) (16 per cent) are the three main groups.

162 Emigrants from Chuanchow came earliest, occupied the best places of the western plain, and engaged in commerce, trade and agriculture. The Hakkas came last. When they came, the most fertile soil of the plain was already claimed, so they had to settle in hilly places or mountain foothills. They mostly engaged in agriculture. People from Changchow came between these two in point of time, and also settled between the two in actual geographic regions. They engaged in commerce and agriculture. Hakka and Fukienese have different dialects; and even among the Fukienese, those from the prefecture of Chuanchow and those from the prefecture of Changchow speak with a different accent. The three groups have different patron gods, different associations, and have fought against each other in sanguinary wars. In daily contact, the same native town means higher affinity, higher consciousness of kind. Marriage takes place more frequently among people from the same original native town.

4. The Clan Village.

167 The Chinese seldom leave their ancestral shrines and graves behind them when they go abroad. Pressed by hard living conditions, one male member of the family may leave home for overseas, but the whole family seldom moves to a new place. Many came to Formosa only for a longer or shorter time, and having accumulated sufficient money, went back to their ancestral towns. Even if they settled permanently in the new land, they still kept an intimate contact with their kinsfolk in the old home town. This relationship was broken by the

45;Stanford U, S-4, 5 1956 AD1 Formosa
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B. FORMOSA'S ROLE IN THE SECOND WORLD WAR

175 With a view to the maximum utilization of the manpower in Formosa, the Japanese administration took a census of Formosa's population every five years, beginning in 1920. [162] The population totalled 5,872,084 in 1950; the number of males between the ages of 19 and 40 was estimated to be over 928,000.[47] The invasion of China by Japan was resumed in 1937, and war in the Pacific broke out in 1941. Despite their efforts at assimilation, the Japanese in Formosa exercised great caution in mobilizing the vast reservoir of manpower available in Formosa. Until 1942, no Formosan was allowed to own or harbor firearms of any kind. In June 1942, the Japanese imperial government called for voluntary military service. Japanese sources[48] claimed that hundreds of thousands of Formosan Chinese had registered, but because the Japanese would not trust the latter with arms, only a few hundred were accepted for training. It was not until February 1944 that the Japanese granted the first army commission to a Formosan Chinese, who was a sub-lieutenant in the Army medical service.

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47. Chen Cheng-hsiang, "Taiwan Chih Jen-kou" ["The Population of Taiwan"], Taiwan Yin-hang Chi Kan [Bank of Taiwan Quarterly], Vol. 4, No. 1, March 1951, p. 47-49.

48. Tokyo, Domei English broadcast, Jan. 11, 1943.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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Annex "A," Subparagraph 1c,
Sociological Background

POPULATION OF FORMOSA

I. INTRODUCTION

161 The population of Formosa [Taiwan] in 1955 is estimated[1] at about 10,400,000, including about 7,500,000 Formosa-born Chinese (hereafter Formosan Chinese, as distinguished from Mainland Chinese), about 2,000,000 Chinese civilians from the Mainland, 700,000 military personnel and troops, and about 200,000 non-Chinese tribes of aborigines. The latter are composed of seven linguistically distinct tribes believed to have come originally from Malaya, the Philippines, New Guinea, and Kwangtung Province. The Formosan Chinese are descendants of Mainland Chinese who migrated from Fukien and Kwangtung provinces chiefly during the eighteenth and nineteenth centuries.

II. ETHNIC GROUPS

162 563 The population of Formosa may be divided into two distinct ethnic groups: the aborigines and the Chinese.

A. Aborigines

Prior to 1600, Formosa was sparsely populated by so-called aborigines, referred to by the Japanese as "savages" and by the Chinese government as "mountain tribes" or "brethren of the mountains," whose habitations ranged

[Footnote 1 next page.]

162 563 over most of the island. However, an increasing number of Chinese immigrants, with their superior civilization, pushed these natives into mountainous areas and thereafter occupied the fertile lowlands of the island.

563 105 According to language, custom, and physical characteristics, the aborigines are commonly divided into seven tribes: Taiyal, Saiset, Bunun, Ami, Paiwan, Tsou, and Yami. Although physical characteristics may vary, they are generally brave warriors and can run long distance or climb steep mountains and cross swift streams with skill and speed. Their short stature, light-brown skin, and straight black hair, as well as their language and customs, suggest a close resemblance to the Malays of the South Seas. They are independent in nature, passionate in temperament, and show respect for the aged and love for the young. They live in villages and build huts made of wood and stones. Some 70,000 aborigines are called Pepohuan, meaning assimilated savages. Their customs and activities are similar to those of the Formosan Chinese who had assimilated them in the lowlands. Tribesmen who were not able to bear the economic and cultural pressures exerted upon them fled to the mountainous interior.

1. This estimate is the result of reconciling various estimates offered by writers on Formosa's population. The analyses in this chapter, however, will be based on the total registered population because the household registry system provides the only statistics available on the population. The total registered population in 1953 was 8,438,016.

161 The accompanying figure shows that the most heavily populated areas lie in the Taipei Basin and in the plains of Taichung and Tainan. In 1953, Taipei City had a density of 3,600 persons per square mile; the density for Kao-hsiung was 1,100. The least-populated hsien of Taitung has only 12 persons per square mile.[4]

IV. COMPOSITION OF THE POPULATION

A. Age Composition

162 Formosa's average population is young. As of 1953, population under the age of fifteen comprised 42.2 per cent of the total and those under forty years of age comprised 82 per cent of the total.[5] Old people have never made up a large share of the population. Improved medical facilities in the past decades have reduced infant mortality and helped to maintain the youthfulness of the population. The birth rate has been constantly high. The changes in age composition for the last twenty years are shown in Table 2. An age structure of this sort is costly to society; there are few to support many -- as was the case in 1953, when each group of one hundred persons between the ages of fifteen and sixty-four, the most productive working years, had to support eighty others, although not necessarily all of the hundred were employed.[6]

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4. Ibid.

5. United Nations, Statistical Office, Demographic Yearbook, 1954, New York, 1954, p. 127.

6. Ibid.

162 In contrast, the corresponding ratio[7] for Japan in 1950 was 68, for the United States 55, and for Sweden 36. Attempts to reduce this burden of dependency include encouraging the youngsters to work as soon as they are physically able and requiring them to forgo the training that would make their efforts more productive. Society must shoulder responsibility for the education and care of the younger population.

[See following page for Table 2.]

7. George Barclay, A Report on Taiwan's Population to JCRR, Princeton University Press, 1954, p. 50.

45:Stanford U, S-4, 5 1956 AD 1 Formosa
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Table 2. Population By Age and Percentage in Each Age Group. */

Age	1930	1940	1950	1953
		A. Population (in thousands)		
0-14 years	1,767	2,432	3,129	3,524
15-39 "	1,684	2,057	3,075	3,274
40-64 "	756	870	1,161	1,279
65 and over	107	151	189	206
Total	4,314	5,510	7,554	8,284 */
		B. Percentage by Age Group		
0--14 years	41.0	44.2	41.3	42.2
15-39 "	39.0	37.3	40.8	39.8
40-64 "	17.5	15.8	15.4	15.5
65 and over	2.5	2.7	2.5	2.5
Total	100.0	100.0	100.0	100.0

[Footnotes next page.]

162 The age-sex pyramid of Formosa's population reveals that fertility is extremely high today and mortality was high in the past. A comparison of the 1953 and 1954 pyramid shows that fertility has increased in recent years. This should not be interpreted as a post-war phenomenon, but should be attributed to the gradual improvement of health conditions and medical facilities. The crude rate of birth has remained over 40 per thousand for most of the last fifty years. There has been a drastic reduction in infant[8] mortality in recent years -- 135.5 in 1940 and 35.3 in 1952. These facts will probably keep the population "young" for a long time to come.

B. Sex Composition

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*/ For 1930 and 1940, data are for Taiwanese; for 1950, figures represent the total registered population as taken from George Barclay, A Report on Taiwan's Population, Taipei, JCRR, 1954, p. 48, in which figures for 1930 and 1940 are taken from respective census reports and figures for 1950 are from Taiwan Province, Statistical Abstract, Twelfth Period, Taipei, 1951; 1953, from United Nation, Statistical Office, Demographic Yearbook, 1954, New York, 1954, p. 127.

+/ This figure derived from another source does not correspond with the figures for total registered population given earlier. The discrepancy may be due to the exclusion of foreigners and other groups.

8. United Nations, Statistical Office, Demographic Yearbook, 1953, New York, 1953, pp. 220-21.

162 In Formosa, there are 105 males to every 100 females.[9] In 1940 when the population was more permanently settled, the ratio[10] was 102 to 100 females. The many male immigrants who came in after the war probably account for the present sex ratio.

C. Urban and Rural Population

369 167 Urbanization has increased rapidly in the past few decades. In 1920, four per cent of the population lived in cities of more than 100,000 inhabitants; in 1952, the number in such cities had increased to 21 per cent. Economic development in the last years of Japanese control and in the current postwar years, and the influx of Mainland people in the late 1940's and early 1950's, have contributed to growth in urban population. The preponderance of agricultural population has become less pronounced, and the high degree of ethnic and cultural homogeneity has been diminishing.

The majority of young people come to the cities with the hope of finding jobs; immigrants from the Mainland are mostly non-farmers and therefore flock to the cities; and most wives follow their husbands to the cities.

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9. China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], Vol. III, Taipei, 1954, p. 78.

10. Provincial Government of Taiwan, Results of the Seventh Population Census of Taiwan, 1940, Taipei, 1953, p. 40.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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Table 3. Percentage Distribution of the Total Population in Communities by Size 1920-1952 */

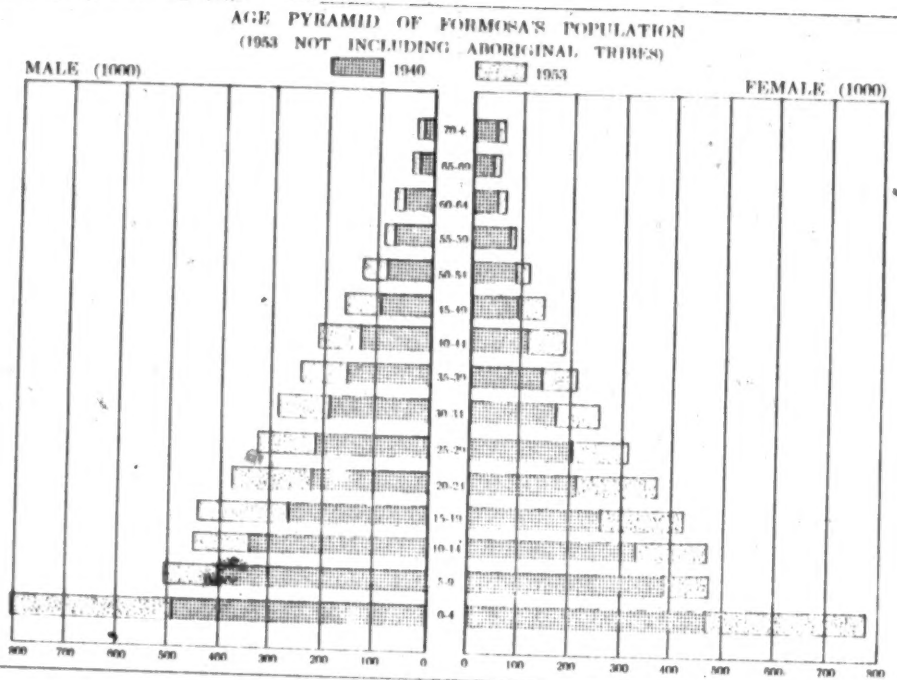
Year	Under 20,000	20,000 30,000	30,000 40,000	40,000 100,000	100,000 or more	Others +
1920	75	11	5	3	4	1
1930	59	22	2	8	5	3
1940	36	34	7	8	12	2
1952	23	25	17	12	21	2

*/ Arranged from governmental reports of each census, as quoted in Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 255.

+/ Aborigines and boat dwellers.

1: Stanford U. S-4, 5 1956 AD1 Formosa AD1

1: Stanford U. S-4, 5 1956 AD1 Formosa AD1



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[Facing p. 77]

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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D. Occupational Composition

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In 1953, of 5,400,000 people more than twelve years of age, 1,800,000 were engaged in agriculture, 23,000 were in industry, and 460,000 were students. There were 2,000,000 people without formal occupation, but most of them (1,700,000) were housewives. Agriculture is the most predominant occupation although the proportion of agricultural workers to the total working population has declined gradually during the last forty years. From 1915 to 1940, the proportion of farmers in relation to the total working population decreased from 70.1 per cent to 62.4 per cent;[11] the percentage for 1953 was 53. For detailed breakdown, see Table 4.

11. T'ai-wan-sheng Wu-shih-i-nien-lai T'ung-chi T'i-yao [Statistical Summary of Taiwan for the Past Fifty-one Years], Taipei, Provincial Government of Taiwan, 1946, pp. 130-38; See also Results of the Seventh Population Census of Taiwan, 1940, Taipei, 1953, pp. 68-69.

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Table 4. Population by Occupation */

	Population	Male	Female
Over 12 yrs. of age	5,422,044	2,777,938	2,644,106
Agriculture	1,811,767	1,277,139	534,628
Mining	36,659	32,786	3,873
Industry	232,873	207,752	26,121
Commerce	251,230	231,866	19,364
Transportation	68,196	65,480	2,716
Public Service	119,728	109,489	10,239
Professionals	74,644	57,925	16,729
Service Industry	225,969	168,181	57,788
No Occupation **	2,005,777	219,851	1,785,886
Student	462,469	291,971	170,498
Military Service x/	58,967	57,563	1,404
Others	72,805	57,935	14,870
Under 12 yrs. of age	3,015,972	1,548,700	1,467,202
Current total Y/	8,438,016	4,326,708	4,111,308

E. Marital Status

162 A great proportion of the people 15 years old or more are married. The rate of divorce in Formosa is low, about 0.45 per 1,000 population as compared with 2.48 for the United States.[12]

Table 5. Marital Status of Population 15 Years Old and Over - 1953 */

	Number	Percentage
Single	1,447,803	30
Married	2,966,356	62
Widowed	388,191	8
Divorced	30,508	-
Total	4,832,858	100

*/ China News Press, Chung-hua Nien-pao 1954 [China Annual, 1954], p. 77.

F. Educational Status

212 87 Forty-five per cent of the total population know how to read and write. If children under six years are excluded, the percentage of literacy rises to 59 per cent. Over 90 per cent of the children from six to twelve years of age now attend primary schools; primary education is compulsory. Because many illiterate people are over school age, a literacy movement as well as other types of adult education are being promoted. A detailed breakdown of the educational status of the population is shown in Table 6.

12. United Nations, Demographic Yearbook, 1953, pp. 276-77.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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shipping have resulted in further division of extended families and at the same time have given women more opportunity for employment outside the household. There is a great deal of evidence that extended families are separating to form smaller and less-inclusive units. In 1812, the average household consisted of 8.3 persons;[7] in 1953, the average household had 5.5 persons.[8] In a survey conducted by the Foreign Operations Administration's Mutual Security Mission to China, the composition of urban households was characterized by a relatively large proportion of legal households consisting of a single person, and such households accounted for more than 9 per cent of the total.[9]

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7. Yoshinori Ino, Taiwan bunkashi, Vol. II [The Records of the Culture of Taiwan], Tokyo Toko shoyin, 1928, p. 238.

8. Statistical Abstract of the Republic of China, 1955, Taipei, Directorate-General of Budgets, Accounts, and Statistics, Executive Yuan, 1955, p. 27.

9. A. F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 261.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 1h,
Sociological Background

SOCIAL VALUES, PATTERNS OF LIVING, AND FOLK BELIEFS

162 Nearly 98 per cent of the population on Formosa today are Chinese. Of this number, approximately one-fifth have come to Formosa from the Mainland since 1945. Of the remaining four-fifths, the majority are descendants of early settlers who migrated to the island from Fukien and Kwangtung provinces between 1600 and 1895. Non-Chinese aborigines make up about 2 per cent of the present population. Social values and the major patterns of living on Formosa are derived from the Chinese, in spite of the efforts of the Japanese to sever the ties between the Mainland and Formosa during a half-century of rule. Even the official promotion of Shintoism did not destroy the customs and traditions of either the aborigines or the Chinese on Formosa. The restoration of Formosa to China in 1945, followed by the influx of some two million Chinese from the Mainland, has further strengthened ties with the mother country.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph lm,
Sociological Background

LABOR

I. MAIN CHARACTERISTICS OF LABOR

162 Composition of the Working Population. Owing to efforts to accelerate industrial development during the latter years of Japanese occupation, the proportion of agricultural workers to the total working population in Formosa gradually declined. From 1915 to 1940, the proportion of farmers in relations to the total working force decreased from 70.1 per cent to 62.4 per cent.[1] Since the restoration of the island to China, special emphasis has been placed on intensive industrialization by the government with the co-operation of the American Mutual Security Mission to China. This development has inevitably led to increasing activities in manufacturing, construction, etc., resulting in a gradual decrease in the agricultural population.

1. Provincial Government of Taiwan, Statistical Summary of Taiwan Province for the Past Fifty-one Years, Taipei, 1946, pp. 139-38; and Results of the Seventh Population Census of Taiwan, Taipei, 1953, pp. 68-69.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3a",
Economic Background

LAND REFORM

I. LAND TENURE BEFORE REFORM

423 162 For many years the most crucial problem confronting Formosa, as is the case with most countries on the continent of Asia, has been that of too many farmers and not enough land. There has been an enormous growth of population in the past half-century. For lack of industrial development, over 51.93 per cent of the total population in Formosa is engaged in farming.[1] The agricultural [161] population grew[2] from 3,318,235 in 1944 to 4,381,816 in 1953. Only 24.7 per cent of the land in Formosa is arable.[3] As is always the

1. Taiwan Agricultural Yearbook, 1954 Edition, compiled by the Provincial Department of Agriculture and Forestry, Taipei, October 1954, p. 1.

2. Ibid., p. 25.

3. Ibid., p. 8. The total area of Taiwan Province, including the Pescadores and adjacent small islands, is 3,707,658 chia (or 35,961 square kilometers) and the total area of public and private cultivated land is 903,273 chia (or 8,082 square kilometers) in 1953. (Chia is the unit of measurement of land on Formosa; one chia is equal to .9699 hectare or 2.3968 acres.)

423 case in heavily populated countries with limited
162 land, very little land is offered for sale. The majority of the farmers are tenants. When the population grows larger the competition becomes keener. Consequently, the landlords are able to impose high rentals and other harsh terms. As time goes on, the landlords grow progressively richer and the tenants progessively poorer. The general poverty from which the poor peasants are unable to lift themselves is the primary cause of social unrest. Before the land reform programs were launched at the end of 1948, the distribution of tenure among the agricultural population in Formosa was as tabulated below.[4]

	Number of Farm Families	Percentage
Owner-cultivators	211,649	35
Part-owners	154,460	26
Tenants	231,224	39
Total	597,333	100

4. Ibid., p. 24.

423 The foregoing tabulation shows that
162 tenants and part-tenants who own no land, or only part of the land they till, constituted 65 per cent of the farm population, and only 35 per cent were independent farmers. The scarcity of land coupled with inequitable distribution led to the continued exploitation of the tenant farmer by the landlord.

427 Prior to 1949 the land rental averaged 50 per cent of the total yield per annum; in some cases more. In Taichung and Hsinchu there were instances where the tenants paid to the landlords 70 per cent of their annual harvest. In addition to the high rental, the tenants often were required to pay the landlord a large rent deposit. Then there was uncertainty of tenure. In most cases there was no written lease. Even when there was a written contract, the period of lease generally covered only one to two years, or was not definitely stated. This left the landlord free to terminate the lease at will. Since the dispossessed tenant was not entitled to any compensation, the resulting hardship could be easily imagined. The need for reform was evidently urgent.

II. LAND REFORM

423 Land reform for the sake of social justice was advocated by Dr. Sun Yat-sen,

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3a,
Economic Background

AGRICULTURE

I. INTRODUCTION

241 Formosa's economy is predominantly
162 agricultural. Household registration in 1950
431 indicates that of a gainfully employed male population of 2.1 million, roughly 57 per cent were farmers.[1] The Taiwan Agricultural Yearbook reports that about 52 per cent of the total population in 1953 were directly dependent on agriculture for a living.[2] Approximately 49 per cent of the total national income in 1951 was derived from agriculture.[3]

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1. George W. Barclay, A Report on Taiwan's Population, Princeton, Princeton University Press, 1954, p. 59.

2. Provincial Government of Taiwan, Taiwan Agricultural Yearbook, 1954, Taipei, 1954, p. 1.

3. Industrial Development Commission, Economic Stabilization Board, Industry of Free China, November 1954, Vol. 2, No. 5, Taipei, p. 7. Agriculture is defined to mean all productive activities involved in farming, livestock-raising, forestry, and fisheries.

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[162]
241 The importance of agriculture to the national
434 economy is made more obvious by the fact that a large percentage of Formosan industries involve the processing and transporting of agricultural commodities. Agriculture products also provide an important source of foreign exchange for the island. In 1953, total
[43] exports amounted to approximately US$130,000,000, of which over 90 per cent was derived from the export of agricultural products.

241 The climate in Formosa is eminently suitable for agricultural production. The tropical and sub-tropical atmosphere and abundant rainfall in most parts of the island encourage the cultivation of rice, sweet potatoes, sugar cane, tea, bananas, and vegetables. Rice cultivation is carried on in all parts of the island; sugar cane, sweet potatoes, and peanut are grown in the central and southern sections; tea is cultivated in the northern districts.

648 During the Japanese occupation of
241 Formosa, the policy of economic development was geared to the economic needs of the Japanese Empire. When a shortage of rice was felt in Japan, rice was produced in

48: Chen E-4 (no date) 1955 ADl Formosa ADl

161 increased one and a quarter times[2]. What is the reason for the remarkable contrast between these two islands? It is an interesting and significant problem, and the analysis contained in this paper should shed some light on it.

II. POPULATION GROWTH IN TAIWAN

162 *3. Ethnic Composition of Taiwan's Population.*

As soon as the Japanese occupied Taiwan, they started a survey of the population, and as early as 1896 there were population figures of the whole island. Though the figure was not accurate enough, it was not incompatible with figures obtained by the first census in 1905, and we can say the survey was fairly dependable. In October, 1905, the first census was taken, and an accurate figure of total population was obtained for the first time. The total population was 3,123 thousand, 94% of it was Taiwanese (that is Chinese in Taiwan, transfered to Japan by the Manchurian government), 0.26% was the mainlander (that is Chinese who came to Taiwan after the Japanese occupation, and who were treated as overseas Chinese by the colonial government), 3.62% was aborigine, 1.90% was Japanese. The total population of Taiwan from 1896 to 1943 by ethnic stocks is given in table 1. During this period, the proportion of Taiwanese was always more than 90%.

Table 1, A: Taiwan's Total Population and its Ethnic Composition, 1896-1943.

Year	Total	Taiwanese	Mainlander	Aborigine			Japanese	Korean	Other Foreigners	Taiwanese Computing Population	Taiwanese Static Population	Total Computing Population
				Total	Living off Reservations	Living on Reservations						
Column	1	2	3	4	5	6	7	8	9	10	11	12
1896	2,587,688	2,577,194					10,584					
1900	2,846,108	2,707,322	5,160	95,597			37,954		75			
1904	3,079,922	2,915,964	5,917	104,334			53,365		92			
1905	3,123,302	2,942,266	8,223	113,195	36,752	76,443	59,618			2,979,018	3,055,461	3,046,859
1910	3,299,493	3,064,499	14,840	122,106	41,724	80,382	98,048			3,106,223	3,186,605	3,219,111
1920	3,757,838	3,436,071	24,836	130,310	45,762	84,548	166,621			3,481,833	3,566,381	3,673,290
1930	4,679,066	4,259,523	46,691	140,553	54,399	86,154	232,299			4,313,922	4,400,076	4,592,912
1940	6,077,478	5,523,912	46,190	158,321	62,386	95,935	346,663	2,299	93	5,586,298	5,682,233	5,981,543
1942	6,427,932	5,827,857	50,429	162,031	63,991	98,040	384,847	2,692	76	5,891,848	5,989,888	6,329,892
1943	6,585,841		52,020			100,397	397,090	2,775	89	6,033,470	6,133,867	6,485,444

Figures of 1905-1930, column 3 included the figures of other foreigners (col. 9). Before 1930, Korean (col. 8) was included in Japanese (col. 7).

Data: 1896-1904, from 13, No. 8: Table 31; 1905 after, from 14.
Column 1, 3, 7, 8, 9, 11 from 14: Table 45; Col. 2=11-4; Col. 4, from 14: Table 53; Col. 5=4-6; Col. 6=11-10 (The figures of Col. 5 and 6 can be found in "Household Registration of the Aborigines", published by Government-General). Col. 10, 12, from 14: Table 96.

Note 2: BAKER, J. E.: The Balance between Population and Production. Pub. by Chinese Association for the United Nations, 1951.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

The population figures of Taiwan are sometimes confusing. Often we can find different figures of total population or Taiwanese population for the same year. This table will clear up the confusion. From the administratrative point of view, those people living in Taiwan and with Japanese nationality were registered as Taiwanese. This is the figure of col. 11; in fact, it is the total of Taiwanese and aborigines (11=2+4). The figure of Taiwanese (excluding aborigines) was enumerated in earlier statistical records, but was dropped out after 1905. Strictly speaking, the figure of Taiwanese in col. 2 still included some acculturated aborigines. In the seventh census of 1940 for instance, the number of acculturated aborigines was 58,160. Though the larger part of the aborigines were living in the reservations, some of them were living outside of the reservations. The former were comparatively backward, and their vital statistics were rather incomplete, and thus were omited from vital statistics. According to the inclusion or exclusion of aborigines living in reservations (col. 6), there are two kinds of population totals: when col. 6 is included, it is the total static population (col. 1); when col. 6 is excluded, it is the total computing population (col. 12). As aborigines were included in Taiwanese population in statistical records, there are also two kinds of totals for Taiwanese population: when col. 6 is included, it is the Taiwanese static population (col. 11); when col. 6 is excluded, it is the Taiwanese computing population (col. 10). 162

Table 1, B: Index of Increase of Taiwan's Total Population and its Main Ethnic Groups, 1896–1943.

	Total		Taiwanese		Mainlander	Aborigines			Japanese	
						Total	Off Reservation	On Reservation		
1896	100.00		100.00						100.00	
1900	109.98		105.05		100.00	100.00			358.59	
1904	119.01		113.14		114.67	109.12			504.20	
1905	120.69	100.00	114.16	100.00	159.36	118.40	100.00	100.00	563.28	100.00
1910	127.50	105.64	118.91	104.15	287.59	127.72	113.52	105.15	926.37	164.46
1920	145.21	120.31	133.33	116.78	481.31	136.31	124.51	110.60	1,574.27	279.48
1930	180.82	149.81	165.28	144.77	904.86	147.02	148.01	112.70	2,194.81	389.64
1940	234.86	194.58	214.34	187.74	895.15	165.61	169.74	125.49	3,275.34	581.47
1942	248.40	205.80	226.13	198.07	977.30	169.49	174.11	128.25	3,636.12	645.52
1943	254.50	210.86			1,008.13			131.33	3,751.79	666.05

4. *Population Growth.*

The population growth of the half century under Japanese occupation was tremendous. The total population during the 48 years from 1895 to 1943 increased one and a half times, increased 1.1 times during the 39 years from 1905 to 1943. The increase of Taiwanese population during the 47 years from 1896 to 1942 was 1.26 times and almost doubled during the 38 years from 1905 to 1942 (cf. Table 1, B). A comparision with 161

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

161 178 was much promoted by it. Prevention of malaria was successful to a large extent, the activities of preventive hygiene being started by the 1930's. There was reduction in the number of cases of diarrhea, enteritis, and tuberculosis. Infant mortality began to decline. The birth rate rose to a peak, the death rate declined again, and the fluctuations became fewer and of lesser extent. The rate of natural increase attained a peak of 24 per 1,000. Age composion changed, the proportion of infants and children increased markedly.

Fifth Period (1941–1943): The value of industrial products exceeded the value of agricultural products, and the quick tempo of urbanization began. The birth rate began to decline, and death rate continued to drop, to around 18 per 1,000; the rate of natural increase declined slightly. Infant mortality declined further. In comparision with 1906, the average expectation of life of Taiwanese at birth in 1940 was 13 years longer for males and 16.7 years longer for females.

Objectively considered, there were improvements in Taiwan during the half century of Japanese rule; and it is evident at the same time that under the scheme of colonial administration, the improvements were limited in character. The specific character of this social change can be traced in the population data. In order to let her colony carry out its function, in order to make it a good supplier of rice and sugar which Japan urgently needed, various kinds of basic establishments and developments had to be accomplished, such as the wiping out of epidemics, prevention of endemics, basic sanitation, development of transportation, primary education etc. In order to make her colony a good market for manufactured products, the purchasing power and the level of living of the people had to be raised somewhat. But if the "improvement" was pushed too far, it would enable the people to resist and revolt, so it must be kept within certain limits. The Japanese were quite clear on these points, and developed the island within the colonial scheme. The results were successful, even to the extent of Taiwan being called the "ideal colony". Here is the fundamental character of social change in Taiwan. Some data will help us to understand the situation concretely.

161 165 Though the death rate of Taiwanese had declined, its tempo was slow, and still remained very high in comparision with the death rate of Japanese in Taiwan. In the early years of occupation, the death rate of Japanese in Taiwan was tremendously high, but declined quickly and steadily, and with the passage of time the rate was not only lower than in Japan proper, but even attained the level of the most advanced western countries. To take the death rate of 1925 for instance, it was 24.84 per 1,000 for Taiwanese, 20.27 per 1,000 in Japan proper, but was as low as 11.34 per 1,000 for the Japanese in Taiwan. Though it is somewhat higher than Australia (9.2 per 1,000) and Netherlands (9.8 per 1,000), it is still lower than Sweden (11.7 per 1,000), England and Wales (12.2 per 1,000). The age composition of the Japanese in Taiwan was specific, [162] there were more youths and adults in its population, and no doubt this was one of the causes of its low death rate. But even after the difference of age composition was

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertilizer and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertilizer increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyze the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1943. p. 201.

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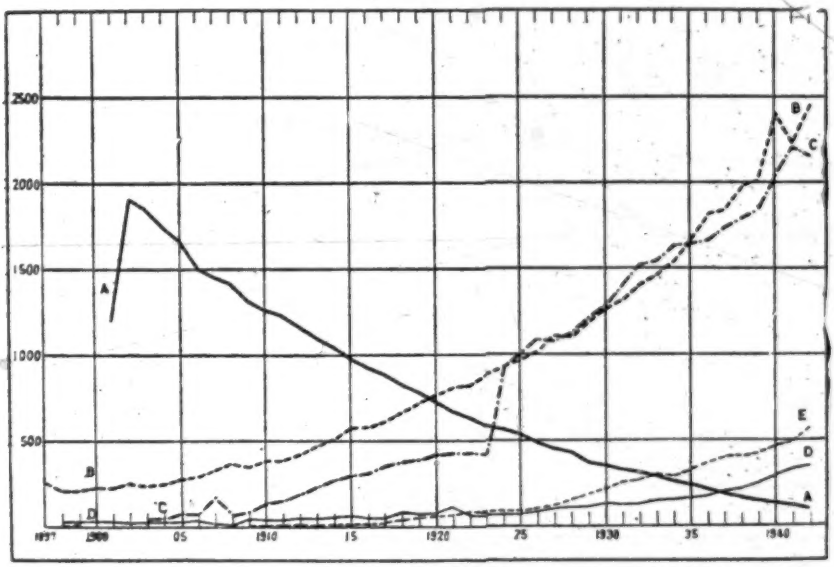
759 was raised to a medical vocational school, to a medical college, and at last became a school of the Taipei Imperial University. Within the 47 years between 1899 and 1945, a total of 2,813 doctors (1,888 Taiwanese doctors and 925 Japanese doctors) were trained by the school.[8]

759 The trend of change in the number of medical personnel in Taiwan is given in Figure 3. The decrease in the number of doctors of Chinese medicine and the increase
177 of doctors of western medicine is interesting. It is also significant to note that, the
162 number of the latter exceeded the number of the former by 1920. As to the ratio of inhabitants to doctors (of western medicine), the number of inhabitants per doctor was as follows:

years	number of inhabitants per doctor
1897–1906	10,000–12,000
1907–1911	8,000– 9,000
1912–1913	around 7,000
1914–1916	around 6,000
1917–1919	around 5,000
1920–1926	around 4,000
1927–1935	around 3,000
after 1936	around 2,000

Fig. 3 Number of Medical Personnel, Taiwan, 1897-1942



A: Doctors of Chinese Medicine B: Doctors of Western Medicine C: Midwives
D: Pharmacists E: Dentists
Source, 14: Table 484

Note 8: Li Ting-yeh: Part on Sanitation, Manuscript of the History of Taiwan Province, 1962, Taipei, p. 10.

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In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

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Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W. S. Thompson, who stayed some months in Nanking, China, in 1930-31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67-68).

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Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation,

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Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparision of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1952, Taipei, p. 66.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

By these actions the Japanese set apart from all others those who were descended from the original residents of Taiwan. This segregation in the statistics extended from the most obvious differentiation—that of Japanese nationals—down to fine distinctions within the Taiwanese population itself.[7] It was consistent in both the population censuses and vital statistics, making it possible to amalgamate the two systems of record-keeping continuously as long as they were maintained.

TABLE 1

TAIWANESE BORN OUTSIDE OF TAIWAN, 1920 AND 1930

Proportion of All Persons Who Have Been Born "Abroad," by Age and Sex

	Census of 1920		*Census of 1930*	
	Male	*Female*	*Male*	*Female*
All ages	0.2	0.1	0.1	0.0
0-9	0.0	0.0	0.0	0.0
10-19	0.0	0.0	0.0	0.0
20-29	0.1	0.0	0.0	0.0
30-39	0.1	0.0	0.0	0.0
40-49	0.5	0.1	0.1	0.1
50-59	1.3	0.2	0.3	0.1
60-69	1.9	0.3	0.8	0.1
70 and above	2.6	0.7	1.0	0.3

Sources: *Census of 1920, Descriptive Report with Appendix*, Table 79.
Census of 1930, Statistical Tables, Table 55.

Regulating the conduct of "alien" Chinese nationals in Taiwan was not the sole purpose in establishing the legal status of residents. The authorities also set out to halt the further migration of people from the mainland. In this they were apparently successful. Taiwanese were required to verify their nationality by certain proofs, chief of which was evidence of having been born in Taiwan. Taking this as a criterion, there seems to have been little admixture from the mainland to the category of "Taiwanese." For example, tables showing Taiwanese who were born "abroad" were published with the censuses of 1920 and 1930. If the information was accurate, practically the entire population of Taiwanese born after 1895 was ac-

[7] This fine detail was confined to a slightly different classification, based on "race." It provided categories within the group with Taiwanese nationality—aborigines, Taiwanese of Fukien origin, and Taiwanese of Kwangtung origin. The two classifications were not precisely the same, the one based on "nationality" being the more consistent at different times.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

659 tually born in Taiwan (see Table 1). Almost none under 25 years
167 of age in 1920, or under 35 in 1930, were recorded as having been born outside. Some who were older at these two dates had been
• 162 born in China, but they were very few and were probably living in Taiwan at the time of annexation. These figures imply that migration after 1895 was probably confined to people who were appropriately registered by nationality, and counted as *aliens* in census enumerations.[8]

Hence the census category of "Taiwanese" was defined so as to exclude migrants to and from the island. This is significant to know, for it means that Taiwanese counted in any census after 1905 were exactly the survivors of those who had been counted before (plus those who had been born in the meantime). It also means that the population of Taiwanese was for statistical purposes a "closed" population—one which neither gained nor lost people by migration. All change in the size of the Taiwanese population was therefore due to "natural increase," or the balance between births and deaths. One can thus speak precisely of population "growth" in Taiwan, without reference to migration as a complicating factor.

Half a Century of Rapid Growth

161 The total population, and the sub-total of Taiwanese, are shown in Table 2 as counted on October 1 of each census year, along with the annual geometric rates of growth that are implied at each intercensal stage. Every year showed an increase. The only setbacks were between 1915 and 1920, when the island suffered three near-epidemic attacks of disease. Even over this relatively poor span the average yearly rate of increase was close to one per cent. The original population of 1895 was more than doubled by 1945; when the vital statistics were discontinued in 1943, there were nearly six million Taiwanese.

[8] By evasion of the law some Chinese might conceivably have slipped into Taiwan and passed themselves off as Taiwanese. A further acquaintance with the regulatory system in later chapters, however, will make this appear most unlikely.

There is evidence of another sort that the Taiwanese were not diminished by removals to the mainland. Briefly, detailed testing of the validity of birth and death statistics has shown that practically all persons born in Taiwan were later accounted for in a census enumeration, or as registered deaths if they failed to survive. Practically all who were enumerated in one census were similarly accounted for at later dates. During the 1930's, Japanese permitted small numbers of Taiwanese to leave the island for special purposes. The effect of these departures was very small, and raises no difficulty in dealing with the data of earlier years. Thus, if there was emigration, it too was clandestine and very small.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

161 at large, for example, the increase of people that has populated most of the earth's surface has progressed steadily only in a few centuries of sweeping changes. It has maintained an average yearly rate of half of one per cent, only one-fifth that of the Taiwanese. At their more recent rate of increase, they could supply the entire world's present population in less than 250 years.

Growth at this pace, for all its associated virtues in the saving of life and postponement of death, can be a costly way of expanding the membership of a society. It imposes on the adults the burden of supporting more dependent children than would otherwise be required. Consequently, at any particular time growing populations contain large proportions of young children and infants.

162 The increase of Taiwanese left this kind of mark on their age composition. By 1940, they had passed through 50 years of growth almost unbroken by periods of high mortality. The age structure, both of males and of females, was one that expanded steadily at each lower age to a broad base of infants at the bottom (see Fig. 3). The progression was almost smooth, with few irregularities in between.

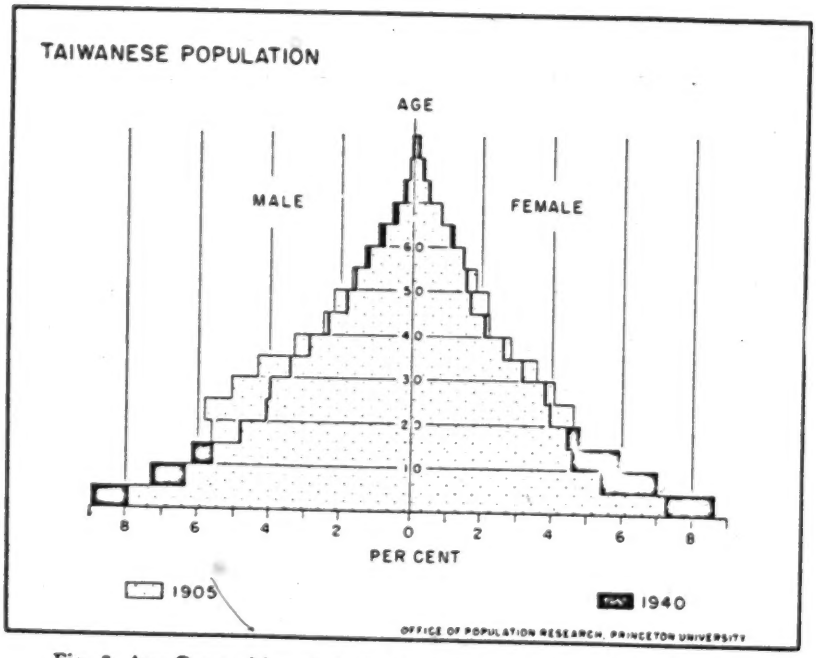

Fig. 3. Age Composition of the Taiwanese Population, 1905 and 1940.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

THE GROWTH OF POPULATION

In 1905 there were only a little more than half as many Taiwanese as in 1940. Their distribution in different ages presumably had not been subject to this past influence of steady growth. It nevertheless had many of the indications of potential expansion. Births were at high levels in relation to the numbers of adults. Through the effects of high and erratic mortality, many never reached maturity. 161

The inroads of past deaths had been far more irregular and generally more severe than in the population of 1940. As reflected in the dearth of persons from 5 to 20, for example, the turbulence that prevailed in Taiwan from 1890 to 1905 must have taken a heavy toll of infants and young children, and possibly prevented many others from being born. Even so, the population of Taiwanese in 1905 was an extremely youthful one. Provided that the supply of new infants each year would continue undiminished, it needed only an energetic set of measures for the control of mortality in order to produce the growth that ensued.

Because in most census tables "nationality" was adopted to classify the population, the Taiwanese must be considered for most purposes as a single group. It was not, however, a completely homogeneous category. It contained the remnants of the aboriginal inhabitants, and people from many different parts of China. Those of Fukien origin were predominant; their ancestors had made up the largest portion of all the migrants to Taiwan. The majority who reported ancestry in Kwangtung were descendants of the earlier Hakka migrants. These two principal classes of Chinese had begun to mix by intermarriage, which explains the lesser gain in those of Fukien origin by 1935. But during the great natural increase of Taiwanese they both grew almost evenly.[9] 162

The aborigines had ceased to be an important part of the population by 1905. No longer able to contest the seizure of their lands and destruction of hunting grounds, they had retreated to the mountains of Taiwan where most succeeded in avoiding Chinese influence. It took many years before they were finally subdued by the Japanese. The statistical information about the aborigines is incomplete and cannot be compared from one date to another, and we must all but ignore them in discussing the rest of the Taiwanese. Paradoxically,

[9] Already by 1905 the boundaries between these two groups were less pronounced than they once had been. Separate tables of the population in that year according to principal language spoken showed a certain amount of mixture between the two. The remarkable fact is that they remained as distinct as they did.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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this small and obscure minority have been subjects for an immense amount of anthropological investigation during Japanese rule in Taiwan, while the peoples of Chinese origin (for whom accurate and precise information has been available these many years) have been almost entirely neglected. The increase of aborigines in census enumerations probably signifies nothing in the way of growth; it was not until the 1930's that they were brought fully within the scope of the census.

TABLE 3

ETHNIC COMPOSITION OF THE POPULATION OF TAIWAN

Censuses of 1905 and 1935

	1905			1935		
	Persons	*Per Cent of Total*	*Males per 100 Females*	*Persons*	*Per Cent of Total*	*Males per 100 Females*
Japanese	57,335	1.9	152	270,674	5.2	116
Korean*				1,479	0.0	60
Taiwanese						
Fukien Origin	2,492,784	82.0	112	3,939,966	75.6	103
Kwangtung Origin	397,195	13.1	108	735,334	14.1	103
Other Chinese Origin	506	0.0	218	265	0.0	109
Aborigines	82,795	2.7	96	207,900	4.0	101
"Others"	9,136	0.3	1,757	56,808	1.1	217

* Koreans included with "Others" in 1905.

Source: *Census of 1935, Statistical Tables*, Introduction, p. 32.

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The numerical position of the Japanese community in Taiwan gives no clue to its strong influence in the course of events after 1895. Its growth was not of the same sort as that of Taiwanese. Few if any Japanese regularly lived in the island in 1895.[10] By 1905 a settlement of 57,335 was recorded for the census, increasing to 270,584 in 1935 and 312,386 in 1940, or five times its earlier size.[11] Japanese in Taiwan did not add to their numbers through natural increase alone, especially since their community was a highly masculine one (see Table 3).[12] As a matter of fact, their registered natural increase from

[10] One foreign writer at the time went so far as to assert that prior to 1895 "there was not in the whole island a single Japanese resident." See Davidson, James W. (1903), p. 592.

[11] The military garrison was supposed to be excluded from all of these enumerations.

[12] Marriages with Taiwanese were prohibited until 1932. Offspring of such illicit mixed unions were rarely if ever counted later as Japanese, making the shortage of women a serious restriction on the per capita reproduction of Japanese.

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1906 to 1940 amounted to only 146,597, and if accurate could account for only 57 per cent of the total gain. The numbers of Japanese in Taiwan therefore increased very largely by migration. As we shall see, this was a special type of migration, based on opportunities that did not prevail for others in Taiwan or for Japanese at home, and brought special kinds of migrants. By recruiting new members relatively faster than the natural increase of the Taiwanese, they also raised their proportion in the total population (see Table 3).

The only other non-Taiwanese group, excluding an insignificant number of Koreans, were the Chinese from the mainland. They are shown in Table [illegible] "Aliens," mixed with a few other foreign nationalities. Numerically they were even smaller than the Japanese. Being the ones most likely to blur the ethnic boundaries, Chinese nationals were classified and marked out with great care from the rest of the population, as we have indicated. In census enumerations they would have been indistinguishable from Taiwanese, but for the necessity the Japanese felt to control their activities and forestall the development of close ties between Taiwanese and the mainland.[13]

The Taiwanese, however, were the group of major consequence for demographic study. Up to 1945 they comprised practically the whole of the population taken at large. The proportion of non-Taiwanese never reached 7 per cent. Distributed in the total, all these others were minor elements; only when special considerations are introduced do they become important. In the following pages, attention is given to the Taiwanese population almost exclusively, for their development under Japanese rule, which produced this natural increase, is the main problem to be investigated.

[13] [Taiwan.] Government of Formosa. *The Special Population Census of Formosa, 1905.* [English translation] p. 161.

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ECONOMIC ACTIVITIES AND SOCIAL CHANGE

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It is certain that Taiwan underwent some social changes under the Japanese. The colonial program itself was one, with consequences that were far-reaching. Moreover, the expansion of population and production could not have occurred without further adjustments in social institutions, for in the so-called natural environment men rarely succeed (under the most favorable conditions) in enlarging their works in exact scale. But to have left so much of the old society intact, these changes must have been distributed unevenly through the population; some portions must have been influenced more than others.

In ascertaining the facts of the case, the first step is to see how the working population became involved in new activities. The work of peasant farmers was least affected. Hence one should look for the largest results in alternative fields. The only way for specialization to have progressed very far, in view of what is known of the agricultural economy, was through the spread of employment other than farming.

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Fortunately, there is reliable information to show who performed the principal economic activities at certain times. Five census enumerations were conducted with great concern for determining the occupational composition of the population. In four of these, up to 1930, tables were published classifying the people in detail according to occupation and other characteristics, using categories that are nearly if not exactly comparable from year to year.[20] The proportions of all working persons found among various classes of occupations have been assembled from these sources in Table 11. In 1940, the same information was collected and tabulated, but not published with full explanation of procedures; only the one table reproduced here has become available outside of Taiwan.*

Even as early as 1905 not everyone in the island was restricted to agriculture as a means of support. Slightly more than two-thirds of all persons with occupation were so engaged, with a group half as large remaining to be accounted for in other pursuits. These data

[20] Where the classification departed from previous practice, continuity can be preserved in broad groups of occupations by re-allocating occupations in the smaller groupings. Where such re-grouping has been possible, it will be appropriately noted in the text. Later, in cross-tabulations with other characteristics, the broadest categories often must be used as they stand.

* While this book was in press, a collection of tables from the census of 1940 was published in Taiwan. See *Results of the Seventh Population Census of Taiwan, 1940* (Taipei, Provincial Government of Taiwan, Bureau of Accounting and Statistics, March 1953).

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TABLE 11

OCCUPATIONAL COMPOSITION, TOTAL POPULATION OF TAIWAN
Per Cents of All Occupied Persons Reported in Each Occupation,* 1905, 1930, and 1940. All Ethnic Groups, Both Sexes

Occupation†	*1905*	*1930*	*1940*
Agriculture‡	71.2	68.2	64.6
Fishing	2.2	1.8	5.4
Mining	0.5	1.4	1.9
Manufacturing	6.2	8.5	7.6
Commerce	6.7	12.0	10.0
Transportation	2.1	3.0	2.7
Gov't. and Prof.	2.3	4.9	5.1
Other	8.8	0.2	2.7
Total Occupied	100.0	100.0	100.0
Per Cent Occupied	45.8	38.8	37.6

* Persons classified as Domestic Servants have been removed.

† The data used in this table to represent the years 1930 and 1940 are not of precisely the same sort as those showing the occupational distribution of the population in other tables. The scheme for classifying occupations was greatly changed between the censuses of 1930 and 1940; as a result, the only basis for comparison between these two dates is the classification according to "Industry," of which the main categories remained the same. Hence the figures in Column 2 and Column 3 of this table represent the distribution of occupied persons by the "Industries" in which they worked, and not by their "Occupations."

‡ In all of these tables of employed persons, unless specified to the contrary, the category "Agriculture" includes "Forestry."

Sources: *Census of 1905, General Volume*, Table 45.
Census of 1930, Statistical Tables, Table 28.
Ch'en Cheng-hsiang, *Land Utilization in Taiwan* (1950), p. 62.

bear out the evidence of history during Manchu times, to the effect that a good many people had already been occupied in services connected with exporting and marketing primary produce.

Observations in 1905 cannot, of course, perfectly represent conditions ten years earlier—some Japanese were present in the statistics, and their influence in the economy was beginning to be felt. But these early census materials offer the closest approach to the pre-Japanese period that is possible. They depict a situation that must have been very similar to that of the final years of Chinese rule in Taiwan.

Table 11 summarizes the effects of major shifts in occupation throughout the entire working population, reaching to the eve of World War II. Though only an abbreviated picture, it belies any

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suggestion that the organization of livelihood in general had been profoundly altered under the Japanese. But any discussion of the problem very soon outruns crude data like these. Though Table 11 is comprehensive, covering all groups in the population, it lumps together people of too many kinds, and thereby hides many significant types of variation. The same material can be used more efficiently when refined by some of the controls at our disposal.

In the first place, not everyone in the population was equally well reported as to occupation. Asia being even more than the West a man's world, occupational data do not mean the same thing for males and females. Women are barred from many occupations and, whatever their duties, are not readily regarded in society as having regular employment. Whether a woman in Taiwan reported herself as being employed or not often depended on other attributes of her social position more than on the actual tasks performed—for example, whether she had yet been married, whether widowed or divorced, what work was followed by other members of her family, or simply local custom governing attitudes toward the work of women. For reasons that will be elaborated in the following chapter, we shall henceforth separate females from males in all occupational tables, under the assumption that the working activities of males more accurately reflect the composition of employment in the economy.

Omitting females from Table 12 has the effect of correcting the inflated appearance that they give to agriculture, especially in the earlier years. With this more meaningful series of observations, it is striking not merely that activities were so diversified in the beginning, but that they changed so little. In the 35 years that followed this first general census the structure of occupations among men remained about the same. By this more adequate criterion, agriculture lost almost no ground as a field of employment after 1905. Still nearly two-thirds of all working men were farmers as late as 1930, the terminal date for these figures. From Table 11 it is clear that the same thing must have been true in 1940.

And so, even including the Japanese, those who were caught up in the "industrialization" made up a minor part of all males in Taiwan. Demographically, this cardinal aspect of "economic development" was never anything but a small-scale operation.

Obviously, Table 11 and Table 12 cannot bring to light the full extent of trends accompanying events over this period. These figures indicate only shifts from one broad type of activity to another. They

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TABLE 12

OCCUPATIONAL COMPOSITION OF WORKING MALES IN TAIWAN TOTAL, ALL ETHNIC GROUPS

Per Cents of Occupied Males Reported in Each Occupation, 1905, 1920, and 1930*

Occupation	*1905*	*1920*	*1930*
Agriculture	67.7	64.3	63.1
Fishing	2.7	2.2	2.0
Mining	.6	1.5	1.3
Manufacturing	6.2	9.5	8.9
Commerce	7.8	8.3	10.9
Transportation	2.7	3.9	4.5
Gov't. & Prof.	2.8	4.1	5.1
Other	9.5	6.2	4.2
Total Occupied	100.0	100.0	100.0
Percent of Males Occupied	67.2	62.4	58.2

* Domestic servants have been excluded.
Source: Data of Table 16.

make no allowance for a more subtle kind of change—differences evolving within these groups of occupations.

These variations may take two forms. One consists of movement among the positions that comprise each broader group. This disturbance in the framework of positions can be taken as a result of innovations that actually altered the organization of work. It was noteworthy only in those lines where Japanese took a direct hand (see Table 13, below). Where it involved changes across the boundaries of the occupational groups tabulated in Table 12, the effects appear as occupational shifts from one census to the next. These one would expect to arise from such sources as the drawing of sugar workers from old into modern mills; from the wider shift toward factory work within the generic scope of "manufacturing"; the adjustment of commerce to the newer export industries; or the replacing of archaic transport or banking enterprises with wage-earning employees of Japanese concerns—though only a portion can be detected through the broad categories that we have used.

These differences also took a second form that cannot be conveyed in terms of the distribution of working activities. Many new skills were introduced within the existing arrangement or organization of work. The agricultural program was achieved primarily through this

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unobtrusive path, along with many of the spectacular improvements in productivity in other fields.[21] This form is the more elusive one to deal with, for it did not of itself produce shifts in employment. At the same time, the dimensions of economic achievement in Taiwan were too large to have been confined to the limits of occupational change shown in Table 12, unless they depended heavily on this second channel.

TABLE 13

RELATIVE GROWTH OF EMPLOYMENT IN DIFFERENT LINES
TOTAL POPULATION, ALL ETHNIC GROUPS

Occupation	*Ratios of Males Employed in 1930 to Those in 1905, by Occupation*
Agriculture	1.18
Fishing	.94
Mining	2.68
Manufacturing	2.91
Commerce	1.78
Gov't. & Prof.	2.28
Transportation, etc.	2.26
Other	.56
Total, All Occupations	1.27
Total Males	1.46

Sources: *Census of 1905, General Volume*, Table 45.
Census of 1930, Statistical Tables, Table 28.

Comparing the occupational structure at successive points of time is not the best measure of change. In some respects a better one is to indicate how the different lines of employment shared in the outstanding demographic trend, the growth of population. With 1905 as a base, the relative increase for each occupational stratum expresses more clearly the strides that were being made outside of agriculture (see Table 13).

These results would have been far different if none of the social changes under colonial rule had occurred—if, for example, the original situation had been fully stable, in the sense of being able to reproduce itself indefinitely, with no interference from outside or within save the single effect of population growth. (It is, of course,

[21] The two approaches were not independent. For example, introducing the use of fertilizers on a wide scale did not appreciably interfere with the management of peasant farms; but it did stimulate a lively business in supplying commercial fertilizer materials. The important point is that the two types of effect often fell in different places—in this case, the fertilizer trade went chiefly to Japanese importers.

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nothing more than a hypothetical exercise to assume this course of events, since population growth itself presupposes some conditions that had not been present before.) Under these assumptions, presumably each occupational stratum would have received an equal share of the increase, and the ratios of expansion for all would have been identical. The fact that they grew so unevenly illustrates that the actual events departed considerably from this imaginary sequence.

Several conditions would be required in order to maintain this hypothetical stability. People would need to follow well-accepted rules in adopting occupations, customs that would impede any widespread transfers by individuals from one kind of work to another. Chinese have for centuries come close to this result by passing many types of work down from fathers to sons. In Taiwan, keeping the various lines of work in balance would have implied a close adherence to such traditions by most of the population, as it did in the past. In effect, the unequal ratios of increase between occupations meant that many men who would have become farmers did not, but entered some alternative employment instead.[22]

Table 13 also indicates which occupations were most affected. Employment expanded rapidly in some of the fields where Japanese capital was prominent. These were also the fields that employed technical specialists and made the least use of the traditional fund of skills existing among the Taiwanese. Growth in these lines did not necessarily broaden employment opportunities for Taiwanese. There were in all 26.6 per cent more occupied males in Taiwan in 1930 than in 1905,[23] but 2.3 times as many in professional and administrative positions and in occupations connected with transportation, 81 per cent and 78 per cent more in manufacturing and commerce respectively. The farming segment in the population lagged slightly behind the total of employed men; but it was so large initially that it could relinquish large numbers of actual or potential members to other occupations before showing signs of the loss.[24]

[22] This aspect of occupational transfers will be taken up in some detail in the next chapter.

[23] This ratio is less than the increase in the general population, because changes in the age composition over this period raised the proportions of children and aged persons in the total. The proportions of men occupied in the prime working ages—15 to 64—remained practically the same.

[24] Losses from agriculture did not supply all of the additional employment in the expanding fields. The group "Other Occupations" was the source of almost the same portion of the inequalities in these figures. Being a catch-all, this category is always a weak spot in occupational statistics. In Taiwan it was made up chiefly of "day laborers,"

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These ratios measure how far each occupation increased irrespective of its size in relation to others at the start. Table 13 therefore expresses the force of events on each occupation, and not the force of occupational changes in the economy. This being the case, they should not all be given equal weight. The development of mining, by this criterion, exceeded any of the other fields. Though truly a creation of Japanese exploration and investment, the mining industry in Taiwan never reached any substantial size, and does not merit special attention as a field of employment.

Lacking detailed evidence for the period following 1930, some conjecture is needed. Official sources and more recent descriptive materials in English are unreliable, since they invariably exaggerate the extent of Japanese achievement. We have certain data, however, to suggest the dimensions of expansion in demographic terms. While Japanese planners tried to raise production in all lines, they concentrated on a few specific items that were especially important to Japan. They paid most attention to enlarging factory facilities for the processing of primary products. Hence, it should be possible to detect some of this flurry of new activity in the numbers of people working in factories.

Statistics of factory employment in Taiwan were begun in 1914, and published each year ending in 1941. They fell far short of being perfect indicators, being subject to many kinds of inaccuracy that a census enumeration can easily avoid.[25] Nevertheless as a series of observations they furnish very useful results. The rise of factory employment may be compared with growth in the total population in Fig. 10, where the numbers of persons employed in "factories" from year to year are plotted on a logarithmic scale. The growth in total population and in agricultural population is also shown, in hundreds of persons.

Factory employment rose steadily from the beginning to the end

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not otherwise classified. Its decline represented some actual movement of workers and new recruits into new jobs, and in part merely assigning of new names to the same work. This circumstance tends to magnify the difference between agriculture and other occupations, but does not otherwise distort the picture shown in Table 13.

[25] They apparently paralleled the corresponding figures for Japan in covering all factories with more than five workers. They were published without explanation of standards or procedures, which were less rigorous than those used in the censuses. It is not specified whether factory workers were full or part-time workers; they are not shown separately by ethnic affiliation; their numbers must have increased (independently of any change in actual employment) by the adding of new enterprises to the reporting system; and their actual duties are not given.

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463 162 of this period. There were only two departures from this growth—the prosperous days of 1920 and 1929 and their aftermaths. Overlooking these brief deviations from the trend, the average rate of growth from 1918 until 1935 was *no greater than that of the total population.* Only in 1936 did the force of economic expansion reach the population to the extent of diffusing factory work more widely through it.

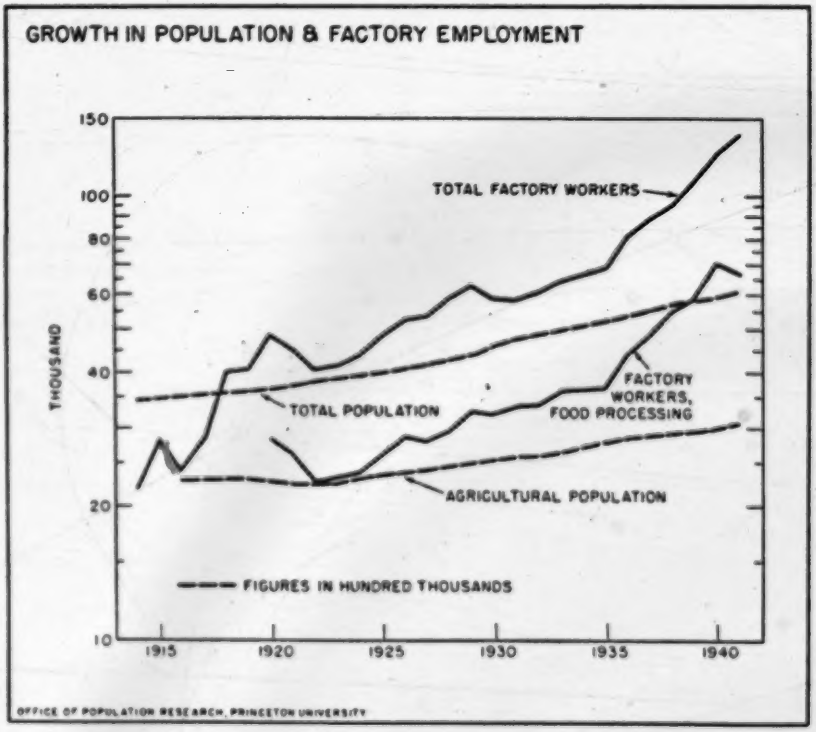

Fig. 10. Increase of Factory Employment and of Population in Taiwan, 1914-1941.

The largest part of the total (about 55 per cent) was made up of workers in sugar mills (see Fig. 10). The sugar industry kept its priority in the later economic planning. It serves as a reminder that the expansion of production continued to be dominated by this single industry, systematically nurtured and expanded as a source of alcohol for Japan.

The evidence for the spread of factory work can be supplemented

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by the annual registry of agricultural population (i.e., members of families dependent on agriculture).[26] The two major spurts in factory employment occurred during the first World War and just preceding the second. These were the only two periods of substantial slackening in gradual increments of farm population to the point of actual decline in the early 1920's. After 1940 this portion of the population resumed its usual rate of growth, suggesting that the opportunities for shifting the balance of employment had begun to disappear.

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Occupational Shifts: Taiwanese and Japanese

The data up to this point illustrate some of the redeployment of manpower in the economy. They give no basis for considering the social changes that were responsible, for they do not disclose who were the participants. To understand how manpower responds to altered environmental conditions, one must know some of the affiliations that have shaped its members' decisions. Moreover, "economic development" is of no great interest here for its own sake, but rather for the nature of its reception and use by peoples not yet under its full influence. Therefore the Taiwanese are the important group to observe, and in a different sense the Japanese in their role of aliens on the scene.

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Most of the apparent diversification in economic activities shown in Table 12 did not consist of movements in the Taiwanese population at all. It reflected primarily the special characteristics of Japanese in Taiwan. Though never more than one-twentieth of the total population, their nationals were so concentrated in certain special positions that they often outnumbered Taiwanese. Once this special group is removed (Table 14), Taiwanese appear to have contributed only a small amount to the total occupational shifts up to 1930. Separated from the presence of Japanese in these key posts, the part of Taiwanese in the modernized sectors of the economy was indeed a modest one.

[26] The total population and agricultural population have been reduced to one-hundredth of their size to fit into Fig. 10. They can consequently be used to show more than merely relative trends. Where either one intersects a trend line for factory employees, the ratio of the latter to the former is 1:100, or 1 per cent. (Of course, the scale being logarithmic, the same relation does not hold between points separated by larger intervals.) This circumstance helps to point out how small the total amount of work in factories was in relation to the entire population. At its peak, judged by these figures, it occupied less than 3 per cent of the population. It remained under 2 per cent for most of this period.

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TABLE 14

OCCUPATIONAL COMPOSITION OF TAIWANESE
Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	69.9	68.9	68.0
Fishing	2.8	2.2	2.1
Mining	0.5	1.4	1.3
Manufacturing	5.6	7.9	7.6
Commerce	7.4	7.6	10.2
Transportation, etc.	2.2	3.2	3.9
Gov't. & Prof.	1.8	2.2	2.7
Other	9.8	6.6	4.2
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	66.7	61.8	57.7

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.
Source: Data of Table 16.

As for the Japanese, most who were old enough to work had been born in the Home Islands. All of these had arrived in Taiwan as a result of some decision to move, and presumably had some purpose in being there. Theirs was a highly selective migration. It brought in the promoters and technicians, the industrialists and clerical personnel, the officials and minor functionaries to operate this first colonial venture. As in most colonies, they enjoyed facilities and perquisites of a superior type—better, if not to conditions generally prevailing in the home country, at least to the standards that they as individuals could have expected at home.[27]

Much of the migration was coordinated with economic policy.[28]

[27] On top of better vocational opportunities, Japanese commonly received special bonuses for service in Taiwan. Rates of pay for comparable wage labor in Taiwan were consistently higher for Japanese (see *Statistical Summary*, Tables 301-303).

[28] This had not always been the case. For most of the first decade after 1895, Japanese were permitted to go to Taiwan with little restriction. The freedom attracted an "undesirable" element to the island, whose business activities were so unbridled and uncoordinated as to call forth a stricter government policy to deal with incoming personnel. Japanese looked back from the later ordered development on this early chaotic period with horror. The unsatisfactory results of laissez-faire may also have contributed to the decision to centralize the most profitable opportunities in state hands. Through official monopolies in the major export lines, it was possible to regulate continuously the conduct of Japanese businessmen as well as to make substantial levies in these enterprises for revenue.

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Japanese drew lessons from the colonial experience of European powers in supplying the special skills and competencies that their program required. Government and private industry recruited their personnel from Japan, according to needs which they determined in advance. In one respect they learned the lessons of staffing their technical positions better than their teachers: they paid more attention to procuring lower levels of skills from their own ranks along with filling the top functions. Important implemental positions, like police, railroad technicians, and maintenance men, were heavily staffed with Japanese.

All Japanese nationals, regardless of whether specially recruited or not, were favored over Taiwanese when employed by Japanese concerns.[29] The best openings were in professional and official positions, as administrators in government and finance. Less coveted, but still bearing prestige over Taiwanese counterparts, were the jobs of technical and skilled workers in transportation and industry, and petty officials in the government bureaucracy. In every census Japanese appeared consistently in these occupations (see Table 15).

As a group, they were conspicuous in staying out of agriculture,

TABLE 15

OCCUPATIONAL COMPOSITION OF JAPANESE IN TAIWAN

Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	1.0	4.4	4.6
Fishing	0.6	2.0	2.1
Mining	5.0	1.9	0.5
Manufacturing	20.6	27.4	18.2
Commerce	16.5	15.0	14.6
Transportation, etc.	13.9	11.7	11.0
Gov't. & Prof.	41.3	37.2	45.6
Other	1.1	0.4	3.4
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	80.4	69.0	60.8

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.

Source: Data of Table 16.

[29] Notwithstanding, the colony had its failures. The census reports list a scattering of Japanese as day laborers, ricksha pullers, longshoremen, and in similar occupations.

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despite the fact that most were engaged in some capacity in helping the passage of farm products to Japan. Japan made almost no use of Taiwan as an outlet for its own growing agricultural population. From time to time the authorities announced projects for settling farmers from the Home Islands. These plans may have been designed to make a favorable impression among government circles in Japan itself; none ever proved feasible in Taiwan. Only a few thousand "colonists" of this type came to Taiwan and made a start in farming. In spite of manifold blessings of official support, subsidies, and special privileges, the settlements never managed to prosper. The families often left the countryside for better employment in towns and cities, and during the 1930's the whole idea was abandoned.[30]

Taiwan's economy was thus organized not only to export its narrow range of commodities to Japan, but to import its basic specialized skills in the persons of Japanese migrants. For the authorities this was an easy answer to the problem of staffing essential functions with people of appropriate training and experience. It avoided, among other things, the need to devise means for securing them from the human resources at hand in Taiwan. From the standpoint of Japan it was not an efficient solution. It drew upon types of manpower that the Japanese at home could not well afford to lose, and at the same time failed to make the best use of talents existing among the Taiwanese.[31] This anomaly in distribution of skills between the two areas is illustrated in Fig. 11. Japanese residents in Taiwan were a highly selected group even for Japan itself, where technical abilities were also scarce.

Possession of an external source of supply for specialized skills had

[30] Yanaihara, Tadao (1929), pp. 174-175, notes that it was already a failure before 1930.

[31] The founding of Taihoku Imperial University was an outstanding example of this policy. It was an institution of high caliber, well equipped and operated by men of repute in Japan. The University notably did *not* engage in training any considerable number of technical personnel among Taiwanese. It was organized to promote research rather than teaching, its classes were small, and Taiwanese students were not readily admitted. See Kerr, George H. (1952), p. 53 ff.

On a more practical plane, several technical schools were later established for limited training of Taiwanese. These, to use the common expression of educators in this country, were "vocational" rather than "professional" in that they taught manual instead of liberal skills. Enlargement of educational facilities came too late to provide the technical training needed for the war effort, though it did serve to advance literacy (in the Japanese language) among Taiwanese youth (see *Census of 1930, Statistical Tables*, Table 81). Once started, the spread of educational facilities made considerable headway. By 1943, 70 per cent of Taiwanese children of legal school age were attending some sort of school. In time this more liberal turn of policy might have paved the way for admitting Taiwanese into more responsible positions in the island's new industrial program.

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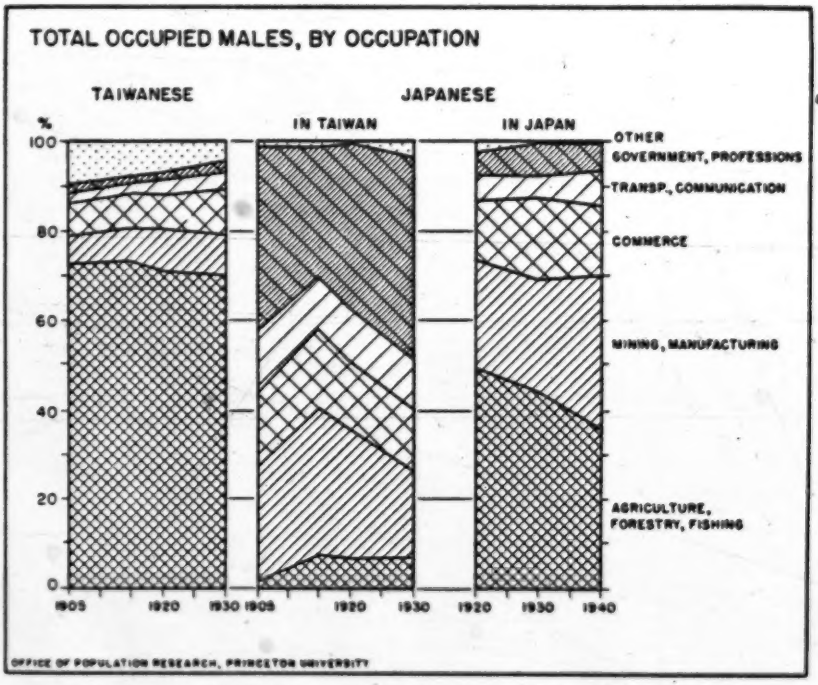

Fig. 11. Trends in Occupations in Taiwan and Japan, 1905-1940.

certain cogent advantages. The alien status of Japanese nationals was useful in keeping high standards of responsibility and performance among members of the public and private bureaucracies. This personnel could be interposed to administer Taiwanese affairs without becoming susceptible to local pressures. Though the Japanese had gained access to the rural society by manipulating its traditional institutions, they had to guard against subversion of their administration by influence from the Taiwanese side.

They did not succeed, as no large organization has, in making their officials completely disinterested and honest. There were scandals and reports of self-enrichment on the part of several of their highly-placed nationals. When it came to collusion with Taiwanese, however, they were all but incorruptible. The instances of improbity that achieved publicity in Taiwan were mostly between government and business interests. Irregularities of this sort did not threaten the objectives of the regime, for these parties had more at stake together than at issue in the economic expansion. Much of what was lost in

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563 this wasteful scheme of recruiting from abroad therefore must have been regained in the form of security against the conservative influence of tradition from within.

In one respect, however, this policy proved to be an unqualified loss to the Japanese. They established a caste-like status for their own nationals, hedged about with favoritism in employment, education, and business opportunity. This widened the gulf that the general severity of their rule had made between themselves and the Taiwanese. The enmity that they had earned among the population left them unprepared to bring it effectively into the last-minute industrial effort called forth by the war.[32]

We know from the Japanese themselves that the latter 1930's were for them years of exceptional new decisions and vigorous efforts at expansion. Official policy began to assert itself more strongly in matters of industrial planning and investment. The previous success in aiding farm production, which had given official circles some occasion for complacency, suddenly became inadequate. The government began at a strenuous pace to mobilize Taiwan's economy for serving the broader purposes of the Empire.

563 463 •162 On very short notice they sought to transform Taiwan into a quasi-industrial appendage of Japan. The attempts to encourage new aptitudes and incentives among Taiwanese are as interesting to contemplate, in terms of their implications for manpower, as were the attempts to prevent this very development. The two objectives are of course incompatible, but they were fostered side by side by the Japanese under the stress of preparing for war. Yet by 1940, at the peak of all this energy, the portion of the working population employed outside of agriculture was scarcely greater than at earlier census dates—still only one-third, and this figure includes an undetermined number of Japanese residents (see Table 11). Only a tiny fraction of the people in Taiwan had taken up factory employment, and many of these were also Japanese. We are left with the conclusion that Japanese colonial policies and indigenous tradition had combined to restrict social change within a small segment of the population. Japanese comprised most of this segment. New activities were spread thinly among Taiwanese, and left the remainder engaged in the same pursuits as their ancestors for countless generations.

[32] During the quickened prewar mobilization of their resources in Taiwan, despite the crowded condition of agriculture, Japanese businessmen actually complained of a *shortage* of labor in industry.

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TABLE 16

Taiwan: Total Males, and Males with Occupation Distributed by Occupation, at Census Dates, 1905 to 1930. Total All Groups, Taiwanese, Japanese, and Others*

Occupation	*1930*	*1920*	*1915*	*1905*
TOTAL MALES				
Occupied	1,369,877	1,180,842	1,155,777	1,081,667
Agr. and Forestry	864,884	761,047	776,181	731,479
Fishing (Excl. Salt)	27,709	25,858	26,911	29,465
Mining	18,345	17,240	9,741	6,843
Manufacturing	122,066	112,063	94,338	67,526
Commerce	148,847	97,726	93,171	83,815
Transportation	61,323	45,645	38,901	29,138
Gov't. and Prof.	69,644	48,018	34,737	30,566
Other	57,059	73,245	81,797	102,839
TAIWANESE MALES				
Occupied	1,265,185	1,100,297	1,088,199	1,045,667
Agr. and Forestry	860,613	757,917	772,437	731,102
Fishing (Excl. Salt)	25,916	24,261	26,150	29,260
Mining	16,970	15,629	8,319	5,203
Manufacturing	95,832	87,314	72,444	58,833
Commerce	129,372	83,600	79,823	77,060
Transportation	48,677	35,428	29,505	23,186
Gov't. and Prof.	34,260	23,811	19,177	18,923
Other	53,545	72,337	80,344	102,100
JAPANESE MALES				
Occupied	75,812	63,853	53,403	27,835
Agr. and Forestry	3,474	2,815	3,430	285
Fishing (Excl. Salt)	1,617	1,310	611	170
Mining	411	1,187	1,113	1,380
Manufacturing	13,796	17,530	16,482	5,739
Commerce	11,043	9,567	9,498	4,592
Transportation	8,360	7,466	6,273	3,871
Gov't. and Prof.	34,511	23,751	15,328	11,502
Other	2,600	227	668	296
OTHER MALES				
Occupied	28,880	16,629	14,169	8,165
Agr. and Forestry	797	315	312	86
Fishing (Excl. Salt)	176	280	150	35
Mining	964	424	309	260

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TABLE 16 (continued)

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Occupation	*1930*	*1920*	*1915*	*1905*
Manufacturing	12,438	7,209	5,410	2,954
Commerce	8,432	4,538	3,849	2,163
Transportation	4,286	2,727	3,122	2,081
Gov't. and Prof.	873	455	232	143
Other	914	681	785	443

* For comparability, Domestic servants are excluded at all dates; Ceramics workers are assigned to Manufacturing in 1905 and 1915; Salt workers are assigned to Manufacturing from Fishing in 1905, 1915, and 1920.

Sources: *Census of 1905, General Volume*, Table 25.
Census of 1915, Statistical Tables, Table 66.
Census of 1920, Descriptive Report, Appendix, Tables 51 and 52.
Census of 1930, Statistical Tables, Total Island, Tables 45 and 46.

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659 a matter of course within the households that finally make use of them—items which in industrial societies are ordinarily purchased 462 in the market. In these activities women are occupied often from childhood to old age, and sometimes more vigorously than men. It is this economy of the household, and not real inactivity, that utilizes the efforts of females in useful pursuits but provides against their holding extra-familial occupations.

We can be certain that a goodly portion of the work done in Taiwan was concealed in the activities of women. When such is the case, estimates of manpower based on occupational data are necessarily distorted, especially when these data have been compiled without overt care to this problem. Here the only feasible procedure in measuring manpower is to exclude altogether this important segment—womanpower—and to concentrate only on the "male labor force" as representing the dominant working patterns of the population.

659 Even within the male population, however, not all of its members are eligible or able for permanent employment. Close to half of all males in Taiwan—practically all those without occupations—were consistently of ages in which employment was not customary. Age always has a great deal to do with whether a person follows an occupation or not, and often with the sort of work he may perform. Tasks that are looked upon as useful are commonly ones that infants and the aged, for example, lack the capacity for doing. In between these extremes, some males of certain ages are excluded from the labor force when sufficient value is attached to other activities such as school attendance, acquisition of special skills, patriarchy, or infirmity—either due to priority of the competing activities themselves (regardless of who performs them) or due to the kinds of persons involved.

These various factors determining employment are so closely associated with age that at any one time almost all of the men of young and middle adulthood in a population have some occupation. The exclusions are concentrated in the years of childhood and old age. For this reason it is meaningful to speak of the "population of working ages," and often more information is available about them as a whole than about the labor force itself.

The Labor Force in Taiwan

162 Let us continue this line of inquiry by inspecting the portions of 464 the population that are employed in relation to sex and age. With

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some idea by this time of what the census standards of employment purported to be in Taiwan, one should then see how they are performed in practice. As a first step it is interesting to compare the occupied portion of the population with a corresponding group elsewhere. To judge from the proportions of men occupied by age in various countries—and under varied kinds of census administration—the extent of employment is approximately the same among the recorded populations of the world.[12]

In 1930, for example, these proportions in Taiwan closely resembled in most ages those for the United States, when a similar standard ("gainful occupation") was used in this country to assign status in the labor force. In Table 17, the figures for these two countries were nearly alike among all men above age 25, though they were markedly higher in Taiwan at younger ages. The parallel does not imply that "work" amounted to the same thing among men in both populations. Nor does their divergent use of young men suggest that Americans were necessarily more prone to idleness than Taiwanese. The chief significance of Table 17 comes rather from showing that work as defined for census purposes commands the energies of practically all of the young adult men in both populations,[13] despite the wide differences in economic organization between the two countries.

Granted the basic similarity, the principal difference in Table 17 deserves comment. In the first place men in Taiwan evidently begin to do regular work much earlier in life than in the Western world. Extension of general education into the years of later adolescence, as everyone is aware, is a recent and modern phenomenon and confined to a few countries, for it has just recently been felt to be indispensable to the skills that this new world requires. The luxury of being able to maintain these services is not readily appreciated without contrasting it with less fortunate areas. In Taiwan, as in most of Asia, practically everyone destined to have an occupation was already employed before age 20. Many, not shown here, even entered a permanent occupation, in which they remained, before reaching age 15.[14]

[12] Notestein, Frank W., et al. (1944), p. 118.

[13] It is interesting to note that the differences made by different criteria—i.e., more refined labor force measures—are slight, if not trivial, for our purposes. Cf. Durand, John D. (1948), Appendix A, pp. 197-200.

[14] The census data showing dependency of childhood up to 1930 do not tell the whole story. In the latter 1930's the Japanese made concessions toward the extension of schooling, until by 1940 Taiwan was perhaps better in this regard than most Asiatic countries

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TABLE 17

162 THE LABOR FORCE IN THE TOTAL POPULATION, TAIWAN AND THE UNITED STATES

462 Proportions of All Persons in Each Age Group Who Had an Occupation, Male and Female, 1930

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Age Groups	Taiwan (Taiwanese Only*) All Occupations	Taiwan (Taiwanese Only*) Occupied outside Agriculture	United States (All Groups) All Occupations
	Males		
15–19	85.4	24.4	47.8
20–24	96.4	33.6	89.9
25–34	97.5	35.9	97.3
35–44	97.3	33.9	97.6
45–54	93.8	29.0	96.5
55–64	81.8	21.6	90.2
65+	54.7	11.9	58.3
	Females		
15–19	38.0	5.6	26.6
20–24	32.0	4.6	42.4
25–34	31.2	5.2	27.8
35–44	31.2	5.7	22.6
45–54	23.3	4.4	20.4
55–64	13.4	3.0	16.1
65+	4.3	1.3	8.0

* Domestic servants among the Taiwanese, male and female, have been excluded.
Sources: U. S. Dept. of Commerce, Bureau of the Census, *15th Census of the United States, 1930, Population*, Volume V, *General Report on Occupations*. Chap. 4, Table 2.
Taiwan—Census of 1930, Prefectural Volumes, Table 15.

162 462 For reasons advanced above, data on occupations for women are less satisfactory. In Table 17, roughly one-third of the women in most ages up to 45 reported some occupation in 1930; but practically all stated that they were "farmers."[15] While superficially these figures appear to make a good showing against the data for the United States, the resemblance is misleading. In fact, on the basis of this information

besides Japan itself. But these events occurred too late to have much effect on the ages of starting work.

[15] Even for the few women who acknowledged occupations outside of agriculture, the specific kinds of work that occupied the bulk of this group are, suspiciously, the very ones that are usually conducted in households. For example, most of the "industrially employed" women were engaged in handicraft production (wood and bamboo articles, food processing, Panama hats) typically conducted on a household scale.

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one can really say next to nothing about the employment of Taiwanese women. Henceforth, except for special purposes, we shall confine ourselves to using occupational data for men only.

Occupational Composition of the Male Labor Force

With the outline of total employment among males of different ages now established, it is only a matter of course to follow up by showing the occupational composition of the same group. This amounts to a close view of the data in Chapter III, considered for the moment apart from the differences in age structure and differences in the extent of employment in various ages.

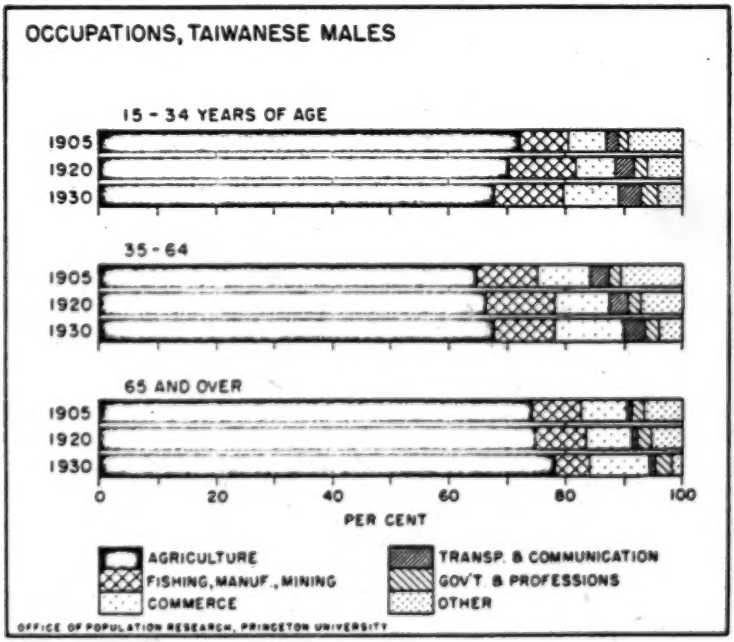

Fig. 12. Occupational Composition of Taiwanese, by Age, 1905-1930.

Even taken by separate age groups, Taiwanese men were performing the same types of work after 25 years of colonial rule as at the beginning. The situation can be efficiently summarized in Fig. 12, which bears out in some detail the evidence of the last chapter. As regards the whole of the male working population, the stability existing from one time to another was not exaggerated in Chapter III.

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962 Broad features like these were reduplicated in a degree that overshadows all accompanying trends—in this case down to the disposition of manpower at all working ages at successive dates. Fig. 12 shows clearly that this society had, up to 1930, put new generations to work along lines very similar to those of the old.

That these proportions should remain almost constant through time implies great stability of the agrarian social order. But this evidence is of a nature that best illustrates the more prominent relationships, and does not give much weight to the shifts that did occur. Farming activities again appear predominant—as in fact they were—to the point of eclipsing the trends in growth of other types of employment. These can be brought out only through the use of more responsive measures.

Moreover, even this degree of stability does not mean that individuals could not have moved from one occupation to another. A circulatory movement of individuals is fully consistent with the data of Fig. 12, provided that the avenues remained unchanging. It is not only possible but implied by the data themselves. In Fig. 12 the swelling and contracting of employment among different occupations from lower to higher age strata of course represent only the positions of people in these ages at one time; but a pattern that is repeated so closely in three successive censuses can hardly reflect just the events of a short period. Over such a long span of time, unless the various occupations lost their members through widely different rates of death and retirement, this pattern could come about only from losing them through movement to other occupations.

If part of this movement is a matter of such circulation, it demonstrates all the more strongly the part of traditional institutions in maintaining the society against the forces of change. Movement of this type will not be readily distinguished from shifts as a result of actual change, when the two are later analyzed apart from the composition of the labor force. It is therefore important to make clear at this point that whatever the extent of such shifts (as yet undisclosed by these techniques), there must always have been a prominent element of circulation involved.

Movement between Occupations

463 [illegible] data of Fig. 12 are poorly adapted to illustrate the nature of occupational movements in the population. Agricultural employment is preponderant, and masks the shifts that individuals actually

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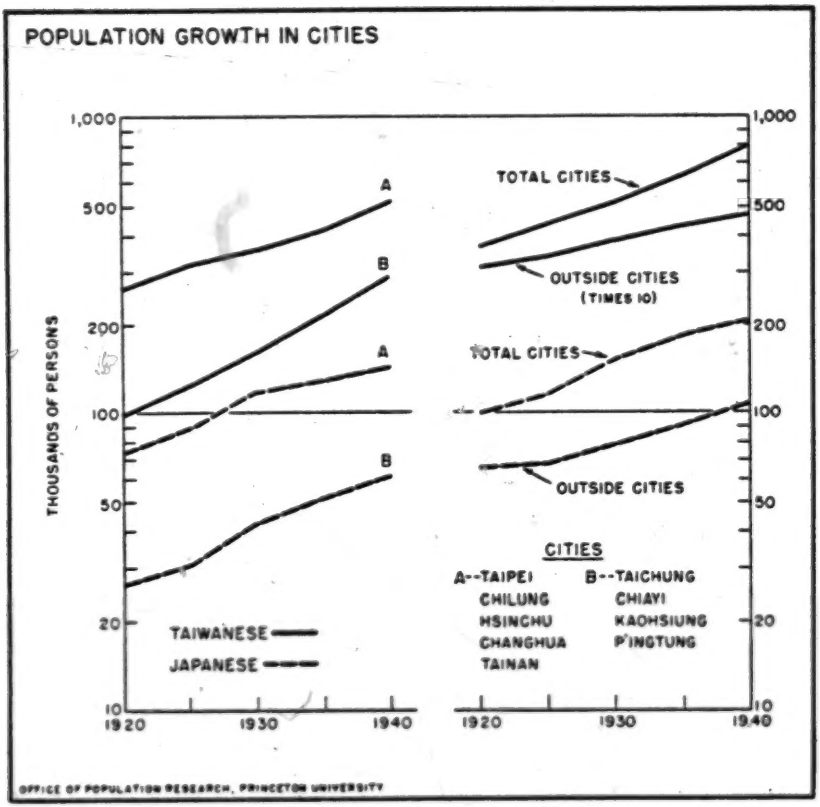

Fig. 19. Growth of Population in Major Cities of Taiwan, 1920-1940. Taiwanese and Japanese.

both places. They certainly esteemed urban more than rustic life; but work of a similar nature was also available to them outside the cities. For them the place of residence had less influence on their type of livelihood.

Ethnic Composition of Cities

The growth of cities depended on only a small part of all Taiwanese to supply the necessary migrants. It was not so with the Japanese. In a sense, the majority of them were migrants, having been born outside of Taiwan. More important, however, nearly two-thirds of all Japanese took up residence in cities and presumably stayed there (see Table 25). They found an urban setting most advanta-

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TABLE 25

PROPORTIONS OF TAIWAN'S POPULATION OF EACH ETHNIC GROUP Living Inside the Nine Major Cities in Taiwan, and in Taipei City

	1920		1940	
	Per Cent of Total Population	*Sex Ratios*	*Per Cent of Total Population*	*Sex Ratios*
Nine Cities Combined				
Taiwanese	10.5	106	14.7	104
Japanese	60.2	119	65.6	105
Other	68.4	345	59.8	175
Taipei City Alone				
Taiwanese	3.1	102	4.0	99
Japanese	27.5	117	29.3	100
Other	38.6	364	26.8	166

Source: *Census of 1930, Statistical Tables*, Table 1.

geous for conducting the new activities that they brought with them to Taiwan. Japanese proceeded to develop Taiwan's cities to provide an appropriate environment of modern banking facilities, centers of government administration, reservoirs of professional skills, and headquarters of private business.

Personal comforts, too, were not neglected. Running water, systems of sewage disposal, gas, electricity, and cinemas first appeared in these cities, and did not spread far beyond them. For those who could afford the time and expense, life in Taipei was graced by a nearby golf course and several fashionable vacation resorts. Japanese were energetic in constructing large public buildings conspicuously of Western architectural styles, thoroughfares and parks for their gratification and diversion. The section of Taichung City that was occupied by Japanese was referred to fondly as "little Kyoto."[13] Cities understandably were attractive places for Japanese to reside.

The Japanese affinity for urban life was exceeded only among the mainland Chinese that were found in Taiwan.[14] The explanation in their case is somewhat different. These people were admitted to the island as small merchants or as laborers in many of the modern enter-

[13] OPNAV, Civil Affairs Handbook (1944), *Taichu Province*, p. 149 ff.

[14] These made up almost all of the category "Other Nationalities" in Table 25 and in published census tables.

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prises that flourished wherever there were Japanese. In this respect they were distinct from Taiwanese, as their occupational composition indicates (see Table 16). Otherwise they merged in language, customs, and sympathies most closely with the urban population of Taiwanese.

The Chinese tended to remain in cities or commercial towns. The authorities held them under suspicion and close scrutiny, and often confined them by labor contract to menial positions. On the whole they did not become permanent residents of Taiwan; by their sex ratios they appear as a relatively transient group (though some of them intermarried with Taiwanese). Many were merely seasonal workers who remained in Taiwan for only part of the year.

The ethnic composition of the urban population was, like its increase, a product of migration from outside cities rather than growth from within. Different cities did not all exert the same attraction for people according to ethnic background. Variations between cities in ethnic composition (see Table 26) were scarcely a matter of *Taiwanese* being drawn less into some cities than into others, for they comprised the broad population base in every one. These differ-

TABLE 26

ETHNIC COMPOSITION OF MAJOR CITIES IN TAIWAN

Per Cent of Total Population in Each Ethnic Group
1920, 1930 and 1940

	Taiwanese			*Japanese*			*Others*		
*Cities**	*1920*	*1930*	*1940*	*1920*	*1930*	*1940*	*1920*	*1930*	*1940*
Taipei	66.4	64.1	67.9	27.8	29.4	28.1	5.8	6.6	4.1
Chilung	70.3	68.4	69.5	24.8	24.7	24.8	4.9	6.9	5.7
Hsinchu	90.7	87.4	86.3	8.3	11.3	12.7	1.1	1.2	1.0
Taichung	70.5	72.8	78.9	28.0	24.4	19.8	1.5	2.8	1.3
Changhua	97.0	93.6	94.0	2.3	4.5	5.1	.7	1.9	.9
Tainan	81.1	80.5	86.0	15.9	15.8	11.7	3.0	3.7	2.3
Chiayi	83.8	82.3	87.4	14.5	14.8	10.8	1.7	2.9	1.8
Kaohsiung	74.1	72.2	79.8	24.1	24.6	18.6	1.8	3.2	1.6
P'ingtung	84.2	82.8	85.8	14.2	13.8	12.3	1.6	3.4	1.9
Total	75.9	73.9	78.0	20.6	21.5	19.2	3.5	4.5	2.8

* Boundaries of all cities have been adjusted to those of 1935.

Sources: *1920 Population Register*, Table 2.
Census of 1930, Statistical Tables, Tables 1 and 2.
Census of 1935, Statistical Tables, Table 1.

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ences are to be explained primarily by the preferences of Japanese for certain cities as opposed to others.[15]

We may thus regard the proportion of Japanese in the population as the major element in the variation between cities. The ethnic composition of each city was remarkably stable from 1920 to 1940, though almost all doubled in population. Taipei, Chilung, Taichung, and Kaohsiung were all more than one-fifth Japanese at each census date. This is least surprising in the case of Taipei, for it was the administrative hub of the entire island, and a thriving center of foreign trade as well. Chilung because of its natural harbor became established early as the principal port of access to and from Japan. It kept this position even after the harbor no longer handled heavy traffic, by possessing some of the key industries intended to complement Japan's war effort. Taichung was in the fertile middle section of the island, and prospered enormously from the collecting, processing, and marketing of agricultural produce. Kaohsiung was the center from which the Japanese mounted their most extensive efforts at modernization: in the city itself and its immediate environs were concentrated the major processing industries of the island. Large sums were spent in improving its harbor to facilitate the passage of this new production out of the island.[16]

The remaining five Municipalities were more typically Chinese in atmosphere, with the alien features of Japanese presence kept more in the background. Whatever their types, these cities of Taiwan were the most important places where Japanese residents mingled with Taiwanese. Japanese nationals were scattered over the rest of the island in administrative and technical posts, public and private, but only in these cities did they associate regularly with Taiwanese. Only there did many Taiwanese who were non-farmers come into frequent contact with Japanese. Consequently, one would expect that the urban environment was the principal channel of modern influence.

Even in these cities there were certain obstacles in the way of such contact. The barrier was not entirely one of language, for Taiwanese soon acquired the rudiments of the Japanese tongue through school-

[15] Mainland Chinese varied almost as much as their share in the total population by city. But they were so few, and their stay in Taiwan so impermanent, that they cannot be considered a very important part of even the urban population.

[16] Kaohsiung City was also built up as a base for southward expansion in the Pacific Ocean, but did not have the opportunity to fulfill the promise of this investment.

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ing and practice. Japanese did many things to discourage free intercourse between the two groups, and raised exaggerated fears of animosity from the Taiwanese among their own kind.[17]

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The Japanese maintained high levels of living in Taiwan. Their wealth did not create the separation between the two groups, but helped to enlarge it. The opulence of Japanese was more than simply a matter of superior income (which the Taiwanese might have emulated); it was also founded on privilege.

For example, wherever possible they lived apart in special portions of each city. These sections were arranged so as to provide the facilities that they were in a position to command—Japanese shops, entertainment, and cleanliness, one of the greatest of all luxuries in Asia. Influential Japanese strove to put themselves in such surroundings, whereupon they allowed poorer sections to develop as Taiwanese residents could best afford. Owing to this combination of jealous care and neglect, the central districts of most cities were elaborately laid out with efficient street patterns and handsome landscapes—but with residential finery and modern public buildings concentrated in a few blocks and the indescribable slums that Asia often produces spread over the remainder.[18]

It is easy to see the nature of residential segregation in Taipei City, where it was carried farthest (see Fig. 20, based on 1935 census data). There were two large concentrations of Taiwanese, at the north and the southeast corners. These were the sites of the original pair of settlements that grew into the present city. The space in between had been gradually built up before 1895 as the seat of Manchu administration for the island. It was razed and replaced by the Japanese (following a destructive typhoon in 1912) to make way for new construction that they planned. The Japanese built this central area themselves, and therefore to their own design. It had a core in which almost none but Japanese eventually lived, surrounded by a

[17] One can say that these fears were exaggerated without implying that they were without foundation. By their repressive administration, Japanese invited widespread ill-will in the population. Much of this might have been allayed if they had not on the one hand advertised the benefits of their rule and, on the other, systematically cut off any opportunities for Taiwanese to compete with Japanese on equal footing. This ambivalent policy even undermined some of their foremost objectives by impeding their use of the local labor supply in the most effective ways for war production.

[18] The enforcement of health and sanitary regulations held the two groups in complete equality before the law. In looking back at the severity of these measures, Chinese have remembered them as instances of oppression by the Japanese. But by such means the authorities were able to avoid the unhealthful conditions usually associated with urban crowding in Asia. See Hsü Tze-wei (1946), p. 444 ff.

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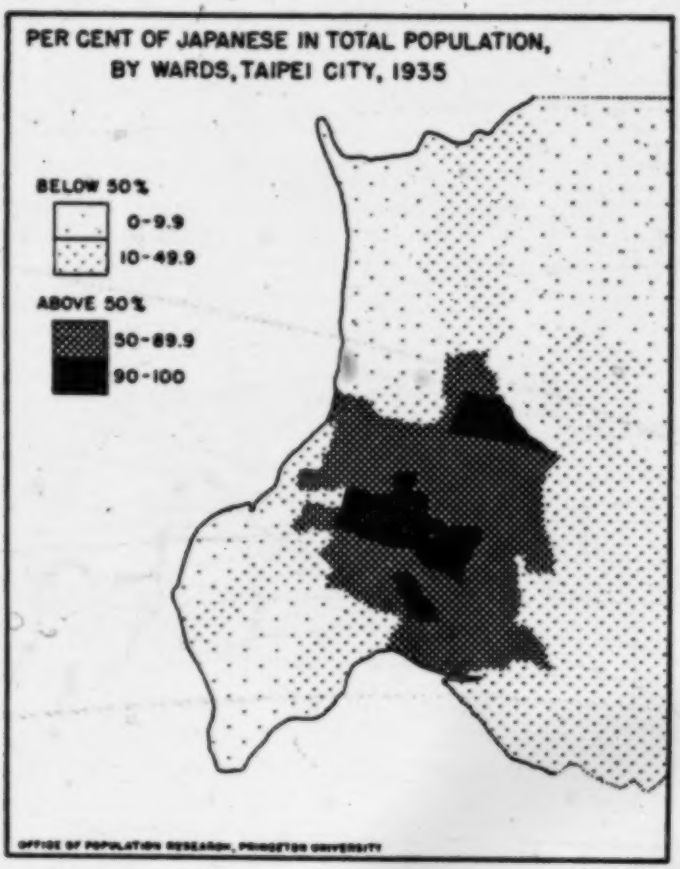

Fig. 20. Residential Segregation of Japanese in Taipei City.

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substantial area where Japanese residents predominated. Around the fringes of this modern district, other Japanese (reportedly those of lower income and social status[19]) lived more thinly mixed with Taiwanese. Almost one-half of the city's surface was taken up by poorer districts composed entirely of Taiwanese dwellings, shops, and open markets.

There is also another way to see how the separation of living quarters kept the two groups apart—in terms of persons rather than the space involved. Table 27 illustrates this aspect of segregation for

[19] OPNAV, Civil Affairs Handbook (1944), *Taihoku Province*, p. 133. A more comprehensive account of the growth of Taipei City, in relation to the surrounding region, is given in Ch'en Cheng-hsiang (1952).

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TABLE 27

RESIDENTIAL SEGREGATION IN TAIPEI CITY, 1925 AND 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese in Each "Ward"

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Per Cent Japanese in Each Ward	1925		1935	
	Number	Per Cent of Total	Number	Per Cent of Total
		Taiwanese		
0– 9.9	94,551	73.4	109,309	62.5
10.0– 49.9	25,681	19.9	48,815	27.9
50.0– 89.9	7,964	6.2	16,508	9.4
90.0–100.0	606	0.5	384	0.2
Total Taiwanese	128,802	100.0	175,016	100.0
		Japanese		
0– 9.9	3,069	5.8	3,640	4.5
10.0– 49.9	11,462	21.5	18,173	22.2
50.0– 89.9	24,926	46.7	48,775	59.7
90.0–100.0	13,884	26.0	11,116	13.6
Total Japanese	53,341	100.0	81,704	100.0

Sources: *Census of 1925, Statistical Tables*, Table 2.
Census of 1935, Statistical Tables, Table 2.

Taipei City in 1925 and 1935. Here both Taiwanese and Japanese have been grouped according to the degree of concentration of Japanese in each "ward." While the non-Japanese wards held the bulk of Taiwanese, there was some considerable area of overlap where the two groups were relatively mixed. From the evidence of this table, many Japanese who were arriving in Taiwan were forced to go to residential areas that contained some Taiwanese residents. This is shown by the relative gain of Japanese in the sections that were not purely Japanese, but where Japanese residents were in the majority. With its members increasing, the Japanese community eventually had to mix more widely with Taiwanese, since the areas that were already more than 90 per cent Japanese could not absorb any newcomers. They moved into wards with only the "better element" of Taiwanese, however, and managed to keep this mixture to a minimum. The proportion of Japanese living in predominantly Taiwanese wards actually fell off very slightly.

From the Taiwanese side, moving into mixed sections was carried somewhat further. Taiwanese were beginning to spread into wards that were not purely Taiwanese, sections closer to the center of the

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city which they had occupied together with Japanese. Because there were more of them, and because they had been more concentrated among their own kind before, the Taiwanese moving into these areas contributed more to the mixture than the Japanese. The data here do not signify that it was very extensive. But it [illegible]es some difference which of these two aspects of segregation we choose to use as a standard of comparison.

This trend in the segregation of urban residents was of some significance in the other cities during the years when they were growing rapidly, for the system was put under strain by the continuous arrival of new immigrants. On the whole, the Japanese were successful in housing most of their people in residential wards that were predominantly Japanese, and well-to-do Taiwanese were moderately successful in entering sections containing some Japanese, but not into the sections most prized by the Japanese.

For Japanese, no other city offered living quarters and facilities so exclusive as those of Taipei (see Table 28). In every one of these six other Municipalities they lived more widely intermixed with Taiwanese (though not necessarily at the same levels of comfort). Kao-

TABLE 28

RESIDENTIAL SEGREGATION IN SIX CITIES OF TAIWAN, 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese of Each Ward

Per Cent Japanese in Each Ward	*Chilung*	*Hsinchu*	*Taichung*	*Tainan*	*Chiayi*	*Kaohsiung*
			Taiwanese			
0– 9.9	56.6	68.5	52.7	50.0	58.2	56.1
10.0– 49.9	34.2	30.7	42.7	48.3	41.5	36.2
50.0– 89.9	8.9	0.7	4.5	1.7	0.3	7.7
90.0–100.0	0.3	0.1	0.1	0.0	0.0	0.0
Total Taiwanese	100.0	100.0	100.0	100.0	100.0	100.0
			Japanese			
0– 9.9	5.7	16.4	6.8	11.0	15.7	7.9
10.0– 49.9	35.6	54.3	53.0	69.9	80.0	38.6
50.0– 89.9	50.9	16.6	34.9	11.1	4.3	53.5
90.0–100.0	7.8	12.7	5.3	8.0	0.0	0.0
Total Japanese	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Census of 1935, Statistical Tables*, Table 2.

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hsiung and Chiayi had not a single ward with as high as 90 per cent of its population Japanese. For Taiwanese, on the other hand, Taipei consisted neither more nor less of mixed wards than the other cities. In all, at least nine-tenths of the Taiwanese population of every city stayed in districts in which less than a majority of the inhabitants were Japanese.

The Taiwanese in Cities

Of all Taiwanese, so few went to cities that one is prompted to ask whether there were not some special factors present restricting the size of this migration. The effects of such a selective process over many years should produce differences in the characteristics of persons living in cities and of those living outside.

Since few if any newcomers had an opportunity to take up agriculture in the cities, a prominent feature of cityward migration was a movement to new work. To the extent that it was, one would expect that the migrants were the types of persons who usually undertook new occupations in Taiwan—for example, men rather than women, primarily in the ages of young adulthood. If the migrant population had been limited to these categories, cities with large proportions of migrants in their populations must have had disproportionate numbers of young men as compared with the rest of the island. Such a tendency has characterized rapid urbanization elsewhere.

In addition, cities frequently offer opportunities for employment that are considered superior to those found in the countryside. This is especially true of many agrarian societies, where rural poverty sometimes reaches extremes that make the meanest of urban jobs seem attractive. Where such conditions exist, movement to cities very often serves to drain off large numbers of men in young working ages who have lost or overcome their attachment to farming.

In 1935, these effects of age and sex selection were hardly perceptible in Taiwan's urban population taken as a whole. The age composition of all their males combined was nearly the same as the rural population (Table 29). Surprisingly, urban females likewise had almost the same age structure as those outside of cities. Hence, there could have been no sweeping dislocation of persons of different age and sex groups as a result of urbanization in Taiwan.

There are special circumstances in which it is not hard to imagine some movement of single individuals in an agrarian society; this has

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TABLE 29

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AGE AND SEX COMPOSITION OF TAIWANESE, INSIDE AND OUTSIDE OF NINE MAJOR CITIES, 1925 AND 1935

Per Cent of Total Population in Selected Age Intervals, Male and Female

Age	Males		Females		Males per 100 Females	
	Inside	*Outside*	*Inside*	*Outside*	*Inside*	*Outside*
			1925			
0–14	36.5	40.2	37.5	40.0	101	105
15–39	44.1	40.6	39.5	37.6	116	113
40–64	17.8	17.4	19.5	18.8	95	96
65+	1.6	1.8	3.5	3.6	47	52
Total	100.0	100.0	100.0	100.0	104	104
			1935			
0–14	41.0	43.2	41.1	42.9	103	103
15–39	41.6	38.5	39.0	37.0	110	107
40–64	15.9	16.5	16.8	16.8	97	101
65+	1.5	1.8	3.1	3.3	50	57
Total	100.0	100.0	100.0	100.0	103	103

Sources: *Census of 1925, Statistical Tables*, Table 3.
Census of 1935, Statistical Tables, Table 7.

been known to occur in the form of contractual servitude by children, of young men (though not frequently young women) shifting to non-agricultural employment, and of movement by old persons to reside with emigrant kin. But it is inconceivable that these deviant events might have occurred jointly in chance coordination so as to reproduce the rural age structure so closely in cities. Such a migration as this could have been possible only if many people travelled to cities in family units and not as isolated individuals. A great many migrants therefore must have moved merely because they were members of migrant kinship groups.[30]

This situation did not hold with equal force in all cities. Variations in composition among separate cities were as great as the distinction between city and non-city. Assuming the age group 15 to 39 among males to be the most responsive to new opportunities for

[30] Estimates for the age composition of the *migrants* lend weight to this supposition. Survivors to 1935 of people who were already in cities in 1925 can be estimated at every age by subtracting the deaths that one would expect of them; the amount by which these survivors fail to account for the people actually found in cities in 1935 gives a fair idea of the persons gained through migration at each age. Though migrants measured in this way were somewhat concentrated in young adult ages, there were also impressive numbers in younger and older ages.

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TABLE 30

DIFFERENCES IN AGE AND SEX COMPOSITION OF TAIWANESE BY CITY, 1935

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Cities	*Per Cent 15-39 of all Taiwanese Males*	*Sex Ratios 15-39*	*Sex Ratios all Ages*	*Growth of City: Ratio of Taiwanese Population 1940/1920*
Taipei	41.8	106	98	2.05
Chilung	42.4	112	103	2.07
Hsinchu	38.2	101	100	1.76
Taichung	43.2	115	107	2.92
Changhua	39.0	102	100	1.67
Tainan	40.6	110	105	1.97
Chiayi	42.2	112	105	2.58
Kaohsiung	42.8	120	110	3.56
P'ingtung	43.5	118	108	2.55
Total, All Cities	41.6	110	103	2.22

Source: *Census of 1935, Statistical Tables*, Table 7.

employment, we can use this group to summarize the differences (see Table 30). The cities of rapid growth—i.e., with relatively large proportions of immigrants—were the cities with more young men. Cities that grew faster did so in part by attracting more men in young working ages, and thus separated many of them from normal family life. Significantly, the age composition of females was nearly the same in *all* the individual cities, and thus was similar in each to rural communities.

The non-rural character of Municipalities in Taiwan, therefore, did not of itself make for non-rural age structure, but the same factors that were behind the more rapid growth of some cities tended to draw selectively from the population of different ages outside cities. One should always bear in mind that the greatest of the differences in Table 30 are moderate when considered alongside societies in which urban growth has been associated with sweeping modernization.

Something in addition can be learned about the particular characteristics of separate cities from the nature of economic activities in each. One single census table of persons with occupations was published in 1930 for individual cities, with the males of all ethnic groups lumped together. Cities were farthest removed of any civil

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TABLE 31

INTER-CITY DIFFERENCES IN OCCUPATIONAL COMPOSITION

Per Cent of Occupied Males in Selected Types of Occupation in Each of Seven Municipalities, 1930

All Nationality Groups

Cities	*Manufacturing*	*Commerce*	*Transportation*	*Government*	*Agriculture*	*Other Occupations*
Taipei	26	30	10	18	6	10
Chilung	16	21	23	9	4	27
Hsinchu	21	25	10	13	20	11
Taichung	23	28	10	19	14	6
Tainan	28	28	13	18	5	8
Chiayi	22	29	10	12	20	7
Kaohsiung	24	19	20	11	13	13
Total Seven Cities	24	27	13	15	9	12

Source: *Census of 1930, Statistical Tables*, Table 40.

divisions from rural conditions. Nevertheless, large blocs of Taiwan's urban population still supported themselves by farming. Only three Municipalities in 1930 had as few as one-twentieth of their working males engaged in agriculture. It is small wonder that these cities had failed to show symptoms of advanced urbanism in other respects.

Other types of employment in these cities also had certain special features. Government administration in Taipei, transshipping of seaport cargoes in Chilung and Kaohsiung, and sugar processing in Taichung and Tainan were reflected as important activities in their share of all male employment. These figures, pertaining to 1930, reveal nothing of the intensified industrial activity in these cities in the succeeding decade. They are the only available indication in demographic terms of the peculiarities of individual cities. In any event, we are less interested in these peculiar elements than in the relations between types of employment and urban settlement among Taiwanese. Since Table 31 does not show Taiwanese separately, it is affected by differences in the proportions of Japanese and in their work among the various cities. Hence the information, while illuminating, is less useful than one might wish.

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More information is available for the population of all seven cities combined. By means of some estimation, we can find the occupational

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TABLE 32

OCCUPATIONAL COMPOSITION IN CITIES OF TAIWAN BY ETHNIC GROUP, 1930*

Distribution of Occupied Males by Occupation and Nationality

	Taiwanese	*Japanese*	*Other Nationalities*
A. Per Cents by Occupation			
Agriculture	13.1	0.9	0.2
Fishing	2.1	2.2	0.5
Mining	2.1	0.2	1.1
Manufacturing	22.8	18.6	43.8
Commerce	29.1	19.6	27.8
Transportation	13.7	10.2	19.1
Govt. & Prof.	6.4	44.4	3.3
Other	10.7	3.9	4.2
Total Occupied	100.0	100.0	100.0
Per Cent Occupied of All Males	54.4	58.0	76.8
B. Per Cents by Ethnic Group			
Agriculture	97.5	2.4	0.1
Fishing	70.8	27.2	2.0
Mining	89.9	3.8	6.3
Manufacturing	65.0	19.0	16.0
Commerce	73.2	17.8	9.0
Transportation	69.1	18.5	12.4
Govt. & Prof.	28.2	70.0	1.8
Other	84.7	11.1	4.2
Total Occupied	67.4	24.0	8.6

* Includes the seven cities of Municipal rank in 1930.
Source: Estimated from *Census of 1930, Statistical Tables*, Table 39.

composition of each ethnic group separately (Table 32).[21] Taking account only of males with occupation, these data represent the urban Taiwanese at less of a disadvantage next to the Japanese than was true over the entire island. Of course, one must remember that Taiwanese (and Mainland Chinese) in the same type of work with Jap-

[21] The necessity to "estimate" arises because the occupational data *by ethnic groups* were given in "Occupation" units (i.e., persons with a principal occupation plus persons with a secondary occupation), and counted some persons twice. In the tables shown here, the ethnic composition of "Occupations" has been applied to the total of persons (males) in each occupation.

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anese usually had subordinate positions. Nevertheless, it seems conclusive that by moving into cities Taiwanese were able to narrow the gap that separated their forms of livelihood from those of the Japanese.

The ethnic composition of occupied persons (appended to Table 32) indicates how the differences in occupational structure among these ethnic groups were weighted in the urban population. Taiwanese, of course, predominated in all lines except in government service and professional activities. Keeping these coveted positions in their own hands was one of the ways in which Japanese were able to live side by side with the rest of the population and avoid the pressure of competition.

Chinese nationals ("Other Nationalities" in Table 32) in these cities also appeared in a few types of work far more than in the working population as a whole. Their specialties were of an opposite kind: many worked as laborers in small manufacturing enterprises and as longshoremen, accounting for their large share of all "Manufacturing" and "Transportation" workers.

TABLE 33

OCCUPATIONAL DISTRIBUTION OF TAIWANESE MALES REPORTING AN OCCUPATION, INSIDE AND OUTSIDE MAJOR CITIES, 1905, 1920, 1930

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	1905		1920		1930	
	*Inside**	*Outside*	*Inside†*	*Outside*	*Inside‡*	*Outside*
Agriculture	2.3	72.1	13.2	71.9	13.1	74.0
Fishing	.6	2.9	1.2	2.3	2.1	2.0
Mining	28.4	5.4	1.1	1.4	2.1	1.3
Manufacturing			27.1	6.9	22.8	5.9
Commerce	37.7	6.4	28.9	6.4	29.1	8.2
Transportation	10.4	1.9	11.2	2.8	13.7	2.8
Govt. & Prof.	5.6	1.7	6.7	1.9	6.4	2.3
Other	15.0	9.6	10.6	6.4	10.7	3.5
Total Occup.	100.0	100.0	100.0	100.0	100.0	100.0

* Comprises the cities of Taipei, Taichung, and Tainan. The boundaries for Taipei in this tabulation were smaller than the city as subsequently organized.

† Cities of Taipei, Taichung, and Tainan, with the same boundaries used at later census dates.

‡ Cities of Taipei, Chilung, [illegible], Taichung, Tainan, Chiayi, Kaohsiung.

Sources: *Census of 1905, Detailed Tables, Prefectural Volume*, Table 17.
Census of 1920, Prefectural Volume, Table 16.
Census of 1930, Statistical Tables, Table 39.

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MIGRATION AND THE GROWTH OF CITIES

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Finally, the role of migration in social change can be clear only if we can make comparisons at different points of time. Occupational profiles of city and non-city working males are available in not quite the same form for three separate dates. The census reports of 1905 and 1920 each included a table of occupied persons in three cities (Taipei, Taichung and Tainan). Placed next to the corresponding figures in 1930 (Table 33), these early data are reasonably similar in all three years.

Not all of the same cities are included, and so the occupational distributions for cities alone do not stand close comparison with each other. One's attention is therefore drawn to the structure of occupations *outside* the cities involved. In Table 33, it appears that by removing the small group of urban working persons from the total population of Taiwanese, one in effect also removes most of the diversification in employment over time, and consequently a large share of the social changes that occurred in Taiwan. In other words, the new activities that resulted from Japanese occupation remained sealed up in the few urban centers. The Taiwanese population outside of these cities remained essentially as agrarian as at the beginning of Japanese rule.[22]

Even if as centers of innovation we did not consider Taiwan's cities important, a study of migration would have made them so. Permanent migration was rare among Taiwanese; but of those who migrated, a large proportion went to a few cities. Even though these cities were not growing fast enough to enlarge their share of all Taiwanese very substantially, they did the greatest part in redistributing the population.

The real significance of these shifts of residence arose from the fact that they were also shifts in activities. For the most part withdrawal from agriculture meant exit from rural communities. People departed every year to large towns or cities that had some provision for more diverse kinds of livelihood. It was primarily in these centers that the Japanese fostered modern enterprises and developed a need for labor. Migration was one of the forms of the response to

[22] Obviously, since more cities are represented in the 1930 figures, the figures themselves are biased and there is some chance of bias in the conclusion that we have drawn. By taking occupied men of all ethnic groups, the same comparison can be made based on the *same three cities* at all dates. This is possible because the table for all ethnic groups was published for each city separately (cf. Table 31, above). The result is the same, in that the data indicate no change in occupational structure outside even these three cities.

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166 these new opportunities for employment. It steadily brought more
162 Taiwanese into contact with the modern side of the Japanese economic program.

Yet even though movement to the cities did widen the horizons of
166 a few Taiwanese, it was surrounded by circumstances that tended to minimize this effect. The familial character of the migration made
178 the break between country and city less sharp than it might have been. Removal to a city did not expose migrants very readily to whatever new influences were there. These were all dominated by Japanese, who kept most of their innovations to themselves and erected barriers against free intercourse with the rest of the population.

Urban growth therefore did not promote general social change among the Taiwanese. It removed into cities those who were to feel the strongest effects of contact with these alien elements. Migration thus helped to absorb the modern aspects of economic development so that they did not intrude into the affairs of rural communities.

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Chinese cultural norms set no limit to the number of family relatives that it is desirable to maintain in a single household, but attach great merit to holding together many branches of a family in one unit. Though Chinese are thus inclined to feel that the bigger the family the better—there seem to be no general class or status differences in the ideal size that they should strive for—so many degrees of relationship are eligible for inclusion that other considerations usually enter and help to settle the question. In practice, the real limitations tend to be how strongly a particular family feels it can enhance its prestige through adherence to tradition, and how well it can afford financially to do so.

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TABLE 43

SIZE OF HOUSEHOLDS IN TAIWAN IN SUCCESSIVE CENSUSES

Average Persons per Household, All Types of Household, All Ethnic Groups, 1905 to 1940

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1905	5.2
1915	5.3
1920	5.3
1925	5.5
1930	5.7
1935	5.8
1940	6.0

Sources: *1935 Census, Statistical Tables*, Descriptive Section, p. 30.
1940 Census, Summary Returns, published in the Gazette of the Government-General of Taiwan, April 22, 1941.

Despite the considerable emphasis on their size and cohesion, these family units actually are not exceptionally large. From the total numbers of households and of people, published with the regular report of each census of Taiwan, we can first establish a few main features of the case to guide the more detailed discussion that is to follow. Expressed as the average number of persons to a household, these figures show that the size of households (for everyone, mixing together all nationality groups and all types of household arrangements) started out in 1905 at 5.2, and rose steadily during the census period (see Table 43). The increase was not especially rapid, but it was unbroken and marked by acceleration with the passage of time. Correlated with what is already known about the growth of population in Taiwan, this steady movement implies that

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592 households were not keeping up with the increase of people, and
162 that family groups were therefore undergoing some change in their composition. Though some aspects of this change can be shown more satisfactorily below, the process is most easily seen in these figures, since they cover the complete span of the census administration.

162 As usual, the published results of these census materials did not
128 do justice to the care that went into their collection. Household tables were not always shown in useful form, and the figures of Table 43 do not convey very much even about the size of families in Taiwan. Obviously in order to draw reliable conclusions about families of Taiwanese it must be possible to separate them as a group in the statistics, and to make sure that the statistics employed are a fair representation of family groups. For exactly this purpose, the Japanese treated one kind of household as standard, the so-called "ordinary" household, to cover the "normal" types of living arrangements. People in certain special categories were excluded; residents of these non-family households, or "quasi-households," will be omitted from most of the tables that follow.[4]

162 Information about quasi-households is sketchy and hard to find.
592 The size of these establishments is unknown for separate nationality
563 groups, perhaps through a deliberate effort to conceal the military forces (though they would nearly all have been classified as Japanese anyway, according to the status of the person in charge). The figures can be pieced together for the entire population, and appear in Tables 44 and 45. Quasi-households were a very small part of the total, but accounted for a much larger portion of non-Taiwanese. Only one person in a hundred of all nationality groups lived in such circumstances; 6.6 per cent of Japanese and 20 per cent of Mainland Chinese lived in quasi-households in 1930, but relatively few of the Taiwanese were found outside of ordinary households. Since Taiwanese are the main source of interest in the problem, the few living in quasi-households are unimportant, and for the remainder of this chapter the term "household" will be used to refer to "ordinary" households only.

On the average, ordinary households of Taiwanese contained be-

[4] They comprise people counted in hospitals, prisons, schools, military barracks, police and other special dormitories, and hotels. Although they must be removed before the household data can be said to represent patterns of familial life, the line drawn between the two types of household is not entirely rigorous. Many of these people, especially the ones in hotels and schools, were only temporarily absent from their homes, and their family affiliations may have continued undiminished.

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TABLE 44

PER CENT OF TAIWAN'S POPULATION LIVING IN "ORDINARY" HOUSEHOLDS, 1905-1930

Both Sexes

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Year	Persons Living in Ordinary Households	Persons Living in "Quasi-Households"	Per Cent Living in Ordinary Households
	All Nationality Groups		
1905	3,021,260	18,491	99.4
1915	3,461,282	18,640	99.5
1920	3,624,403	30,905	99.2
1930	4,546,970	45,567	99.0
	Taiwanese		
1920	3,454,956	11,551	99.7
1930	4,293,234	20,447	99.5
	Japanese		
1920	151,862	12,404	92.4
1930	213,314	14,967	93.4
	Other Nationalities*		
1920	17,585	6,950	71.7
1930	40,422	10,153	79.9

* "Other nationalities" consists almost entirely of Mainland Chinese.

Sources: *Census of 1905, General Volume of Statistical Tables*, Table 114.
Census of 1915, Statistical Tables, Table 109 and 116.
Census of 1920, Descriptive Report with Appendix, Appendix Table 149, 164, 165 and 169.
Census of 1930, Statistical Tables, Total Island, Table 5.

tween five and six persons during that portion of the census period when they can be observed separately. Because Taiwanese made up almost the entire population and because most of them lived in family groups, the initial approximation of Table 43 was fairly close to the actual size of their households. Differences begin to emerge when other nationality groups are listed by themselves; the households of both Japanese and Mainland Chinese on the average were smaller by a considerable margin than those of the Taiwanese, and remained that way (see Table 45).

Not only did Taiwanese follow the ideal of large households more closely than the other population groups in Taiwan, but they displayed a different pattern in approaching it. Distributed according to the number of persons in each, only the households of Taiwanese

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TABLE 45

SIZE OF HOUSEHOLDS, BY TYPE AND NATIONALITY OF HEAD

Average Persons Per Household, "Ordinary" Households and "Quasi-Households"

All Nationality Groups, Taiwanese, Japanese and Other Nationalities 1905 to 1930

Year	*Ordinary Households*	*Quasi-Households*
	All Nationality Groups	
1905	5.19	6.2
1915	5.31	12.4
1920	5.30	20.6
1930	5.64	17.1
	Taiwanese	
1920	5.45	
1930	5.82	
	Japanese	
1920	3.37	
1930	3.74	
	Other Nationalities*	
1920	3.79	
1930	3.84	

* "Other nationalities" consists almost entirely of Mainland Chinese.

Source: From data of preceding table. Certain army and navy barracks were included as quasi-households in the Census of 1920 for the first time, accounting for much of the increase over 1915 and 1905 in the average size of quasi-households shown above.

were in a pattern that reveals a predominance of families with two or more generations, families of the sort that must be required to maintain a high rate of natural increase. Their households were found most commonly with four and five members, more rarely of smaller sizes. The process by which the average size of Taiwanese households rose from 1905 on was not a completely general shift toward larger units, but rather one of forming relatively fewer small households (with the exception of people living alone) and raising the proportion of very large ones (see Fig. 30). The sizes most often achieved remained very nearly the same as before, and the distribution simply became more skewed. (Expressed in terms of the numbers of persons involved, the effect of this change would, of course,

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592 be multiplied in households of larger size, since they were larger by virtue of containing many people.)

563 A great many Japanese and Chinese nationals staying in Taiwan •162 obviously were separated from close family ties—for example, those who lived alone, and perhaps some of those in households of two or three persons, not to mention the ones who stayed in quasi-households. Few in either group maintained households in Taiwan as large as those that were usual among their countrymen at home. The Japanese gradually began to establish families in Taiwan, and to take up solitary living somewhat less frequently than at the beginning of their rule. In contrast, an extremely high proportion (29 per cent) of Chinese from the mainland by 1930 were still living alone in households of single persons, a result of the transient and impermanent status that they occupied in the island. It is interesting that in both of these minority groups, households of more than five persons, though not very numerous, had a distribution less unlike those of the Taiwanese. Apparently among the more settled and permanent non-Taiwanese in the population the ideals of the desirable family size were similar to those of the Taiwanese; but this attitude seems to have been more widely shared by Taiwanese, who as a group came closer to realizing it.

Composition of Taiwanese Households

592 It is not size in itself that distinguishes the Chinese family system from its counterparts in other countries. Nor does it mean a great deal to know about the size of family or household groups—even when we know their distribution from large to small—unless something can be discovered about their composition. Kinship would not be such a preoccupation in the minds of Chinese if it did not include other things that we have accustomed ourselves to regard as "non-familial." All that the factor of size indicates is the extent to which diverse familial roles can be encompassed within household units. In ascertaining these more diverse activities that were carried on in Taiwanese households, it will be helpful to find out some of the various kinds of members that were present.

The census schedules made inquiry into the family relationship of each household member, reckoned with reference to the head of the household. When the person was not a relative of the head, some further statement was still required—whether hired help, domestic servant, or simply a "lodger" in the house. The trouble is that the

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fortune. In contrast to the West, Chinese culture entertains no alternatives that offer serious competition to the "normal" family roles. 581

TABLE 59

PROPORTIONS OF TAIWANESE EVER-MARRIED, BY AGE AND SEX, 1905 TO 1935 162

Males and Females

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*
			Males			
10–14	0.1	0.0	0.2	0.1	0.1	0.1
15–19	10.2	5.7	6.3	5.3	7.3	5.7
20–24	45.7	40.1	42.8	44.7	51.6	49.8
25–29	77.4	72.9	76.5	78.2	82.9	83.1
30–34	89.4	88.1	88.6	89.7	91.3	91.9
35 and over	95.3	95.4	95.5	95.8	96.2	96.0
			Females			
10–14	2.3	0.7	0.6	0.4	0.5	0.4
15–19	47.3	34.7	32.8	29.4	32.6	28.1
20–24	91.6	87.4	86.6	84.4	86.3	83.0
25–29	98.2	96.6	96.9	96.2	96.1	95.9
30–34	99.2	98.5	98.5	98.3	98.0	97.7
35 and over	99.7	99.5	99.4	99.3	99.3	99.0

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census. The "Informally Married," who in 1920 were shown as a subtotal of "Unmarried," have been reinstated here as "Married," in conformity with the census procedure at other dates.

There has been no indication from related spheres of activity already discussed that these pressures to marry were anything but constant and unyielding during Japanese rule in Taiwan. The percentages of Taiwanese over age 30 who eventually married remained about the same—all but one or two per cent of women, and all but nine or ten per cent of men. Yet the proportions of Taiwanese who had ever been married did not remain constant at all ages. The younger people of both sexes displayed some signs of altering the time when their marriage took place (see Table 59). 582 162

So far as this evidence is germane, however, it offers conflicting testimony: the pressures would appear to have been weakened for women under age 30 and to have grown stronger for men. Faced with this apparent inconsistency, we naturally cannot vouch for the inner motives of people about to marry. Nor can we adopt the usual

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course in demography and merely say that there was a trend for people in Taiwan to "marry earlier" or "marry later," for this is to say nothing about why men and women apparently were of different minds in the matter. But thanks to the assiduity of the Japanese in maintaining Taiwan's population statistics, the problem is open to closer examination with the help of additional data.

TABLE 60

SEX BALANCE OF TAIWANESE IN MARRIAGEABLE AGES

Males per 100 Females Enumerated in Ages 15–49 in Successive Censuses, 1905 to 1940

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*	*1940*
10–14	122	113	109	107	105	103	104
15–19	126	116	112	109	106	104	100
20–24	123	121	115	112	108	106	102
25–29	122	123	120	114	111	108	104
30–34	119	119	120	118	114	110	107
35–39	116	114	114	118	116	112	109
40–44	112	107	108	110	114	114	110
45–49	100	100	99	101	105	109	108
Total, 15–49	119	115	112	111	109	107	104

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

It is worth while first to consider the conditions of the marriage market in Taiwan, in terms of the relative supply of men and women available to marry. Since, practically speaking, the Taiwanese were a "closed population," this is one instance where demographic trends in births and deaths may be observed very simply in their bearing on the more complex aspects of behavior. We have already seen that the chances of surviving through infancy and childhood had been extremely poor for girls born before 1895, and that this handicap disappeared only gradually in later years. As a result, by the time they were nearing age 20—the range when most of them married—there were not enough women to furnish wives for the eligible men.

In 1905, for example, there were more than 20 "surplus" males for every 100 females in the age group 15-19, who could not find wives from the same age group, and would have difficulty in finding them from any younger groups of girls which had suffered similar high mortality (see Table 60). Apparently, as girls began to catch

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up with the boys in the chances of surviving in earlier life, they lost some of this advantage relative to men in marrying; and, as the scarcity of marriageable women became less of a factor conditioning the marriage opportunities for men and women, the result was that the chances of marrying at each age (under, say, 30) improved for men and declined for women.

TABLE 61
EXCESS OF MARRIED WOMEN IN TAIWAN, 1905-1935

	Married Men	*Married Women*	*Difference (2) – (1)*	*Males per 100 Females*
1905				
Taiwanese	594,827	598,556	3,729	99.4
Japanese	12,302	8,246	–4,056	149.2
Other	3,487	220	–3,267	1,585.0
Total	610,616	607,022	–3,594	100.6
1920				
Taiwanese	641,746	648,764	7,018	98.9
Japanese	37,377	32,946	–4,431	113.4
Other	7,427	2,270	–5,157	327.2
Total	686,550	683,980	–2,570	100.4
1935				
Taiwanese	913,655	924,963	11,308	98.8
Japanese	56,562	52,663	–3,899	107.4
Other	15,342	8,132	–7,210	188.7
Total	985,559	985,758	199	100.0

Sources: *Census of 1905, Detailed Tables*, Table 5; *Census of 1920, Descriptive Report with Appendix*, Appendix Table 26; *Census of 1935, Statistical Tables*, Table 7. The category of "Married" as published in 1920 has been reconstituted so as to make it the same as that shown in the other censuses.

All this would be strictly true only if the Taiwanese population had been "closed" against marriage with other groups as completely as it was against migration. There were barriers to intermarriage, but in fact they were less effective. To some extent women enjoyed their felicitous marriage prospects because their nuptial horizons were not entirely restricted to Taiwanese men. Some of them married Mainland Chinese or even Japanese, which helped to enhance their scarcity. These mixed unions probably had a dubious legal status, for many of the male Japanese and Chinese nationals in Taiwan were little more than transients, and some who reported them-

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selves as married may have done so because of a wife at home. It is unknown how many supplemental unions of this sort with Taiwanese women there were. They were not legally registered as marriages where Japanese were involved, for prior to 1932 such marriages were prohibited by law.

The legal status of a union, however, did not make so much difference in the census figures on married persons, since the census was designed to record unregistered as well as "legal" marriages. In this it seems to have been successful, even for those that were not fully legitimized by law, and the census reports are therefore a fairly good source to detect whether or not mixed unions existed.[2] A brief summary of this information is given in Table 61. With monogamous mating and without intermarriage, there should have been equal numbers of Taiwanese married men and married women at any one moment.[3] Actually, every census showed an excess of women over men who were married: a proportion in the neighborhood of one per cent of Taiwanese women were "unmatched" in this sense. But although some of these had undoubtedly become wives of Japanese or Chinese nationals, from the census materials there is no way of determining how widespread this intermarriage was. In the first place, Taiwanese men of wealth were said to take concubines, after the fashion of old-style Chinese gentry, and thereby may have accounted for some of the extra married women.[4] Also, from the Japanese (and Chinese) side, there is no way of knowing how many of these men were reported as married because of wives in Japan (or China), and how many because of wives among the Taiwanese.

Finally, a small though unknown number of Taiwanese men had found wives from women in the other nationality groups in the island, and these have the effect of cancelling some of the "excess" of married Taiwanese women.

These factors make the situation more complicated than it would

[2] The first census (1905) was an exception. Liaisons with Japanese men and Taiwanese women were explicitly not recognized, though such unions involving Mainland Chinese were. In all other censuses, the "informally married"—i.e., those whose marriages were not legally registered—were always shown separately, though sometimes included as a subtotal of "married" and sometimes as a subtotal of "single."

[3] Some Taiwanese men, by the time of the later censuses, were absent in Japan and elsewhere in the Empire, but they were too few to have any noticeable effect in these tabulations.

[4] By the same token, the sex imbalance of married Taiwanese cannot be said to be a measure of concubinage, because of the unknown amount of intermarriage. Neither of these two questions, both important, can be clarified beyond this indeterminate state of information.

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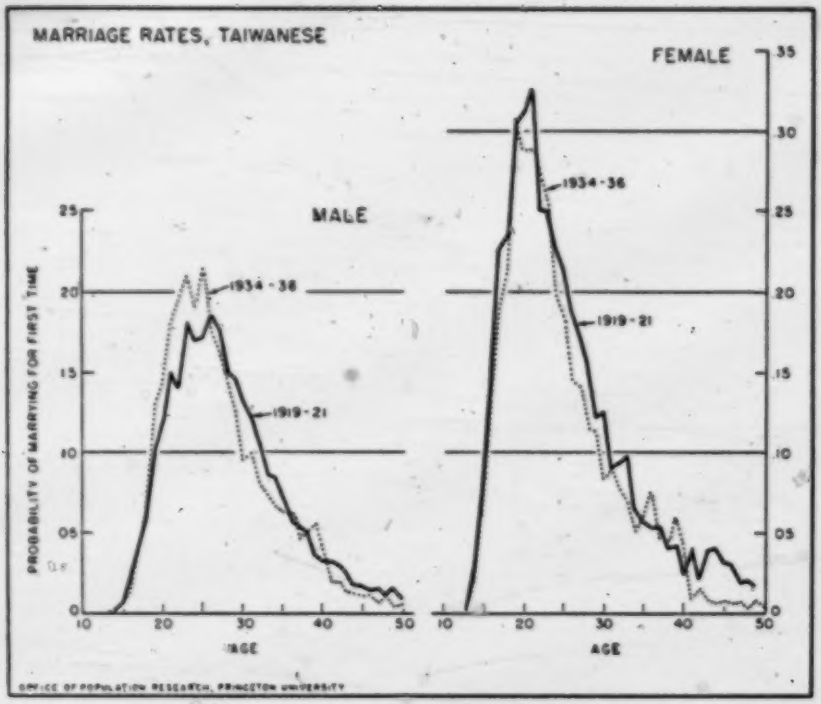

Fig. 31. Marriage Rates of Taiwanese. Probabilities of Marrying for First Time at Each Year of Age, 1919-21 and 1934-36. Males and Females.

be if Taiwanese alone were involved. Still, it is possible to get a more refined idea of the trends already observed by examining the age pattern of marrying that can be found among the Taiwanese. Marriage rates of moderate accuracy can be calculated, based on registered marriages with adjustments for those which were not registered.[5] But because the data on marital status were not published

[5] Marriage rates in this sense have been computed in the form of a "gross nuptiality table." In this form they are often termed "probabilities of marrying," which must first be computed as "probabilities of remaining single." They are exactly analogous to the "probabilities of dying" in a life table, in that they represent the proportion of persons entering each year of age who would have married during that age if none had died, according to the age pattern of the particular calendar year in question.

The rates given by such a table in its raw form are deficient; registered marriages in Taiwan were enough only to produce the number of "legally" married couples that were recorded in each census, but insufficient to have supplied all those whom the census found to be "actually" married (i.e., living together in socially recognized unions). This first set of marriage rates was therefore *adjusted* to bring it more nearly into accord with the facts as shown by the census. The adjustment was arrived at by calculating separately, from the census alone, a nuptiality table for "actually" married and

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582 in full detail at each census, there are just two occasions for which satisfactory marriage rates can be found—1920 and 1935. Marriage
162 rates for these two dates are shown in Fig. 31, representing the marriages of three years averaged around the census year (i.e., 1919-21 and 1934-36).

The data of Fig. 31 pertain only to those being married for the first time, since the first marriage removes a person permanently from the unmarried. They show something less than the full extent of the changes in marriages that have already been demonstrated, for the shifting that appears in Fig. 31 is confined to half of the total period of observation. Already by 1920 women's extremely high chances of marrying before age 25 had begun to subside and those of men to rise. Even so, the persistence of this change is clearly evident in the latter half of the period. Marriage rates continued to move in opposite directions for men and for women after 1920 (though after 1920 it is less apparent for women). Taiwanese customs of marriage still allotted the better opportunities to women when young, concentrating these near age 20, while the high point in men's chances came three or four years later in life. Regardless of their differences in earlier adulthood (when most of the first marriages actually occurred), between 1920 and 1935 neither men nor women showed any tendency to defer marrying until after age 25—the rates of both sexes declined after age 30 and in the later 20's.

Widowhood and Divorce

162 Not everyone who marries stays married. In societies where mor-
589 tality is relatively severe, large proportions of spouses are likely to be separated from their partners through death. Since the mortality of Taiwanese was higher for men than for women, wives were more likely to be bereaved than husbands, and there were more widows than widowers. While every census found substantial portions of people of both sexes who had once been married but whose husbands

"legally" married persons; the ratio of the one to the other was used for "correcting" the rates based on registered (legal) marriages. This procedure leaves something to be desired; the most that can be said in its favor is that it converts into useful form data that would otherwise be useless.

The procedures of estimating nuptiality from census data were an adaptation of those discussed in Mortara, G. (1949). These figures might be suitable to use in place of the data that actually appear in the text, but for the fact that they reflect unduly the events of the census year, and thus give a poor indication of trend. The age pattern of unregistered marriages has no significance as such, for there was nothing to prevent unregistered marriages from being subsequently registered.

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or wives had died, the proportions at nearly every age were two to three times as great for women as for men (see Table 62). 162 589

TABLE 62

WIDOWS AND WIDOWERS IN TAIWAN

Per Cent of Taiwanese Men and Women Who Were Counted as Widows or Widowers in Each Census, 1905 to 1935, by Age

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*
			Males			
20–24	1.0	0.7	0.8	0.5	0.5	0.4
25–29	2.5	2.1	2.4	1.4	1.2	1.1
30–34	4.3	4.1	4.2	2.9	2.3	1.9
35–39	6.8	6.1	6.6	4.9	4.0	3.4
40–44	10.1	8.8	9.2	7.7	6.5	5.7
45–49	14.0	12.1	12.4	10.7	10.1	8.9
50 and over	28.6	26.3	29.3	23.1	22.2	21.3
			Females			
20–24	2.1	1.7	1.9	1.2	1.0	1.0
25–29	4.8	3.7	4.0	2.7	2.3	2.2
30–34	9.4	6.9	7.4	5.3	4.7	4.4
35–39	17.6	13.2	13.2	10.2	9.3	8.2
40–44	30.2	23.7	22.5	18.7	16.5	15.0
45–49	43.4	37.9	35.2	29.9	27.2	24.1
50 and over	72.2	71.2	69.2	65.1	61.6	57.9

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

By 1935, the proportions of adult women who were widows had gradually fallen at all ages, until they were no more than half as high as they had been in 1905. The decrease in proportions of widowed men was similar, though less pronounced. Most of this decline probably arose from the fact that spouses of both sexes became less likely to die during early adulthood, thanks to improved mortality. Not all, however, can be definitely attributed to an actual decrease in widowhood, for the census recorded as widowed only those who remained in the status of widows.

Just as death of a husband or wife is a way to end a marriage, remarriage is a way out of widowhood. In the case of women it is one that is not highly regarded by Chinese tradition. A wife leaves her original family and enters that of her husband, where her status at 587

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587 first is uncertain and tends to be the target of considerable hostility.[6] But if she bears a child, especially a son, during the husband's lifetime, her membership in his family is made relatively secure, for she becomes the means for continuation of the family line. If the family has enough wealth and enough adult family members to prevail in the matter, it is to be preferred that the wife remain a widow rather than remarry. The attitudes generated by the family system, which manage to induce nearly everyone to marry once, act to some extent as a restraint on the number of years that may be spent in married life. Depending on the circumstances, widowhood therefore may be permanent and have the effect of preventing many women from being mothers of additional children.

But the prohibition against remarrying is often given lax observance. In Taiwan special arrangements were sometimes made to ease the practical difficulties.[7] Many women must have lost their husbands before providing a male heir, and a childless widow might have very little claim to standing in her husband's family. Because the remarriage of widows was not looked upon with favor, they were not likely to enjoy the prospects of so good a match as those of unmarried women. It is commonly known that a cheap wedding can be arranged with widows, and so they probably became wives of poorer men. With the shortage of marriageable women that existed in early Taiwan, the abundance of widows doubtless was a factor in finding wives for many men who otherwise might not have married at all.

Remarriage is not regarded so austerely for widowed men; the same circumstances affect them, but all work in the other direction. A man has compelling reasons to remarry after the death of his wife, and these are even stronger if he has become the head of a household and the father of children. A widower's incentive was equal to that of a widow, and he had fewer obstacles.

586 Like widowhood, *divorce* also removes some men and women from married life and helps to reduce still further the efficiency of mar-

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[6] See Levy, M. J., Jr. (1949), Chapters III and IV.

[7] Since the Chinese conception of marriage and descent is patrilineal, the "normal" course for a widow who remarries would be to enter the family of the second husband. The presence of children born to her as a wife, however, complicates the situation, for they are regarded as descendants in the male line—i.e., members of the first husband's family—and would not ordinarily be relinquished. Among poorer Taiwanese there existed a special form of marriage in situations of this sort, observed also in many parts of China, which provides that the second husband marries *into* the family of the widow's children. Marriage of this kind is deprecated and probably occurs chiefly when a widow is left without able-bodied members of her husband's family.

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riage in cementing marital unions. Divorces are different, however, in that most of them occur early, rather than increasing with the length of married life. They leave (at least initially) an equal number of ex-partners of either sex who can remarry if the institutional system permits. They also leave a lesser total residue of persons in a non-married status. The divorced enumerated in the censuses were very small proportions of Taiwanese adults, and showed no trend with the passage of time save reduction to still smaller sizes at the younger ages (see Table 63).

TABLE 63

DIVORCED MEN AND WOMEN IN TAIWAN

Per Cent of Taiwanese Who Were Counted as Divorced from a Previous Marriage, 1905 to 1935, by Age

Age	1905	1915	1920	1925	1930	1935
			Males			
15–19	0.3	0.1	0.1	0.1	0.1	0.0
20–24	1.2	0.8	0.8	0.7	0.7	0.6
25–29	1.9	1.8	1.8	1.6	1.4	1.3
30–34	2.1	2.3	2.3	2.0	1.8	1.6
35–39	1.8	2.1	2.4	2.2	1.9	1.7
40 and over	1.3	1.5	1.8	1.8	1.8	1.8
			Females			
15–19	0.7	0.4	0.4	0.3	0.3	0.2
20–24	1.2	0.9	1.2	0.9	0.9	0.7
25–29	0.9	1.0	1.3	1.0	1.0	0.9
30–34	0.8	0.9	1.2	1.0	1.0	1.0
35–39	0.7	0.8	1.1	1.0	1.0	0.9
40 and over	0.4	0.6	0.8	0.8	0.7	0.8

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

A paucity of divorced people has led observers from time to time to conclude that divorce itself is all but unknown among Chinese. On similar grounds, the abundance of widows is often taken as a rough measurement of how great are the proportions of people who have been widowed. The reasoning behind both types of inference is that the chances of remarriage are poor (especially for women), and therefore the number of observed survivors of divorce and widowhood are a gauge of their frequency.

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586 But neither divorce nor widowhood has been seriously investigated in an agrarian society. Though one must admit that reliable data have been rare, scholars have usually fallen back on stereotypes drawn from the folklore and value statements of the societies themselves. This approach has its pitfalls, especially when these statements are accepted literally without much attention to the social situations in which they have their effect.

Divorce, we are told, happens at the whim of the husband or his family; a wife may be sent back to her original home if her behavior fails to satisfy them on any of several grounds, all very explicitly stated. The divorced woman must return disgraced to her family, nevermore to be sought in marriage. The harshness of this procedure is tempered, mercifully, by prospective loss of the dowry to the husband's family, by recognized conditions that call forth forbearance on their part, and by "local sentiment" which may be offended by the arbitrariness of the whole affair.

In short, the prescriptions of archaic Chinese moral codes leave one with just about as much insight as to what to expect as if he knew nothing of them. In reality not a great deal can be said about the reasons for divorce with the assurance that it is generally accurate. It differs from widowhood in being the outcome of decision rather than death, decision affecting the two families between which the original marriage had been arranged. If a dispute is involved, which is likely, the focal point will probably be the relations of the wife with her husband's family, but only if the marriage was patrilocal. The grounds may be anything rising from these relations, which are known to be difficult. Grievances may exist on either side, though it is easy to see that they originate more readily from that of the husband's family.

586 162 Luckily there is a way of checking on the frequency of divorce in Taiwan, as there is not in the case of widowhood. Its legal significance was judged by Japanese to be sufficient to warrant keeping records of divorce as it occurred. Divorces were registered each year, according to the time elapsed since marriage (in single years of duration up to five, and thence in broader intervals). These data have been slightly rearranged, assuming (with some error) that all of those which occurred less than one year after marriage belonged to marriages made in the same calendar year, that those occurring between the first and the second year of the marriages' duration belonged to

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marriages of the previous year, and so on. It is then possible to calculate approximately the number of marriages of any particular year that ended in divorce within five years[8] (see Table 64).

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TABLE 64

MARRIAGES ENDED IN DIVORCE, 1906-1940

Per Cent of Registered Marriages of Each Year That Were Dissolved by Divorce within 5 Years' Duration

Taiwanese Only

Year	*A. Assuming That* All *Taiwanese Marriages Could End in Divorce*	*B. Assuming That Divorce Occurred Only to* First *Marriages*
1906	14.4	22.3
1910	9.4	13.8
1915	10.5	14.0
1920	7.9	10.6
1925	7.7	9.4
1930	5.8	6.8
1935	4.7	5.2
1939	3.6	3.9

Source: *Statistical Summary*, Table 77.

It makes some difference whether we include those persons who were marrying for the second (or subsequent) time or whether we assume that only first-married couples were divorced. Since the truth probably lies somewhere between these alternatives, Table 64 has a column of figures for each, based of course on the same number of divorces in both cases. Close to 10 per cent of Taiwanese marriages before 1920, nearly 15 per cent if first marriages alone are considered, were regularly being dissolved within five years. The outcome of marriages in 1906 may suggest that divorce had an even higher

[8] For example, it is assumed that first-year divorces in 1910 belonged to marriages of 1910, and that divorces in the second year of marriages to these people all took place in 1911, in the third year 1912, etc. This procedure makes no allowance for those marriages that might have been broken by death, but it will be seen that this omission merely makes the evidence of trend more conservative, and does not exaggerate it.

In most years, between 60 and 70 per cent of registered divorces happened within the first five years of married life. Table 64 must be confined to this period for each annual crop of marriages, because the published data show only the first five years' divorces by single year of duration. The result is that the "divorce rates" of Table 64 represent only two-thirds to three-quarters of the divorces that eventually occurred. This fraction fell slightly during the period of registration, leading to some exaggeration of the decline in divorce shown in Table 64.

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586 incidence before the registration system was established, but also
162 may have been nothing more than a peculiarity of the early operation of the registration system itself. Whatever its initial level, the divorce rate fell steadily throughout the Japanese occupation. Somewhat under four per cent of marriages registered in 1939 failed to last for five years.

The Prevalence of Remarriage

587 It is beyond the capacity of these resources to reveal the percent-
162 ages of any year's marriages that ever ended in divorce. Our disregard of divorces if they occurred more than five years after marriage and the omission of many marriages from registration make it not worth while to strive for more than this approximation. More pressing is the question of what happened to all the people whose marriages suffered this adverse outcome. Even at its lowest stage in Taiwan, divorce was still not uncommon, and produced far more divorced people than the census enumerations were able to detect. Yet experience with these census materials has justified a high respect for their accuracy; there is no reason to doubt that they are the most dependable of all public records in Taiwan. It follows, then, that a large share of those who had been divorced, amounting to most of all those divorced before age 25 or 30, must have remarried. Moreover, they must have remarried without delay, for as a group they spent too little time out of wedlock for more than a small fraction to be counted as divorced in any census.

By way of illustrating the grounds for these conclusions, Table 65 shows the numbers of Taiwanese recorded as divorced in the census of 1920. In adjacent columns are the numbers of remarriages that were registered to divorced persons during that year. In the second portion of Table 65 the same information is given for widows and widowers. Unfortunately the case cannot be made more rigorously. Since there is no way of knowing how many people of each age became divorced or widowed during the year, the total time spent in either status cannot be estimated, and we cannot construct "remarriage rates" by the same procedures applied to people marrying for the first time. In Table 65 it is nonetheless evident that the turnover in divorced and widowed spouses was remarkably high.[9] Remarriages

[9] The turnover may well have been higher than that suggested by Table 65: some remarriages were probably not registered, and some may have been registered incorrectly as first marriages.

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TABLE 65

REMARRIAGES OF WIDOWED AND DIVORCED PERSONS, 1920

(Taiwanese Only)

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Age	Males: Divorced Men Counted on October 1	Males: Remarriages Registered During 1920	Females: Divorced Women Counted on October 1	Females: Remarriages Registered During 1920
A. Divorced*				
10–14	3	1	20	16
15–19	155	66	622	586
20–24	1,303	506	1,389	1,193
25–29	2,362	825	1,185	738
30–34	2,771	727	999	412
35–39	2,756	434	929	236
40–44	2,081	211	786	115
45–49	1,377	100	711	45
50 and over	1,943	53	1,097	20
Total, All Ages	14,751	2,923	7,738	3,361

Age	Males: Widowers Counted on October 1	Males: Remarriages Registered During 1920	Females: Widows Counted on October 1	Females: Remarriages Registered During 1920
B. Widowed*				
10–14	17	1	22	8
15–19	154	48	607	412
20–24	1,278	445	2,504	1,269
25–29	3,191	923	4,224	1,560
30–34	5,058	1,254	7,263	1,455
35–39	7,743	1,364	13,457	1,081
40–44	8,548	930	20,061	624
45–49	9,214	595	27,215	284
50 and over	35,819	503	137,752	133
Total, All Ages	71,022	6,063	213,105	6,826

* The categories of "Widowed" and "Divorced" in this table are restricted to the persons whose original marriages had been registered. Those widowed or divorced men and women whose marriages were not registered have been excluded, for if they remarried they would probably register the event as their first marriage. Accordingly, the numbers in this table are slightly lower than those shown in most census tables for 1920.

Sources: *Census of 1920, Detailed Tables, Total Island*, Table 2; *Vital Statistics of the Population, 1920*, Table 12.

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587 at some ages were almost as numerous as those who were found to be eligible at the census date.

162 In 1920, divorced women were favored over men in remarriage, but widows apparently were not. One cannot help noticing that more widows were remarrying in 1920 than widowers—6,826 as against 6,063, taking all ages together. This could happen only because there were many more of them to seek remarriage. The actual likelihood of marrying again was almost certainly poorer for widows than for widowed men, partly for the reasons already mentioned. While the experience of divorced persons was superficially about the same—3,361 remarriages of women, compared with 2,923 of men—the real situation was almost reversed. Since divorce withdraws an equal number of men and of women from marriage, any later sex disparity among the divorced (aside from some loss of men through heavier mortality) must be the result of unequal chances of remarrying. It turns out, therefore, that divorced women enjoyed better chances than divorced men to marry again. Even during the earlier years when divorce was exceptionally widespread in Taiwan, it probably interfered less with future childbearing among the women affected than did widowhood among widows.[10]

Though these facts do not advance us very far toward explaining the reasons for the wide incidence of divorce in Taiwan and its fall, it helps to know that entering divorce (or widowhood) was not an irrevocable step, provided that the people involved were young enough.[11] Some of the advantage that divorced women maintained over widows was simply that they were younger (though it was more than this, since they also remarried more readily at the same ages). But in order to get a more complete answer one must look for the consequences of the high divorce rates among those who were marrying. For this answer it is necessary to put one additional question: Whom did people find to marry in their second attempt?

Under conditions in Taiwan after 1895, and probably also under those that were current before, a remarkably small proportion of all marriages were introducing people into matrimony for the first time. Only 717 of every thousand marriages in 1906 had this effect for men, still fewer—644—for women. A mere 585, less than 60 per cent,

[10] Of course, divorced women were younger, and this made remarriage more likely. But men and women at the same ages also showed the same disparity.

[11] This is, of course, only another way of saying that part of the handicaps often associated with divorce and widowhood arise because many people in these categories are older than the ages at which it is customary to marry.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

TABLE 66

THE SHIFT TOWARD FIRST MARRIAGES IN TAIWAN

Persons Marrying for the First Time, Per 1,000 Total Marriages between Taiwanese, 1906-1943

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Year	*Husbands*	*Wives*	*Both Husband and Wife Marrying for First Time*
1906	717	644	585
1910	754	685	629
1915	791	746	691
1920	776	746	684
1925	835	825	766
1930	858	854	797
1935	887	893	836
1940	896	907	851
1943	901	921	864

Source: *Statistical Summary*, Table 70.

united *both* partners for the first time. The remainder went toward restoring to married life the widowed and divorced, who were very numerous. Because so many people dropped out, marriage had become surprisingly inefficient as a way of perpetuating family lines, and a large-scale duplication of effort was regularly incurred by those who tried again.

As time went on, however, we have seen that the shortage of women of marriageable age began to disappear, death separated husbands and wives less frequently, and divorce gradually declined in its incidence. By 1940, marriages had become more lasting and less recidivous for both men and women. The margin by which the proportion of women marrying for the first time lagged behind that of men almost vanished, and as high as 85 per cent of all registered matches were first marriages for both husband and wife.

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There were further implications of this shift away from remarriage. Other things being equal (such as the prestige or importance of the particular family connection), a match in which the opposite partner was being married for the first time would be preferred, by the family of either the bride or the groom, over one in which the partner had been divorced or widowed from a previous marriage. The Chinese do not impose on relatives of the deceased the obligation (which is binding in some societies) of marrying a widowed husband or wife; far less do they have any preference for divorced

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TABLE 67

RELATIVE RESTRICTION OF CHOICE IN MATES BY MEN AND WOMEN MARRYING FOR THE FIRST TIME

Per Cent of First Marriages in Each Year That Occurred with Divorced or Widowed Partners of the Opposite Sex. Taiwanese Only

Year	*Unmarried Men. Per Cent Marrying Divorced Wives or Widows*	*Unmarried Women. Per Cent Marrying Divorced Husbands or Widowers*
1906	18	9
1910	16	8
1915	13	7
1920	12	8
1925	8	7
1930	7	7
1935	6	6
1940	5	6
1943	4	6

Source: *Statistical Summary*, Table 70.

persons as candidates for marriage. When people marrying for the first time must take this less desirable latter alternative, it amounts to a restriction in marital choice, through circumstances of poverty or low prestige. We have already found that in their matrimonial position men in some ways were situated unfavorably, owing to the scarcity of eligible women. It is a reflection of this handicap that in the earlier years of registration a much larger proportion of Taiwanese men than women in their first marriage had to accept divorced wives or widows. In this matter of latitude of choice, the subsequent trends in marriage patterns can be summed up as a process of reducing the amount of restriction and equalizing this difference (see Table 67).

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The prospects of widowed or divorced people in remarriage are of course the opposite sides of the same picture, since by Chinese cultural standards their position is expected to be unfavorable. Other things being equal, *their* most advantageous matches are with people previously unmarried. The situation being defined in this way, their chances are closely related to the trends in first marriages—so long as unmarried partners cannot be found for some persons marrying for the first time, these chances might be fairly high.

But it is also true that widowed and divorced people of both sexes

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declined as a portion of the population. For this reason, their chances on remarriage of finding partners not previously married were steadily improved, in spite of the fact that the first-married became less dependent on the widowed and divorced for their supply of

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TABLE 68

RELATIVE ADVANTAGE OF MEN AND OF WOMEN IN REMARRIAGE

Per Cent of Registered Remarriages by Widowed and Divorced Persons with Previously Unmarried Partners of the Opposite Sex
Taiwanese Only

	WIDOWED		*DIVORCED*	
Year	*Husbands. Per Cent Marrying Unmarried Women*	*Wives. Per Cent Marrying Unmarried Men*	*Husbands. Per Cent Marrying Unmarried Women*	*Wives. Per Cent Marrying Unmarried Men*
1906	15	30	32	49
1910	17	33	37	53
1915	20	35	39	48
1920	23	31	39	47
1925	29	34	48	48
1930	30	33	54	51
1935	44	40	60	55
1940	48	42	63	54
1943	52	43	68	52

Source: *Statistical Summary*, Table 70.

spouses (see Table 68). Let it be said, however, that these chances were never very poor. The scarcity of women helped to place widows and divorced women in a position that was surprisingly good, especially in view of the contrary impression given by the accepted notions about their low repute in China.

Men made much larger gains than women, and here they not only equalled but eventually surpassed women in the degree to which they succeeded in getting such terms on remarriage. Judged by this standard, divorced people of either sex were better off than the widowed. This was partly because they were younger and in that respect more marriageable; but in any case if their prospects were so bright, it is impossible to assert that a Chinese taboo against remarriage of divorced people is very strong.

So it is evident that the explanation for these trends in divorce rests upon answers to questions about other trends and patterns of marriage, and that these more significant answers are incomplete

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

587 without some explanation of the peculiar role of divorce in early Taiwan. But there is a common thread running through both of
162 these problems. The negotiation of marriages has been profoundly influenced by the supply of eligible women in relation to that of men—the marriage market formerly was one in which women of marriageable age were scarce. This situation conferred several advantages on the families containing eligible girls, as against those with young men seeking marriage: (1) an excellent chance to avoid permanent spinsterhood by eventually marrying, (2) a better chance to find a partner not previously married, (3) a better chance for them to remarry, if a widow or divorced, and (4) more favorable terms on remarriage.

586 The premium formerly enjoyed by marriageable women supplies the best clue not only to the favorable matches open to families with
162 adult daughters, but also to the reasons why they might afford to suffer the supposed indignity of a divorce. It has been pointed out above that Chinese tradition views divorce one-sidedly—it is something to be initiated by the husband's family, since the wedding makes the wife a member of their household, and the household is where the well-known strains attending her presence arise. But the trends in divorce cannot be explained on this basis. It would imply that husbands, or their families, provoked a profusion of divorces when their own chances of remarriage were at low ebb, and that they became less desirous of divorce as these chances improved.

The wife's parental family does not actually suspend its attachments or obligations to her upon marriage, though commentaries on the Chinese family system commonly give this impression. Her relatives are ordinarily a party to the marriage itself, and may be very alert to the connection which it establishes between the two families. They can often choose whether to let a dispute develop into a break in this connection; sometimes they ensure this turn of events by upholding her interests, or by quarreling over unfulfilled terms of the marriage agreement, whereas they would show more restraint if her chance for remarriage were not good.

58' Nor is the position of the wife herself always so helpless as it is depicted. Over one-fifth of the earlier registered marriages between
162 Taiwanese were not of the "ordinary" type at all, but were matri-
591 local. Though they did not all have the same standing in custom,[12]

[12] They include three recognized forms: adoption of a future son-in-law by a girl's parents, who may then be in charge of him from childhood on; simply marrying-in by the husband; and marrying-in with apparently some restriction to his rights of inheritance. The exact distinctions are left somewhat unclear, for the terms are Japanese, and the facts Chinese. It is also likely that there were variations in procedure from one place to another.

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TABLE 69

PER CENT OF ALL REGISTERED MARRIAGES BETWEEN TAIWANESE THAT WERE MATRILOCAL, 1906-43

1906	21.8
1910	20.4
1915	18.4
1920	17.5
1925	16.1
1930	15.7
1935	9.8
1940	7.8
1943	6.2

Source: *Statistical Summary*, Table 65.

these marriages had in common the fact that the husbands entered the families of the wives, in the reverse of the pattern that was considered normal. These extraordinary marriages were a measure of necessity rather than a repudiation of tradition, for they diminished as a share of all marriages along with the major difficulties of men in finding brides. But matrilocal marriage signifies a considerable compromise with the dominance allotted to men by Chinese tradition. Where it occurs, it means that in order to maintain the rule of male descent, either the husband must be relegated to a less important position or the continuity of the wife's family must be broken. Chinese may on different occasions prefer one or the other of these alternatives, but when they resort to matrilocal marriage it is a sign that precedence has been given to continuation of the wife's family line. This solution makes the husband's status in the wife's family rest on sufferance, and cannot avoid undermining his dignity and authority.[13] The norms of patriarchal authority were not undermined, however, in the Taiwanese population as a whole: when men were no longer obliged to marry on these degrading terms, they began to shun this type of marriage (see Table 69). Because it was inconsistent with the rest of the family system, matrilocal marriage presented a special occasion for discord—men were led to expect one kind of familial role as husbands, but required to accept another one that was inferior.

[13] Further compromise is actually possible. Various devices are practiced in China, such as entering the husband on the registers of the wife's family, changing his surname to theirs, and perhaps admitting him to her inheritance, as ways to smooth over the departure from tradition in such marriages. How urgent these niceties are probably depends on the importance and wealth of the families involved—i.e., how urgently they feel the need to keep up conventional appearances.

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586 Evidently it is mistaken to consider divorce simply as a prerogative of the husband or his family, just because the Chinese believe that it ought to be. Several sources of friction can be found in Chinese family structure that might lead to divorce, but by their manifestations in Taiwan they point to the wife's side, and not the husband's, as having been responsible for its exceptionally high incidence. A great many of the divorces that were recorded must have been precipitated by the wife's family (if not by the wife herself), and it seems inescapable that their willingness to do so was governed largely by the opportunities to find another match for her. The patterns of marriage as well as divorce lend support to this conclusion.

The Reproductive Span of Married Life

162 One reason for giving attention to marriage is that it is the principal step by which people pass into adult familial roles, and thus embodies many of their ideas about the significance of these roles. 582 It is also a matter of great interest in connection with reproductive behavior, since in all known societies some form of marriage establishes the approved social setting for bringing children into the world. From the standpoint of replacement of members in a population, however, the important thing is not simply when people first become married, but how much time they actually spend in married life. But because a particular marriage almost never lasts through the lifetime of both its immediate partners, the duration of married life cannot be precisely determined for Taiwanese. People are arriving and departing continually, and not all of them leave a sufficient trace in the sorts of demographic statistics that are usually available.

The most practical expedient for estimating the amount of time spent in marriage is to consider only those women of reproductive ages who are currently married at some particular time.[24] In Table 70 they are arranged as proportions of all women at these ages at census dates, confirming what has already been implied above—that many years were spent without their husbands by women who had been married, because widowhood and divorce were too prevalent to be cancelled out by remarriage. As women became older more of them became widows, but the percentages of women who dropped

[24] From the standpoint of demographic concepts, there is nothing inherently "better" about narrowing attention to women instead of men. The main reason for doing so here is that we have ways of estimating the fertility of women in Taiwan according to age, but not that of men. The choice of 15-49 as the age interval to use is dictated by convention, but in other populations it has been found to include nearly all cases of maternity.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

TABLE 70

PER CENT OF TAIWANESE WOMEN CURRENTLY MARRIED, BY AGE, AT VARIOUS CENSUS DATES

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Age	*1905*	*1920*	*1935*
15–19	45.9	32.0	27.7
20–24	88.3	83.5	81.2
25–29	92.5	91.6	92.8
30–34	89.0	89.8	92.4
35–39	81.2	84.7	89.3
40–44	68.8	75.8	82.8
45–49	55.9	63.2	74.2
Total, 15–49	75.7	72.2	74.1

Source: Tables of the Taiwanese population by age, sex and marital status in the respective censuses. "Married" in 1920 includes women whose marriages were not registered.

out of married life in this way declined sharply with the fall in mortality among husbands and in the frequency of divorce. Hence some of the time lost to young wives through later marriage was made up by others through prolonged survival of their husbands. One cannot say with certainty that the *net* result was a lengthening of married life for the women of Table 70.[15] But even if it had been, this lengthening might not make much of a contribution to the fertility of women in reproductive ages. It had most of its effect over age 35, when many women had already completed their childbearing.

When it comes to patterns of difference in marriage between groups of Taiwanese, there is not much to find. Little information

[15] There is no simple answer to the question of whether the time spent in marriage increased or not. Other things equal, the fact that women lived longer would result automatically in a lengthening of married life—fewer wives at these ages would die before their husbands. Similarly with longer life for husbands (and less divorce)—women would spend a greater *proportion* of their time married.

The case becomes complicated as soon as new generations of women entering the reproductive ages are included, since new groups of women were becoming larger every year, making the extra time that they spent awaiting marriage still greater, and offsetting some of the increase of the married among older women.

The balance of these effects at census dates is shown by the proportions of women married in the entire age group 15–49, which fell after 1905 and partially recovered later. But these do not give the only answer to the question, for there is no doubt that those women *already* married would stay married longer than women had before, owing largely to the reduction of mortality in the population. It makes a difference whether the question about years spent in marriage is put in terms of a particular group (or "cohort") of women at different times or different groups of women at some particular time. Although the first of these alternatives is really more pertinent to the other problems of interest, even an approximate answer makes extravagant demands for data, and the second form is the one in which related questions (such as local differences, in this chapter, and of fertility, in the next) must be phrased.

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exists to indicate the marrying habits of the people according to their occupations; and for the meager material that is available, the study of Taiwan's occupational data has shown that these can be relied upon only for men, whereas it is the women that interest us here.[16] A comparison can be made, in 1920, between the principal

TABLE 71

PER CENT OF TAIWANESE WOMEN MARRIED, 1920, BY AGE AND ANCESTRAL PLACE OF ORIGIN

Age	*Fukien Origin*	*Kwangtung Origin*	*Other Taiwanese**
15–19	31.9	31.1	37.3
20–24	84.2	81.1	76.2
25–29	92.0	91.3	83.6
30–34	89.9	90.8	84.1
35–39	84.5	86.5	82.6
40–44	75.0	80.0	75.7
45–49	61.8	70.4	66.9
Total, 15–49	72.1	72.9	70.8

* "Other Taiwanese" consisted almost entirely of non-Chinese members of aboriginal tribes in Taiwan.

Source: *Census of 1920, Detailed Tables*, Table 2.

"Married" includes women whose marriages were not registered.

groups of Taiwanese according to place of origin. Those married among Chinese who traced their ancestry from Fukien, and those from Kwangtung, are listed separately in Table 71. Both had almost equal proportions of all their women 15-49 married in 1920. The group from Fukien, which comprised most of the population in Taiwan, apparently married somewhat earlier, but were more widowed in the higher reproductive ages. The women from families of Kwangtung origin, most of whom are descendants from the "Hakka" group in Taiwan, were married to a lesser extent while young, but were able to avoid widowhood until later in life.

It is not possible to find out definitely whether Kwangtung widows were more likely to remarry, or whether they simply had hardier husbands and became widows less often. Their smaller quota of widows can be partly explained away, however, by two facts: their

[16] The later census reports did not show this information at all. In 1920 a long and complicated table was devoted to cross-tabulation of occupation and marital status by age, and similarly for the census of 1915. But for the reason noted in the text they are not of much value in answering the questions raised here. Figures for registered marriages were published according to the occupation of each spouse, but for these and additional reasons these tables are practically useless.

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whole age pattern in marrying was a later one (and therefore probably made their husbands younger in relation to themselves); and most of them lived in Hsinchu Prefecture, which gave them and their husbands better chances of surviving. In view of these considerations, it seems that greater remarriage of widows probably was not very important in producing this difference.

The entry for "Other Taiwanese" in Table 71 gives some indication of the prevalence of marriage in those small groups of the island's aborigines who lived in the foothills and plains. Their women were distinguished from the Chinese by earlier marriage, and poorer chances both of marrying for the first time and of remarrying when widowed or divorced. They were a small group, however, and information about them probably tells nothing about the inhabitants of the interior, who were not enumerated in the census of 1920.

TABLE 72

PER CENT OF TAIWANESE WOMEN MARRIED

By Age, Inside and Outside Major Cities*

1925 and 1935

	1925		1935	
Age	*Inside Cities*	*Outside Cities*	*Inside Cities*	*Outside Cities*
15–19	24.4	29.4	23.9	28.3
20–24	73.3	83.5	73.8	82.4
25–29	85.9	93.5	87.3	93.7
30–34	87.2	92.7	87.6	93.1
35–39	83.4	88.3	84.6	90.1
40–44	74.8	80.1	78.6	83.5
45–49	63.0	68.9	69.1	75.0
Total, 15–49	67.0	73.0	69.4	74.9

* "Inside Cities" includes the nine cities of Municipal rank in 1935. The data for 1925 have been rearranged to conform to this rule.

Source: *Census of 1925, Statistical Tables*, Table 3; *Census of 1935, Statistical Tables*, Table 7.

Local conditions peculiar to different parts of Taiwan also produced a certain amount of variation in the extent of marriage by women. A clear-cut distinction of this sort is that which appears between the people in the major cities and those in the surrounding rural regions. When all the cities that were of Municipal rank in 1935 are grouped together, and then the remainder of the population collected in another group, the women in cities are found to have lagged behind the others by a considerable margin in getting

162 582 married. The gap in proportions married was greatest for the young women in the age interval 20-24, narrowing with advancing age (see Table 72). The gap was similar and located at the same ages both in 1925 and 1935, suggesting that the cities probably shared with the rest of the island in the trend toward later marriage for women.

TABLE 73

VARIATION IN PROPORTIONS MARRIED

Per Cent of Women in the Ages 20–34 Currently Married By Prefecture, Inside and Outside Major Cities, 1925 and 1935 Taiwanese Only

	1925		1935		
Name of Prefecture	*Inside Cities*	*Outside Cities*	*Inside Cities*	*Outside Cities*	*Name of City*
Taipei		88.4		88.3	
	76.2		76.1		(Taipei)
	79.0		84.0		(Chilung)
Hsinchu		87.3		87.2	
	84.7		84.0		(Hsinchu)
Taichung		90.2		89.8	
	86.8		86.1		(Taichung)
	85.5		87.1		(Changhua)
Tainan		92.2		92.1	
	80.2		78.6		(Tainan)
	86.1		87.5		(Chiayi)
Kaohsiung		87.6		85.8	
	87.9		87.1		(Kaohsiung)
	87.1		85.7		(P'ingtung)
Taitung		80.4		83.7	
Hualien		84.0		87.8	
P'enghu Islands		84.6		84.7	
Total Island	81.6	89.3	82.2	89.0	

Source: *Census of 1925, Statistical Tables*, Table 3; *Census of 1935, Statistical Tables*, Table 7.

One cannot deny that there were better incentives or opportunities outside than inside the major cities for women to marry while very young. The extent of marriage among women in these cities is one of the principal features that set them off from the rural sections. But the sharpness of the difference is misleading, and gives an impression of contrast between country and city that is unwarranted. The notion of "urban" as distinct from agrarian conditions

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does not accurately characterize cities that are so little urbanized as those in Taiwan. Some of the difference in Table 72 comes, not from their distinctness as cities, but from the characteristics of people in their surrounding areas. It turns out that cities were less unlike the rural sections of the island when they are compared with those parts from which they drew many of their people (see Table 73). One city actually had a *higher* proportion of its women 20-34 married than the rest of the Prefecture in which it was located.

The case is similar when variation in the individual rural Districts that make up the remainder of the Prefectures (outside of the major cities) is taken into account. Most of it falls in the ages 15-19, which are not shown in Table 73. Even in the ages dealt with here these smaller civil divisions exhibited considerable differences in their marriage customs, which make it impossible to discern patterns of any consequence in the proportions married, as far as cities are concerned, that might denote change. Those places where women had a relatively late start in marrying were sometimes among the *highest* in proportions married by age 30; some of the early-marrying ones were among the lowest in those still married of their older women. But insofar as these local peculiarities represent differences in the way that marriage was regarded by the people, one common factor stands out in all of them—the variation seems to have been in scheduling *when* the women should marry, and not in fixing the proportion who eventually were found to be married.[17] The percentages of women married over age 30 were similar in all smaller civil divisions, both Municipalities and rural Districts. And so the principal result of their diversity may have been to make localities gain or lose in the time that their younger women spent in married life.[18]

[17] The local peculiarities seem also to have been firmly rooted in custom and not patterns of accidental variation, for they were fairly stable through time. The differences in proportions married repeated themselves: they were correlated with nothing else more strongly than with the same proportions at a later date, even though the women involved of course were different each time. Some idea of this stability can be gained by comparing 1925 and 1935 in Table 73, though the case is more impressive when all rural Districts are compared separately. Although it might be expected that young women with lower incidence of marriage would also have lower fertility, there is no indication that this was so in Taiwan to any marked degree, as we shall see in the next chapter. Part of the explanation is doubtless that the differences followed this pattern of local custom more than one of change.

[18] Local variations cannot be said to be linked to the same factors that were discussed above for the entire island. For example, families of young men seeking marriage might, if confronted by a local shortage of young women, arrange a match in a neighboring place. Moreover, the shortage itself might not be one revealed in the statistics but merely one of families having eligible *surnames* (or sufficiently distant relationships). Chinese regard marriage between persons of the same family name as incestuous, and the residents of small communities often are nearly all of the same

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

THE HISTORY OF THE VILLAGE AND AREA

The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[1] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable. 175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan. 175 648 495 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu. 464 369 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were 175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

(only civilians) who came from the mainland in the postwar period (HRAF, Taiwan, 1956:75). But even in 1940, when the Taiwanese population was more settled and the mainlanders had not yet arrived, the ratio was still 102:100. However, in a discussion Professor Chen Shao-hsing has noted that the latter ratio includes Japanese and that for Taiwanese only it would be closer to 101; 100.

TABLE 3

CRUDE RATES OF BIRTHS, DEATHS, NATURAL INCREASE FOR HSIN HSING VILLAGE, PU YEN HSIANG, 1956–1957

		Number of births per 1000	Number of deaths per 1000	Natural rate increase per 1000	Percent of natural increase
Hsin Hsing	1956	46.80	7.80	39.00	3.90
	1957	41.93	6.21	35.72	3.57
Pu Yen	1956	46.73	9.21	37.52	3.75
	1957	40.04	9.74	30.30	3.03

TABLE 4

CRUDE RATES OF BIRTHS, DEATHS, NATURAL INCREASE FOR TAIWAN, HSIN HSING VILLAGE, PU YEN HSIANG, 1953–1957

	Average number of births per 1000 persons	Average number of deaths per 1000 persons	Average natural increase per 1000 persons	Average percent of natural increase
Taiwan 1953–1956	46.5	8.5	38.0	3.80
Hsin Hsing 1956–1957	44.4	7.0	37.4	3.74
Pu Yen 1956–1957	43.4	9.5	33.9	3.39

for Taiwanese only it would be closer to 101:100. But in the rural area of Pu Yen Hsiang, and especially in Hsin Hsing village, there are many more females than males registered with the Hsiang Public Office. This apparently is an indication of the increasingly greater mobility of men to urban areas to find work. (This increasing mobility will be discussed in detail in later sections.)

As noted earlier, the 1958 population figures for Hsin Hsing village list 657 persons living in 115 households (*hu*) or an average of 5.71 persons per household. For all of Pu Yen Hsiang in 1958 the average

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

of parents and their unmarried children. (This material will be discussed in more detail under family and kinship in Chapter 5.)

As Tables 7 and 8 show, there has been a gradual increase in the number of persons in the average household in both Hsin Hsing and Pu Yen Hsiang. This is not, however, an indication of an increase in the number or size of joint families or a decrease in family division. Family division has, in fact, increased as a result of land scarcity and other related factors. The increase in household size is probably the reflection of increase in the size of nuclear families as a result of a decrease in infant mortality and a general decrease in the death rate. For example, in the sixteen-month period during which this research

TABLE 8

AVERAGE NUMBER OF PERSONS PER HOUSEHOLD, PU YEN HSIANG, 1953–1958

	1953	1954	1956	1957	1958
Total population	25,080	25,960	26,705	27,225	27,481
Number of households	4,476	4,523	4,665	4,705	4,715
Average number of persons per household	5.61	5.74	5.72	5.79	5.83

TABLE 9

AGE GROUPS BY PERCENTAGE OF POPULATION IN TAIWAN
(from Barclay, 1954a)

Ages	Percentages for 1930	1940	1950	1953
0–14	41.0	44.2	41.3	42.2
15–39	39.0	37.3	40.8	39.8
40–64	17.5	15.8	15.4	15.5
65 and over	2.5	2.7	2.5	2.5

was carried on, Hsin Hsing village had twenty-two births and only five deaths. Of the latter, four were very old people in their eighties, and only one was an infant.

In Hsin Hsing village in 1956, 82.8 percent of the population was below the age of forty. This is quite similar to what Barclay (1954a:48) notes for the whole Taiwanese population. (See Tables 9 and 10.)[13] Such figures indicate that the population of Taiwan and Hsin Hsing is comparatively young, but they represent villagers who were registered as having their residence in Hsin Hsing. Many villagers, especially young adult males, actually live, though temporarily, in Taipei where they work to supplement the family income. While a number of them have made the move permanent and are actually registered as

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

[10] All population figures for Hsin Hsing village and Pu Yen Hsiang are based upon records found in the Pu Yen Hsiang Public Office. Unfortunately, the demographic statistics available for Hsin Hsing and Pu Yen Hsiang were limited to only certain years and then only beginning in 1955. Data for Taiwan as a whole are only readily available for specific years such as census years. For Hsin Hsing itself it will be noted that all population data for 1955 have been omitted. This is because of some radical errors in the official records—not explainable by the Public Office officials.

[11] The reason for comparing figures of different years in Table 4 is entirely determined by the availability of data. But it is felt that the differences in the years considered do not detract from the validity of the comparison.

[12] The figures in Tables 9 and 10 are again compared for different years entirely because data for only the years cited were available. Nevertheless, I feel that the sets of data are comparable.

[13] All land tenure figures for Hsin Hsing village and Pu Yen Hsiang are based upon the official records of the government Land Office in Lukang and the Pu Yen Hsiang Public Office.

[14] However, in order to compare the average cultivated landholding, by household, in Hsin Hsing village with that of Pu Yen Hsiang as a whole, it is necessary to use the average landholding figure for the total number of households in Hsin Hsing, *i.e.*, 115 farming and nonfarming households in 1958, since the only readily available figure for the twenty-two villages of the *hsiang* was the total number of households, farming and nonfarming. On this basis then, the average amount of land operated in Hsin Hsing was 0.53 *chia* (1.3 acres) per household, as compared to an average of close to 0.8 *chia* (less than 2 acres) per household for the entire *hsiang*. These figures indicate that, although the average landholding in Hsin Hsing is below the all-*hsiang* average, there is a general, serious land scarcity in the whole area. (A complete breakdown of village land tenure figures appears in Chapter 4.)

[15] A good deal of mint (used for distilling menthol oil) is grown in the area.

[16] In 1958 officially NT $36 = US $1, but the actual equation on the open market was about NT $45 = US $1. All figures quoted will be at the equivalence of the official NT $36 = US $1.

Chapter 3: The Land and the Agricultural Process

[1] There are twenty-four solar terms (*er shih su chieh ch'i*) for the twenty-four periods of fifteen days each which make up a year. For a more complete explanation of the calendrical system, see Fei Hsiao-tung (1939:144–155).

[2] *Kan-ch'ing* is the good or bad sentiment, feeling, or relationship existing between individuals (and, in Hsin Hsing, between relatives as well). Fried (1953:226) observes that "*Kan-ch'ing* differs from friendship in that it presumes a much more specific common interest, much less warmth and more formality of contact, and includes a recognized degree of exploitation." In effect, it is basically a matter of structured obligation. The feeling or sentiment results from satisfied or disappointed expectations of appropriate behavior, and the expected behavior is behavior appropriate to the formal relationship of the two individuals within the social structure.

36: Rowe S-4 (no date) 1955 AF1 China AF1
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Although reliable statistics and a full picture of what is happening behind the Bamboo Curtain is difficult to piece together, it seems probable that the nation's real national income has increased under the Communist regime. This gain, however, must be set off against the drain upon the national economy occasioned by the Korean War, so that benefits that might have accrued to the average man have not, with the higher taxes and the emulation "contributions," been forthcoming. Whether he is a farmer, an industrial worker, or a merchant, the average man is beginning to realize that his actual lot is not what he was promised before the Communists came to power. Instead of living better, he finds himself tightening his belt — in a situation in which he dares not complain about it. Even passive resistance has ceased to be a realistic alternative, because it will be punished just as relentlessly, when it is discovered as the more active types of oppositionist activity; and, under present conditions of surveillance and general lack of privacy, it will be discovered.

The fact that the average Chinese still has some spirit left, despite these grievances, is evidenced by the anecdotes and jokes which continue to filter through the Bamboo Curtain. Says one industrial worker to another, with a sad smile: "In past days, everybody exploited everybody. Nowadays, one man does all the exploiting." A ricksha coolie remarked, "In former days, we were tortoises, slow perhaps but still able to advance. Nowadays, the tortoise has turned over [*fan shing*, a Communist expression for taking over leadership], and he can no longer budge."

SOCIAL ORDER UNDER THE NATIONALISTS 1949–

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Evacuation to Formosa

Some two million Chinese who felt they could not accept Communism fled to Taiwan (Formosa) with the Nationalist government before the onslaught of the Communist Army in 1949. Many others have since followed. A small number of these were close associates of President Chiang Kai-shek. Some were private business men who believed that state Communism and private enterprise are incompatible. Some were men and women who, because of their personal experience or knowledge of Communism, were afraid to remain inside the Bamboo Curtain. There is a strong presumption that most if not all of them value freedom and democracy.

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The present population of Taiwan is approximately nine million, some seven million of whom are Taiwanese natives of pure Chinese descent. (There are a few non-Chinese aborigines.)

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Effect of Japanese Occupation

To appreciate fully what the National government has accomplished in Taiwan, a word should be said about the state of affairs there just after the Second World War. As of V-J Day, Taiwan's economy was in full chaos. Its industrial plant had been bombed out. The Taiwanese, after 50 years of subjugation by the Japanese, had neither the training nor the experience they needed in order to take over from the Japanese. The island's currency was inflated. Its normal trade was geared to that of Japan, where SCAP was prohibiting the resumption of normal operations.

Japan had taken great pains to teach the Taiwanese to regard their struggling compatriots on the mainland with contempt and disdain. They did not, therefore, expect much help from the Chinese government, and the latter, weakened by eight years of continuous war and thrown off balance by the onslaught of Chinese Communism, could indeed do little to help the once well-off Taiwanese get back on their feet. A further important complication

52:Steiner S-4 (no date) 1951
AF1 China
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652 Thus far, the provincial budgets have been balanced in recent years. How long the improved financial outlook will continue depends on a number of factors. Undue strain on provincial resources has been avoided by using assets brought over from the mainland and by selling government properties. Indirect benefits derived from the Economic Co-operation Administration program, which for the fiscal year 1951 amount to approximately US$40,000,000, help to arrest the inflationary trend of commodities.[29]

Living Conditions

511 In the absence of comprehensive statistics establishing the trends of per capita income in Taiwan,[30] the Nationalist policy of improving the people's livelihood may be reflected by the measures which have been taken regarding agriculture, industry, food, and other government-operated productive services.

Agriculture

[162] 427 Farming population in Taiwan is estimated to be around 3,800,000. Of this number, 70 per cent are under contract as tenant farmers. Prior to the enforcement of the rent reduction program in April 1949, which set a maximum rental ceiling of 37.5 per cent, the average rental ranged from 46 to 62.5 per cent of the total yield.

In administering the rent reduction program, the provincial authorities fix a standard yield per *chia* (less than 2.5

[29] "Economic Administration Program in Taiwan," an address by Raymond T. Moyer, chief, ECA, China Mission, before the Chinese Association for the United Nations, March 17, 1951.

[30] Premier Chen Cheng states that per capita income in Taiwan has risen 30 per cent since the termination of Japanese rule (Broadcast of the Voice of Free China, Taipeh, May 12, 1951). Also estimated income in Taiwan for 1950 is NT$1,276,000,000 and for 1951

[P. 218(A)]

166 hsien.[14] The few rural dwellers who moved from the townships surveyed went to the larger cities or to the east coast. Two townships on the east coast showed a relatively large immigration[15] during the period 1937-52; most of the newcomers were from the western and southern parts of the island. If employment opportunities in the urban areas are improved, it is believed that there will be a great migration from every township.[16]

In recent years, industrialization has been another factor which influenced a number of people to move from rural areas to urban and industrial areas. Cities having more than 100,000 inhabitants in 1920 accounted for 4 per cent of the total population; while in 1952, large cities accounted for 21 per cent. If we consider that the increase in total population during 1920-52 was 120 per cent -- 3,800,000 to 8,200,000 -- the increase in urban population which amounts to more than 420 per cent is of extreme importance and indicates how rapidly urbanization is taking place in Formosa.

VI. VITAL STATISTICS

•163 A. Births

The birth date of Formosa has been constant and high. During the period 1920-53, the number

14. Ibid., p. 205; the remaining 13 per cent are probably from other hsien and provinces.
15. Raper, loc. cit.
16. Ibid.

Table 7. Births According to Age of Mother, 1950-52 */
(per 1,000)

Year	All Ages	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +
1950	143.2	0.1	60.9	245.0	295.3	266.9	191.5	110.9	29.4
1951	168.0	0.1	67.7	287.1	349.5	310.9	225.9	131.8	34.6
1952	158.5	0.1	53.1	271.8	341.7	293.8	219.9	113.4	29.3

*/ United Nations, Statistical Office, Demographic Yearbook, 1953, New York, 1953, pp. 144-45.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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• 143 of births per 1,000 population has remained over 40, except in the year 1948 when the rate was 39.7.

•163 In the prewar years, the birth dates were found to be lower in the northern and central parts of the island; higher rates prevailed in the southern and eastern districts.[17] Exactly the same tendency exists today, according to a study of sixteen townships made by the Joint Commission on Rural Reconstruction.[18]

General fertility ratios for the Taiwanese in 1930, 1935, and 1940 were estimated at 204, 215, and 206 (births per 1,000 women 15 to 49 years of age).[19] In the twelve months ending in September 1952, the sixteen townships studied by the Joint Commission[20] had a fertility ratio of 290 for every 1,000 women between the ages of 15 and 45. Mothers 25 to 29 years old are the most prolific. But, as a whole, Taiwanese women do not avoid the risks relative to frequent pregnancy and childbirth.

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17. George Barclay, Colonial Development and Population in Taiwan, Princeton University Press, 1954, p. 249.
18. Raper, op. cit., p. 196.
19. Barclay, op. cit., p. 243.
20. Raper, loc. cit.

matrix could easily have reduced death rates to 12 or 15 per 1,000 total population and, if birth rates had remained at 45, shot the rate of natural increase from 2.5 per cent per year to 3.0 per cent or more. 165 563

THE BIRTH RATE

Neither the extension of cultivation, the increase of yields nor the health and medical activities in Taiwan produced any major changes in the familial patterns of the peasants. The recorded birth rate of the Chinese remained above 40. There were some slight evidences of a lower birth rate in the more prosperous and urbanized provinces, but the social and occupational groups that might have adopted the modern individual and familial values, rather than the traditional Eastern values, were few in numbers. 163

The growth implicit in the maintenance of fertility at the level that existed in Taiwan during the last decade of Empire was indeed rapid. The gross reproduction rate for the entire population was over 3.2 and the net rate over 2.0.

It is obvious that no population dependent on agriculture and inhabiting a limited and already densely settled area could reproduce indefinitely at the rate implicit in these figures. Potential growth was more rapid than the actual growth of the thirties, though, for any social and economic changes that would improve levels of living and contribute ultimately toward a reduction in fertility would produce immediate and more rapid declines in the death rate.

THE PROSPECTS: PREWAR JAPANESE VIEW

The balance between the people and the land in prewar Taiwan may have appeared precarious to the Western student but the Japanese foresaw many decades of further expansion before the Malthusian pressures of the people on the food supply would limit either population growth or exportable surpluses. Rice production had increased from 2.1 million koku in 1900 to 4.9 million in 1923 and 9.7 million in 1940. In the latter year the export surplus amounted to five million koku. By 1950 rice production would amount to 12.8 million koku and the quantity available for export to Japan Proper would increase by almost a million koku. 433 241 439

The Japanese also realized that Asian hegemony implied a destiny beyond the agrarian for the once subject peoples and that Japan's own demographic

48: Chen E-4 (no date) 1955 ADl Formosa ADl

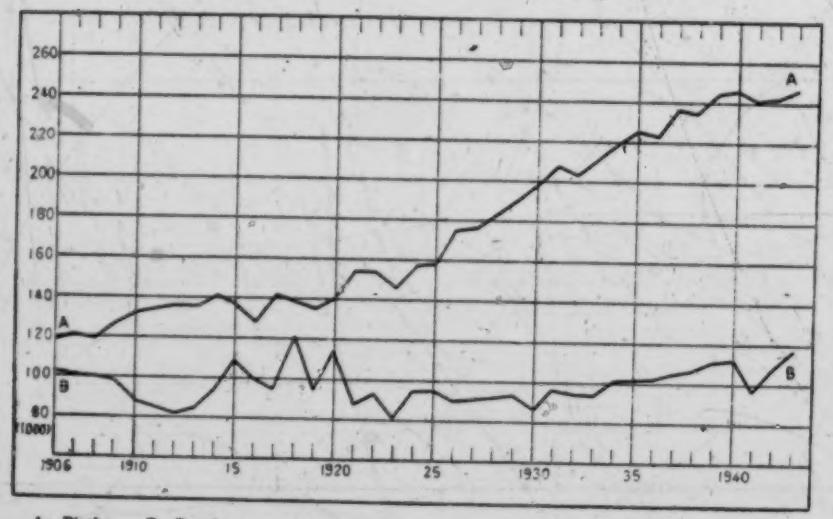
century and a half, and will attain the figure of present world population within two and a half centuries (1: p. 13; 2: p. 45; 4: p. 73-74). As a matter of course these suppositions assume that the present conditions will continue, and that a change of conditions will cause population growth to show another aspect. With regard to the estimation of future population, Sun-Ken Quo has a different point of view based on a different perspective (3). 161

5: *The Cause of Population Growth.*

Natural increase and immigration are two causes of population growth. Since the colonial government strictly controlled the emigration of Taiwanese to the mainland and the immigration of mainlanders to Taiwan, migration was quite insignificant for the population growth of Taiwanese, and 96% of its total growth was the result of natural increase[4]. 161 167

Now, how was this natural increase achieved? From Figure 1 we can see that between 1906 and 1943 the annual number of deaths of Taiwanese did not show any remarkable change, it remained around one hundred thousand. In contrast with this, 163 165

Fig. 1: Number of Births and Deaths of Taiwanese, 1906-1943



A: Births B: Deaths

Source, 14: Table 96

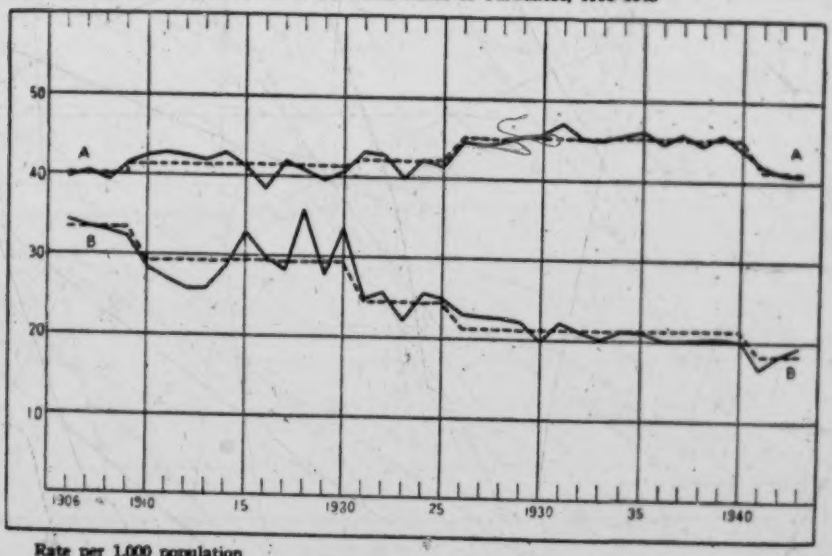
Note 4: The total of the annual increase of Taiwanese population between 1906 and 1943 was 3,078,406 (14: Table 49, 3). (The Taiwanese population in 1905 was 3,055,461, the increase between 1906 and 1943 was 3,078,406, and the grand total of these two figures, 6,133,867 was the Taiwanese population in 1943. 14: Table 40, 2. cf. Table 1, A, column 11 of this paper). Total of the annual natural increase of the Taiwanese between 1906 and 1943 was 2,947,998 (14: Table 96) was 95.76% of the total increase. Total annual increase other than natural increase of the same period was 130,408, and occupied only 4.24% of the total increase.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

163 the number of births has increased markedly, it was around 120 thousand by 1906, it
165 had doubled to around 240 thousand by 1943. The number of deaths remained about the same and the number of births was doubled; this was the cause of Taiwanese population growth.

Analyzing the rates of birth and death, the situation will be clearer and easier to
161 grasp. Though the number of births was doubled between 1906 and 1943, the birth
163 rate remained almost the same, around 40 per thousand. Though the birth rate has remained the same, the number of births has increased in accordance with the increase
165 of population. Despite the annual increase of population, the number of deaths has remained almost unchanged. This indicates a decline in the death rate (cf. Fig. 2). The death rate of Taiwanese was 34.4 per 1,000 in 1906, it dropped to 18.4 per 1,000 by 1942, a decline of 16 per 1,000. The birth rate remained almost the same and death rate dropped 16 per 1,000. This is the cause, of Taiwanese population growth. The result is clearly shown in the amount of natural increase. The space between line A and line B of Figure 1 represents the amount of natural increase, and the space between line A and line B of Figure 2 represents the rate of natural increase (cf. Table 3). Decline of death rate was the key factor of the Taiwanese population change during the half century under Japanese rule.

Figure 2: Birth and Death Rates of Taiwanese, 1906-1943



Rate per 1,000 population

A: Birth rate B: Death rate (The dotted lines represent the average rate of each period.)

Source, 14: Table 64

6. Population Change and Social Change.

From Figure 2 we can observe the trend of the death rate between 1906 and 1943. The graph naturally divides into five periods each with its characteristic type of change

48: Chen E-4 (no date) 1955 ADl Formosa ADl

as indicated in Table 3. The birth rate also shows the same periodical tendency. It is very significant that there is an intimate interrelation between population change and social change in each period, and we even may infer that population change is the index of social change. This will be analyzed in subsequent sections. The average rates of birth, death, and natural increase (Table 3) and main features and changes of each period will be clear from the following table.

Table 3: Five Periods of Taiwanese Population Change.

Period	I	II	III	IV	V
Years	1906–09	1910–20	1921–25	1926–40	1941–43
Number of years	4	11	5	15	3
Average Birth Rate (per 1,000)	40.25	41.40	42.08	45.24	41.10
Average Death Rate (per 1,000)	33.35	29.37	24.61	21.20	18.23
Average Rate of Natural Increase (per 1,000)	6.90	12.03	17.47	24.04	22.83

First Period (before 1909): Wide spread epidemics and malaria, frequent revolts of the people against the Japanese characterize this unstable period. The birth rate was high (more than 40 per 1,000), but the death rate also high, more than 30 per 1,000 on an average, and the fluctuation was remarkable and frequent. The rate of natural increase was about 7 per 1,000.

Second Period (1910–1920): Epidemics were wiped out by the end of this period, the prevention of malaria had started. The uprisings of the Taiwanese were suppressed around 1915, the revolts of the aborigines were largely mitigated by 1920, and comparative social stability was more or less attained. Political, cultural and social movement of the modern type began for the first time after World War I, and took the place of armed uprising. The Japanese colonial policy had changed somewhat. Birth rate increased slightly, death rate declined to an average of around 30 per 1,000, and the rate of natural increase rose to 12 per 1,000.

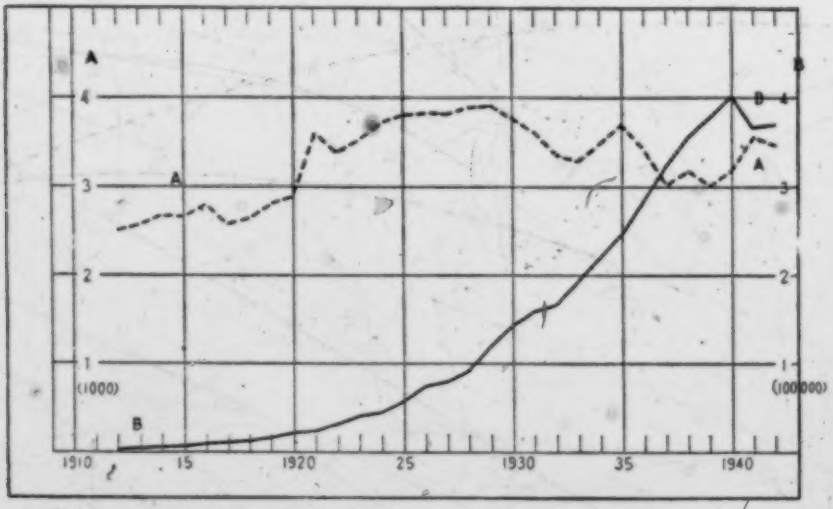
Third Period (1921–25): Vigorous cultural and social movement marked this era. This was a period preparatory to the following period of expansion. Transportation was improved, mobility of people increased. Agricultural products and processed agricultural products increased, the productivity was raised, and the consumption of daily necessities increased slightly. The attitude of the people began to change, they began to adopt new ways of life more readily. Use of mechanical facilities gradually increased, and the number of doctors of western medicine exceeded the number of physicians who practiced Chinese medicine. The spread of primary education was promoted. The birth rate increased again, the death rate was 4.8 per 1,000 lower than the foregoing period, and the rate of natural increase rose 5.5 per 1,000.

Fourth Period (1926–40): During this period there was a tremendous increase in the output of agricultural products, attaining the peak production during the Japanese rule. The hydroelectric plant of Sun Moon Lake was completed in 1934, and industry

48: Chen E-4 (no date) 1955 ADl Formosa ADl

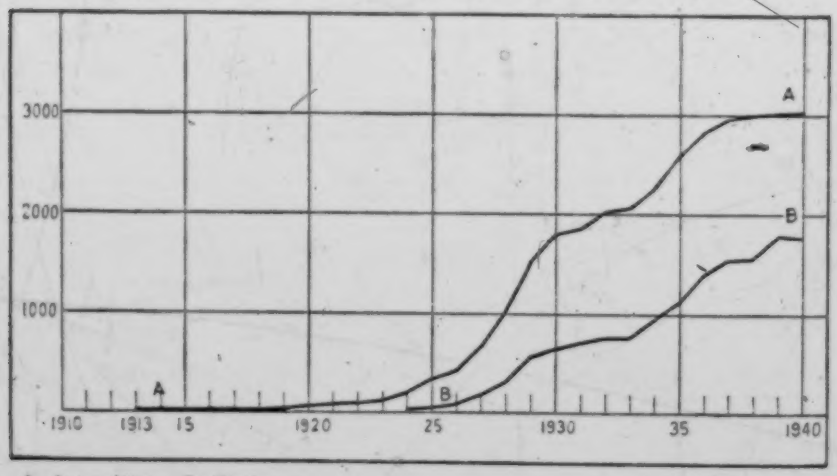
During the early years of Japanese occupation, the difference in the rates of birth and death in different localities was remarkable. As time passed, the development of different localities was gradually equalized, so the

Fig. 4 Number of Rickshaws and Bicycles, Taiwan, 1912–1942



A: Rickshaws (unit: 1,000) B: Bicycles (unit: 100,000)
Source, 14: Table 457

Fig. 5 Number of Automobiles and Trucks, Taiwan, 1913–1943



A: Automobiles B: Trucks
Source, 14: Table 457, 455

48: Chen E-4 (no date) 1955 ADl Formosa ADl

rates of birth and death were more and more equalized. The difference between the highest and the lowest birth rate among different localities was 13.4 per 1,000 in 1906, but had fallen to 8.5 per 1,000 in 1935; the difference between the highest and the lowest death rate among different localities was 32.6 per 1,000 in 1906, but it was only 8.9 per 1,000 in 1935 (see Table 4, cf. 1: p. 169).

Table 4: The Highest and the Lowest Birth Rate, the Highest and the Lowest Death Rate of Different Prefectures of Taiwan in Selected Years (Rate: per 1,000 population)

		1906		1935				1906		1935	
Birth Rate		Whole Province	39.3	Whole Province	45.2	Death Rate		Whole Province	34.0	Whole Province	20.5
	The Highest	Nanto Prefecture	47.7	Tainan Prefecture	48.1		The Higheat	Chiai Prefecture	52.9	Taitung Prefecture	24.4
	The Lowest	Yansuika Prefecture	34.3	Taipei Prefecture	39.6		The Lowest	Hsinchu Prefecture	20.3	Penghu Prefecture	15.5
	Differece		13.4		8.5		Difference		32.6		8.9

Source: 10:1906, 1935.

13. *Agriculture and Industry*

To get primary agricultural products and processed agricultural products, especially rice and sugar, which Japan needed urgently, was one of the main policies of Japan in Taiwan. The colonial government had spent much of time and money for the promotion of the production of rice and sugar. They made various kinds of surveys, researches, and experiments, used the system of police and pao-chia for enforcement, and as a result, the outputs of rice and sugar had increased tremendously.

Among the various types of production in Taiwan, agriculture and manufacturing were the two main types, and the proportion occupied by forestry, fishery, and mining was rather small. In 1912, the value of the total output of all types of production amounted to 146,374 thousand yen. Among these, the proportion of agriculture was 63%, manufacturing was 32%, and the total of three other types (forestry, fishery, and mining) was only 5%. By 1942, manufacturing had developed fairly well, its production value had exceeded that of agriculture. The value of the total output of all types of production in 1942 was 1,515,627 thousand yen. Agriculture's share of this was 42%, manufacturing was 46%, and the total of three other types was 12%. Agriculture and manufacturing, the two main types of production, were again represented by rice and sugar respectively. The proportion of the value of rice to the total value of agricultural products was 59% in 1912, and 39% in 1942. The proportion of the value of sugar to the total value of manufactured products was 79% in 1912 and 42% in 1942. Considering these facts, it seems not unproper to take rice and sugar as representative of Taiwan production.

From figure 6 we can see, that in comparision with the increase of acreage of cultivation (line A), the increase in the output of rice (line B) was tremendously high.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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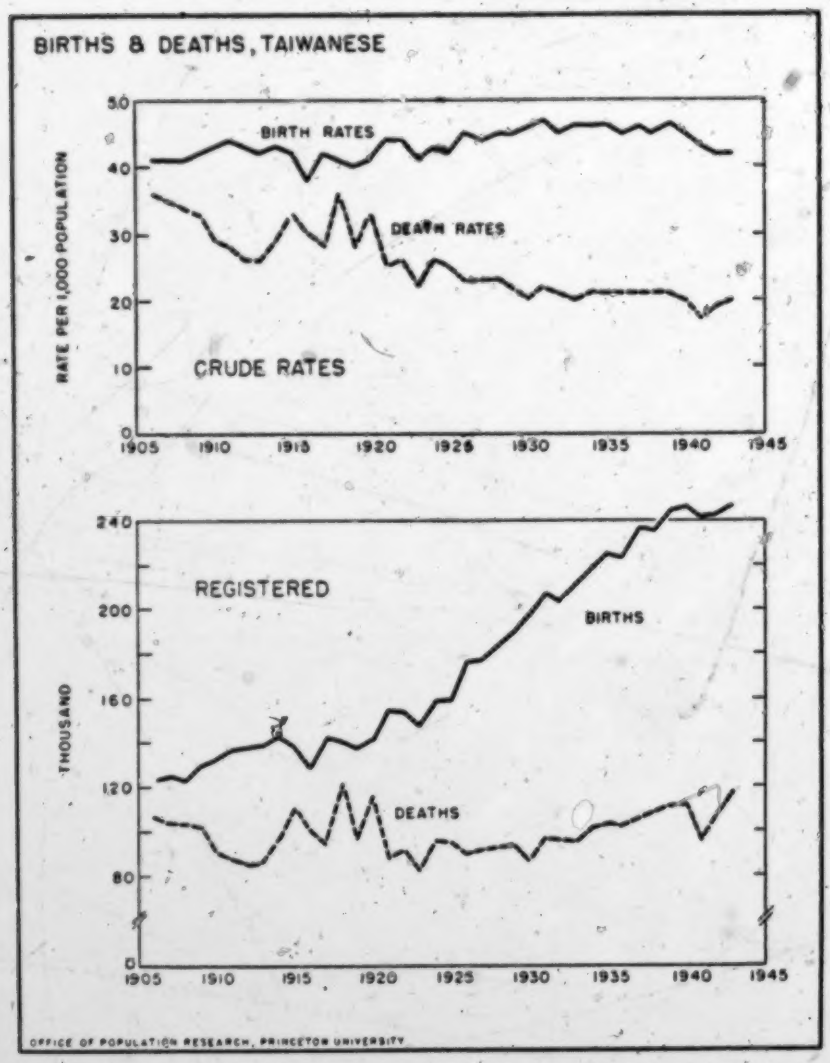

Fig. 21. Crude Birth and Death Rates and Total Registered Births and Deaths of Taiwanese, 1906-1943.

for it allows one to speak in terms of probabilities of dying, which 165
is what we mean here by the notion of mortality. Being conventional, it lends itself easily to comparison with data from other places independent of differences in age structure, even when the procedures of computation are slightly varied. Some caution, of course, must be

52:Barclay S-5 (nodate)1954 ADI Formosa ADI

161 enough range of social functions is carried on in family units, individuals cannot readily participate in the society except as family
182 members. Their contacts with the rest of the society may come to depend on ties of kinship, lacking provision for being conducted on other terms.

Familial institutions have always been one of the most prominent elements in Chinese society. The culture of China is dominated by a morality that systematically urges and abets the production of progeny. We have already seen the by-products of this situation among the Taiwanese. The organization of livelihood, the inheritance of occupation, the immobility of the rural population and the character of migration to cities all reflected the influence of family relationships in the decisions of individuals.

At the same time, events under Japanese rule undeniably altered many of the conditions of life in Taiwan. In fifty years of selective exposure to modern innovations, Taiwanese were showing the effects of this contact, though none of these effects—except the gains in longevity—could be called spectacular. It now remains to be seen whether these developments had created more than superficial social changes, and had begun to exert any influence on fertility.

The Course of Fertility in Taiwan

163 Due to its peculiar nature in Taiwan, the system of vital registration recorded the numbers of Taiwanese births with a high standard of accuracy. Births were registered by the same system as were deaths, which has been described in some detail in Chapter VI. It functioned as part of a more comprehensive scheme of control; this scheme in turn owed its effectiveness to the ingenious way that it was fitted into local solidarities and backed by police power. Since the system recorded deaths accurately and since the figures it helped to compile in census enumerations were practically complete, the tests illustrated in Chapter VI indicate that few live births went unregistered.

By this token the data for births are nearly as valid as were the figures for deaths. In other respects, however, they are less adequate. It is not enough for the study of fertility to know the numbers of births that occurred. The significant event is in reality parenthood rather than the birth itself—we do not search for the motives of a child in entering the world, but of its parents in bringing about the event. Accordingly, some information is needed about the circumstances of birth, and in particular about the characteristics of parents. Though Taiwan's Research Bureau issued copious data each year

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

in its regular report on vital statistics, no direct information of this sort was published. Births were tabulated simply by the civil division in which they occurred. The few other characteristics that were shown did not include any usable information about parents.[a]

Japanese showed no interest in taking advantage of their excellent birth statistics in Taiwan. Their failure to do so all but precludes any detailed study of the nature of fertility in this society, for it has denied us the information that might reveal some of the motivations surrounding parenthood. Since many of the relevant details are lacking from published sources, we shall have to fall back on approximations to conduct the sorts of measurements that will have some meaning in comparison with other countries.

"Fertility" is usually defined less precisely than mortality. Records

TABLE 74
CRUDE BIRTH AND DEATH RATES OF TAIWANESE, 1906-1943, AND RATES OF NATURAL INCREASE*

Years	*Births per Thousand Persons*	*Deaths per Thousand Persons*	*Natural Increase per Thousand Persons*
1906–10	41.7	33.4	8.3
1911–15	42.9	28.6	14.3
1916–20	40.4	31.0	9.4
1921–25	42.8	25.0	17.8
1926–30	45.0	22.1	22.9
1931–35	46.0	21.2	24.8
1936–40	45.4	20.6	24.8
1941–43	42.1	18.5	23.6

* Figures here are unweighted averages of annual birth and death rates for each year. Before 1915, births and deaths have been adjusted slightly on the basis of the internal pattern of infant mortality in later years. Otherwise no allowance has been made for under-registration.

Source: *Statistical Summary*, Table 64.

[a] The vital statistics did contain tables of births by occupation of parent, but the standards of classification were different from those used in the census (though the categories were the same), and did not receive much care in compilation. Similarly, tables were published purporting to show whether or not births were legitimate, but these cannot be relied upon to indicate the actual marital status of parents, because the Japanese did not recognize marriages that were not legally registered. Basic demographic data like the ages of mothers and actual marital status were never published.

On the credit side, the tables of births by place of occurrence were reliable, and were not noticeably affected by arbitrary allocations to other places or the migration of pregnant women just before childbirth, as in Japan. (See Taeuber, I. B., and Beal, E. G., Jr. [October 1946], pp. 17-18.) It should be noted that even this advantage did not hold for Japanese in Taiwan. Some of their births were recorded in Taiwan, and some allocated to the legal residence of their families in Japan, making it almost impossible to estimate fertility or infant mortality of Japanese in Taiwan.

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of births are kept primarily as records of the persons being born, whereas for purposes of measurement we have seen above that they must be viewed in relation to some population of actual or potential parents.[4] When the ages of mothers have not been specified, for example, arbitrary procedures have to be adopted for deciding which women might have been parents. There is consequently more latitude in devising measures to express the level of fertility than of mortality. Each different convention that is adopted bears some different significance.

The simplest expression for fertility is the births of each calendar year per thousand total population, or crude birth rate. By including everybody in the denominator, it avoids most of the problems that arise with more complex measures.[5] Table 74 summarizes the trend of crude birth rates for Taiwanese. Crude rates are useful in showing the balance of the two in changes of population size, for they place births on the same footing as deaths. In contrast to their death rates, Taiwanese crude birth rates scarcely changed in almost forty years. In a sense, therefore, the rates of natural increase rose almost solely because of decline in mortality; but they would not have risen to their high level in Table 74 if crude birth rates had not remained nearly constant at between 40 and 50 per thousand.

These data show no tendency for fertility to fall along with death rates. Quite to the contrary, birth rates actually rose slightly over the period. Crude birth rates, however, have a well-known property of indicating trends that are spurious, due to changes in age composition of the population. Before attaching much significance to these minor movements of rates, one should first examine the evidence of more precise indices of fertility.

[4] Moreover, as events occurring to adults, births are more complex in their distribution than deaths. A birth can happen more than once to any one parent, as death cannot, and introduces at least one more possible dimension for measurement.

[5] Use of crude birth rates does not avoid all of these problems. (It also creates new ones, as indicated below in the text.) Usually part of the births of a given year are included in both terms of the rates.

More important, however, is another difficulty which all measures share equally. Birth itself is not so definite an event as death. In societies where infant mortality is high, it is next to impossible to determine exactly what is a "live" birth. In Taiwan we have seen this problem illustrated in the case of unregistered non-survivors—babies who were perhaps born alive but died in the first few hours or days of infancy. Some of these may have been listed as stillbirths in the statistics, but an unknown number were probably omitted completely. Hence any measure of fertility based on these figures is certainly in some degree an understatement. Aside from the adjustment of births made before 1915, we must accept the figures of "live" births as they were published, with only minor adjustments to bring them into line with the numbers of children counted in the census.

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Trends in fertility can be better approximated in terms of child-bearing by potential mothers. In countries where this information is known, practically all women who become mothers do in fact have their births between ages 15 and 50. General fertility ratios, or total births per thousand women in this age interval, give a better idea of actual trends among women who might have become mothers. The first column of Table 75 shows a series of such ratios centered around

TABLE 75
GENERAL FERTILITY RATIOS FOR TAIWANESE, 1905-1940
Births per 1,000 Women 15-49, Based on Three Separate Estimates of Births

Year	*Births Registered During Census Year*	*Three-Year Average of Registered Births, Centered Around Census Year*	*Births Estimated From Infants Counted in Census*
1905	170*	170†	188‡
1915	179	176	188
1920	174	177	184
1930	199	200	204
1935	209	206	215
1940	203	201	206

* This is the value actually computed for 1906.
† Represents the unweighted average of ratios for 1906 to 1909.
‡ Births estimated by adding to infant survivors the deaths implied by the infant death rate in each calendar year.
Sources: Vital Statistics Reports for each year involved; tables of population by age and sex from each census, and special tables of infants by month of age.

census years. It is based on the births as registered, just as were the crude rates in Table 74. These ratios make the apparent rise of fertility seem just as prominent as when based on the evidence of crude birth rates. Neither index is conclusive, for there is reason to suspect omission in the early birth registration.

There is available still another resource, one that is not impaired by defective birth reporting in the early years. Through the combination of Chinese consciousness of age and careful Japanese census procedures, enumerations of infants at each census year were more complete in their coverage than birth registration.[6] Since the census was always taken on the first day of October, the Japanese scheme

[6] They have been invaluable, in fact, in testing the adequacy of birth registration for small civil divisions in later census years. This information was omitted in the tabulation of one census, that of 1925.

for allocating age (by calendar year of birth) gave an age interval for infants representing only three-fourths of a full year's births. Recognizing this shortcoming, census authorities tabulated full information on infants by month of age and published supplemental tables with all enumerated infants born since October 1 of the preceding year.[7] These tables make possible an estimate of births in each of the early census years that is nearly independent of the bias in the registration system. Given thorough enumeration, it should hence be consistent over time and not exhibit as increasing fertility what was in fact improvement in registration.

The last column of Table 75 gives general fertility ratios based on these special enumerations at each census. Here the infants have been used to estimate births occurring over the preceding year. For this estimation we have assumed that the births preceding the census date were affected by mortality conditions that prevailed during the calendar year of the census.[8]

These figures represent the trend of fertility in Taiwan more dependably than crude birth rates. Far from declining in the slightest, these ratios of all adult Taiwanese women evidently *increased* slightly. The fertility ratios based on census infants show that the rise before 1920 was probably a matter of improvement in registration, for infants were so carefully enumerated that they could not have been over-counted. On the other hand, the numbers of census infants counted at any one date may reflect an extraordinary crop of births in the preceding year. This was apparently the case in 1935. Taken separately, that year yielded the highest observation for fertility. Averaged with adjacent years it produces a value that is less extreme, and more appropriate to use in estimating the trend. (The same interpretation does not apply to the discrepancy between the single-year ratio and the 3-year ratio for 1915; here births were exceptionally low in 1916, possibly in reaction to an outbreak of malaria in 1915. To judge from the large number of deaths among potential mothers in that year, they must have been heavily affected by the disease.)

[7] As for validity, these show consistency of age reporting even by single months when tested against births by month of occurrence. The same tables continued to be published after 1930, when the age system above infancy was changed.

[8] Specifically, that the calendar-year infant death rate is a true mortality rate. The calculation is based on the life-table term l_1, converted to L_0 by the arbitrary weights $.28\, l_0 + .72\, l_1$ for males and $.29\, l_0 + .71\, l_1$ for females. If the life table radix is 1, then the ration $1/L_0$ applied to infants of each sex serves to estimate births over the preceding year. This figure is always conservative, for in years of under-registration infant mortality was not fully reported.

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Insofar as any actual change can be detected from the ratios before 1930—and this was very slight—it was not downward. The situation after 1930 is less clear. There is little to be gained by augmenting the materials used so far with observations for single years, for yearly fertility ratios indicate fluctuation as well as trend. There were two high points, in 1935 and 1937, after which they fell slightly until 1943.

Since fertility had remained high enough up to this time to maintain an accelerating rate of growth in population, it is of special interest to see whether we have observed after 1935 merely a wavering in its upward course or the portent of actual decline. Unfortunately, the figures presented in Table 75 are the total of direct knowledge about the problem that is at present available outside of Taiwan. They cannot be verified, nor investigated in further detail, nor disproved on the basis of other data now at hand. They cannot even be examined for differences between civil divisions, for such data too are lacking after 1935.

The trends of the 1930's can be given closer scrutiny, however, by recourse to indirect procedures. Using supplemental data from Japan, it is possible to make a closer comparison of points within the census period by means of gross reproduction rates.[9] With the allowance that these make for varying age composition among the women in reproductive ages, fertility in 1940 appears to have been just slightly less than in 1935, and less *in both years* than in 1930.[10] General fertility ratios followed their peculiar course during the 1930's primarily because a large group of women were passing through their ages of greatest childbirth in the middle portion of the decade. The rise and fall of general fertility ratios after 1930 therefore indicated nothing but the unusual concentration of potential mothers: with-

[9] As employed here, the gross reproduction rate is no more than a procedure of age standardization for women. It is the sum of the age-specific fertility rates of women at all the reproductive ages 15-49, representing the average number of female births produced by one woman passed through all of these ages and exposed successively to all of these rates.

As we have remarked, births were not published in Taiwan by age of mother. Age-specific schedules of births have therefore been borrowed from Japan in 1930 as a way of estimating the distribution of births among women of different ages. Taking the age-specific rates associated with general fertility ratios that most closely fit those of Taiwan, we have used them to distribute a given number of total births among enumerated women by age. The total number of births that occurred is not altered by this procedure, but expected age differences in fertility are weighted by the number of women in each age. Cf. Taeuber, I. B., and Notestein, F. W. (1947), p. 15, where the original age-specific schedules are discussed.

[10] Actually, all three of these figures are based on 3-year averages of births centered around 1930, 1935, and 1940 respectively, with an allowance for under-registration.

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163 out this fortuitous circumstance, the fertility ratios would have shown the same trend as the reproduction rates in Table 76.

TABLE 76
GROSS REPRODUCTION RATES FOR TAIWANESE, 1905-1940*

1905	2.93
1915	3.07
1920	3.00
1930	3.39
1935	3.31
1940	3.26

* Computed through the use of age schedules of fertility substituted from Japan in 1930. The number of births occurring in 1905, 1915 and 1920 was assumed to be the number of infants counted in each census plus those who had died since birth (according to infant death rates of the given calendar year). Rates for 1930, 1935, and 1940 are based on the average yearly number of registered births during 3-year periods centered on each census year, plus a slight allowance for under-registration.

These reproduction rates seem to be the closest approximation to the "true" fertility trend of Taiwanese women that is possible. It apparently increased between 1920 and 1930, though one must bear in mind that the procedure for estimating births in 1920 differed from that in later years.[21] On surer ground, fertility probably was declining very slightly from 1930 into the period of World War II. But if fertility did change at all, it changed very little, and at the end of Japanese rule in Taiwan was at practically the same level as at the beginning.

Taiwan and Selected Other Countries

A comparison with other countries gives a better idea of how high this level was. Because of the difficulties alluded to in measuring fertility, we shall again resort to gross reproduction rates as a standard form for this purpose.

Gross reproduction rates in Taiwan ranked among the highest recorded for any population in the world. Japan and Korea, for example, were the closest parallel cases. Both are Asian countries with large segments of rural population, who in the past had adjusted their livelihood and reproduction to conditions similar to those

[21] The difference was such that it might give false testimony about the trend. Since births were estimated from infants enumerated in the census, too low a value for infant mortality would give too low a figure for births. Moreover, the calendar year 1920 may have deviated from a "true" trend, for it was a year of unusual sickness in the population, which may have reduced the number of births.

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TABLE 77
GROSS REPRODUCTION RATES
For Selected Countries

Korea*	
1935	3.38
Japan†	
Total Country	
1920	2.66
1930	2.40
1940	2.06
Hokkaido Province	
1920	3.32
1930	2.95
1940	2.35
Aomori Province	
1920	3.39
1930	3.05
1940	2.44
Chinese in Malaya‡	
1947	3.25-3.37
Rumania§	
1930-31	2.38
Palestine Moslems¶	
1935	3.57

* *Population Index* (1944), p. 239.
† Taeuber, I. B., and Notestein, F. W. (1947), p. 18.
‡ Smith, T. E. (1950), p. 73; based on two alternative estimates.
§ *Population Index* (1950), p. 175.
¶ *Ibid.*, p. 177.

confronting most Taiwanese. Korea stands somewhere between Japan and Taiwan in the agrarian condition of its people, but closer to Taiwan. Only there did reproduction rates exceed those of the Taiwanese. In Japan, during recent decades large groups of people had been drawn into a rapid process of industrial development, and had begun to pay overt attention to restricting the numbers of their children. There, to find reproduction rates for provinces as high as the averages of all Taiwanese, one must go to the "backward" frontier provinces of Hokkaido and Aomori, and go back in time to the years 1920 and 1925. Even in these areas, which were extreme in relation to the rest of Japan, gross reproduction rates became lower by 1930 than the ones we have found for all of Taiwan.[12]

[12] See Taeuber, I. B., and Notestein, F. W. (1947), p. 18.

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163 Estimated reproduction rates for Chinese in Malaya are included in Table 77. They furnish a useful illustration of Chinese living outside of their own country. They are also outside the scope of the Japanese system of population statistics, and any possible bias that might be imputed to it. The range of the estimate brings it near to the level that we have found in Taiwan. This is a somewhat exceptional case, for almost half of the Chinese in Malaya in 1947 were living in towns and cities, and were engaged in non-agricultural pursuits. In their fertility they still resembled Taiwanese; their gross reproduction rates were higher than the agricultural Malaysians.[13]

Presumably fertility of this level is not actually uncommon in the world, but has existed without benefit of statistics to reveal the fact. One cannot find reproduction rates of this magnitude in recent years anywhere in Europe outside the Soviet Union. For comparable cases on a national scale it is necessary to go back to the turn of the century. In short, reproduction rates such as those of the Taiwanese have almost ceased to be characteristics of the nations that maintain adequate statistics.

The Spatial Pattern of Fertility in Taiwan

If the fertility of Taiwanese was so high and if it had scarcely changed over time, it becomes important to know whether it remained the same everywhere in the island. Familial traditions drawn from China being what they were, it would be surprising if differences had been widespread before Japanese occupation. Previous chapters have shown that only selected portions of the population came into direct contact with the new influences generated by Japanese administration. Consequently one should not expect that any large number of Taiwanese had been led to change their reproductive behavior as a result. The mode of selection and the extent of participation by Taiwanese in non-traditional activities, however, did touch some groups more than others. The question that remains to be decided is whether these factors were sufficient to induce any appreciable portions of the population to depart from their accustomed levels of fertility.

The same advantage of gross reproduction rates for international comparison also makes them useful for examining different portions of the same population—they make allowance for inequalities of age distribution in different groups of women. The only groups of

[13] See Smith, T. E. (1950), pp. 48-52; 73.

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Taiwanese for which births can be matched to parents are those counted in each civil division at census dates. Migration was small, and so it happens that age differences between civil divisions were not large. Such elaborate indicators would not be needed were it not for the fact that differences in fertility were likewise small, and require sensitive tests to be discriminated at all (see Fig. 32).

These measures do reveal that average fertility was not identical as between the main sections of the island (see Table 78). By Prefecture, reproduction rates varied from high to low in somewhat the same spatial arrangement as mortality. Northern Taiwanese had lower fertility on the whole than those in the south. These differences, which were consistent from 1930 to 1935, appear to have been present for many years.[14]

A clue to the source of this variation is given by the fertility of Taiwanese in cities. Reproduction rates for cities in Table 78 were also consistent from 1930 to 1935—consistent both in relation to each other and in relation to the surrounding countryside. The differences were most extreme for cities as compared with the remainder. In a rural region, a city is a center of most activities that differ from those of its hinterland. Since urban boundaries are arbitrarily defined, it is easy to presume that the lower reproduction rates in some Prefectures had their roots in cities and spread out to the surrounding population. The presumption holds true only in part. Taipei and Chilung, for example, are bordered by an area that shared many of the activities distinguishing the city populations as more "urban" than the rest. But the other cities were less like their bordering Districts, even though they tended to differ still more from Districts of other Prefectures (see Fig. 32).

It is important to find that Taiwanese women in some cities tended to be less fertile than those in rural Districts, for our treatment of migration showed that the cities were centers of Japanese influence in the population. It appeared that this influence was not the same in all cities; hence there is no reason to suppose that its effect on fertility should be identical everywhere. But the differences within the group of nine cities in 1935 *exceeded* the variation between Prefectures. Gross reproduction rates for Taiwanese in Kaohsiung City—one of the most rapidly developing urban centers of the island—actually were very slightly higher than the average of those who

[14] Provisional estimates of fertility in 1905 have some trace of the same pattern. They are less precise and less reliable than these, however, due to the difficulty in determining the levels of births and infant mortality in this early period.

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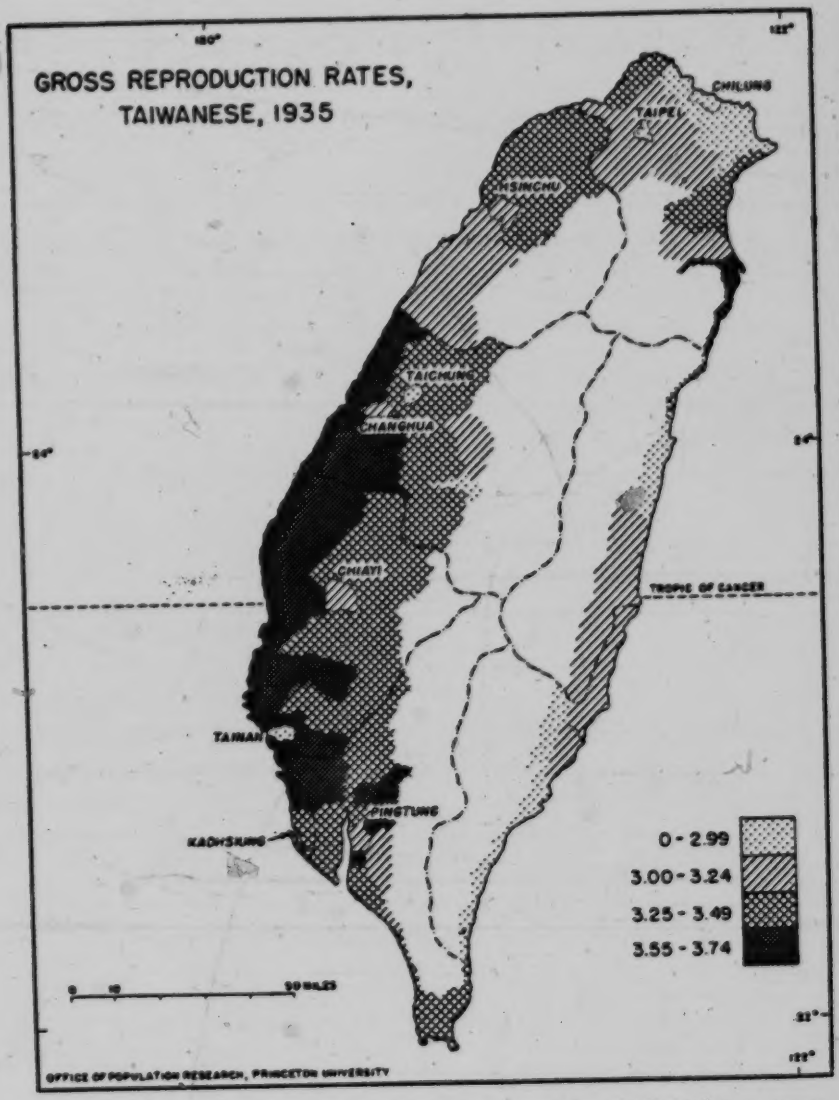

Fig. 32. Gross Reproduction Rates of Taiwanese, by Civil Division, 1935. Aborigine Territory is excluded.

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TABLE 78

TAIWAN. GROSS REPRODUCTION RATES, 1930 AND 1935
Prefectures, Major Cities, and Prefectures Outside Cities

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Prefecture	1930 Total Pref.	1930 Inside Cities	1930 Outside Cities	1935 Total Pref.	1935 Inside Cities	1935 Outside Cities	(City)
Taipei	3.12		3.24	2.99		3.10	
		2.78			2.69		(Taipei)
		2.76			2.76		(Chilung)
Hsinchu	3.34		3.35	3.23		3.24	
		3.13			3.05		(Hsinchu)
Taichung	3.56		3.57	3.39		3.42	
		3.17			2.93		(Taichung)
		—			3.16		(Changhua)
Tainan	3.59		3.66	3.44		3.51	
		3.04			2.90		(Tainan)
		3.19			3.06		(Chiayi)
Kaohsiung	3.39		3.39	3.39		3.36	
		3.40			3.40		(Kaohsiung)
		—			3.16		(P'ingtung)
Taitung	2.83			2.97			
Hualien	3.27			3.06			
Total Island	3.39			3.31			

Source: Based on census tables of Taiwanese population by age, registered births, and fertility schedules substituted from Japan, 1930.

lived outside in the same Prefecture. The range of variation between cities was also greater than between Prefectures. It nearly coincided with the range over all of the rural Districts, if the small settlements on the east coast are excluded.[15]

But we are really interested in variation among individuals or non-territorial groups of individuals. In an agrarian society it is probably more inefficient than elsewhere to use civil divisions as units of observation for this purpose. One of the principal features of agrarian social organization is that localities are as far as possible self-sufficient.

[15] It is difficult to compare these with fertility over the rest of the island. Registration of births was less complete, and fertility estimates were based on smaller numbers of cases. Since these reproduction rates are a complicated type of ratio, it is impractical to estimate the random error to be expected when cases become few. It seems best not to consider these observations as being equally reliable with the remainder.

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163 When this is the case, grouped differences in activities tend to be distributed in much the same way within the various geographical units. The same should follow for the motives and interests that one might expect to find associated with substantial differences in fertility. If, for example, wives of rural gentry were more or less fertile than those of rural peasants (and there is no evidence on either side of this question), the fact that most gentry subsisted as landowners in rural villages and towns would in every case conceal the variation in the average of each civil division observed.

The case is identical with all other types of activities that are organized with the same local scope. Since we know that very few people migrated from one part of the island to another, and not many people changed their type of employment, such sources of variation apparently were contained within the boundaries of Districts. For this reason, it has not been possible to find any evidence of association between fertility and other recorded types of behavior of rural Taiwanese by Districts. It is not a fault of the statistics, but a characteristic of the society.

This diagnosis explains why fertility is not observed to have varied with other characteristics of Taiwanese over the various rural sections of the island, but it leaves two other questions unsettled. First, the strongest spatial pattern of fertility was the sectional one, viewed in prefectural units. This is surprising to find, especially since Taiwan is small in size and new in its settlement, and Taiwanese displayed little variation in demographic characteristics among Prefectures. One would not expect to find "regional" differences, which would most likely stem from long tradition and established usage. Yet this pattern was present, and lacks any apparent reason to explain it.[16]

Second, if the social structure of most rural localities was homogeneous because they were agrarian, that of cities ought not to be, since they were responsible for the greatest differences in economic and related activities over the island. Yet fertility of Taiwanese in the major cities in no instance fell outside the range established by

[16] Conceivably it could reflect traditional practices brought over from the mainland with the original migrants and preserved intact in local villages, though there is no evidence on this point. It appears not to have been related with the one outstanding difference by place of origin, however; in 1920 general fertility ratios of descendants of Fukien Chinese and Kwangtung Chinese were substantially the same. There remain the possible "factors" of climate and different types of agriculture, which did vary more or less with the sectional pattern of fertility. But knowing these is not of much help, for they supply no reason why fertility actually should have varied.

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rural Districts, though each city tended to have somewhat lower rates than the whole of the Prefecture to which it belonged. The diagnosis above thus seems inadequate in two respects: it fails to account for the broad sectional differences in fertility that existed, and by implication it accounts for differences between city and countryside that did not exist.

Those differences that can be found in fertility do not appear to be coupled with other known features that are thought to affect the motives of reproduction. Reproduction rates showed no consistent patterns of association with the different kinds of livelihood prevailing in civil divisions, with the standing of the various places with respect to migration, or with the extent to which most localities had felt Japanese influence. Over the island as a whole, the case was the same where marriage is concerned—it is not possible to explain the variation that existed in fertility by saying that it reflected differences in the desire or opportunities of women to marry.

In Taipei City, however, it does appear that conditions preventing women from being married may have offered some interference with their childbearing. Many of its women avoided marriage and abstained from remarriage, and gross reproduction rates there were the lowest of all Districts or cities. As between the separate "wards" of the city, ratios of children to women (an alternative measurement of fertility) were closely related to the proportions of Taiwanese women who were married: those wards with more of their young adult women married had higher ratios, and the ratios where there were many unmarried women were lower. Taipei's low fertility might even be said to have depended on preventing potential mothers from marrying, for those who did marry exceeded the rural women of the same Prefecture in childbearing—the gross reproduction rate for *married* women in Taipei City was very slightly higher than that for the remainder of the Prefecture in 1935. Lower fertility, *where found*, was hence not a matter of fewer children among the married, but of absence of children among those who did not marry.

But though this conclusion seems to fit, since the Taiwanese were not yet subject to the better-known pressures for raising small families, it is not sufficient to establish a general rule for the rest of Taiwan or for Chinese people living elsewhere. In other parts of Taiwan lower birth rates were not often to be found. Other cities, for example, did not lose in distinctness from their respective Prefectures when the reproduction rates of their married women are

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compared. Basing these fertility rates on married instead of total women makes very little difference in the way they are distributed, and practically none in the observed trend of fertility, for the ages in which marriage patterns changed were not the ages in which women made their large contributions to fertility. Insofar as the factor of marriage did make a difference it seems to have cancelled out some of the variation that can be observed, but not enough of it to alter the relative standing of most civil divisions in their fertility.

Viewed in relation to other peoples who have come to restrict their fertility under modern conditions, however, the whole range of variation among Taiwanese by civil divisions seems trivial. The very lowest of "urban" gross reproduction rates, in Taipei City, corresponds to very high fertility in most other countries. In Japan, even in 1935 more than half of the provinces *outside* the principal cities had lower rates than this. There is no way to determine, then, whether or not the observed differences in Taiwan might have presaged further declines in the segments of Taiwanese that were exposed to outside influence. But two things are certain: such a decline had not proceeded very far, and its progress was extremely slow. It may have been nothing more than a continuation of differences that existed before the arrival of Japanese in Taiwan.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
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the rural people. Some forms of improved sanitation reached the rural areas through the schools and, perhaps more effectively, through the publishing of government edicts enforcing practices of sanitation. Semiannual government inspections forced villagers to clean up their houses and the villages twice a year. The inspections were carried out by the Japanese police and civil officials, and any family which did not pass the inspection was subject to fine and to reinspection, which meant that "the party was punished by having to clean up all over again." The policy of inspections instituted by the Japanese has been continued under the Nationalist Chinese regime.

During the latter part of the war, and especially after the restoration of Chinese rule to Taiwan, there was a marked increase in the incidence of disease, particularly communicable diseases. There was even a recurrence of cholera. This was a direct result of the poor living conditions brought about by the war and, with the coming of the Chinese government, a chaotic administration which was unable or unwilling to deal with health problems. However, the situation gradually began to improve after 1948 and 1949 when Taiwan became the new stronghold of the Nationalist Chinese regime. This improvement is evidenced by the general situation in the Hsin Hsing area. Beginning in the early 1950's the number of Western-style doctors practicing in the area increased. At this date, there are a number of such doctors, and the villagers consider their fees reasonable and within their means. The reason for this great increase lies in the different licensing practices of the Japanese and the Nationalist governments. Under the Japanese a man had to be a graduate of a medical school before he could practice medicine; under the Chinese government, the applicant is required only to pass a practical examination. This means that people who have worked in hospitals as aides or technicians and have had some opportunity to observe others practicing medicine may have accumulated enough knowledge to pass the examination and obtain a license. Therefore, while there are now a large number of licensed doctors practicing in the Hsin Hsing area, only a few who went to school in Japan have had formal medical training.

In addition to the great increase in the number of doctors practicing in the local area, in recent years there has also been a marked expansion in the number of private and public hospitals in the cities. These hospitals, which are sometimes very large, can accommodate many patients, house relatively modern facilities such as operating rooms, X-ray and other equipment, and provide modern drugs for patients. Although most of the patients treated in these hospitals are city people, village people sometimes go to them for treatment. They are usually referred there by a local doctor who is capable of diagnosing an illness as one requiring hospital care or who is honest enough to

4:Grajdanzev--174 S-4 (no date) 1942 Formosans
116, 164, 171, 758

"In 1937 about 22 times as many cases of dysentery per 1,000 inhabitants, twice as many cases of typhoid fever, 9 times as many of paratyphoid, 17 times as many of scarlet fever, 3 times as many of diphtheria and 21 times as many cases of insanity were registered in Japan as in Taiwan. But this does not mean that Taiwan is a remarkably healthy place in which to live. There are more cases of epidemic diseases per 1,000 population in Taiwan than in Japan, but they are not registered because the masses of the population cannot afford to pay a physician, far less a hospital. From the official sources we know, for example, that each year out of 100-108 thousand deaths at least 9,000 are due to tuberculosis; probably far more because it is doubtful whether all cases are registered. According to the official estimates the number of tubercular persons is '80-90 thousand', but there are only 150 beds in the tuberculosis hospital for the whole island. Besides tuberculosis the island is ridden by trachoma, intestinal parasites, venereal diseases, leprosy, and malaria. Concerning the first two, official sources say only that they are 'widespread'. As to venereal diseases the chief means of their transmission is licensed and unlicensed prostitution."

4:Grajdanzev--174-175 S-4 (no date) 1942 Formosans
116, 164, 177, 548

"Before the coming of the Japanese, prostitution was practically unknown (1). In [175]

1 Franck, H. A., Glimpses of Japan and Formosa, 1924, pp. 178-181. The author quotes also the testimony of a Spanish missionary who spent many years in Formosa.

1938 out of 45,582 examinations of licensed prostitutes by the police 4.26 per cent were found to be victims of these diseases (2). Beside these licensed prostitutes (who do their

2. The officials mention that in Japan only 2.15 per cent of the prostitutes are infected.

part in contributing to the state treasury) there are an unknown number of unlicensed prostitutes who from times to time are caught and examined by the police. In 1938 more than one thousand of these were examined, 31.6 per cent of whom were infected. The difference between these two groups is explained very simply: those among the licensed who cannot be cured enter the ranks of the unlicensed."

4:Grajdanzev--175 S-4 (no date) 1942 Formosans
116, 164, 758

"According to the police investigation of 1930, there were at that time 1,084 lepers on the island, but the actual number is certainly larger. (In Korea there were 13,786 lepers in 1937, not including incipient cases, and probably this also underestimates the situation.) Only 700-800 of these are segregated."

9: Yamasaki--225 N-5 (1896-1897) 1900 Formosans
134, 164

The tributaries of the Taito-kei flow through this territory [MC: the terraced tableland in the south] like a network. The soil is very fertile; but the town of Taichū (Taiwan-fu) situated here is notorious for malaria.

10: Schumacher--223 [4] T-1 (ca. 1896) 1898 Formosans
116, 164, 175

I want to state that the extremely high mortality rate among the Chinese and the Japanese is not due to unalterable circumstances. The Japanese, to quote some figures, lost 66% of their men in the course of the campaign, who were simply victims of disease. The Japanese guard division left the rough climate of Korea in the spring equipped with winter-uniforms. This factor, combined with a scarcity of provisions following the capture of Kelung, resulted in a period of terrible suffering for the division. In spite of it all the men tried to deal with a task that was beyond their powers at this state of the game. Weakened by fevers, hunger, dysentery and long marches, the group had advanced to Tschang-hua, but was in such a pitiful condition that cholera, plague, elefantiasis, and small pox found easy victims.

10: Schumacher--223 [5] T-1 (ca. 1896) 1898 Formosans
116, 164, 361, 364

The origin, spread, and finally the endemic occurrence of illnesses are favored among the Chinese of Formosa by the layout of their towns, villages and dwellings. Nearly all the settlements have grown up in depressions which could be fed but not drained. It is true that sewers are found in all large settlements; they receive dirty water but there is no outlet for it. The water is left to evaporate and naturally infects the air. The sewers are deep ditches occupying the entire width of the narrow alleys; they are lined with tiles or planks. Add to that the fact that the Chinese are not very much concerned with bodily cleanliness, that individuals are not segregated in any way from a large group of people, that there is continued contact even at the time of contagious epidemics, and that they do not receive any medical attention, and then it becomes obvious that the origin of many illnesses should not simply be attributed to the climate of the island.

31: Hofmann--604-605 N-3 (1909) 1912 Formosans
116, 132, 164

The climate is mild and saturated with humidity; it has a soothing, lulling effect. The greatest number of rainfalls occurs in the north of Formosa (3,440 millimeters per year in Kilung), where they occur regularly throughout the year. In the south of the island there is a dry season during the winter months and a rainy season which begins about the end of May. It is, unfortunately, not possible to stamp out malaria altogether. This disease often occurs here in its most severe [605] form and is fatal after a short time. The agricultural districts, however, are dependent on the humidity which causes the miasma; for any visitor to the island, therefore, quinine is an absolute necessity.

III. PUBLIC HEALTH PROBLEMS

A. General Background

744 731 Many of the communicable diseases usually associated with a tropical and sub-tropical climate were common to Formosa until the end of the nineteenth century. At that time, Formosa was still commonly called the island of epidemics. Plague, cholera, and smallpox caused the most serious epidemics; malaria, dysentery, typhus, and pneumonia were widespread but less prevalent. The control and prevention of these diseases became a major task of the Japanese administration which took over control of the island in 1895. The activities of the health bureau were closely coordinated with the exercise of the police power. Such measures as enforced vaccination, isolation of patients, destruction of contaminated houses, elimination of rats, and strict quarantine at seaports brought quick results. Since 1920, no major epidemics have occurred on Formosa.[16] Preventive activities against venereal diseases, parasitic diseases, trachoma, tuberculosis, and leprosy were begun by the Japanese in the late 1920's. By 1942, deaths from contagious and other diseases among Chinese inhabitants of Formosa had been reduced to the following yearly rate:[17] tuberculosis, 4,834; malaria, 5,792, parasitic diseases, 5,775; tracheitis, 4,661; pneumonia, 18,922; diarrhea and intestinal inflammation, 14,789; and kidney disease, 5,993. The least results were achieved in controlling tuberculosis, malaria,

744 164

16. Shao-hsing Chen, "Population Growth and Social Change in Taiwan," Bulletin of the Department of Archeology and Anthropology, Nat'l. Taiwan Univ., Taipei, May 1955, pp. 76-103.

17. [next page]

764 parasitic diseases, pneumonia, diarrhea, and
164 intestinal inflammation, but the remarkable success in general of the health measures undertaken by the Japanese is evident in the decreased death rate during the course of the Japanese occupation.

DECLINE OF DEATH RATES DURING 1906-1942

Year	Total Population	Number of Deaths	Crude Death Rate per 1,000 pop.
1906	3,156.7	104.7	33.2
1925	4,147.5	98.0	23.6
1942	6,249.5	112.0	18.0

Source: Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Tables 50 and 87. Crude death rates are calculated by the author.

Since the end of World War II, the most prevalent and menacing diseases have been tuberculosis, pneumonia, malaria, trachoma, leprosy, parasitic diseases, and diarrhea. Of lesser incidence are diphtheria, typhoid, smallpox, typhus, plague, cholera, and venereal diseases. Significant progress has been made since the war in controlling a number of these diseases, particularly malaria, tuberculosis, the venereal diseases, leprosy, and trachoma. Progress in this area and in the building of hospitals, expansion of

17. [from previous page] The Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Table 91.

764 medical facilities, training of personnel and
164 distribution of medical supplies have been effected through the joint undertakings of Chinese Government, United States, and international agencies, namely, the American MSMC, American Board for Medical Aid to China, Sino-American JCRR, World Health Organization (WHO), and United Nations International Children's Emergency Fund (UNICEF). The decline in the death rate during the 1948-53 period from 14.3 to 9.5 per 1,000 population[18] is clear evidence of the advances made by these joint efforts.

B. Specific Measures

744 Malaria. The Japanese in the last years of their malaria-control program maintained 375 malaria stations throughout the island for the administration of suppressive drugs. During the war the efforts were discontinued and an epidemic broke out in the post-war years. The Malaria Eradication Program begun in 1952 under the joint sponsorship of the Provincial Government, WHO, MSMC, and JCRR, arrives at complete elimination of the disease from the island by the end of 1956. By early 1956, the program had provided direct protection against malaria to more than 5,500,000 residents of formerly malarial areas.[19] The control program is carried out through (1) continuous checking and study of malaria parasites and treatment of malaria patients in the rehabilitated 144 malaria control stations throughout the island, and (2) the planned residual spraying with DDT of all dwellings in

18. See Table 8 in chapter on Population.

19. Mutual Security Mission to China, International Cooperation Adm., The Public Health Program on Taiwan (unpublished pamphlet), Taipei, 1955, p. 6.

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,600 physicians were registered as engaged in private practice or public service. There were about 600 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per cent in this 35-year period and virtually all 161 241 177

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Hitherto the development of chemical production, heavy industry, and consumer goods industries on Taiwan had declined, but now they were earnestly promoted. This gave another impetus to social change. 178 648

8. Elimination of Epidemics

After the occupation of Taiwan, two things troubled the Japanese most: the revolts of the Taiwanese and epidemics. One branch of the Japanese expeditionary army landed on the Pescadores on March 21, 1895. By mid-May, fully 1945 people out of 6,190 were afflicted by cholera, and 1,247 died. Another branch of the expeditionary army landed on Taiwan at about the same time and was also stricken with cholera, malaria, dysentry, typhus, pneumonia, and beri-beri. Only one fifth of the total army was free from illness by the end of September (5: Vol. 2, No. 12). During the early years of the Japanese occupation epidemics spread widely, and thus, elimination of epidemics was the first administrative task for the new rulers of Taiwan. 648 164

Plague, cholera, and small-pox were three serious epidemics in Taiwan. Plague broke out in Hongkong in 1894, invaded in Taiwan two years later, and had spread to many places during the next twenty-two years. During this time more than thirty thousand people were inflicted, and twenty-four thousand died. It was wiped out in 1917 (5: Vol. 2, No. 12). The activities of extermination and prevention by police power were conspicuous. They included the isolation of patients, destruction and burning of contaminated houses, extermination of rats, quarantine at sea ports etc. Though the means adopted were harsh and cruel, they were effective. Cholera was not as serious as plague in Taiwan. A greater prevalence of cholera occured in 1902, 1912, 1913, and 1920. After 1921 the preventative arrangements were more or less completed and by the cooperation of the people and the public health system, the occurence of cholera could be closely controlled. 164 744

During the early years of Japanese occupation small-pox was a serious problem. With the enforcement of vaccination, it began to decline after 1903. Since then, except for a greater prevalence in 1918–1920, small-pox has not been a menance in Taiwan (5: Vol. 2, No. 12).

Plague was wiped out in 1917. Cholera and small-pox were under control by 1920. Since then there has been no serious problem of epidemics in Taiwan. Incidentally, the cattle pest which ravaged Taiwan from 1896 and killed more than forty thousand head of cattle, was also exterminated in 1920.[7]

Whether or not a society is menaced by epidemic is always a significant social fact. We may say that freedom from epidemics is the first step toward modernization. In Taiwan, the course of this change can be traced in the data of population change. Before 1920 the death rate was high, and it also fluctuated frequently, and the extent of fluctuation was great. This is a sign of the uncertainty of life. In fact, living in a society where epidemics constantly spread, one could not estimate in the morning what would be happen before nightfall. Fatalism, such as shown in the saying "man proposes, 161 164

Note 7: Animal Resources of Taiwan, published by the Bank of Taiwan, 1952, p. 172, p. 296.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

161 but God disposes", "Der Mensch denkt, und Gott lenkt", "Der Mensch schaltet, Gott
164 waltet", was fostered under such circumstances. In Taiwan there was a saying: Confucius did not accept an invitation for the next day, since he didn't know whether he would be still alive in the evening or not. Under these circumstances, the attitude of the people is always "looking backward", and planning for the future will be laughed at as utopian. Once epidemics were wiped out, the death rate not only lowered, but its fluctuation became more infrequent and of lesser extent. This is a sign of more stability of life, and thus the traditional fatalism gradually dies out. The attitude of the people changes from "looking backward" to "looking forward", and planning for the future becomes a realistic idea. Ancestor worship and all kinds of cult and ritual are the main concern of people who are always looking backward, but for the peole who are looking forward, the upbringing and education of the younger generation is the most important.

9. Prevention of Endemic Disease

164 Malaria was the main endemic of Taiwan. Though epidemics are disastrous enough, their prevalence is intermittent, and the extent of their devastation is not necessarily very large. In contrast, malaria creeps in slowly, destroys vitality and attacks human life directly and indirectly. From the time of the Japanese occupation (1895) until 1916, about one tenth of all the deaths in Taiwan were caused by malaria, and during this period it was always the first or second in rank among the leading causes of death. Unaccustomed to the climate of Taiwan, the Japanese in Taiwan had to pay a heavy toll to malaria. In 1899 for instance, one quarter of the total deaths of Japanese in Taiwan were caused by malaria. In 1907, under the supervision of a professor of
165 medicine, prevention of malaria was started by a camphor manufacturing corporation
744 in a village of southern Taiwan, and some results were obtained. Preventative activity by the government-general was started at Peito, a town near Taipei, in 1910. As it was found effective, the regulations for the prevention of malaria were enacted in 1913, and were enforced through the system of police and paochia. The area of prevalence was designated, inhabitants within the area were complelled to have a blood test, and the patients were compelled to take medicine. The use of mosquito nets, drainage, and other sanitary works were enforced. The means adopted were harsh, but the result was good. The malaria death rate began to decline after 1916, considerable improvement has been made since 1925, and as a result the crude death rate was lowered. (cf. Fig. 11).

10. Activities of Preventive Hygiene

The devastation from epidemics and malaria was great, and thus the activities for their prevention were begun first. Some simple facilities for patients of leprosy and mental disease were also provided in earlier years. Other diseases, such as tuberculosis, venereal diseases, trachoma, and parasitic diseases, did not show any serious devastation, and they were not considered as serious problems by the government. The administration in Taiwan was mainly an imitation of that in Japan. What they had

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

done in Japan was adopted in Taiwan with some slight time lapse. In 1916 a hygienic survey was made in Japan, and five years later, in 1921, the same project was adopted in Taiwan. Between 1922 and 1925, and also from 1926 to 1928, an extensive hygienic survey was carried out in various parts of the island. After the results were published the planning of sanitary works was mostly based on the data of the survey.

The prevention of trachoma was started around 1926, and was most active in the 1930's. The prevention of tuberculosis began from 1932. The Association for the Prevention of Tuberculosis was organized in 1934, Regulations for the Prevention of Tuberculosis were enacted in 1938, Tuberculosis Prevention Day was initiated in 1939, and a sanatorium was constructed in most prefectures, most of them being completed in 1942–43. These activities were quite effective, and the death rate from tuberculosis declined after 1938 (cf. Fig. 11, line D.) Activities of tuberculosis prevention were started in the U. S. in 1890, and as a result, deaths from tuberculosis declined sharply. It has been pointed out by a social scientist that, though the improvement in living conditions will lower the death rate from tuberculosis, community preventive activity is also very significant (20: p. 631). It is interesting to note that, this was true both in the U. S. and in Taiwan.

The preventive activities against venereal disease, mental disease, parasitic disease, and leprosy were also started by the 1930's. For the administration of these activities, a section of preventive hygiene was added to the Health Department of the government-general in 1935. This may be taken as a sign that more emphasis was put on preventive hygiene.

11. Sanitary Facilities and Medical Personnel

Various kinds of basic sanitary facilities such as drainage, water supply, disposal of garbage and night-soil, supervision of slaughter-houses and markets, inspection of food and businesses such as barber shops, restaurants, and hotels were started rather early. These were started in the cities, particularly in the wards of the city which were largely occupied by the Japanese, and gradually extended to wider areas. The establishment of public hospitals and public doctors was also early in time. Naturally, these were established first and foremost for the benefit of the Japanese in Taiwan. Japanese business men in Taiwan had enjoyed various kinds of privileges, Japanese officers received an allowance 60% greater than that of their brothers at home, and all of them could utilize these public facilities. This was the reason why their death rate was not only lower than the death rate of Japan proper, but even comparable to that of the most advanced countries in the world.

Before the Japanese occupation there were a few hospitals operated by Christian missions. Physicians in these hospitals were the only doctors of western medicine, and other physicians were doctors who practiced Chinese medicine. Some Japanese doctors of western medicine came to Taiwan after the occupation, but their number was very small. In response to the urgent need for medical personnel, training classes for doctors and nurses were set up in Taipei Hospital in 1897. The medical training class

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

721 and to contend with many types of hardship not found on the main-
165 land. As they pushed toward the island's foothills, they also suffered the consequences of many bloody incidents of violence that they provoked among aboriginal tribesmen.

Even in the lowlands, where activities were comparatively settled
164 and routine, life itself was a very uncertain thing. From their environment people were subjected to attack by several kinds of fatal sickness. Through certain traditional practices they unwittingly exposed themselves to many others. The semi-tropical climate of Taiwan favored the spread of a multitude of disease-producing agents. Accustomed methods of cultivating the land—especially those having to do with the conservation of human wastes as fertilizer—encouraged the transmission of these organisms to humans.[1]

Through conditions such as these, the population harbored many body parasites and other sources of infection. As a result, many people passed their lives chronically enfeebled, and others remained constantly exposed to the onset of illness. Certain types of disease often spread over the island, restrained only by the isolation of many localities and the difficulty of travel. From time to time, some would grow to spectacular epidemics in which thousands perished. Disease even proved to be one of the best defenses that Taiwan had against attack by the troops of Western powers, and delayed the Japanese in taking control of the island.

Plague was the foremost among these epidemic diseases.[2] Taiwan was repeatedly swept by attacks of this illness, with heavy fatalities. An uncontrolled traffic of shipping from the mainland and from elsewhere in Asia, much of it illicit, made it easy to introduce infected rats and persons. Conditions of knowledge and sanitation in Taiwan were wholly inadequate to cope with the problem.[3]

Cholera was the second most important disease that occurred in epidemic proportions. Lacking knowledge or facilities to control the spread of cholera, Taiwanese sometimes suffered the full course of epidemics throughout a whole season without being able to take counter-measures.[4] Cholera also was well known and feared in the

[1] For an able popular account of some of the connections between custom and the "food cycle" that propagates these organisms, see Winfield, G. F. (1948), p. 112 ff.

[2] See Hsü Tze-wei (1946), p. 444.

[3] For some of the futile steps adopted against plague by the people, see Campbell, W. (1915), p. 77.

[4] Drinking water was usually taken from the rivers or from shallow wells, making them easily subject to pollution. See Takekoshi, Y. (1907), p. 285.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

early Western contacts with Taiwan. It all but wiped out some of the military expeditions sent there as tentative colonial ventures by European powers, and later helped to persuade the Japanese to embark on large-scale measures of control. 164

Malaria was ordinarily endemic in Taiwan. The moist heat, and the practice of admitting water into fields for irrigation in pools that were left to stagnate, helped to nurture the mosquitoes that spread the disease. Occasionally malaria broke out in epidemic form. It was likewise impossible to control, but was simply allowed to run its course. Even in the more fortunate years it served to undermine the strength of Taiwanese during much of the year, and probably also their resistance to other sickness.

In addition to these major diseases, Taiwanese were widely afflicted with the more common debilitating ailments that tend to shorten life and lead to complicating illnesses in Asia. Enteric diseases and internal parasites were always prevalent, as in China. Tuberculosis and venereal disease were later found to be widespread, and presumably had existed also at this earlier period. Superficial skin and eye maladies were frequent. Taiwan's position as a transshipping point in the opium trade introduced a plentiful amount of the drug for local consumption, which impaired the health of the inhabitants still further. In the census of 1905, it was found that nearly one-fifth of all Taiwanese men over age 30 were known users of opium, and there were probably others who managed to conceal the fact. As external trade increased, surreptitiously and openly, Taiwan became exposed to a wider variety of diseases and a greater number of transmitting agents from outside. At the same time, the official policy of seclusion also kept out the techniques that the West was evolving to deal with them. [276]

These baneful health conditions added new hardships for the people who migrated to Taiwan. The risks of death thus engendered became a formidable feature of everyday living. Moreover, under the pressure of poverty many families apparently eliminated certain unwanted offspring, either through exposure or deliberate neglect. As a result, a large proportion of those who were born into the population never survived to adulthood. The dangers to life were such that probably Taiwan gained few if any people through natural increase; very high fertility was needed merely to offset the losses through death. 165

4:Grajdanzev--30-31 S-4 (no date) 1942 Formosans-1-2
116, 162, 165, 171, 563

"The real explanation of the striking difference in birth and death rates is that the Japanese and the Chinese on the island form two separate groups, the living conditions and customs of which are completely different. But the figures reveal more than this. The birth rate of the Japanese in Taiwan is only slightly below that of the Japanese in Japan Proper, while the death rate of the Japanese in Japan is 17.0 (1937) and in Taiwan only 9.6 To some degree this may be explained by the fact that there are a smaller number of aged Japanese on the island, but this alone is not sufficient. It is well known that in the same population different social classes have different death rates. The social composition of the Japanese [31] on the island is such that they are better off than the Japanese in Japan, to say nothing of the Chinese in Taiwan, whose death rate is more than double that of the Japanese. The Japanese on the island live under better sanitary conditions, are better fed, have better medical treatment and more leisure than the masses of the Chinese. This does not mean, of course, that the death rate of the Chinese is stable: it is falling, and this fall, typical of all colonial countries similarly situated, is probably due to improved methods of combatting epidemic diseases.

4:Grajdanzev--30-31 S-4 (no date) 1942 Formosans-2
116, 162, 165, 171, 563

Death Rates In Some Tropical Colonies
(per thousand)

	1911-13	1921-25	1926-30	1931-35	1937
Taiwan	...	24.0	22.0	20.6	19.3
Palestine	...	23.7	24.3	21.0	15.0 (1938)
Philippines	19.1	18.9	19.7	18.5	18.8
Ceylon	31.8	27.8	25.1	24.7	21.7
Straits Settlements	40.0	28.9	30.7	24.7	21.3

As regards mortality, Taiwan is in about the same position as other colonies, a fact which suggests that living conditions are comparable to those in any other colony named above."

B. Deaths

• 165 While the birth rates for the last few decades remained scarcely changed, the death rates were reduced to less than half during the same period (see Table 8). The present death rate of 9.5 compares favorably with the rates of the United States (9.6) and Canada (9.0) for 1950.[21] However, it is possible that the registration system may have presented a lower death rate in Formosa because some deaths went unrecorded as a result of administrative laxity, or because relatives of the deceased hoped to continue to receive the additional rice ration.

In cities where adequate medical facilities are available, the death rates are definitely lower.[22] A great number of infants die, but children who attain the age of 10-14 may be expected to live to be adults. After the age of fifty, the number of deaths increases rapidly.

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21. United Nations, op. cit., p. 168-69.

22. Norman Wycoff, "An Outline of Demographic Conditions and Prospects on Taiwan," Chinese-American Economic Cooperation, Vol. I, No. 5, May 1952, p. 54.

45: Stanford U. S-4,5 1956 AD1 Formosa AD1

(faces p. 86.)

Table 9. Death Rates by Age and Sex*

	1950	1951	1952
•165 Under 1			
Male	39.9	42.7	37.7
Female	36.5	38.0	36.6
1-4			
Male	23.0	23.4	16.8
Female	25.0	26.5	19.7
5-9			
Male	3.3	3.4	3.1
Female	3.6	3.3	3.4
10-14			
Male	2.3	2.2	1.8
Female	2.0	1.8	1.6
15-19			
Male	2.2	2.2	1.8
Female	2.2	2.0	1.8
20-24			
Male	3.4	3.5	3.0
Female	3.5	3.3	2.8
25-29			
Male	4.2	4.7	3.9
Female	4.2	4.1	3.2
30-34			
Male	5.4	5.4	4.5
Female	5.1	5.3	4.3
35-39			
Male	6.2	6.8	5.7
Female	6.3	6.2	5.3
40-44			
Male	10.3	9.6	8.0
Female	8.8	8.7	6.8
45-49			
Male	13.9	13.5	10.9
Female	10.6	10.2	8.3
50-54			
Male	20.3	18.7	15.6
Female	15.7	13.0	10.5
55-59			
Male	30.5	26.5	23.6
Female	21.1	18.2	14.7
60-64			
Male	41.1	41.4	35.7
Female	30.5	28.0	25.2
65-69			
Male	58.2	57.6	52.8
Female	41.4	38.4	34.1
70 and over			
Male	126.4	131.5	117.9
Female	93.9	101.1	90.5
Average, All Ages			
Male	11.5	11.7	9.9
Female	11.2	11.4	9.8

* United Nations Statistical Office, Demographic Yearbook, 1953, New York, pp. 184-185.

[Facing p. 86]

an infirmary. Efforts have been successful in preventing epidemics and infectious diseases among the prisoners.

The number of deaths[8] in prisons and detention houses has been progressively reduced during the past five years although the number of inmates has remained more or less constant. The following table attests to the improved conditions in Formosan prisons. */

DEATH RATE IN FORMOSAN PRISONS

At End of Year	Number of Inmates In Prisons	Number of Inmates In Detention Homes	Total No. of Deaths During the Year
1949	2,909	1,691	70
1950	2,619	1,209	23
1951	3,667	2,043	19
1952	2,906	1,954	13
1953	3,021	2,346	8
1954	—	—	—

*/ Yearbook of the Republic of China, 1953, 1954.

II. THE POLICE SYSTEM

The Ministry of Interior of the Executive Yuan exercises general supervision over the

8. In 1946 there were 863 deaths caused by epidemics in Formosan prisons. The number of deaths in prison in 1947 was 222 and in 1948, 156.

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 376 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

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declined consistently from 33 per 1,000 total population in 1906 to 1909, to 20 in 1930 to 1937, with temporary setbacks only during World War I.

Life tables for the Japanese and the Chinese as of 1926 to 1930 place in sharp focus the low economic and health position of the native peoples as contrasted to the alien elite. The expectation of life at birth for males was 38.8 for the Chinese and 48.5 for the Japanese. The excess deaths of the Chinese were concentrated among children. Deaths during the first year of life amounted to 174 for each 1,000 boy babies among the Chinese and only 85 for the Japanese. Only 73 per cent of the Chinese boy babies lived to reach age 5.

The decline in the mortality of the Taiwanese under Japanese domination was appreciable but it did not approach the attainment of the standards deemed minimal in the West. At the end of the Japanese period the expectation of life at birth was perhaps 10 years greater than it was for the people of China or of India when there were no major epidemics or famines. The allocation of a larger portion of the production of the Island to the health, educational and cultural needs of the people could have produced sharp declines in the death rate and hence an even more rapid rate of population increase. An altered distribution of income within the existing technological

Taiwanese Children

matrix could easily have reduced death rates to 12 or 15 per 1,000 total population and, if birth rates had remained at 45, shot the rate of natural increase from 2.5 per cent per year to 3.0 per cent or more. 165 563

THE BIRTH RATE

Neither the extension of cultivation, the increase of yields nor the health and medical activities in Taiwan produced any major changes in the familial patterns of the peasants. The recorded birth rate of the Chinese remained above 40. There were some slight evidences of a lower birth rate in the more prosperous and urbanized provinces, but the social and occupational groups that might have adopted the modern individual and familial values, rather than the traditional Eastern values, were few in numbers. 163

The growth implicit in the maintenance of fertility at the level that existed in Taiwan during the last decade of Empire was indeed rapid. The gross reproduction rate for the entire population was over 3.2 and the net rate over 2.0.

It is obvious that no population dependent on agriculture and inhabiting a limited and already densely settled area could reproduce indefinitely at the rate implicit in these figures. Potential growth was more rapid than the actual growth of the thirties, though, for any social and economic changes that would improve levels of living and contribute ultimately toward a reduction in fertility would produce immediate and more rapid declines in the death rate.

THE PROSPECTS: PREWAR JAPANESE VIEW

The balance between the people and the land in prewar Taiwan may have appeared precarious to the Western student but the Japanese foresaw many decades of further expansion before the Malthusian pressures of the people on the food supply would limit either population growth or exportable surpluses. Rice production had increased from 2.1 million koku in 1900 to 4.9 million in 1923 and 9.7 million in 1940. In the latter year the export surplus amounted to five million koku. By 1950 rice production would amount to 12.8 million koku and the quantity available for export to Japan Proper would increase by almost a million koku. 433 241 439

The Japanese also realized that Asian hegemony implied a destiny beyond the agrarian for the once subject peoples and that Japan's own demographic

48: Chen E-4 (no date) 1955 ADl Formosa ADl

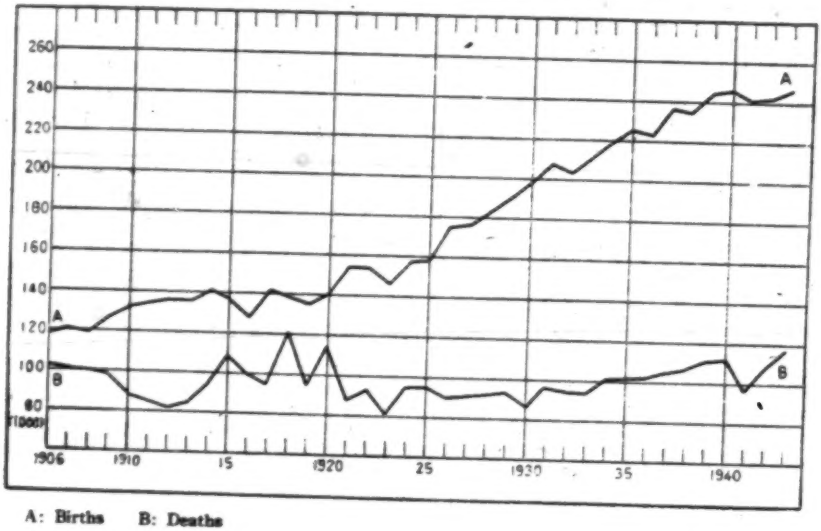
century and a half, and will attain the figure of present world population within two and a half centuries (1: p. 13; 2: p. 45; 4: p. 73–74). As a matter of course these suppositions assume that the present conditions will continue, and that a change of conditions will cause population growth to show another aspect. With regard to the estimation of future population, Sun-Ken Quo has a different point of view based on a different perspective (3). 161

5. *The Cause of Population Growth.*

Natural increase and immigration are two causes of population growth. Since the colonial government strictly controlled the emigration of Taiwanese to the mainland and the immigration of mainlanders to Taiwan, migration was quite insignificant for the population growth of Taiwanese, and 96% of its total growth was the result of natural increase[9]. 161 167

Now, how was this natural increase achieved? From Figure 1 we can see that between 1906 and 1943 the annual number of deaths of Taiwanese did not show any remarkable change, it remained around one hundred thousand. In contrast with this, 163 165

Fig. 1: Number of Births and Deaths of Taiwanese, 1906–1943



A: Births B: Deaths

Source, 14: Table 96

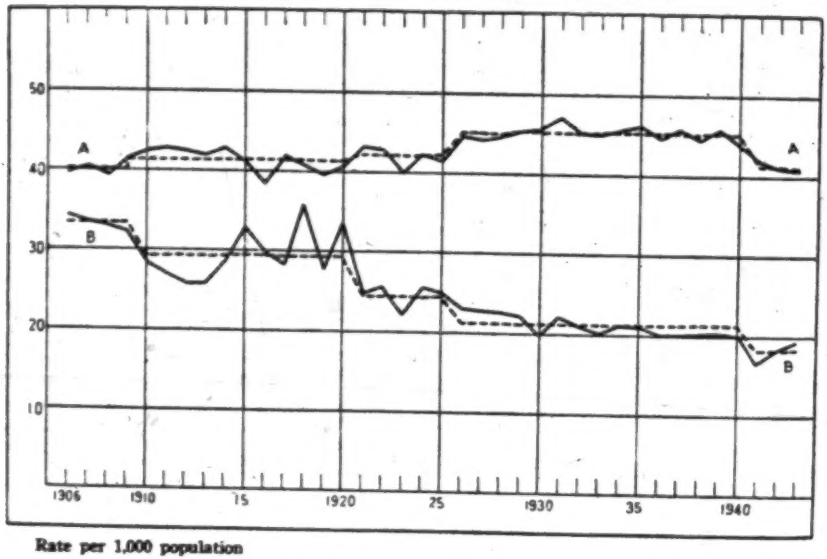
Note 4: The total of the annual increase of Taiwanese population between 1906 and 1943 was 3,078,406 (14: Table 49, 3). (The Taiwanese population in 1905 was 3,055,461, the increase between 1906 and 1943 was 3,078,406, and the grand total of these two figures, 6,133,867 was the Taiwanese population in 1943. 14: Table 49, 2. cf. Table 1, A, column 11 of this paper). Total of the annual natural increase of the Taiwanese between 1906 and 1943 was 2,947,998 (14: Table 96) was 95.76% of the total increase. Total annual increase other than natural increase of the same period was 130,408, and occupied only 4.24% of the total increase.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

163 the number of births has increased markedly, it was around 120 thousand by 1906, it
165 had doubled to around 240 thousand by 1943. The number of deaths remained about the same and the number of births was doubled; this was the cause of Taiwanese population growth.

Analyzing the rates of birth and death, the situation will be clearer and easier to
161 grasp. Though the number of births was doubled between 1906 and 1943, the birth rate remained almost the same, around 40 per thousand. Though the birth rate has
163 remained the same, the number of births has increased in accordance with the increase
165 of population. Despite the annual increase of population, the number of deaths has remained almost unchanged. This indicates a decline in the death rate (cf. Fig. 2). The death rate of Taiwanese was 34.4 per 1,000 in 1906, it dropped to 18.4 per 1,000 by 1942, a decline of 16 per 1,000. The birth rate remained almost the same and death rate dropped 16 per 1,000. This is the cause of Taiwanese population growth. The result is clearly shown in the amount of natural increase. The space between line A and line B of Figure 1 represents the amount of natural increase, and the space between line A and line B of Figure 2 represents the rate of natural increase (cf. Table 3). Decline of death rate was the key factor of the Taiwanese population change during the half century under Japanese rule.

Figure 2: Birth and Death Rates of Taiwanese, 1906-1943



Rate per 1,000 population

A: Birth rate B: Death rate (The dotted lines represent the average rate of each period.)

Source, 14: Table 64

6. *Population Change and Social Change.*

From Figure 2 we can observe the trend of the death rate between 1906 and 1943. The graph naturally divides into five periods each with its characteristic type of change

48: Chen E-4 (no date) 1955 ADl Formosa ADl

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as indicated in Table 3. The birth rate also shows the same periodical tendency. It is very significant that there is an intimate interrelation between population change and social change in each period, and we even may infer that population change is the index of social change. This will be analyzed in subsequent sections. The average rates of birth, death, and natural increase (Table 3) and main features and changes of each period will be clear from the following table.

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Table 3: Five Periods of Taiwanese Population Change.

Period	I	II	III	IV	V
Years	1906–09	1910–20	1921–25	1926–40	1941–43
Number of years	4	11	5	15	3
Average Birth Rate (per 1,000)	40.25	41.40	42.08	45.24	41.10
Average Death Rate (per 1,000)	33.35	29.37	24.61	21.20	18.23
Average Rate of Natural Increase (per 1,000)	6.90	12.03	17.47	24.04	22.83

First Period (before 1909): Wide spread epidemics and malaria, frequent revolts of the people against the Japanese characterize this unstable period. The birth rate was high (more than 40 per 1,000), but the death rate also high, more than 30 per 1,000 on an average, and the fluctuation was remarkable and frequent. The rate of natural increase was about 7 per 1,000.

Second Period (1910–1920): Epidemics were wiped out by the end of this period, the prevention of malaria had started. The uprisings of the Taiwanese were suppressed around 1915, the revolts of the aborigines were largely mitigated by 1920, and comparative social stability was more or less attained. Political, cultural and social movement of the modern type began for the first time after World War I, and took the place of armed uprising. The Japanese colonial policy had changed somewhat. Birth rate increased slightly, death rate declined to an average of around 30 per 1,000, and the rate of natural increase rose to 12 per 1,000.

Third Period (1921–25): Vigorous cultural and social movement marked this era. This was a period preparatory to the following period of expansion. Transportation was improved, mobility of people increased. Agricultural products and processed agricultural products increased, the productivity was raised, and the consumption of daily necessities increased slightly. The attitude of the people began to change, they began to adopt new ways of life more readily. Use of mechanical facilities gradually increased, and the number of doctors of western medicine exceeded the number of physicians who practiced Chinese medicine. The spread of primary education was promoted. The birth rate increased again, the death rate was 4.8 per 1,000 lower than the foregoing period, and the rate of natural increase rose 5.5 per 1,000.

Fourth Period (1926–40): During this period there was a tremendous increase in the output of agricultural products, attaining the peak production during the Japanese rule. The hydroelectric plant of Sun Moon Lake was completed in 1934, and industry

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

161 was much promoted by it. Prevention of malaria was successful to a large extent, the
178 activities of preventive hygiene being started by the 1930's. There was reduction in the number of cases of diarrhea, enteritis, and tuberculosis. Infant mortality began to decline. The birth rate rose to a peak, the death rate declined again, and the fluctuations became fewer and of lesser extent. The rate of natural increase attained a peak of 24 per 1,000. Age composion changed, the proportion of infants and children increased markedly.

Fifth Period (1941-1943): The value of industrial products exceeded the value of agricultural products, and the quick tempo of urbanization began. The birth rate began to decline, and death rate continued to drop, to around 18 per 1,000; the rate of natural increase declined slightly. Infant mortality declined further. In comparision with 1906, the average expectation of life of Taiwanese at birth in 1940 was 13 years longer for males and 16.7 years longer for females.

Objectively considered, there were improvements in Taiwan during the half century of Japanese rule; and it is evident at the same time that under the scheme of colonial administration, the improvements were limited in character. The specific character of this social change can be traced in the population data. In order to let her colony carry out its function, in order to make it a good supplier of rice and sugar which Japan urgently needed, various kinds of basic establishments and developments had to be accomplished, such as the wiping out of epidemics, prevention of endemics, basic sanitation, development of transportation, primary education etc. In order to make her colony a good market for manufactured products, the purchasing power and the level of living of the people had to be raised somewhat. But if the "improvement" was pushed too far, it would enable the people to resist and revolt, so it must be kept within certain limits. The Japanese were quite clear on these points, and developed the island within the colonial scheme. The results were successful, even to the extent of Taiwan being called the "ideal colony". Here is the fundamental character of social change in Taiwan. Some data will help us to understand the situation concretely.

161 Though the death rate of Taiwanese had declined, its tempo was slow, and still
● 165 remained very high in comparision with the death rate of Japanese in Taiwan. In the early years of occupation, the death rate of Japanese in Taiwan was tremendously high, but declined quickly and steadily, and with the passage of time the rate was not only lower than in Japan proper, but even attained the level of the most advanced western countries. To take the death rate of 1925 for instance, it was 24.84 per 1,000 for Taiwanese, 20.27 per 1,000 in Japan proper, but was as low as 11.34 per 1,000 for the Japanese in Taiwan. Though it is somewhat higher than Australia (9.2 per 1,000) and Netherlands (9.8 per 1,000), it is still lower than Sweden (11.7 per 1,000), England and Wales (12.2 per 1,000). The age composition of the Japanese in Taiwan was specific,
[162] there were more youths and adults in its population, and no doubt this was one of the causes of its low death rate. But even after the difference of age composition was

48: Chen E-4 (no date) 1955 ADl Formosa ADl

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertilizer and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertilizer increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyze the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1943. p. 201.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

161 but God disposes", "Der Mensch denkt, und Gott lenkt", "Der Mensch schaltet, Gott
164 waltet", was fostered under such circumstances. In Taiwan there was a saying: Confucius did not accept an invitation for the next day, since he didn't know whether he would be still alive in the evening or not. Under these circumstances, the attitude of the people is always "looking backward", and planning for the future will be laughed at as utopian. Once epidemics were wiped out, the death rate not only lowered, but its fluctuation became more infrequent and of lesser extent. This is a sign of more stability of life, and thus the traditional fatalism gradually dies out. The attitude of the people changes from "looking backward" to "looking forward", and planning for the future becomes a realistic idea. Ancestor worship and all kinds of cult and ritual are the main concern of people who are always looking backward, but for the peole who are looking forward, the upbringing and education of the younger generation is the most important.

9. Prevention of Endemic Disease

164 Malaria was the main endemic of Taiwan. Though epidemics are disastrous enough, their prevalence is intermittent, and the extent of their devastation is not necessarily very large. In contrast, malaria creeps in slowly, destroys vitality and attacks human life directly and indirectly. From the time of the Japanese occupation (1895) until 1916, about one tenth of all the deaths in Taiwan were caused by malaria, and during this period it was always the first or second in rank among the leading causes of death. Unaccustomed to the climate of Taiwan, the Japanese in Taiwan had to pay a heavy toll to malaria. In 1899 for instance, one quarter of the total deaths of Japanese in Taiwan were caused by malaria. In 1907, under the supervision of a professor of
165 medicine, prevention of malaria was started by a camphor manufacturing corporation
744 in a village of southern Taiwan, and some results were obtained. Preventative activity by the government-general was started at Peito, a town near Taipei, in 1910. As it was found effective, the regulations for the prevention of malaria were enacted in 1913, and were enforced through the system of police and paochia. The area of prevalence was designated, inhabitants within the area were complelled to have a blood test, and the patients were compelled to take medicine. The use of mosquito nets, drainage, and other sanitary works were enforced. The means adopted were harsh, but the result was good. The malaria death rate began to decline after 1916, considerable improvement has been made since 1925, and as a result the crude death rate was lowered. (cf. Fig. 11).

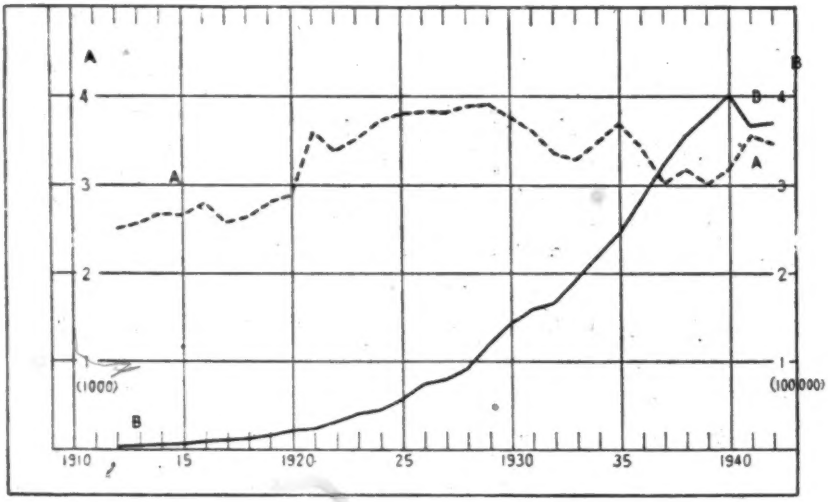
10. Activities of Preventive Hygiene

The devastation from epidemics and malaria was great, and thus the activities for their prevention were begun first. Some simple facilities for patients of leprosy and mental disease were also provided in earlier years. Other diseases, such as tuberculosis, venereal diseases, trachoma, and parasitic diseases, did not show any serious devastation, and they were not considered as serious problems by the government. The administration in Taiwan was mainly an imitation of that in Japan. What they had

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

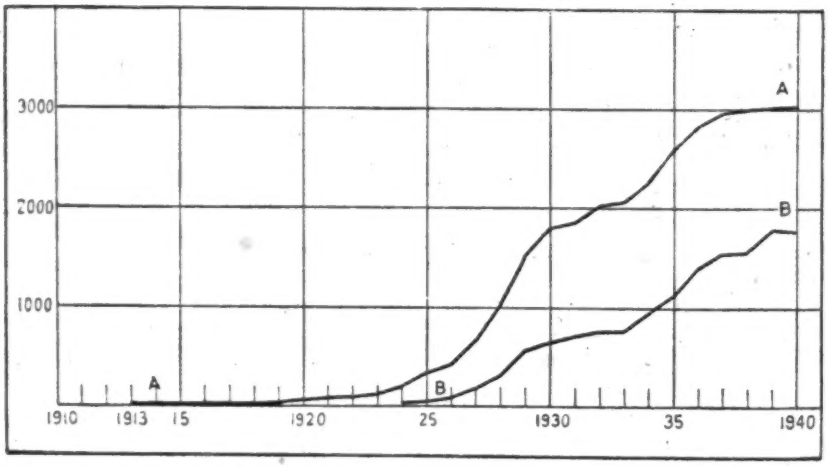
161 During the early years of Japanese occupation,
163 the difference in the rates of birth and death in different localities was remarkable.
165 As time passed, the development of different localities was gradually equalized, so the

Fig. 4 Number of Rickshaws and Bicycles, Taiwan, 1912-1942



A: Rickshaws (unit: 1,000) B: Bicycles (unit: 100,000)
Source, 14: Table 457

Fig. 5 Number of Automobiles and Trucks, Taiwan, 1913-1943



A: Automobiles B: Trucks
Source, 14: Table 457, 455

48: Chen E-4 (no date) 1955 ADl Formosa ADl

rates of birth and death were more and more equalized. The difference between the highest and the lowest birth rate among different localities was 13.4 per 1,000 in 1906, but had fallen to 8.5 per 1,000 in 1935; the difference between the highest and the lowest death rate among different localities was 32.6 per 1,000 in 1906, but it was only 8.9 per 1,000 in 1935 (see Table 4, cf. 1: p. 169). 161 163 165

Table 4: The Highest and the Lowest Birth Rate, the Highest and the Lowest Death Rate of Different Prefectures of Taiwan in Selected Years (Rate: per 1,000 population)

		1906		1935				1906		1935	
Birth Rate		Whole Province	39.3	Whole Province	45.2	Death Rate		Whole Province	34.0	Whole Province	20.5
	The Highest	Nanto Prefecture	47.7	Tainan Prefecture	48.1		The Higheat	Chiai Prefecture	52.9	Taitung Prefecture	24.4
	The Lowest	Yansuika Prefecture	34.3	Taipei Prefecture	39.6		The Lowest	Hsinchu Prefecture	20.3	Penghu Prefecture	15.5
	Differece		13.4		8.5		Difference		32.6		8.9

Source: 10:1906, 1935.

13. *Agriculture and Industry*

To get primary agricultural products and processed agricultural products, especially rice and sugar, which Japan needed urgently, was one of the main policies of Japan in Taiwan. The colonial government had spent much of time and money for the promotion of the production of rice and sugar. They made various kinds of surveys, researches, and experiments, used the system of police and pao-chia for enforcement, and as a result, the outputs of rice and sugar had increased tremendously. 451 433

Among the various types of production in Taiwan, agriculture and manufacturing were the two main types, and the proportion occupied by forestry, fishery, and mining was rather small. In 1912, the value of the total output of all types of production amounted to 146,374 thousand yen. Among these, the proportion of agriculture was 63%, manufacturing was 32%, and the total of three other types (forestry, fishery, and mining) was only 5%. By 1942, manufacturing had developed fairly well, its production value had exceeded that of agriculture. The value of the total output of all types of production in 1942 was 1,515,627 thousand yen. Agriculture's share of this was 42%, manufacturing was 46%, and the total of three other types was 12%. Agriculture and manufacturing, the two main types of production, were again represented by rice and sugar respectively. The proportion of the value of rice to the total value of agricultural products was 59% in 1912, and 39% in 1942. The proportion of the value of sugar to the total value of manufactured products was 79% in 1912 and 42% in 1942. Considering these facts, it seems not unproper to take rice and sugar as representative of Taiwan production.

From figure 6 we can see, that in comparision with the increase of acreage of cultivation (line A), the increase in the output of rice (line B) was tremendously high.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER VI

Public Health and the Risks of Death

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In the preceding pages, we have given attention to various features of intercourse between Taiwanese and Japanese in Taiwan. Most of the evidence has been in agreement on one point—the policies of Japanese as rulers of the island failed to make any substantial difference in the social structure of its people. The more it seemed to change in some particular, the more it turned out to be essentially the same thing. As a matter of official design many innovations were concentrated in the hands of a favored few. Even when it came to implementing their aims, Japanese found ways to meet the population on its own terms. Much of their success in colonial administration was due to the ability to make the social system serve their purposes without changing its form.

The most significant exception was their effort on behalf of the health of the inhabitants. Japanese have never received full credit for their achievement in this realm, either on the part of the Taiwanese (who resented the intrusions that it involved in their lives) or from Western students of population and public health (who mostly ignored or belittled it). The "benefits" of rationalizing Taiwanese agriculture may be a matter of dispute, for it enormously enriched a few Japanese at the same time that it broadened standards of consumption in the population. The motives of Japanese in introducing to Taiwan some of the advantages of scientific discovery from the outside world may likewise be suspect, for they managed to keep control over most of the fruits of improvement. But there is no doubt that in the field of public health Japanese rule added many years to the expected lifetime of Taiwanese. This, in an environment of opinion that looks with approval upon any postponement of death, deserves to be given adequate attention.

Early Health Conditions in Taiwan

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Prior to 1895, Taiwan was renowned as an unhealthful place to live. It presented special hazards to survival in addition to those which its people had learned to accept in South China. Unusual efforts had been called forth in expanding settlement into the relatively empty area, and these entailed unusual risks of death. Early Chinese migrants to Taiwan had to attend to clearing new lands,

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

721 165 and to contend with many types of hardship not found on the mainland. As they pushed toward the island's foothills, they also suffered the consequences of many bloody incidents of violence that they provoked among aboriginal tribesmen.

164 Even in the lowlands, where activities were comparatively settled and routine, life itself was a very uncertain thing. From their environment people were subjected to attack by several kinds of fatal sickness. Through certain traditional practices they unwittingly exposed themselves to many others. The semi-tropical climate of Taiwan favored the spread of a multitude of disease-producing agents. Accustomed methods of cultivating the land—especially those having to do with the conservation of human wastes as fertilizer—encouraged the transmission of these organisms to humans.[1]

Through conditions such as these, the population harbored many body parasites and other sources of infection. As a result, many people passed their lives chronically enfeebled, and others remained constantly exposed to the onset of illness. Certain types of disease often spread over the island, restrained only by the isolation of many localities and the difficulty of travel. From time to time, some would grow to spectacular epidemics in which thousands perished. Disease even proved to be one of the best defenses that Taiwan had against attack by the troops of Western powers, and delayed the Japanese in taking control of the island.

Plague was the foremost among these epidemic diseases.[2] Taiwan was repeatedly swept by attacks of this illness, with heavy fatalities. An uncontrolled traffic of shipping from the mainland and from elsewhere in Asia, much of it illicit, made it easy to introduce infected rats and persons. Conditions of knowledge and sanitation in Taiwan were wholly inadequate to cope with the problem.[3]

Cholera was the second most important disease that occurred in epidemic proportions. Lacking knowledge or facilities to control the spread of cholera, Taiwanese sometimes suffered the full course of epidemics throughout a whole season without being able to take counter-measures.[4] Cholera also was well known and feared in the

[1] For an able popular account of some of the connections between custom and the "food cycle" that propagates these organisms, see Winfield, G. F. (1948), p. 112 ff.

[2] See Hsü Tze-wei. (1936), p. 444.

[3] For some of the futile steps adopted against plague by the people, see Campbell, W. (1915), p. 77.

[4] Drinking water was usually taken from the rivers or from shallow wells, making them easily subject to pollution. See Takekoshi, Y. (1907), p. 285.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

early Western contacts with Taiwan. It all but wiped out some of the military expeditions sent there as tentative colonial ventures by European powers, and later helped to persuade the Japanese to embark on large-scale measures of control. 164

Malaria was ordinarily endemic in Taiwan. The moist heat, and the practice of admitting water into fields for irrigation in pools that were left to stagnate, helped to nurture the mosquitoes that spread the disease. Occasionally malaria broke out in epidemic form. It was likewise impossible to control, but was simply allowed to run its course. Even in the more fortunate years it served to undermine the strength of Taiwanese during much of the year, and probably also their resistance to other sickness.

In addition to these major diseases, Taiwanese were widely afflicted with the more common debilitating ailments that tend to shorten life and lead to complicating illnesses in Asia. Enteric diseases and internal parasites were always prevalent, as in China. Tuberculosis and venereal disease were later found to be widespread, and presumably had existed also at this earlier period. Superficial skin and eye maladies were frequent. Taiwan's position as a transshipping point in the opium trade introduced a plentiful amount of the drug for local consumption, which impaired the health of the inhabitants still further. In the census of 1905, it was found that nearly one-fifth of all Taiwanese men over age 30 were known users of opium, and there were probably others who managed to conceal the fact. As external trade increased, surreptitiously and openly, Taiwan became exposed to a wider variety of diseases and a greater number of transmitting agents from outside. At the same time, the official policy of seclusion also kept out the techniques that the West was evolving to deal with them. [276]

These baneful health conditions added new hardships for the people who migrated to Taiwan. The risks of death thus engendered became a formidable feature of everyday living. Moreover, under the pressure of poverty many families apparently eliminated certain unwanted offspring, either through exposure or deliberate neglect. As a result, a large proportion of those who were born into the population never survived to adulthood. The dangers to life were such that probably Taiwan gained few if any people through natural increase; very high fertility was needed merely to offset the losses through death. 165

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

PUBLIC HEALTH AND THE RISKS OF DEATH

The Japanese and Public Health

165 The Japanese military forces that first set out to subdue Taiwan met no firmly organized resistance among the people, but were nearly overcome by sickness in their own ranks before taking possession of the island. Out of an undisclosed total number of troops taking part in the campaign, the Japanese acknowledged only 154 combat fatalities, but over 4,000 died of disease within the first several months, and 27,000 had to be hospitalized (most of them in Japan).[5] Epidemic illness did not, like poverty, stay confined to the Taiwanese population and leave the new rulers unmolested. Mosquitoes that carried malaria, for example, did not observe this distinction. The Japanese liking for raw fish was said to make them even more vulnerable than Taiwanese to the parasites that infested the food. Among the garrison alone, annual deaths of more than 40 per thousand were reported during the first decade of occupation, probably a higher figure than in the adult population of Taiwanese. In order to make this region of the world safe for imperialism, the Japanese found that they had to take drastic measures to curb the spread of disease.

657 744 They started almost at once to devise ways of counteracting the most serious sources. The steps that they adopted are instructive, for the result was a marked success with only a modest outlay. The campaign against sickness was launched when scientific knowledge as to the nature of these diseases was by present standards still rudimentary. Its weapons were crude and sometimes misguided. Moreover, there were many other goals of administration that competed with public health for attention. The authorities were never in a position to divert large blocs of funds to make their program elaborate or munificent. It lacked the grandeur of projects sometimes contemplated by those who draw up plans for "backward" areas today. The whole approach of the Japanese to the problem of disease in Taiwan was an austere one. They avoided every possible expense in equipment and physical facilities, and depended on intensive use of all the administrative resources at their command.

744 In slightly over a decade the authorities almost eradicated plague as a major disease, through strict vigilance for suspected cases of infection, rigorous quarantine regulations, and careful inspection of incoming ocean cargoes for infected rats.[6] Cholera was similarly pre-

[5] Davidson, James W. (1903), p. 354.
[6] Naito, Hideo (1937), p. 84 ff.

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tation were confined to some of the major cities, the influence of these broader health measures gradually spread evenly over most of the island. In this way Japanese gained results that were very substantial through the use of none but crude techniques.

The Japanese policy toward opium addiction was less consistent, for here they found welfare goals to be in conflict with profit motives. They made the manufacture of opium a government monopoly, and closely regulated its sale. The announced purpose for this control was to eradicate the use of the drug, but the Taiwanese occasionally complained that officials secretly abetted its consumption. The truth of the matter is not clear, but their success in other tasks suggests that opium addiction could have been stamped out far more quickly if they had made a determined effort to do so. Some of their own records show that new users of opium were being granted licenses as late as the 1920's. It is likely that the Japanese appreciated the effectiveness of addiction in enervating the resistance to their rule among wealthy families, and they made no secret of the steady public revenues that they derived from opium sales.[12]

The Evidence for Measurement of Mortality

There is not much point in describing the purposes and methods of public health work without having some independent appraisal of results. Such efforts have often been sponsored elsewhere with much fanfare and little accomplishment. The only trustworthy way to view the results of economic and sanitation policies in prolonging life is through some form of measurement; this is likewise the only precise way of comparing the risks of death in Taiwan and in other areas.

Fortunately the data that exist to gauge mortality in Taiwan are excellent. The occurrence of many kinds of illness involving danger of contagion was required by law to be reported to the authorities. Partly as a means of avoiding contamination of the living by the dead, and partly just as a means of tightening official control over the reporting of disease, the Japanese also strictly regulated burials and cremations.[13] The rigors of enforcing these rules led to concealment of some illness and evasions by mis-stating exact causes of

[12] A careful study of opium addiction in Taiwan and its relation to mortality is contained in Tu Tsung-ming (1935 and 1938).

[13] See Hsü Tze-wei (1946), p. 449.

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death;[24] but at the same time they led to registration of deaths that was virtually complete.

A person while living had a legitimate civil status only by being entered in an appropriate police register. Deceased, his absence could be legitimized only by removal from these rolls, and his burial could be permitted only by following this prescribed procedure. All of these records were kept by the police or by affiliated agencies. The police were alert and well-deployed to prevent evasions. Since such records were useful to them in surveillance of the population, they employed the *pao-chia* system to make the registration effective. The people in each locality were thus compelled to accept conformity with these requirements as a matter of their own collective interest. Consequently a person's identity in these records from birth till death was almost never subject to confusion or concealment.

This consistency of information in all the population registers has a special significance for demographic research. It means, for example, that each person's death record was matched to the record of his birth, so that the exact number of years elapsed between the two events can be calculated. The same legal identity of a person formed the basis for his entry in every census enumeration. "Age," as a census category, was not set down according to an individual's recollection of the number of birthdays experienced. Instead, the pertinent fact that was entered was his date of birth, and age was ascribed to him in the process of tabulation at the central census office.

Age in Taiwanese population statistics was therefore explicitly defined: it was a classification of equal intervals, in which each person ideally had one and only one "true" position at a time. It was possible for age to correspond perfectly in the recording of all three kinds of events of interest here—birth, enumeration at census date, and death. An unambiguous scheme of this sort for reckoning age is especially important in a population of Chinese, because most Chinese compute their ages in a manner that cannot be reconciled to Western usage. Starting with age one at the date of birth, it is customary for them to add a year of age with the passage of every (lunar)

[24] Once cases of smallpox, scarlet fever, typhoid fever and certain other diseases were discovered, the people were forced to undergo disinfection of lodgings and personal effects that was often destructive. Hence, it has been alleged that diagnoses were deliberately falsified to avoid these consequences (see OPNAV, Civil Affairs Handbook, 1944, *Shinchiku Province*, p. 54; U.S. War Department, TB Med 30, p. 6). A more important source of inaccuracy was probably (in the case of deaths) ignorance as to the nature of a decedent's illness. Tuberculosis was said to be very prevalent, and yet few deaths were ever diagnosed as due to this cause.

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A welcome feature of Taiwan's mortality and census data is that they lend themselves to a detailed test for accuracy. First, they can be checked against the number of people counted in one census who died before the next one. For any given cohort of births, if the data are all correct, this should be equal to the number of survivors counted in the earlier minus the number counted in the later census. The censuses of 1905 and 1920 are compared in these terms in Table 34, for males only; the result is almost identical for females. The column of ratios indicates the degree to which registered deaths account for the difference in the numbers of survivors counted at successive census dates.

If all records were complete and accurate, the ratios would be unity at every age. If the differences in census survivors are assumed to be correct, then apparently a few deaths went unregistered in certain years. It is obvious that the records were not perfect. As it is, they were so nearly complete that there is little if anything to be gained from trying to make corrections for the discrepancies. Since this is simultaneously a test of census enumeration and vital registration (and an extremely sensitive test of age reporting), it is not possible to decide whether the discrepancies arose from deaths that were omitted or people overlooked from the earlier census.[18]

Since mortality in the first year of life is usually measured on the basis of the number of live-born babies, it is necessary also to know how adequate the birth statistics were in relation to death and census records. A test for births, similar to that above, is shown in Table 35; the results give an excellent account of the birth registration. The registration of birth entered a child permanently in the police lists, and was an almost inescapable bond during his later life. By this criterion, the chances of evading subsequent controls allied to

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tables for Taiwanese, for the yearly intervals had the same upper and lower limits as those of the vital statistics.

Japanese were apologetic about the deviation of this system from the Western mode of age reporting, and beginning with 1930 "modernized" the system so that its special virtue was eliminated. Starting with the census of that year, census-year rather than calendar-year intervals were used, making the system identical with the Western conventions in design. For dates after 1930 it is no longer possible to relate deaths precisely to enumerated census population.

[18] There is reason for not putting all the blame on registered deaths, for the area of effective administration was expanded slightly after 1905, and by 1915 and 1920 had brought more people into the registration and census system than the survivors of those enumerated in 1905. This being the case, it is possible that both measuring instruments were nearly perfect, and that the discrepancies arose entirely from the expansion of administration.

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TABLE 34

TEST FOR ADEQUACY OF DEATH REGISTRATION OF TAIWANESE

Males by Year of Birth, Surviving at Census Dates in 1905 and 1920, and Intervening Deaths as Registered

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Year of Birth	*Survivors 1905*	*Survivors 1920*	*Difference*	*Registered Deaths 1905-1920*	*"Completeness" of Death Registration**
1904	48,859	38,257	10,602	11,602	1.094
1903	43,432	35,769	7,663	7,768	1.014
1902	43,340	36,392	6,948	6,718	.967
1901	41,658	35,523	6,135	6,087	.992
1900	41,910	36,224	5,686	5,564	.979
1899	38,149	32,899	5,250	5,099	.971
1898	40,913	35,409	5,504	5,257	.955
1897	34,183	29,707	4,476	4,801	1.073
1896	33,855	29,149	4,706	4,872	1.035
1895	35,579	30,148	5,431	5,177	.053
1894	32,338	27,187	5,151	5,052	.981
1893	32,581	27,062	5,519	5,444	.986
1892	34,122	27,945	6,177	6,224	1.008
1891	32,421	25,963	6,458	6,263	.970
1890	31,626	24,672	6,954	6,540	.940
1889	32,164	25,479	6,685	7,273	1.088
1888	34,355	25,907	8,448	8,040	.952
1887	35,471	27,101	8,370	8,584	1.026
1886	33,697	25,254	8,443	8,587	1.017
1885	33,445	24,708	8,737	9,016	1.032
1884	36,969	27,156	9,813	10,023	1.021
1883	34,750	25,257	9,493	9,911	1.044
1882	32,431	23,034	9,397	9,922	1.056
1881	35,951	25,034	10,917	11,100	1.017
1880	31,335	21,484	9,851	10,242	1.040
1879	31,345	21,230	10,115	10,287	1.017
1878	29,016	19,036	9,980	9,961	.998
1877	27,669	18,379	9,290	9,988	1.075
1876	31,238	20,263	10,975	11,239	1.024
1875	27,991	17,880	10,111	10,741	1.062

* Ratio: Deaths/Difference.

Sources: *Census of 1920, Descriptive Report*, Appendix, Table 15.
Vital Statistics, yearly volumes, 1906-1920.
Statistical Summary, Table 58, for population by age in 1905.

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TABLE 35

TEST FOR ADEQUACY OF BIRTH REGISTRATION OF TAIWANESE Births from 1906 to 1920, as Registered and as Estimated from Survivors Enumerated in Census of 1920 and Intervening Deaths

Year of Birth	*Survivors 1920*	*Registered Deaths Since Birth*	*Estimated Births (1) + (2)*	*Registered Births**	*"Completeness" of Registered Births†*
			Males		
1920	46,832	7,725	54,557	54,064	.9910
1919	55,006	12,993	67,999	70,349	1.0346
1918	52,260	18,219	70,479	71,764	1.0182
1917	52,245	19,854	72,099	73,430	1.0185
1916	46,234	19,805	66,039	65,837	.9969
1915	48,109	22,322	70,431	70,855	1.0060
1914	49,637	23,109	72,746	72,755	1.0001
1913	48,427	21,550	69,977	70,170	1.0028
1912	48,810	20,961	69,771	69,990	1.0031
1911	48,388	21,159	69,547	69,558	1.0002
1910	46,609	20,806	67,415	68,042	1.0093
1909	44,540	20,780	65,320	65,666	1.0053
1908	41,626	20,353	61,979	61,993	1.0002
1907	43,003	20,074	63,077	63,290	1.0034
1906	41,598	20,008	61,606	62,120	1.0083
			Females		
1920	46,017	5,815	51,832	51,410	.9919
1919	53,950	10,346	64,296	66,358	1.0321
1918	50,328	16,028	66,356	67,701	1.0203
1917	49,315	18,099	67,414	68,984	1.0233
1916	44,230	18,658	62,888	62,768	.9981
1915	45,348	21,372	66,720	66,814	1.0014
1914	46,245	22,279	68,524	68,695	1.0025
1913	45,434	21,281	66,715	66,797	1.0012
1912	45,403	21,090	66,493	66,632	1.0021
1911	45,373	20,805	66,178	66,100	.9988
1910	43,251	20,262	63,513	64,099	1.0092
1909	41,268	20,187	61,455	61,620	1.0027
1908	38,292	19,737	58,029	57,807	.9962
1907	38,594	19,981	58,575	58,466	.9981
1906	37,323	19,824	57,147	56,987	.9972

* In 1920, deaths and births have been taken only from January 1 to October 1.
† Ratio: Registered Births/Estimated Births.
Sources: *Census of 1920, Descriptive Report*, Appendix, Table 15.
Vital Statistics, yearly volumes, 1906-1920.

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the registration system were very slight. The same result is found for births of more recent years.

With very few exceptions, these events—births, deaths, and presence at each census date—were nearly all recorded and were recorded accurately. The pattern of omissions is itself significant: whatever their source, they contained practically no age or sex bias. Therefore (with one reservation)[19] we shall accept all published deaths and all population figures as complete and correct for the measurement of mortality. The differences would be trivial if they were distributed as adjustments over all the years of deaths; and the tests give no clue as to how such adjustment should be distributed.

The Decline of Mortality

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The simplest question that arises about the trend of Taiwanese mortality is also the easiest to answer: what happened to the prevalence of deaths in the population during colonial rule? Unfortunately for judging this trend, no one can say what was the level of mortality in Taiwan when the Japanese first arrived. The Manchu government did not even know the number of its subjects, far less their behavior with respect to births and deaths. The colonial regime founded by the Japanese started a thorough system of vital statistics only after a decade of control. Consequently the very earliest usable record began at a time when life had already been made more secure.

The trend of annual death rates after 1905 appears clearly in Table 36. It was not only downward, but was rapid in its fall. Over the same period there were scarcely any recorded instances to equal the speed of this decline. Supposing that there were over 40 deaths per thousand persons in 1895 and before, the yearly incidence must have dropped by more than one-half in the next fifty years.

Thanks to improved drugs and newer approaches to the problems of health, such a feat has since this time become fairly easy in countries of high mortality. Crude death rates of 20 are no longer considered low. But subsequent advances in medicine should not be allowed to detract from this performance. With the resources and

[19] The only reservation is in the case of infants. This requires special attention, and is discussed in the section on infant mortality.

In reality, the ambiguity is a more fundamental one than any amount of "correction" can remedy. It arises from an inherent difficulty in making a precise definition for a "live" birth in a society where infants are delivered without skilled medical care and where the chances of surviving the first day of life are very poor. Where families regard mere discussion of deceased offspring as inauspicious, the prospects for developing precise measuring standards for infant mortality are poor.

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TABLE 36

CRUDE DEATH RATES OF TAIWANESE, 1906-1943*

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Years	Deaths per Thousand Persons
1906–10	33.4
1911–15	28.6
1916–20	31.0
1921–25	25.0
1926–30	22.1
1931–35	21.2
1936–40	20.6
1941–43	18.5

* Unweighted averages of annual death rates for each year. Before 1915, deaths have been adjusted slightly on the basis of the internal pattern of infant mortality in later years, as explained in the text.

Source: *Statistical Summary*, Table 64.

knowledge available in these earlier years it was a far more noteworthy achievement than it now appears. Almost entirely through the reduction of mortality, the annual natural increase of Taiwanese rose to 25 per thousand, which even today is rarely found.

The fall of mortality was not unbroken. It was interrupted in quick succession in 1915, 1918 and 1920 by waves of fatal illness over the island. The first occasion was accompanied by an unusual number of malaria deaths,[20] when the program of malaria control was only in its second year. In 1918 and 1920, the Taiwanese were visited by a part of the world-wide influenza outbreaks at the end of World War I. In all three years the cause-of-death data, defective as they were, revealed exceptional fatalities due to malaria and respiratory ailments respectively, but no serious recurrence of the old epidemic diseases.

None of these setbacks quite matched the initial years of statistical record. Since mortality in 1906 undoubtedly was already lower than it had been in the pre-Japanese period, one can say that for the island as a whole these later reversals were minor and transitory (see Fig. 21).

Taiwanese Life Tables

The life table is a device that represents mortality in a special conventionalized way. Conceptually it is an instrument of precision.

[20] And reportedly some civil disturbance, though such instances are always exaggerated and difficult to evaluate.

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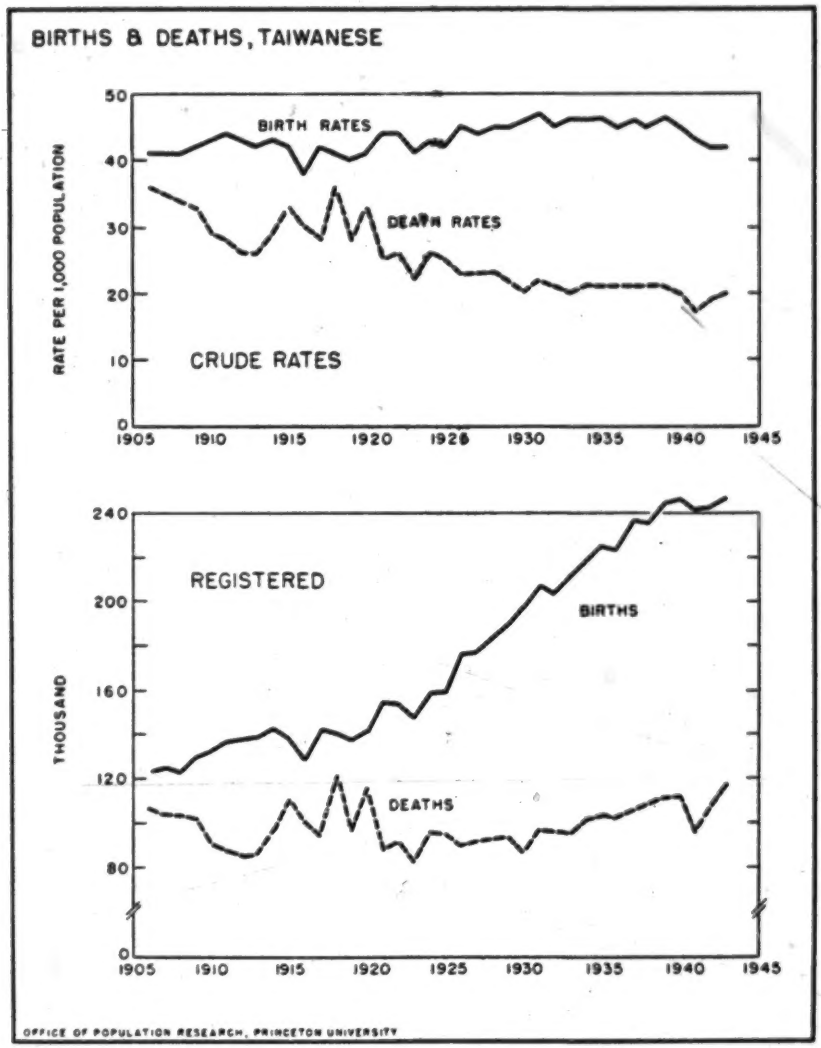

Fig. 21. Crude Birth and Death Rates and Total Registered Births and Deaths of Taiwanese, 1906-1943.

for it allows one to speak in terms of probabilities of dying, which is what we mean here by the notion of mortality. Being conventional, it lends itself easily to comparison with data from other places independent of differences in age structure, even when the procedures of computation are slightly varied. Some caution, of course, must be 165

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exercised in this application, for the life table is also a way of making poor mortality data look good. Since precise information about mortality has not heretofore existed for a population consisting of Chinese,[21] tables prepared for Taiwanese under differing mortality conditions should be of some additional interest from this standpoint alone.

Life tables are very convenient as a way of summarizing age-specific risks of mortality for each sex in a specified short period. They can also be used to illustrate one aspect of the course of mortality with the passage of time—the age incidence of change. There are more efficient ways of expressing secular change *per se*;[22] where secular change is interrupted by fluctuations of short duration, the age incidence of deaths in a given period is probably the sort of measure to be preferred.

In the case of Taiwan the life table is the most appropriate form in which to express the import of this particular type of death statistics. The data are peculiarly suited, as we have seen, to showing precisely the proportions of persons entering each year of age who died before the next birthday. This proportion is the figure conventionally used to estimate the probability of dying in the given year of age. Having such data as these, one can prepare life tables directly and not by the roundabout and arbitrary procedures that ordinarily must be used.[23]

Actuarial practice has adopted strong graduation formulae to make life-table data appear more regular than they are. Presumably these procedures are grounded on assumptions that mortality risks are fundamentally a continuous function of age. On the basis of wide experience, this assumption seems reasonable enough. However, the justification for smoothing is based also on the assumption that much of the fluctuation in observed data represents chance variations in the risks of death at given ages;[24] actuaries, understand-

[21] Little attention has been given to two official tables that have been published. See Taiwan, Government-General, Research Bureau. *Life Tables of Taiwan, 1926-1930* (First Issue) (1936), 160 pp.; Taiwan, Provincial Government, Department of Statistics. *Life Tables of Taiwan, 1936-1940* (Second Issue) (1947).

[22] A more satisfactory procedure for this specific purpose is to examine mortality of actual cohorts of persons over time, where age and time can be observed while varying together, and their interaction can be taken into account. It is planned to examine this aspect of mortality change in Taiwan at some later date.

[23] Where S_x represents the number of survivors to exact age x, and D_x the number of them who died in age x, q_x (the probability of dying at that age) can be expressed directly as D_x/S_x. The arbitrary conversion of an observed central death-rate, m_x, such as by assuming $q_x=2m_x/(2+m_x)$, then becomes superfluous and can be by-passed.

[24] See Knibbs, G. H. (1917), pp. 86-88.

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ably, do not relish the thought that their work consists merely of manipulating errors of observation.[25]

Taiwan's data throw some light on the relative magnitude of the random and the error components of irregularity in age-specific mortality rates. For example, one life table has been prepared for the period 1909-1911, in order to illustrate the risks of death at a time when they were still high. The mortality rates of this table (see Fig. 22) represent a small number of deaths, as do those of the succeeding tables, and have not been subjected to any graduation.[26]

The people in the lowest to the highest ages of any life table represent groups born over a long period of time, each of which might be expected to exhibit peculiarities of its own previous exposure to mortality. Nevertheless, the risks of death shown in Fig. 22 deviate only slightly from a smooth progression with age. The persons exposed to death at each age were few; in view of their number, much larger variability would appear reasonable. Even if we were to assume a complete lack of error in the data (throwing the whole burden of all deviations from continuity to the element of chance), the random component of these fluctuations is very small. A strong case for the notion of continuity can be made from this life table. But by the same token it appears that the *error* component of deviation from continuity in ordinary data is the major portion. Perhaps not much general significance for the variability of "true" mortality rates by age can be drawn from these data. Very likely, however, smoothing devices as commonly used have as their major function the adjustment for errors of observation. Aside from errors of omission, these presumably arise because information by age is incorrect and because deaths as usually registered do not belong to the people to whom they are assigned.[27]

Taiwan's mortality data have not been widely known. Two official

[25] There is in addition a possible third influence—the cohort effect, or effect of the date of birth. This is generally ignored.

[26] Strictly speaking, they represent the weighted averages of three cohorts of persons entering each year of age, in 1909, 1910, and 1911 respectively. The mortality rates are in the simple form $(D_1+D_2+D_3)/(S_1+S_2+S_3)$ in each year of age. This averaging has the effect of reducing the variability of single-year values as compared with the life tables to be presented later. The effect of different weighting for different cohorts is ignored.

[27] All this is not meant to imply that actuarial procedures are misguided or that smoothing is unwarranted when dealing with inferior data. The actual errors introduced in most instances by graduation of mortality rates are probably not very great. It does seem important, however, to know how close an approximation to continuity accurate data can give, as a basis for inferring that the error component of deviations is not inconsiderable.

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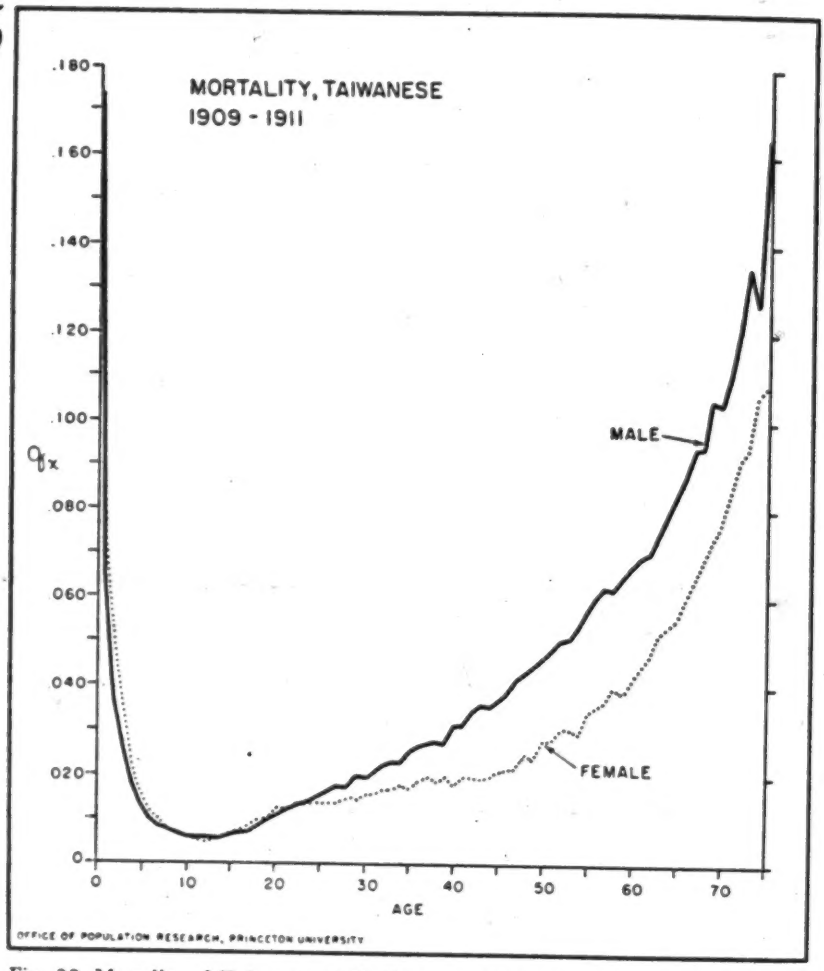

Fig. 22. Mortality of Taiwanese, Life Table of 1910-1911. Values of q_x, by Age, Male and Female.

life tables were compiled and published from them,[28] which have likewise not become well known to Western demographers. Consequently it is desirable to compare the conditions in Taiwan with

[28] These two official tables were constructed by conventional procedures. The 1926-1930 life table, the earlier of the two, covered a period when the information on year of birth had been temporarily dropped from publication of vital statistics. The second table, for 1936-1940, covered a span when the census population could no longer be matched to registered deaths. Hence, the more precise procedure used here was denied to both of them.

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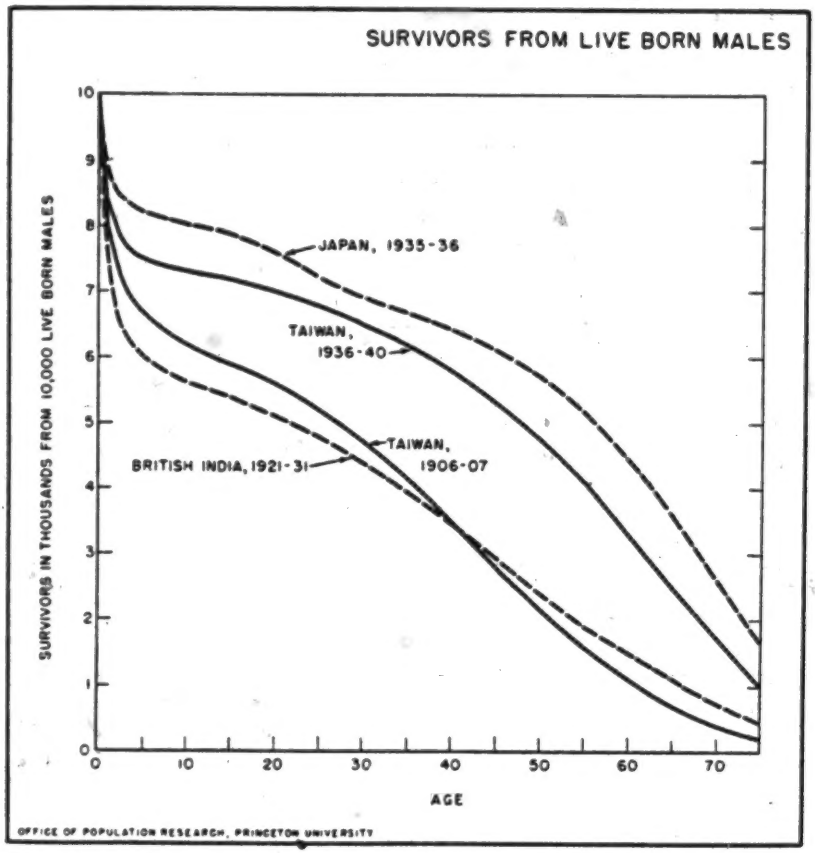

Fig. 23. Life Table Survivors of 10,000 Live Male Births, by Age (l_x). Taiwan and Selected Other Countries.

other examples that are more familiar. This is done in Fig. 23, where life-table survivors of an arbitrary 10,000 male births have been plotted for Taiwan in 1906 and 1936-1940, Japan in 1926-1930, and British India in 1921-1931. Even near the turn of the century, to take the year 1906 as an example, mortality in Taiwan was no higher than that of British India many years later. The gross effects of mortality in Taiwan had by 1940 come to a point closer to Japan during the 1920's than to the previous situation in Taiwan. The median age at death (the age at which mortality rates of the given period would have reduced a starting cohort by one-half) was nearly doubled between these two dates.

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165 Such a comparison does not, however, reveal much about mortality in Taiwan itself. It shows next to nothing of the nature or extent of the decline. A better way to examine the shifts by age is to look at the changes in the risks of death. The probabilities of dying show these changes in each age independently of other ages. Graphically this profile of mortality appears for various dates in Fig. 24, plotted

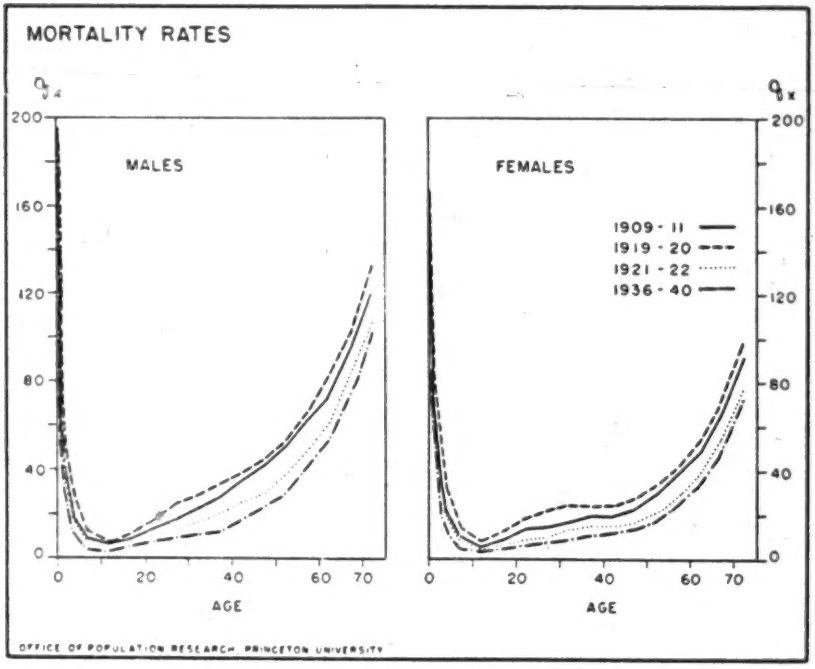

Fig. 24. Mortality of Taiwanese, by Age (q_x), Selected Life Tables. Males and Females.

on pivotal ages. The earliest point is the three-year period 1909-1911, expressing conditions that were greatly improved over those found in 1906.[29] It represents the effects of selective sanitation works (i.e., in the larger cities), and of mass disease controls of the crudest sort. Epidemics had been suppressed, but the full-scale attack on malaria,

[29] The procedures of preparing these life tables make them reflect the events of two calendar years. They are also based on the persons *entering* each age in the given year, some of whom did not die before the following year. The table for 1906, therefore, is composed mostly of deaths that occurred in 1906, plus some that did not take place until 1907. 1906 was the year of a severe earthquake in one Prefecture, and for this reason may have been less favorable than neighboring years.

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for example, had not yet begun. Not long before, the Japanese had just succeeded in gaining undisputed control of the island outside of the central mountain region. By implication, the conditions in 1909-1911 thus give an indication of what is possible with the most rudimentary types of health measures. At that time most were still experimental, for the Japanese were just beginning to struggle with the problems of rationalizing agricultural practices, and had not had enough time to organize a concerted program against infection and disease.

If mortality had been reduced easily and quickly, the gain was not a very secure one. The reversals in 1915, 1918, and 1920 are shown in Fig. 24 in their incidence by age; they again restored temporarily the unhealthful state that had prevailed before. (Influenza in 1920 struck early in the year, and affected principally those who had not passed a birthday since 1919; the age cohorts of 1919 were the ones that absorbed the force of the disease.) By contrast, when the steady effects of economic and health policies gradually became felt, mortality risks (as exemplified by the period 1936-1940) were brought firmly down to much lower levels. Translated into figures for the mean expectation of life at various ages in each year, the risks of these years are summarized in Table 37.

The pattern of the decline appears only when the mortality rates themselves are viewed in detail. From age 15 to age 50, most people pass through the most active portion of their lives. Adults in a country of relatively high mortality move from ages when death is rare through a stage of steadily increasing risks. By age 50 in Taiwan at least half of the members of each cohort of births were no longer alive. Adulthood is usually associated with two chief hazards of death. In a society like Taiwan, the working activities undertaken by men and childbearing of women begin to bring people of both sexes into contact with greater risks of dying. The interval covers the entire normal childbearing period of women and most of the time of active employment of men.

Deaths occurred in different patterns for men and women in these ages. Mortality actually started at slightly lower levels for women who were approaching adulthood than for men. It also advanced less rapidly with age. In years of moderate mortality this progression with age was nearly continuous; when there were extraordinary hazards, they had the heaviest effect on women of younger ages and

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TABLE 37

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MEAN LIFE EXPECTANCY OF TAIWANESE AT DIFFERENT AGES

Selected Life Tables. Values of e_x, in Years

Age	*1906*	*1909-11*	*1919*	*1921*	*1926-30*	*1936-40*
			Males			
0	27.7	32.4	27.7	34.5	38.8	41.1
1	33.2	38.1	33.4	41.6	45.9	47.6
5	35.9	40.0	36.2	44.0	47.5	49.5
10	33.5	36.7	33.4	40.8	43.6	45.6
30	20.4	22.6	20.8	26.2	28.1	29.7
50	12.0	13.2	12.5	15.0	16.0	16.5
			Females			
0	29.0	35.6	29.6	38.6	43.1	45.7
1	34.0	40.7	34.4	45.0	49.4	51.5
5	38.8	44.7	38.9	49.2	52.5	54.6
10	27.2	41.9	36.9	46.4	48.8	50.8
30	25.5	29.0	25.8	31.9	33.5	34.8
50	15.5	17.4	16.4	19.6	20.3	20.6

Sources: Life tables of 1906, 1909-11, 1919 and 1921 were computed from the assembled data of Taiwan's censuses and vital registration. The table of 1926-30 is from Taiwan, Government-General (1936); that of 1936-40 is from Taiwan, Provincial Government (1947).

altered the entire pattern that usually prevailed (see Fig. 25).[30] Thus enlarged from the mortality rates given in Fig. 24, the disparity between male and female age structure of adult mortality also appears more strongly.

In spite of the differences in structure, male and female risks of death have both given the appearance of reacting in the same way to the changes in general conditions of health in the population. And this is very nearly true as far as secular decline in mortality was concerned. But the exceptional risks (as in 1915, 1918, and 1920) affected women very differently from men. Their age incidence remained unchanged for men. For women, these risks were heavily concentrated at some of the later years of the childbearing period.

The most typical pattern of sex selection of age-specific mortality is illustrated in the period 1936-1940 (see Fig. 26). The values are

[30] Fig. 25 is based on age-specific death rates rather than on life-table probabilities. It makes no difference in the pattern of the results. Death rates are adopted for this illustration because they show the events of the exact calendar years that are most appropriate for this comparison.

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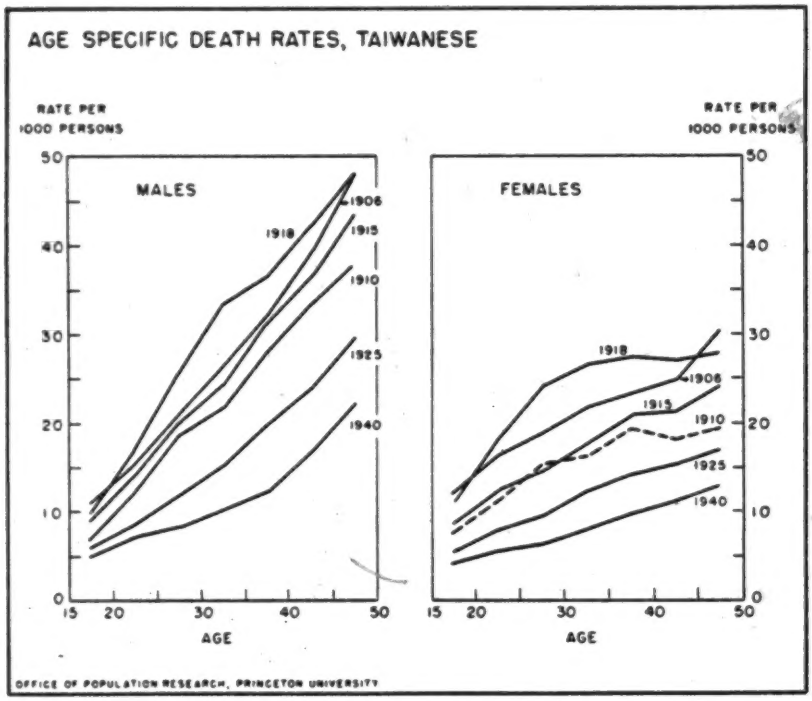

Fig. 25. Age-Specific Death Rates of Adults in Selected Years. Taiwanese Males and Females.

sex ratios of deaths at each age to an equal number of males and females beginning that age during the year in question.[31] The usual sex balance of mortality risks in Taiwan was different from what prevailed in other recorded Asian populations—e.g., Japan and India. It is, of course, not surprising to see that it was not the same as the United States. But the nature of the difference also runs contrary to what might be expected. In particular, it is startling to find that females were normally less likely to die than males at all ages over 15 years. This critical age span, when women of a high-fertility society are entering a period of frequent pregnancy and childbirth, is commonly thought to be likewise a stage of high mortality for them. The evidence as to fertility, which will appear in the following chapter, shows that Taiwanese women did not avoid these risks by avoid-

[31] Above age 4, the actual values plotted are sex ratios of ${}_5q_x$, or mortality rates over age intervals of 5 years each.

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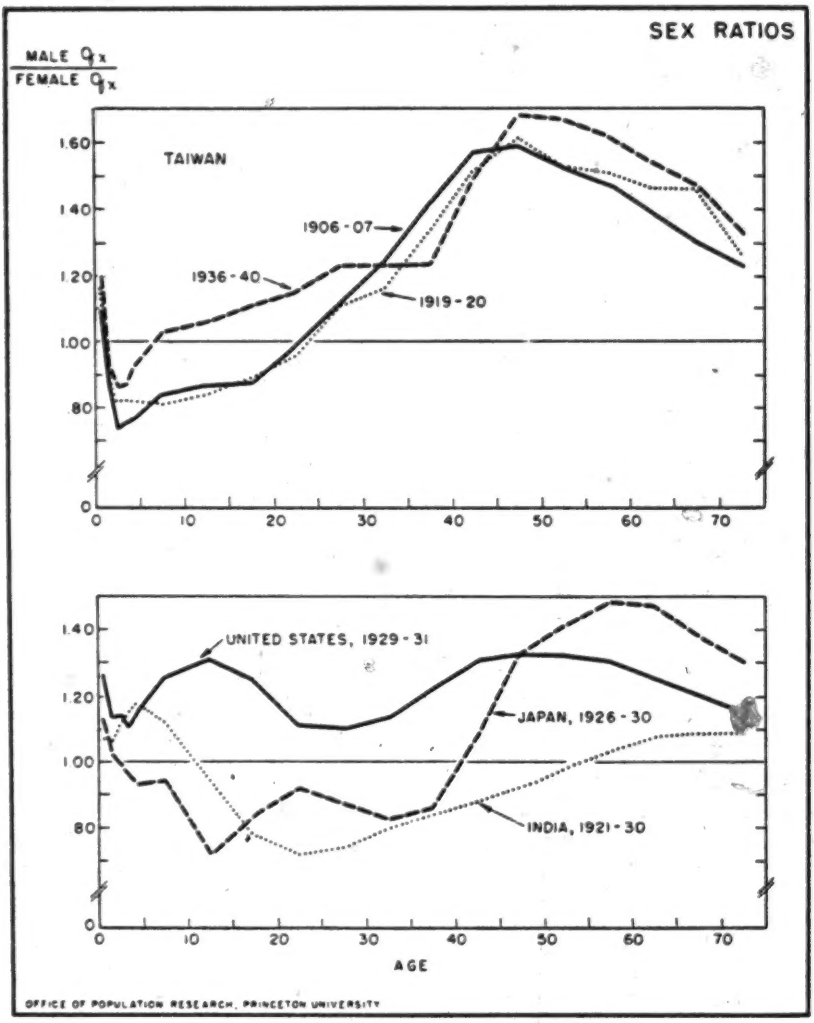

Fig. 26. Sex Selectivity of Mortality in Taiwan and Other Countries. Number of Male Deaths for Every Female Death, Among an Equal Number of Each Sex Entering Each Age.

ing childbirth. Fertility in Taiwan was consistently higher than for all of Japan, and yet in Japan women in childbearing ages were put at considerable disadvantage with men in their chances of survival.[32]

[32] In both societies, the cessation of childbearing is marked, for example at age 40 and above, by a decided improvement in likelihood of survival of women in relation to

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Though Taiwanese women in most years succeeded in warding off more risks of death than men in early adulthood, they did not fare so well during times of greatest sickness or near-epidemic. In both 1906 and 1920 the situation was reversed. In all ages other than infancy up to mid-adulthood, females experienced higher risks than males. Their greater susceptibility in these times is as puzzling as their comparative robustness in other years. It did not move them much closer to the position of Japanese females in relation to males, for the pattern of selectivity was still distinct from that of Japan.

Regardless of the year of observation, young girls consistently suffered greater risks than boys. In the first year of life, as is usually the case, males invariably had inferior average chances of surviving to their first birthday. For the next nine or more years they more than made up for this initial disadvantage. Without fail, there were more male than female survivors to age ten from an equal number of each who managed to enter the second year of life (see Table 38). This was the case for all cohorts of which the record is available from the first birthday to the tenth—26 cohorts in all. Because of this, a higher proportion of boys than girls survived from birth to age ten.

It is easier to reconcile lower rates of survival for young girls with known features of Chinese society than it is the advantage held by women over men at all higher ages. With a few exceptions, the difference in risks was consistent in every year of age. It often extended to age 12 or beyond, after which males generally remained at greater risk for the rest of life. Sex ratios of even numbers of one-year-olds surviving to age ten show a steady movement toward equalizing the risks of death in this interval with the passage of time. It is well known that male offspring are especially cherished in Chinese families, for they provide the basis for family continuity over several generations. The resulting preferential treatment in childhood for boys rather than girls is borne out by the evidence of Table 38, since survival of young girls elsewhere in the world is usually found to be superior to that of boys.[32]

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men. So it is barely conceivable that unhealthful activities of men simply over-balanced these special risks of women. (Due to tuberculosis in Japan, male mortality almost outweighed that of females for a short span between age 20 and age 30, despite the fact that mortality for women was high.) It seems unlikely, however, on comparison with the pattern for India (Fig. 26). India was similarly an unhealthful place for men, but placed women at an even greater disadvantage.

[32] A trace of this same phenomenon can be found in the early life tables for Japan. These are based, of course, on a particular period and not on actual cohorts. In the 1947 table for all Japan, however, mortality of males was higher at every age.

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TABLE 38

TAIWANESE SURVIVORS THROUGH EARLY CHILDHOOD

(After Infancy)

Actual Survivors to Exact Age 10 of Each Thousand Males and Females Who Passed their First Birthday, by Year of First Birthday

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Year	*Males*	*Females*	*Male Survivors per 100 Females*
1907	812	769	106
1908	822	781	105
1909	819	785	104
1910	825	792	104
1911	826	790	104
1912	820	784	105
1913	819	777	105
1914	813	777	105
1915	807	773	104
1916	812	780	104
1917	810	778	104
1918	814	787	103
1919	825	801	103
1920	843	822	102
1921	853	834	102
1922	865	846	102
1923	856	840	102
1924	852	834	102
1925	862	841	102
1926	863	846	102
1927	870	854	102
1928	870	854	102
1929	874	858	102
1930	870	855	102
1931	866	848	102
1932	873	861	101
1933	870	858	101
1934	870	858	101

Source: Based on Vital Statistics of each year.

In most of the world, more deaths occur in infancy than at any other year of age. This is especially true of Asia. Deaths before completing the first year of life used to eliminate close to one-fifth of all births in Taiwan. In many countries this figure is believed to be

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higher; cases of 25 per cent wastage of births in infancy have been known. Infant mortality is important for life tables also because it is difficult to measure. Most countries with high risks of death have been unable to keep adequate records of births, and infants who die after a few days or weeks in the world may not be accounted for either as births or deaths. The tests of completeness in registration and enumeration have demonstrated that in Taiwan nearly all children whose births were registered were also either enumerated in subsequent censuses or recorded as deaths if they did not survive.

The system of regulation that kept the local registers was severe as well as thorough. An entire community was held responsible, through its *pao-chia* organization, for failures to keep the registers in order. Some kinds of oversight might be successfully concealed, but if a child survived, its legal status as a person depended on having a record with the police, which was initiated by entering the event of birth. Pressure brought to bear by neighbors, if not prudence on the part of the family itself, tended to promote compliance with these rules. Consequently, a child could not easily remain alive very long and escape being entered in the official records.[34]

There remains, however, a problem of unregistered non-survivors, who might have died so young that no official cognizance was ever taken of their existence or decease. There are three kinds of evidence that some non-conformity of this sort existed early in the registration period. First, birth rates (Fig. 21) appear to have risen slightly, which though possible seems unlikely. Second, the rates of infant mortality that one can derive from unadjusted registration figures seem lower than they must have actually been, in view of the decline in mortality at other ages.[35] Finally, the sex ratio of registered live births was somewhat more masculine at the beginning than in later years. There is reason to suspect that some female infants might have been destroyed and not registered.[36]

[34] The government made provision for late registrations; there were very few, from which one can infer that almost all registrations that were made occurred soon after birth.

[35] All figures for infant mortality before 1916 that are shown here have been adjusted slightly, by a procedure that is described below. Unadjusted, the data make infant mortality appear to have *increased* over the first several years of record. One is led to believe that the opposite was true, in view of the fall of mortality at other ages.

[36] It is not easy to determine the extent or even the general existence of early infanticide in Taiwan. Missionaries and Western travellers often expressed indignation at the practice (see Pickering, Campbell, Davidson). Writings on both China and Taiwan have many references to it, mostly only gossip. Japanese officials took a strongly hostile attitude toward this disposal of infants, and apparently succeeded after a few years in

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165 This idiosyncrasy of the registration system did not prevent our tests from demonstrating almost perfect correspondence among registered births, deaths, and children counted in the census. In other words, the omissions were exactly the same for births as for deaths. Internal evidence indicates that they were not permitted to continue very long. Infant deaths were also tabulated for small intervals within a year, from which probabilities of survival by month can be estimated. The probabilities for the first month of life form a reasonably close regression on those for the second and third combined, for all years *except 1915 and earlier*. Between 1906 and 1915, the probabilities as recorded in the first month were higher than the values that the regression would imply. If we assume the regression of yearly observations after 1915 to be correct, and the probabilities in the second and third months of life to be accurate throughout, then the values for the first month reflect omissions before 1916 of babies who did not survive to one month of age. Following this assumption, all figures for births and infant deaths before 1916 that are used here have been adjusted upward slightly from their registered number to fit what regression values of these probabilities imply for infant mortality and births.[37]

Two procedures are often employed to measure infant mortality. The more appropriate one is to compile it as the proportion born who died in the first year of life, based on births occurring in a calendar year and the deaths to this cohort of births before their first birthday. This is the measure that corresponds to the concept of life-table mortality, and that will be used here except where otherwise specified. Ordinarily, however, deaths are not known by the year of birth of the decedents, but only by the calendar year of occurrence and by age. In this case it is customary to compute what we shall here call infant death rates, using simply the ratio of calendar-year births and calendar-year infant deaths.

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stamping it out. By 1906, when the vital statistics records can be relied upon in most matters, there was scarcely any trace of infanticide among Taiwanese.

To set limits on the extent of the practice, we may assume that all male births were registered, that infanticide occurred only to females, and that the true sex ratio of live births was 105. Then (the sex ratio of registered births in early years being 109), in the first five years not more than 2 per cent of female babies could have been disposed of in this way. In any case, the sex ratio of registered births soon fell to 105, and stayed between 105 and 106 thereafter.

[37] This is a conservative correction, since it entails the further assumption that these were the only omissions. The number of survivors to the end of the first year of life remains the same as before the adjustment.

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TABLE 39

INFANT MORTALITY OF TAIWANESE*

Deaths Per 1,000 Live Births in Each Year

	Males		*Females*	
Year	*Death Rate (Calendar-Year Deaths)*	*Mortality Rate (Actual Deaths)*	*Death Rate (Calendar-Year Deaths)*	*Mortality Rate (Actual Deaths)*
1906	192	182	173	165
1907	174	175	161	162
1908	190	188	173	172
1909	182	183	162	163
1910	167	168	144	144
1911	176	171	144	141
1912	164	169	139	143
1913	177	178	149	152
1914	180	187	161	167
1915	203	202	183	180
1916	193	179	161	150
1917	173	182	148	155
1918	202	199	172	173
1919	186	196	160	167
1920	190	178	161	149
1921	173	175	144	147
1922	184	180	155	150
1923	164	171	133	141
1924	190	196	159	164
1925	186	177	158	150
1926	171	—	139	—
1927	175	—	145	—
1928	181	—	152	—
1929	171	—	141	—
1930	163	—	139	—
1931	177	—	146	—
1932	167	—	140	—
1933	161	169	137	143
1934	167	163	143	139
1935	160	163	133	133
1936	159	159	131	133
1937	157	159	132	134
1938	159	155	132	128

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TABLE 39 (continued)

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Year	Males: Death Rate (Calendar-Year Deaths)	Males: Mortality Rate (Actual Deaths)	Females: Death Rate (Calendar-Year Deaths)	Females: Mortality Rate (Actual Deaths)
1939	152	156	126	129
1940	148	136	122	114
1941	131	133	114	116
1942	136	—	116	—
1943	134	—	116	—

* Registered deaths have been adjusted slightly before 1916, based on a regression of mortality in the first month of life on mortality in the second and third months of life in 1916 and all subsequent years. Births have been adjusted accordingly. Data for actual mortality rates were not published for certain years.

Sources: Vital Statistics, individual years; *Statistical Summary*, Tables 64 and 89.

We must rely on death rates of this latter sort to examine the internal composition of infant mortality, for deaths by month-of-age were published only in this form. This approximation measures infant mortality with nearly the same yearly values as did the actual rates (see Table 39). It is worth while to tolerate some disagreement between the two in order to divide mortality of the first year into smaller intervals.

The progression of these death rates through time is plotted in Fig. 27. Infant mortality on the whole did not decline very sharply. (There will be occasion shortly to compare it with other ages.) If our guess about the defect in registration is correct, then two conclusions necessarily follow. First, the risks of death after the first month of age are documented fully, without omissions. Second, and more important, mortality in this span—the so-called postneonatal mortality—dropped no more than all infant mortality. Neonatal mortality then changed just as sharply as that of infants who survived the first month.[38]

Such a pattern of decline in infant deaths is contrary to what is commonly taken for granted. The usual suppositions about infant mortality in the process of decline have been made *a priori*, for

[38] In addition, according to our guess above, if additional events (births and deaths) ought to be added to the earliest years to make the figures absolutely complete, they must be added to the neonatal period, making mortality in the first month still higher at the beginning. This could only have the effect of indicating a more pronounced drop in neonatal mortality. There is almost no way of allocating extra deaths that could reverse the pattern shown in Fig. 27."

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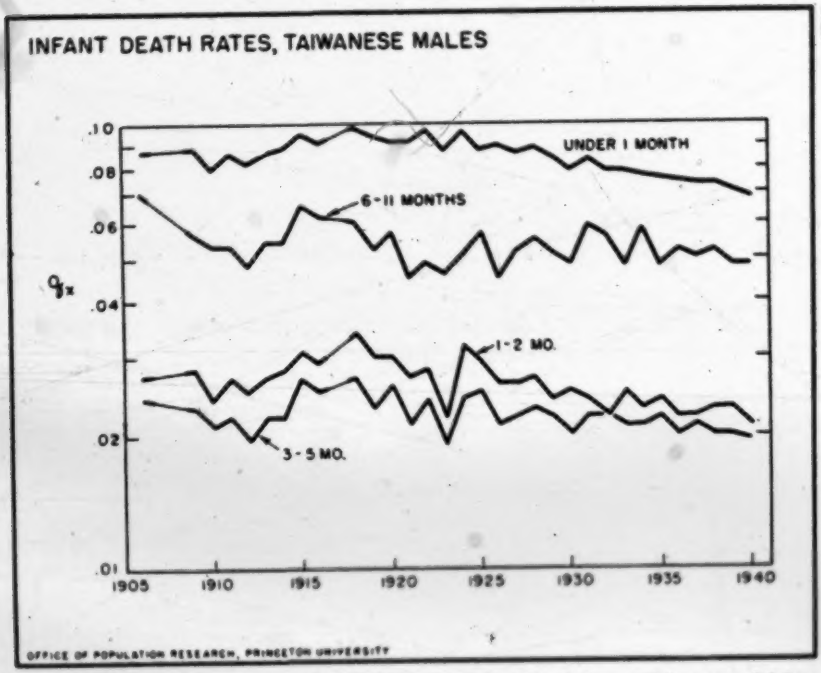

Fig. 27. Fall of Death Rates of Infants by Month of Age. Taiwanese Males, 1906-1940.

actual evidence is rare.[39] Neonatal mortality is thought to be resistant to measures that bring infant mortality under control and thus to most general health measures. Part of the reason may lie in particular environmental influences such as standards of nutrition in a population, the climatic conditions, and the customs governing childbirth and infant care. Part also may be linked with maternal health, which could exert a pre-natal as well as post-natal effect on the chances of live-born babies to survive. It is curious that the distinctive behavior of neonatal mortality in Taiwan (as compared with Europe and America) should coincide with the distinctive low mortality of adult women in childbearing ages. Whether or not one has influenced the other is impossible to say without actual information on the matter. The medical aspects of reproduction in such an Asian

[39] The evidence also has come from European and American countries. Unfortunately it has been subject to a large sampling bias, inasmuch as it represents those countries whose progress toward low mortality has occurred within a particular cultural order, of which the individual countries are but variants.

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165 cultural order are so little known in the West that the question cannot be pursued further except by speculation.

Decline of Mortality by Age

The appearance that the data above give to infant mortality may lead us to keep certain reservations about their accuracy. No such doubt can exist about the general validity of mortality registered at age one and above. The tests reported in Table 34 and Table 35 present Taiwan's statistical system as a paragon even among those of the technologically advanced nations in the world. The trends they show in mortality of later life cannot but be accepted.

For what they are worth, our best estimates of mortality in infancy suggest that it did not decline sharply. On surer ground, it is certain that the chances of dying in later years of childhood and early adulthood fell faster. Fig. 28 displays graphically the basic data on rate of decline in mortality (chances of dying) at selected ages of males entering those ages each year.[40] In the ages taken here as examples—1, 2, 3, 4, 10 and 25—older children and young adults gained the most in chances of survival. Among children, in general the older, the more the improvement. Every higher age gained more ground than infants. Part of this difference may be due to the nature of changes made through colonial administration in the external risks confronting persons of each age. But doubtless a certain part is also due to the effect of carrying improved health from one age to the next by the same individuals—the "cohort effect." Yearly fluctuations are large enough, however, that no special patterns of either type are to be found without complicated manipulations of the data.

To find the risks declining more or less together at different ages does not imply that the number of years of life saved in the population was the same with advancing age. The saving of life in infancy was greater, despite the more moderate drop in the risks than at any other age. This fact holds true regardless of whether one adopts this period-by-period approach or follows the mortality of successive actual cohorts.

[40] The earlier values of the mortality rates at higher ages are connected with broken lines because the observations are not spaced at every year. Mortality rates for every year have been computed only for persons born after 1905.

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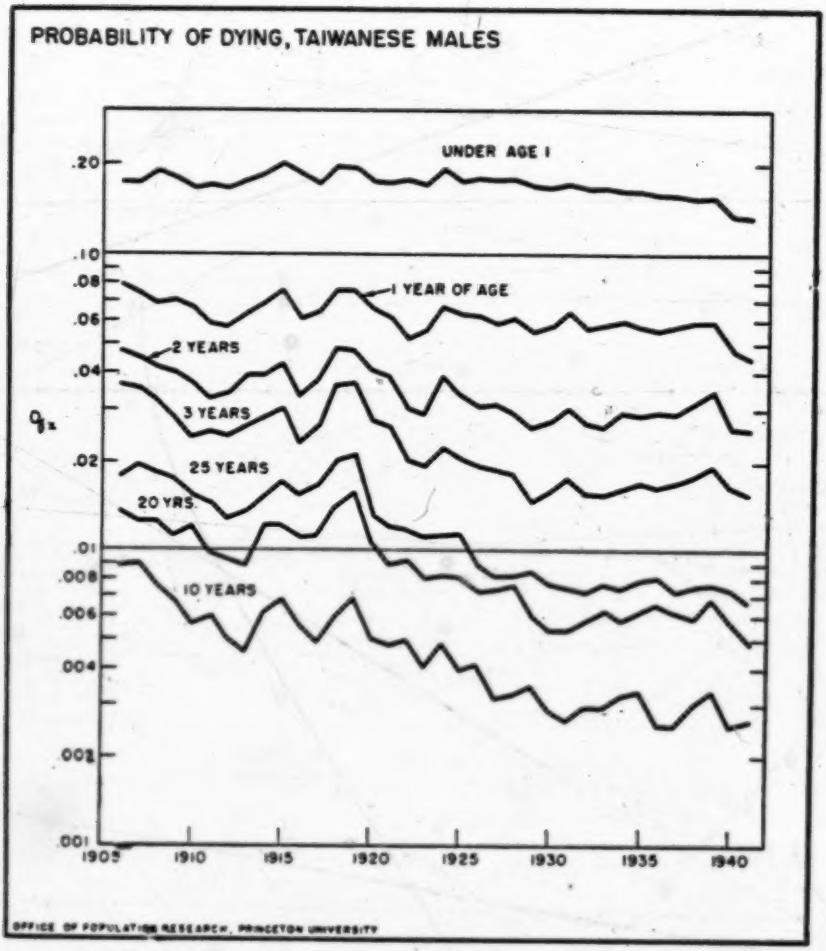

Fig. 28. Decline of Mortality by Age, 1906-1941. Taiwanese Males.

Sectional Differences in Mortality

It would be strange if for people of each age the risks of death were the same everywhere in Taiwan. It happens that most of our information can be obtained only for the island taken as a whole. The measures have been designed to take advantage of this and to present a detailed view of the total population at some sacrifice of knowledge about its parts. Moreover, with a total population that

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•165 was so small, any reduction in the number of cases tends to make sensitive measurements unreliable.

The livelihood of Taiwanese farmers brought them into close and continual contact with their physical surroundings. Such a people cannot avoid some influence of climate and environment on its chances of survival. For a place so small there were marked differences in seasons and rainfall over the island. Whether or not related to this factor, from time to time local peculiarities in the incidence of disease have often been noted.

In pre-Japanese times, isolation of small localities kept much of the communicable disease from being transmitted across the island. Even epidemics were observed that stayed confined to towns and apparently did not become general. The Japanese destroyed this barrier by an efficient network of communications, but maintained special medical inspections on the railroads and at check points on routes of heavy travel. They also imposed port restrictions to prevent disease from being imported from abroad.

As the site of the most modern cities and the favorite residence of Japanese, Taipei Prefecture was one of the safest places in which to live. It was also more liberally supplied with medical facilities than any other Prefecture, because it was Taiwan's center for training and research in tropical medicine. It was relatively free from malaria, and contained the most elaborate sanitary facilities in the island. Other sections were less distinguished, unless by exceptionally heavy incidence of sickness. Taichung was the most afflicted with malaria. The three southern Prefectures were all said to have an unusual amount of influenza and other respiratory disease. The smaller settlements along the eastern coast started out with health conditions far inferior to the rest, though they were gradually improved.

Whatever the causes, there were wide disparities in age-specific mortality among the various Prefectures as late as 1925 (see Fig. 29, for males only). For some unknown reason Hsinchu was the most favored part of the island, followed by Taipei. The range from highest to lowest at this date was almost as great as between the beginning and the end of the Japanese period. It is interesting also that the differences were consistent at all ages, with almost no shifts in the standing of Prefectures at any age. At a time when there was very little migration between Prefectures, these life table values may be regarded as a good representation of actual differences.

Expressed as the mean expectation of life at selected ages (Table

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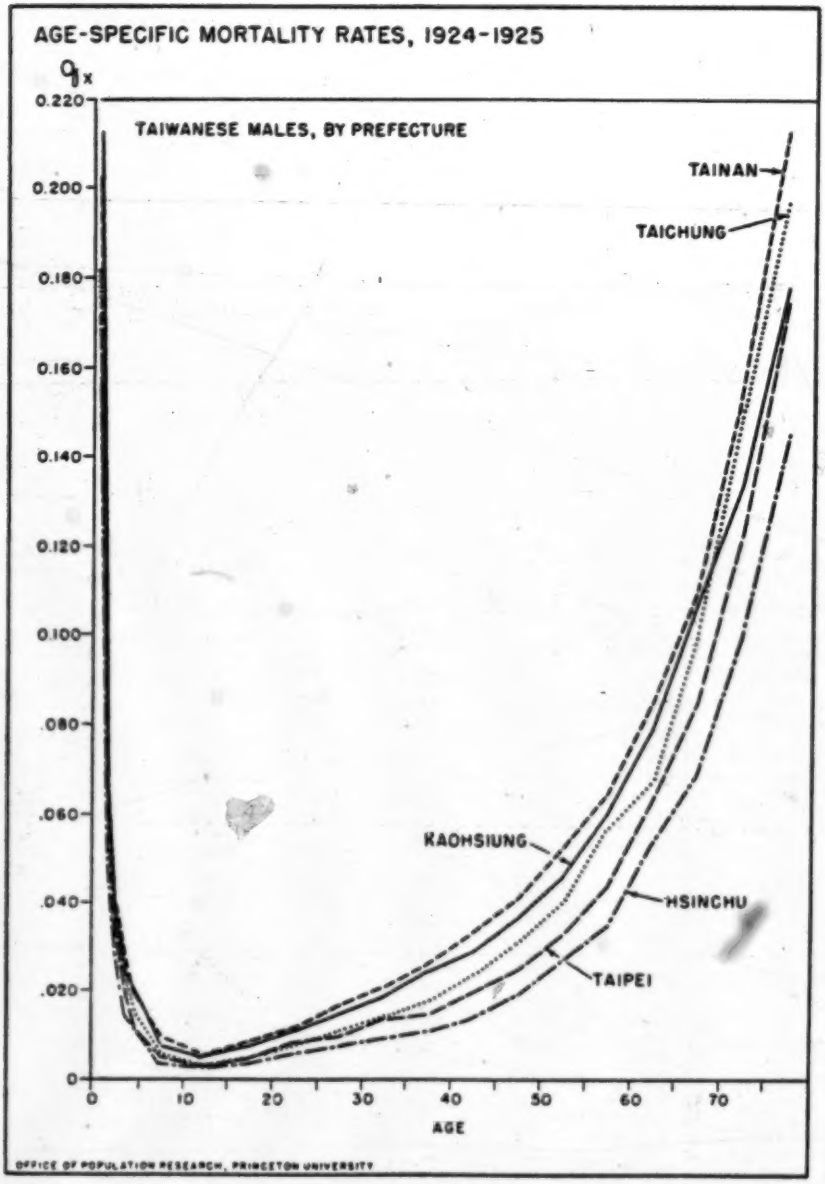

Fig. 29. Mortality of Taiwanese Males in Each Age, by Prefecture. Values of q_x, Life Tables of 1924-1925.

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TABLE 40

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MEAN LIFE EXPECTANCY OF TAIWANESE AT DIFFERENT AGES
Prefectural Life Tables of 1924-1925. Values of e_x, in Years

Age	PREFECTURE				
	Taipei	*Hsinchu*	*Taichung*	*Tainan*	*Kaohsiung*
			Males		
0	38.3	43.1	35.9	30.4	31.7
1	45.2	50.2	42.8	37.1	39.2
5	47.5	51.5	45.7	39.7	41.8
10	43.6	47.4	42.0	36.5	38.3
30	28.0	31.1	26.0	22.3	23.8
50	15.4	17.1	13.9	12.4	13.2
			Females		
0	42.2	46.6	40.7	34.7	34.5
1	48.3	52.3	46.9	40.8	41.4
5	52.8	55.1	52.0	45.0	45.8
10	49.2	51.4	48.5	41.9	42.7
30	33.7	35.4	32.6	28.3	28.8
50	20.1	20.4	19.1	17.0	17.2

Sources: Computed from census and vital registration data of 1924 and 1925.

40), the effects of mortality were as heavy in Tainan as for the total island in 1909-1911. On the other hand, the expectancy was even higher at all ages in Hsinchu than for all of Taiwan in 1936-1940, and much higher in the ages of childhood (cf. Table 37, above). Mortality according to these data tended to align itself with the axis of the island—low in the north, high in the south, and intermediate in the central part. For a land so small, and a population of so few, sectional differences of this magnitude are indeed surprising. (The two small eastern Prefectures have been omitted, not having enough people to make a meaningful life table.)

This pattern of dissimilarity was of long standing. Turning to cruder indices, we can see that the same order of ranking existed throughout the registration period (see Table 41). No matter what index of mortality is used, the grouping remains almost unchanged.

Here also it is evident that the places of higher mortality were making the faster progress toward control over death than the ones that were already low. This appears as well in the fact that the rela-

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TABLE 41

TAIWAN. DIFFERENCES IN MORTALITY BY PREFECTURE, IN SELECTED YEARS

Crude Death Rates, Infant Death Rates, and Deaths Per Thousand Females Aged 15 to 49†

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	PREFECTURES*							
Year	*Taipei*	*Hsinchu*	*Taichung*	*Tainan*	*Kaohsiung*	*Taitung & Hualien*	*P'enghu Islands*	*Total Island*
				Crude Death Rates				
1906	28	22	37	42	41	35	37	35
1915	25	20	30	36	34	30	26	29
1925	23	19	24	29	29	31	26	25
1930	22	17	21	23	24	21	22	21
1935	22	19	21	21	21	21	19	21
				Infant Death Rates				
1906	—	—	—	—	—	—	—	192
1915	162	138	176	192	191	148	204	174
1925	157	139	164	180	191	149	—‡	167
1930	157	130	153	161	179	152	172	156
1935	154	139	146	151	155	160	131	149
				Deaths per Thousand Women Aged 15-49				
1906	13	10	15	29	26	24	15	20
1915	11	9	13	20	20	16	12	15
1925	9	7	9	14	14	15	—‡	11
1930	8	6	7	9	10	8	9	8
1935	8	7	8	8	9	9	5	8

† All rates are averaged over three years around the census year. Those for 1906 represent one year only. Infant death rates have been omitted for 1906, as being unreliable.

* Prefectural divisions before 1920 have been matched approximately to the subsequent boundaries.

‡ Included in Kaohsiung Prefecture.

tive dispersion of death rates was continually being reduced along with the death rates themselves.

As expressed in terms of the *relative* variation among Prefectures in Table 42, the gains in survival were being spread more evenly over the various portions of the island as time went on. And part of the reduction in mortality for the total must have taken the form merely of levelling some of the initial inequities in health

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TABLE 42

RELATIVE VARIATION OF MORTALITY AMONG PREFECTURES IN SELECTED YEARS

Coefficients of Variation for the Death Rates of Each Year in Table 41

Year	*Crude Death Rates*	*Infant Death Rates*	*Deaths/ Women 15–49*
1906	19.2	—	36.0
1915	17.7	13.2	27.9
1925	15.2	10.8	27.3
1930	9.6	9.3	15.2
1935	5.1	6.3	16.6

Source: Computed from data of Table 41.

conditions. Much headway was made in this process after 1925, when the life tables above revealed such large gaps in the degree of control over sickness and death. It must be kept in mind when studying mortality here and in other areas of rapid decline that initial achievement is likely not to extend to many in the population, and that later progress may be no more than bringing more types of people nearer to the same point as the ones who were privileged in the beginning.

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Taiwan formerly had a well-earned reputation as a spot of capricious and unchecked risks to life among its inhabitants. Its position athwart trading routes of the last century made it a likely place to introduce epidemic disease from the rest of Asia. As it became drawn into contact with the outside world and its wider sources of infection, the state of medical knowledge among its people did not keep pace. The former government lacked the capacity and the incentive to adopt measures that might alleviate or forestall such sickness. Taiwanese were therefore often subjected to intense attacks of these diseases, some of them becoming general over the island.

In fifty years of administration the Japanese quickly eliminated epidemics. They succeeded in gradually making the other sources of fatal illness and ill health less prevalent, and thus postponed the prospect of death for Taiwanese. While some characteristics of the decline in mortality that they induced followed familiar patterns, it also carried certain distinctive traits of the society in which it occurred. Special features like the apparent vitality of adult women

52:Barclay S-5 (no date)1954 AD1 Formosa AD1

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and the importance of neonatal mortality in the decline of total infant mortality we have established with repeated observations. As far as present knowledge is equipped to deal with them, these peculiarities must remain inexplicable.

The means to this accomplishment were inexpensive and rudimentary. Aside from probably raising levels of living, the Japanese developed a concerted program against an important group of dangers to health. They attacked those pestilent conditions that can be reached through sanitation and slight reorganizations on a mass scale of practices that were deeply rooted in custom. More thorough measures, which were also more burdensome, were avoided. Their health program relied on administrative efficiency and energy in execution to make up for what it lacked in elegance of equipment and technique.

It is significant to find that such an approach could achieve the results that it did. In many other areas of high mortality the desire to reduce the risks of death is prompting steps in the same direction, and Taiwan's experience ought to prove instructive for such efforts. It is only a modest sample of what might be done in a "backward" region with effective administration—without necessarily incurring the great expense often thought to be associated with high standards of public health. Recent progress in research and development of drugs can make success more certain than before. Future strides in medical knowledge can enhance it still further.

The greatest limitation is that health promotion among people with high mortality requires constant vigilance. Default threatens such a program with collapse, for medical procedures now known are still not automatic, nor are they foolproof. Japanese measures to control disease were primarily suppressive. They did not eradicate malaria or remove the potential sources of cholera infection. Failure to appreciate these latent dangers led to severe outbreaks of cholera and malaria after the island was taken over by forces from the mainland in 1945. Since then the standards of administration, which had been allowed to deteriorate, have been raised again; with the improved technical knowledge at its disposal, the Nationalist government may be able to keep mortality at levels even below those of the Japanese period. The example of Japanese health policies, however, remains a useful lesson in what energetic measures can accomplish without the benefit of these superior medical facilities.

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CHAPTER VI. APPENDIX

TAIWANESE LIFE TABLES

Number of Survivors to 10,000 Live Births (l_x), Selected Years, by Year in Which Persons Entered Each Age

	1906		1909-1911		1915		1919		1921		1926-1930		1936-1940		
Age	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Age
0	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0
1	8,078	8,270	8,261	8,510	7,980	8,200	8,037	8,328	8,080	8,377	8,257	8,546	8,444	8,706	1
2	7,458	7,552	7,728	7,892	7,363	7,472	7,422	7,611	7,590	7,811	7,775	8,004	7,959	8,169	2
3	7,100	7,061	7,446	7,491	7,045	7,033	7,061	7,158	7,290	7,450	7,551	7,705	7,713	7,876	3
4	6,841	6,721	7,253	7,232	6,829	6,750	6,802	6,838	7,097	7,209	7,420	7,541	7,578	7,717	4
5	6,668	6,498	7,125	7,072	6,683	6,562	6,613	6,607	6,974	7,062	7,337	7,445	7,495	7,627	5
10	6,189	5,945	6,811	6,717	6,337	6,159	6,217	6,121	6,694	6,745	7,154	7,258	7,319	7,453	10
15	5,949	5,680	6,624	6,543	6,139	5,980	6,009	5,876	6,554	6,612	7,038	7,150	7,216	7,354	15
20	5,646	5,353	6,379	6,273	5,872	5,704	5,691	5,528	6,329	6,419	6,860	6,975	7,048	7,199	20
25	5,222	4,948	5,986	5,886	5,477	5,344	5,212	5,043	6,020	6,122	6,592	6,724	6,809	6,988	25
30	4,707	4,514	5,491	5,486	4,954	4,938	4,617	4,524	5,634	5,816	6,268	6,440	6,530	6,754	30
35	4,123	4,061	4,924	5,058	4,355	4,511	4,015	4,014	5,194	5,446	5,884	6,114	6,201	6,479	35
40	3,479	3,615	4,301	4,605	3,725	4,061	3,398	3,550	4,705	5,074	5,423	5,749	5,820	6,156	40
45	2,841	3,193	3,625	4,183	3,063	3,620	2,805	3,140	4,154	4,696	4,892	5,377	5,234	5,816	45
50	2,217	2,753	2,944	3,739	2,413	3,201	2,236	2,744	3,590	4,305	4,290	4,986	4,766	5,443	50
55	1,642	2,285	2,278	3,227	1,812	2,696	1,712	2,324	2,957	3,884	3,637	4,534	4,101	4,990	55
60	1,153	1,819	1,658	2,674	1,260	2,150	1,224	1,884	2,311	3,366	2,938	3,988	3,347	4,424	60
65	735	1,344	1,139	2,092	812	1,586	798	1,434	1,689	2,766	2,192	3,315	2,546	3,734	65
70	414	892	697	1,498	456	1,056	443	996	1,087	2,107	1,472	2,553	1,738	2,926	70
75	191	502	368	931	212	573	217	595	616	1,413	845	1,750	1,010	2,005	75
80	73	232	137	477	80	244	80	281	288	745	387	1,007	465	1,126	80
85	24	103	45	212	26	108	26	125	95	330	128	446	153	461	85
90	5	31	9	64	5	32	5	38	19	99	26	134	30	114	90

Sources: Life tables of 1906, 1909-11, 1915, 1919 and 1921 were computed from the assembled data of Taiwan's censuses and vital registration. The table of 1926-30 is from Taiwan, Government-General (1936); that of 1936-40 is from Taiwan, Provincial Government (1947).

15; U.S. Navy--24 [2] (no date) 1944 Formosans
116, 166, 177, 221

"In normal times population movements which entail permanent shifts in residence or occupation have been (a) from farms to urban centers; (b) from older residences to new industrial sites and into war industry; (c) subsidized movements of both farm and industrial labor to the East Coast valley; (d) compulsory movement of aborigines from scattered mountain settlements to villages established by the police; (e) movements of families and individuals returning to Japan; and (f) movements of traders, merchants, and seasonal labor to and from the China coast before 1938."

15: U.S. Navy --24 [3] (no date) 1944 Formosans
116, ~~166,~~ 369, 464, 177.36 Japanese
636.36

"The industrial centers at Keelung, Shinchiku, Takao and Karenko have attracted many voluntarily. The better paid technical and supervisory personnel are Japanese, but the common labor is Formosan-Chinese drawn from local rural communities. There is evidence that the creation of a number of new air establishments has necessitated the development of servicing communities near them, either at the fields' borders or in nearby villages. The development of a town at Toshien, just north of Takao, is the most important example of a 'war town' on the west coast. Karenko's new industries and the hinterland development of villages on a Japanese pattern and with Japanese names are examples of a more permanent new development."

15: U.S. Navy --24 [5] (no date) 1944 Formosans
116, 166, 486, 659, 177.48 Japanese
636.48

"The movement of Formosan-Chinese or Japanese into the aborigine territory is supposed to be strictly regulated. Permits must be had for any forest operations which take laborers into the area for logging or for camphor extraction. Likewise, the movements of aborigines who wish to leave the territory for business or sightseeing (educational) visits to towns and villages is carefully checked by the Japanese police. The police stations are small centers for trade and local administration through which most such traffic must pass. Roads, paths and the pushcar lines converge on these centers.

Movement from the western and northern settled regions to the isolated East Coast is susceptible of complete control. The town of Suo is the last important settlement at the northeast. Koshun is the last important settlement at the extreme south. Through these two towns pass all round-the-island motor traffic. (A road crossing the southern peninsula from Shajo eastward may now cross above Koshun.) All persons entering the territory through these points are expected to be registered for police purposes.

Some foot traffic (confined largely to bearers of supplies and messengers for the interior police stations) passes across the island from the Taichu-Hori district over the Noko mountain ridge to Karenko. It is improbable that Formosan-Chinese, singly or in small groups, should attempt to cross the mountains on foot unless armed or escorted by armed police."

15: U.S. Navy--32 [10] (no date) 1944 Formosans
116, 166, 464, 177.16 Japanese
636.16

"The labor shortage is especially acute on the east coast where major industrial developments are planned for the next few years. To alleviate the shortage a bureau has been set up which attempts to engage workers on the west coast, send them around to the east, and there settle them in advantageous places.

In January, 1939, an employment bureau organized in Karenko (capital ¥200,000), brought 500 labor immigrants from the west coast of the island and put them to work in the Japan Aluminum Company's factory. They were given land (1/2 acre to each house) and were required to raise hogs, for there is a shortage of pork on the East Coast. A government bureau plans to continue this resettlement work."

V. MIGRATORY MOVEMENTS

167 From the beginning of the seventeenth century to the end of the nineteenth century immigrants from the Chinese coast increased the population in Formosa. However, due to prohibitive measurs against immigration taken by the Japanese, the major increase after 1895 was caused by excess of births over deaths. In the post-war years, particularly when the Nationalist Government abandoned the China Mainland, a vast number of civilians and troops came to Formosa, swelling the population by about 20 per cent. It was estimated that in 1952 there were about 9,700,000 people on the island; of this number one-fifth were Mainlanders.[13]

166 Internal migration is largely limited to rural people moving to urban areas. Because of familial and local ties farmers rarely move unless they plan to change their occupation. Moreover, because of the lack of frontier lands, farmers do not gain by moving to other areas unless they change their livelihood. To the farmers, migration means departure from rural life and activities. As a result, most people tend to stay in or near the locality in which they were born. About 60 per cent of the 857 heads of households surveyed by the Joint Commission on Rural Reconstruction were born in the village in which they now live, 17 per cent were born in other villages in the same township (chen), and 10 per cent were born in other townships in the same

13. Arthur F. Raper, Rural Taiwan--Problem and Promise, Taipei, JCRR, 1953, p.290, Appendix B contributed by Profs. Ruey Yih-fu and Chen Shao-hsin of National Taiwan University.

166 hsien.[14] The few rural dwellers who moved from the townships surveyed went to the larger cities or to the east coast. Two townships on the east coast showed a relatively large immigration[15] during the period 1937-52; most of the newcomers were from the western and southern parts of the island. If employment opportunities in the urban areas are improved, it is believed that there will be a great migration from every township.[16]

In recent years, industrialization has been another factor which influenced a number of people to move from rural areas to urban and industrial areas. Cities having more than 100,000 inhabitants in 1920 accounted for 4 per cent of the total population; while in 1952, large cities accounted for 21 per cent. If we consider that the increase in total population during 1920-52 was 120 per cent -- 3,800,000 to 8,200,000 -- the increase in urban population which amounts to more than 420 per cent is of extreme importance and indicates how rapidly urbanization is taking place in Formosa.

VI. VITAL STATISTICS

163 A. Births

The birth date of Formosa has been constant and high. During the period 1920-53, the number

14. Ibid., p. 205; the remaining 13 per cent are probably from other hsien and provinces.
15. Raper, loc. cit.
16. Ibid.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

Prefectures, and in Taipei. A thin belt of level land along the east coast was only freshly settled; people were extremely sparse in the interior region (see also Fig. 2). Separating the Aborigine Territory removes the greatest variation in terrain and land use. On this basis the more populous sections of the island can be roughly distinguished, though only in terms of Prefectures (which were not evenly settled throughout). To facilitate this comparison, the density of total population (per square kilometer) in each Prefecture is expressed in the final columns of Table 19 as a percentage of the density over the entire island with the Aborigine Territory excluded.

One can get a quick glance at the total effects of migration by examining the disposition of people among the smallest civil divisions at two separate dates. This information is prepared, for the years 1920 and 1935, in Table 20. The intervening period covers

TABLE 20

TAIWAN. TOTAL POPULATION BY SIZE OF CIVIL DIVISION, 1920 AND 1935

Excluding the Aborigine Territory

Size of Civil Division	1920 Population	1920 Civil Divisions	1935 Population	1935 Civil Divisions
	A. Numbers			
Under 10,000	765,772	116	1,244,749	130
10,000-20,000	1,980,510	141	2,262,691	118
20,000-30,000	409,149	19	606,831	22
30,000-40,000	166,543	5	119,785	3
40,000-50,000	47,921	1	469,151	7
Over 50,000	239,342	2	384,973	2
Total Island	3,609,237	284	5,088,180	282
	B. Per Cents			
Under 10,000	21.2	40.8	24.5	46.1
10,000-20,000	54.9	49.6	44.5	41.8
20,000-30,000	11.4	6.7	11.9	7.8
30,000-40,000	4.6	1.8	2.3	1.1
40,000-50,000	1.3	0.4	9.2	2.5
Over 50,000	6.6	0.7	7.6	0.7
Total Island	100.0	100.0	100.0	100.0

Sources: *Census of 1920, Descriptive Report*, Appendix, Table 8.
Census of 1935, Statistical Tables, Table 3.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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fifteen years of uninterrupted growth in the island's population. This is a short span, but it is the longest one for which appropriate figures exist. Before 1920 the territorial divisions were not the same, and for the census of 1940 no full reports have been published.

Apparently, from Table 20, the fact that there were more people in 1935 made little difference in their mode of settlement. At both dates more than two-thirds of all people (here including Taiwanese and all other groups) were living in places of less than 20,000 in size. Some of the larger civil divisions shifted upward from one group to a higher one; this is to be expected from the mere fact of general population increase. What is surprising is that the biggest cities—and as late as 1940 Taiwan boasted only three larger than 100,000—failed to advance substantially over the rest of the island. Subsidiary centers of less than 50,000 population made the most headway in relation to other places. A certain amount of administrative reorganization enters into these figures, since evidently a few of the minor units were split up into still smaller ones. But these changes were confined to units of the smallest size, and did not encompass many people. Viewed in entirety, migration therefore did not have a marked effect in redistributing the population growth that was in progress among the Taiwanese.[5]

Economic activities had changed so little, however, that migratory movements could hardly have been large. Besides, no large areas of new lands were available to farmers after 1900. Most of the additional space brought under cultivation since that time was converted to agricultural use within the settled area. Expansion of agriculture along these lines did not open opportunities of wider settlement.[6] In the absence of empty lands, there was little for peasant farmers to gain in changing residence unless they also changed their livelihood. In general, if they remained agriculturists it was advantageous also to remain in localities where they were well known, where their families were well established, and where they did not suffer the invidious treatment commonly accorded to strangers.

[5] Differences in natural increase, which might have hidden the effects of some migration in these figures, bore almost no relation to the differences in actual population growth between civil divisions.

[6] The exception to this rule was the rugged east coast of Taiwan. There the authorities brought in "colonists," first Japanese and later Taiwanese, to establish special settlements in the limited plains area for cultivation of sugar and other crops. Though making up a large part of the population later found in this region, this migration was small and of a very special nature.

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On the basis of the previous chapters we should know in advance some of the reasons why people moved. If movement was difficult and uncommon within agriculture, then permanent migration was presumably a matter of going to new jobs. Occupational movement and spatial movement were two interconnected parts of the same process. This meant, for the society, a shift in its economic base; for individuals, it amounted to a change in status, together with exit from rural life and activities.

Bearing in mind that the migrant population was small, we can try to discover where these people went and who they were. For the aggregate of those who crossed local boundaries, both origins and destinations can be found by estimating the balance of persons who moved into or out of each civil division.

This measure is suited to detecting various types of migration. In its results much depends on the types of areas and the period of time chosen for making the estimates. Districts and Municipalities are the places that will be used here; they are small enough not to hide very many moves of more than ten or twenty miles. The smallest time interval is set by the fact that census data give the best indication of total population change by place (i.e., the difference in the people counted from one census to the next in each unit of enumeration). This fixes the period to be used at five years. It is probably sufficient to cancel out some short-term migration and give a certain amount of weight to permanent shifts of residence.

But intercensal population change represents the effects of both net migration and the net amounts gained by births and lost by deaths or natural increase. Since only a tiny fraction of births or deaths went unregistered, they give a good basis for taking out the component of natural increase. The residual term that remains from intercensal population change can therefore be regarded as "net internal migration" in any given civil division.[7]

From 1925 to 1930, net migration viewed in this fashion did not vary greatly among Districts. It is interesting, however, to see the regional groupings of Districts, in terms of per cents of their Tai-

[7] That is, it is practically zero for the island as a whole. Discrepancies are possible for local areas if the chances of dying have been affected by whether or not some of their people were migrants, or if deaths were registered in a previous place of residence. There is no direct evidence available as to the error from those sources. Because Taiwan's population records were of high standard, and because migration was not heavy, it seems safe to assume that these distortions are minor in any particular place. The procedure used for estimating net migration may, however, increase the amplitude of errors in the residual values.

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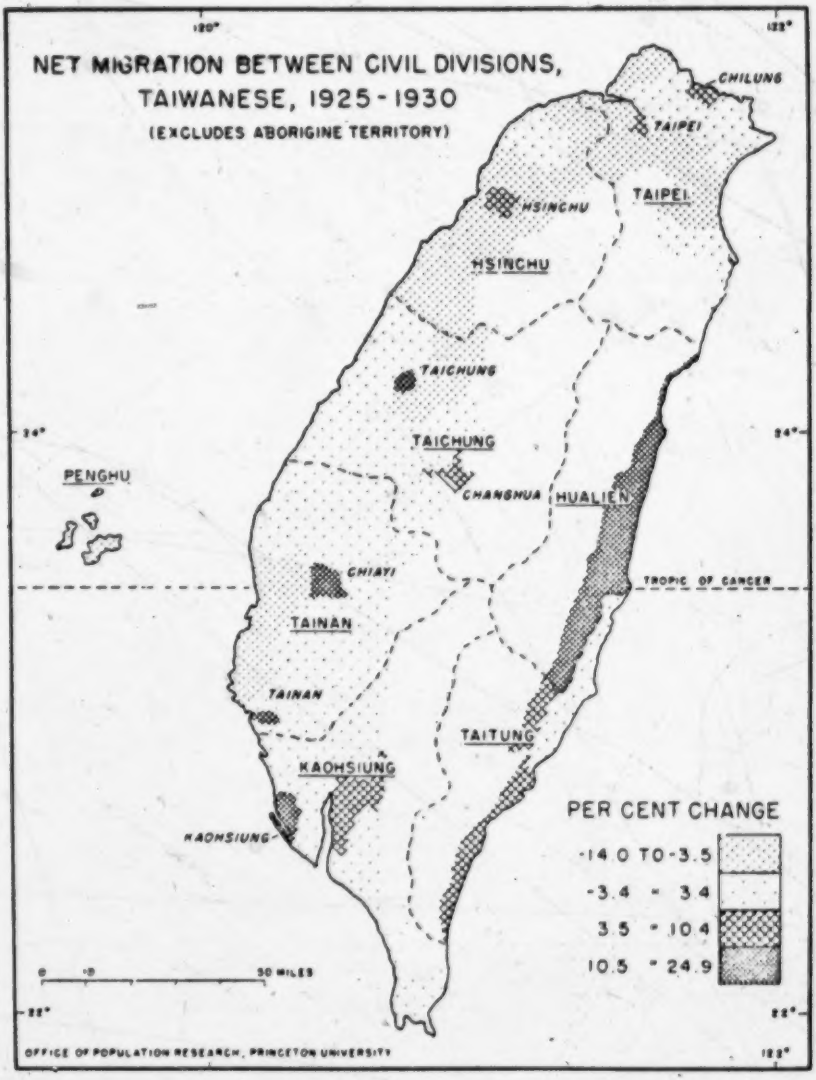

Fig. 17. Net Migration of Taiwanese between Civil Divisions, 1925-1930.

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wanese inhabitants received or lost in this way from 1925 to 1930 (see Fig. 17).[8] These groupings divided the rural areas into two parts—a zone of out-migrant Districts in the north, and a more or less neutral region having almost no increase or loss through migration. A process of rapid settlement was beginning in the habitable parts of the eastern coast, where the authorities and a few private companies encouraged people from other Districts to go. This settlement was carried on partly through government design, and was not entirely spontaneous. It grew rapidly from a small start, but did not shift large numbers of people.

These transfers of people were extraordinary. The only other noteworthy exceptions to near-immobility over the rest of the island were cities. On the map these appear as the several isolated points with relatively high gain in migrants.[9] They were interspersed in rural areas of migration deficit, suggesting that much of the movement covered only the short distance from one civil division to the next.

The same data used for Fig. 17 yield more information in terms of the relation of intercensal change with natural increase and net migration. Fig. 18 illustrates the pattern of association that holds in either case, taking each District and Municipality simply as a unit, equally weighted. Against total population change as the standard of comparison, the percentage of natural increase varied from District to District more or less at random, and within a narrow range. Net migration, on the other hand, contributed most of the variation in population change from one civil division to another. The gist of Fig. 18 is summarized in Table 21, this time with each civil division weighted by the number of persons. In a somewhat different way, Table 21 reinforces what we have just learned about the components of population change: natural increase was nearly the same in all quartile groupings of places according to total population growth. Only net migration varied consistently with total change.

[8] Strictly speaking, ratios of estimated migrants to 1925 population. The Aborigine Territory has been excluded in these data, as it was only in the process of being "pacified" at this time; the ratios therefore show the total area illustrated in Fig. 17 to have a net out-migration, presumably because some people moved into the fringes of the interior area as it was gradually subjugated.

[9] In addition, part of one of the Districts was marked by exceptional growth among its neighbors due to the influence of a city that it contained. This was P'ingtung City, slightly to the east of Kaohsiung. It was elevated to a Municipality in 1932 and separated from the surrounding District.

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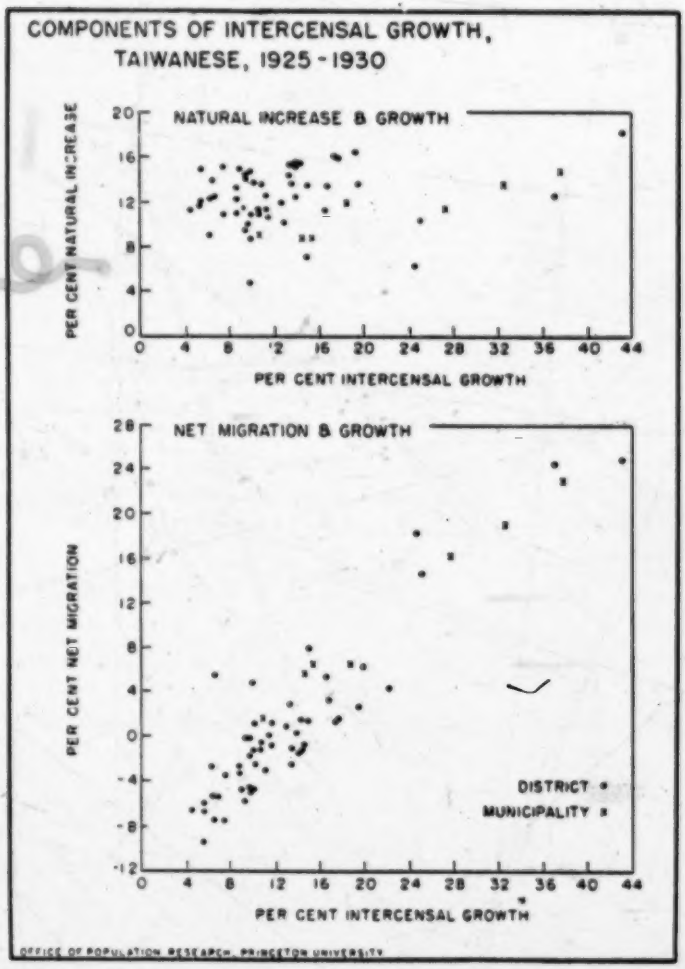

Fig. 18. Net Migration and Natural Increase by Civil Division, Related to Intercensal Growth of Population, 1925-1930.

The residual estimates of net migration above indicate that city populations gained the most from migration. This fact does not of itself imply that they gained the largest numbers of migrants, for we have not yet established that the cities were large enough next to the rural population to have such weight. All that these data reveal about the migrants is, in an aggregate sense, the places of origin and destination. For some idea of the numbers of people involved,

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TABLE 21

NET INTERNAL MIGRATION OF TAIWANESE, 1925-1930

By Districts, Grouped in Quartiles According to Total Intercensal Change. With Municipalities Shown Separately*

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	Per Cent Intercensal Change	*Per Cent Natural Increase*	*Per Cent Net Migration*
First Quartile	6.2	12.4	—6.2
Second Quartile	9.5	12.1	—2.6
Third Quartile	12.7	13.1	— .5
Fourth Quartile	17.3	13.9	3.3
Municipalities	19.1	10.3	8.9

* Percentages are ratios based on population of 1925 in each civil division.
Sources: *Census of 1925, Statistical Tables*, Table 1.
Census of 1930, Statistical Tables, Tables 1 and 2.
Vital Statistics, yearly volumes, 1926-1930.

and of the proportion of migrants who went to cities, we should rather deal directly with those who migrated.

The census reports for 1930 contain a special table showing persons born in a Prefecture other than the one in which they were enumerated—i.e., who had travelled across a prefectural boundary at some time after birth. This material is not in sufficient detail to establish the broad pattern of migration illustrated above,[10] but forms a valuable supplement to our estimates. In particular, it supplies a fuller answer to the question of relative drawing power between country and city.

Very few Taiwanese shifted residence across prefectural boundaries—obviously fewer than those who moved across District boundaries. The ones who did are a specially selected sampling of all people who moved. Most changes of residence in an agrarian society may be expected to be over short distances. These involve the least break with the past and exposure to unfamiliar conditions. They contain much "normal" movement of people having nothing to do with social change, for they are often bound closely to stable local

[10] It is, for example, an independent source of corroboration for the general spatial pattern of migration shown above. With it we can locate those migrants whose travels happened to cross prefectural boundaries (and who survived to the census date) according to their place of destination. By this criterion, the places of highest immigration are mostly the same as those shown by the measure of "net migration" above in the text. These census data lack, however, any information about the District of origin of the migrant population, which is just as essential to know.

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116 customs.[11] Since the Prefecture in Taiwan was a fair-sized geographical unit, much of this short-distance movement regularly occurred within these boundaries and would never come to light in such coarse tabulations. The rural Districts receiving most migrants from other Prefectures were, not unnaturally, those which lay on the border of an adjoining Prefecture.

The growth of each Prefecture through migration was therefore strongly conditioned by this fact. Cities were not so affected. Unless they were located near the edge of their Prefectures—and none was situated at a boundary—they had less chance of receiving short-distance migration from another Prefecture than did their rural hinterland.

Every Municipality in 1930, however, had a larger proportion of inter-prefectural migrants in its population than the remainder of its own Prefecture (see Table 22). These migrants, of course, were not necessarily people who had entered within a definite period of time, but those who had ever migrated. The east-coast Prefectures (Taitung and Hualien), which were non-urban, had the largest proportion of people from other Prefectures; but we have already seen that they were exceptional cases.[12] Significantly, the attraction of cities for people of other Prefectures tended to favor males more than that of their surrounding areas. In Hsinchu Prefecture (which on balance steadily lost migrants), the difference is greatest of all: the sex ratio of migrants to Hsinchu City was 167, to outside the city 72 (see Table 22).

These facts are put into better focus in Table 23. When migration data of this type cover a complete area, they have the special virtue of enabling one to count the migrants by place of origin as well as place of destination. Part A in Table 23 more nearly corresponds to the residual approach that was adopted above. The column next to the number of in-migrants shows their proportion among all residents; the final column gives the proportion of all in-migrants who went to cities. At the same time when 23.5 per cent of all inter-prefectural migrants had gone to cities, the cities themselves held only 10 per cent of all Taiwanese. A more appropriate comparison than over the entire island is to examine the cities of each Prefecture

[11] As, e.g., the "marriage migration" in certain countries. Cf. Davis, K. (1951), pp. 111-114.

[12] And Hualien contained a growing city of moderate size, which was made a Municipality in 1940.

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TABLE 22

INTER-PREFECTURAL MIGRANTS IN TAIWAN, 1930

Taiwanese Residing in Prefecture Other Than That of Birth, Enumerated in Rural Districts and Cities

	A. Rural Districts				*B. Principal Cities (Municipalities in 1930)*				
		Migrants from Another Prefecture (i.e., Born in Other Prefecture)				*Migrants from Another Prefecture (i.e., Born in Other Prefecture)*			
Prefecture	*Total Taiwanese Residents*	*Number*	*% of All Residents*	*Sex Ratio*	*Total Taiwanese Residents*	*Number*	*% of All Residents*	*Sex Ratio*	*Name of City*
Taipei	588,165	18,443	3.1	95	147,620	8,395	5.7	124	Taipei
					51,337	3,353	6.5	145	Chilung
Hsinchu	611,145	6,989	1.1	72	39,361	928	2.4	167	Hsinchu
Taichung	943,314	36,247	3.8	111	39,431	5,040	12.8	106	Taichung
Tainan	989,591	21,678	2.2	100	76,073	5,101	6.7	110	Tainan
					47,615	5,114	10.7	103	Chiayi
Kaohsiung	552,243	24,985	4.5	121	45,288	15,698	34.7	127	Kaohsiung
Taitung	53,684	7,411	13.8	140					
Hualien	72,103	25,670	35.6	136					
P'enghu	55,936	554	1.0	—					
Total Island	3,866,181	141,967	3.7	—					

Source: *Census of 1930, Prefectural Volumes*, Table 30 in each.

separately, where their drawing power stands in clearer contrast to that of their surrounding rural area.

Part B of Table 23 is an interesting supplement to the information already at hand. The deficit standing of Hsinchu is more conspicuous here than in Fig. 17, for the other Prefectures retained most of their own migrants inside their boundaries. P'enghu Islands, in addition, had lost relatively more people to other parts of Taiwan than any other Prefecture. These islands experienced disastrous storms and rural poverty for many years, and had no adequate economic base for many people to follow pursuits other than farming. Through the years P'enghu supplied an unbroken stream of people to Taiwan proper, most of them going to Kaohsiung City.

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TABLE 23

TOTAL SURVIVING MIGRANTS BETWEEN PREFECTURES, AND THOSE WHO WENT TO CITIES*

Taiwanese Enumerated in 1930 Whose Place of Residence Was Different from Place of Birth

	A. By Prefecture of Destination Resident in Prefecture, Born Elsewhere			B. By Prefecture of Origin Born in Prefecture, Resident Elsewhere		
Prefecture	*Number Who Migrated*	*% In-Migrant of All Persons Resident in Each Prefecture*	*% of the In-Migrant Who Went to Cities*	*Number Who Migrated*	*% Out-Migrant of All Persons Born in Each Prefecture*	*% of the Out-Migrant Who Went to Cities*
Taipei	30,191	3.9	38.9	28,665	3.6	19.2
Hsinchu	7,917	1.2	11.7	91,360	12.4	16.3
Taichung	41,287	4.2	12.2	16,569	1.7	20.6
Tainan	31,893	2.9	32.0	19,950	1.8	27.4
Kaohsiung	40,683	6.8	38.6	9,719	1.7	26.0
Taitung	7,415	13.8	–	2,066	4.3	3.4
Hualien	25,650	35.6	–	1,681	3.5	6.1
P'enghu	544	1.0	–	15,570	21.9	74.7
Total Island	185,580	4.3	23.5	185,580	4.3	23.5

* People living in boats are excluded.
Source: *Census of 1930, Prefectural Volumes*, Table 30 in each.

Movement to Cities: The Rate of Growth

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These census materials above all emphasize one important fact: cities were the outstanding recipients of people from the rest of the island. The data regrettably can be used to demonstrate the case in only a limited way. The limitations are, however, of a nature that make this testimony an understatement—the total number of migrants to cities was much larger than merely those who had crossed the borders of a Prefecture. Lacking further data directly for the people who moved, we may find out more about them at their destinations as members of the urban population in Taiwan.

Since these several cities took such a large share of all migrants, they must have grown more rapidly in population than the rest of the island. The Municipalities were only a part of all the cities and towns in Taiwan, for the distinction was one of administrative convenience. Not all had equally developed economic services. They are

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a makeshift way of distinguishing urban places from rural Districts. Many subsidiary market towns, for example, must be overlooked for lack of data.

But in a population that was predominantly rural, these cities were the most "urban," the farthest removed from traditional peasant agriculture. Under the watchfulness of the Japanese, a town could not enlarge its economic importance for the rest of the island very far before it was given regular municipal administration. Hence we may treat them as representing the most extreme departures from rural conditions to be found in Taiwan, and can proceed to find out how far they deviated from the rest.

In 1932, two more cities were raised to municipal rank. The earlier and later population figures for all nine that were Municipalities in 1935 have been sorted out from the respective census reports, and appear in Table 24. It is clear that the cities of Taiwan were not great metropoleis. These nine were the largest, and many Westerners would regard only the foremost among them (Taipei) as being urban. One cannot gainsay their importance to Taiwan: they differed consistently enough from the rest of the island not to be lightly dismissed.

One distinction that is obvious in Table 24 is in the rate of growth. Though the cities varied considerably among themselves, every one increased its Taiwanese inhabitants more than the entire island did. Most cities maintained steady rates of growth, and therefore tended to keep their differences with the others.

The data are condensed and plotted on a logarithmic scale in Fig. 19, so as to contrast the rates of increase of city and non-city Taiwanese and Japanese. The inequalities in growth stand out clearly. Those cities that were expanding more slowly are likewise the ones that had relatively fewer migrants in the data above. They did not outgrow the non-city population by much of a margin, either in Taiwanese or Japanese. The differences in increase persisted over the entire recorded period, and carried over into the later years of accelerated economic growth. Indeed, from these data on population redistribution one could scarcely guess that the tempo of economic life had changed after 1935. Whereas these same cities had held 10 per cent of all Taiwanese in 1920, they contained only 14.7 per cent as late as 1940. For all their growth, cities did not greatly surpass the increase of all Taiwanese.

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TABLE 24

POPULATION OF TAIWANESE AND JAPANESE IN NINE MAJOR CITIES AT SUCCESSIVE CENSUS DATES, 1915-1940*

	1915	*1920*	*1930*	*1940*	*Ratio: 1940/1920*
TAIWANESE					
Taipei	98,495	108,107	147,620	221,602	2.0
Chilung		33,692	51,337	69,578	2.1
Hsinchu		28,951	39,361	51,060	1.8
Taichung	18,444	22,250	39,431	64,884	2.9
Changhua		32,810	40,747	54,741	1.7
Tainan	56,297	62,115	76,073	122,173	2.0
Chiayi		31,392	47,615	80,828	2.6
Kaohsiung		27,153	45,288	96,588	3.6
P'ingtung		18,420	28,917	46,961	2.6
Total, All Cities		364,890	516,389	808,415	2.2
Total Taiwanese		3,466,507	4,313,681	5,510,259	1.6
JAPANESE					
Taipei	37,974	45,211	67,687	91,550	2.0
Chilung		11,898	18,541	24,815	2.1
Hsinchu		2,649	5,102	7,504	2.8
Taichung	6,817	8,817	13,214	16,300	1.8
Changhua		786	1,977	2,977	3.8
Tainan	9,708	12,140	14,955	16,654	1.4
Chiayi		5,445	8,575	9,960	1.8
Kaohsiung		8,840	15,437	28,336	3.2
P'ingtung		3,112	4,814	6,747	2.2
Total, All Cities		98,898	150,302	204,843	2.1
Total Japanese		164,266	228,281	312,386	1.9

* Cities not yet formed before 1935 have been reconstituted for previous years according to their 1935 boundaries from the detailed census tables. Cities changed after 1935 have been adjusted to 1935 boundaries.

Sources: *1915 Population Register* } (Both of these volumes contain the census figures for minor civil divisions.)
1920 Population Register }
Census of 1930, Statistical Tables, Tables 1 and 2.
Census of 1940. (Figures secured from the Gazette of the Taiwan Government-General, April 22, 1941.)

Japanese on the whole had stronger preferences for the same cities as did Taiwanese. But the functions of urban growth were not the same in the two groups. Taiwanese moved to cities as the most promising alternative to farming. Japanese, coming from outside to city and countryside alike, held technical and professional positions in

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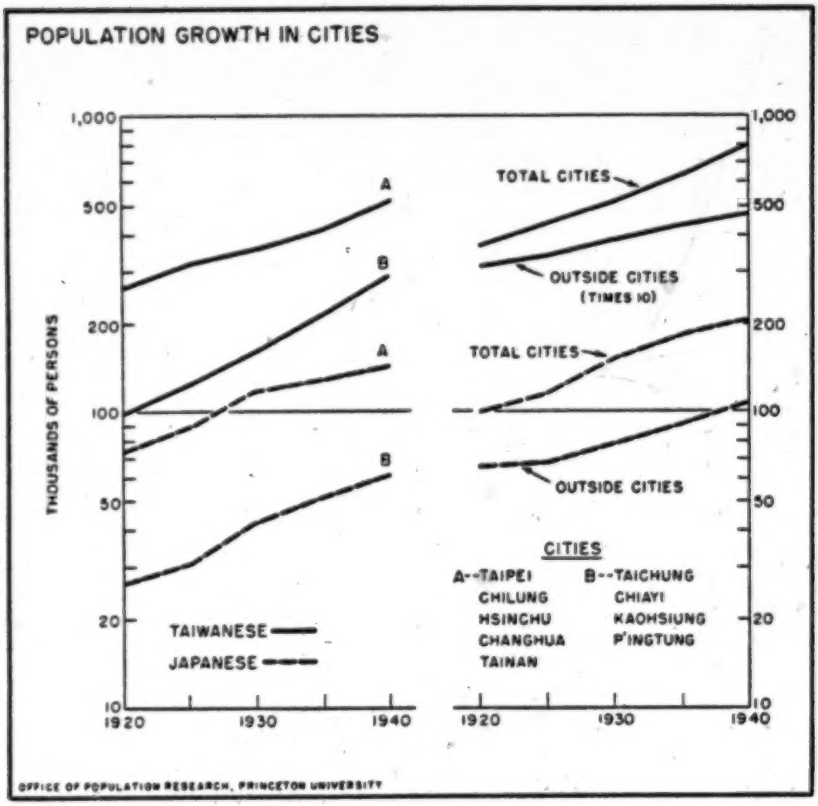

Fig. 19. Growth of Population in Major Cities of Taiwan, 1920-1940. Taiwanese and Japanese.

both places. They certainly esteemed urban more than rustic life; but work of a similar nature was also available to them outside the cities. For them the place of residence had less influence on their type of livelihood.

Ethnic Composition of Cities

The growth of cities depended on only a small part of all Taiwanese to supply the necessary migrants. It was not so with the Japanese. In a sense, the majority of them were migrants, having been born outside of Taiwan. More important, however, nearly two-thirds of all Japanese took up residence in cities and presumably stayed there (see Table 25). They found an urban setting most advanta- 563 162

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hsiung and Chiayi had not a single ward with as high as 90 per cent of its population Japanese. For Taiwanese, on the other hand, Taipei consisted neither more nor less of mixed wards than the other cities. In all, at least nine-tenths of the Taiwanese population of every city stayed in districts in which less than a majority of the inhabitants were Japanese.

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The Taiwanese in Cities

Of all Taiwanese, so few went to cities that one is prompted to ask whether there were not some special factors present restricting the size of this migration. The effects of such a selective process over many years should produce differences in the characteristics of persons living in cities and of those living outside.

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Since few if any newcomers had an opportunity to take up agriculture in the cities, a prominent feature of cityward migration was a movement to new work. To the extent that it was, one would expect that the migrants were the types of persons who usually undertook new occupations in Taiwan—for example, men rather than women, primarily in the ages of young adulthood. If the migrant population had been limited to these categories, cities with large proportions of migrants in their populations must have had disproportionate numbers of young men as compared with the rest of the island. Such a tendency has characterized rapid urbanization elsewhere.

In addition, cities frequently offer opportunities for employment that are considered superior to those found in the countryside. This is especially true of many agrarian societies, where rural poverty sometimes reaches extremes that make the meanest of urban jobs seem attractive. Where such conditions exist, movement to cities very often serves to drain off large numbers of men in young working ages who have lost or overcome their attachment to farming.

In 1935, these effects of age and sex selection were hardly perceptible in Taiwan's urban population taken as a whole. The age composition of all their males combined was nearly the same as the rural population (Table 29). Surprisingly, urban females likewise had almost the same age structure as those outside of cities. Hence, there could have been no sweeping dislocation of persons of different age and sex groups as a result of urbanization in Taiwan.

There are special circumstances in which it is not hard to imagine some movement of single individuals in an agrarian society; this has

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TABLE 29

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AGE AND SEX COMPOSITION OF TAIWANESE, INSIDE AND OUTSIDE OF NINE MAJOR CITIES, 1925 AND 1935

Per Cent of Total Population in Selected Age Intervals, Male and Female

Age	Males Inside	Males Outside	Females Inside	Females Outside	Males per 100 Females Inside	Males per 100 Females Outside
			1925			
0–14	36.5	40.2	37.5	40.0	101	105
15–39	44.1	40.6	39.5	37.6	116	113
40–64	17.8	17.4	19.5	18.8	95	96
65+	1.6	1.8	3.5	3.6	47	52
Total	100.0	100.0	100.0	100.0	104	104
			1935			
0–14	41.0	43.2	41.1	42.9	103	103
15–39	41.6	38.5	39.0	37.0	110	107
40–64	15.9	16.5	16.8	16.8	97	101
65+	1.5	1.8	3.1	3.3	50	57
Total	100.0	100.0	100.0	100.0	103	103

Sources: *Census of 1925, Statistical Tables*, Table 3.
Census of 1935, Statistical Tables, Table 7.

been known to occur in the form of contractual servitude by children, of young men (though not frequently young women) shifting to non-agricultural employment, and of movement by old persons to reside with emigrant kin. But it is inconceivable that these deviant events might have occurred jointly in chance coordination so as to reproduce the rural age structure so closely in cities. Such a migration as this could have been possible only if many people travelled to cities in family units and not as isolated individuals. A great many migrants therefore must have moved merely because they were members of migrant kinship groups.[20]

This situation did not hold with equal force in all cities. Variations in composition among separate cities were as great as the distinction between city and non-city. Assuming the age group 15 to 39 among males to be the most responsive to new opportunities for

[20] Estimates for the age composition of the *migrants* lend weight to this supposition. Survivors to 1935 of people who were already in cities in 1925 can be estimated at every age by subtracting the deaths that one would expect of them; the amount by which these survivors fail to account for the people actually found in cities in 1935 gives a fair idea of the persons gained through migration at each age. Though migrants measured in this way were somewhat concentrated in young adult ages, there were also impressive numbers in younger and older ages.

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TABLE 30

DIFFERENCES IN AGE AND SEX COMPOSITION OF TAIWANESE BY CITY, 1935

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Cities	Per Cent 15-39 of all Taiwanese Males	Sex Ratios 15-39	Sex Ratios all Ages	Growth of City: Ratio of Taiwanese Population 1940/1920
Taipei	41.8	106	98	2.05
Chilung	42.4	112	103	2.07
Hsinchu	38.2	101	100	1.76
Taichung	43.2	115	107	2.92
Changhua	39.0	102	100	1.67
Tainan	40.6	110	105	1.97
Chiayi	42.2	112	105	2.58
Kaohsiung	42.8	120	110	3.56
P'ingtung	43.5	118	108	2.55
Total, All Cities	41.6	110	103	2.22

Source: *Census of 1935, Statistical Tables*, Table 7.

employment, we can use this group to summarize the differences (see Table 30). The cities of rapid growth—i.e., with relatively large proportions of immigrants—were the cities with more young men. Cities that grew faster did so in part by attracting more men in young-working ages, and thus separated many of them from normal family life. Significantly, the age composition of females was nearly the same in *all* the individual cities, and thus was similar in each to rural communities.

The non-rural character of Municipalities in Taiwan, therefore, did not of itself make for non-rural age structure, but the same factors that were behind the more rapid growth of some cities tended to draw selectively from the population of different ages outside cities. One should always bear in mind that the greatest of the differences in Table 30 are moderate when considered alongside societies in which urban growth has been associated with sweeping modernization.

Something in addition can be learned about the particular characteristics of separate cities from the nature of economic activities in each. One single census table of persons with occupations was published in 1930 for individual cities, with the males of all ethnic groups lumped together. Cities were farthest removed of any civil

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TABLE 31
INTER-CITY DIFFERENCES IN OCCUPATIONAL COMPOSITION
Per Cent of Occupied Males in Selected Types of Occupation in Each of Seven Municipalities, 1930
All Nationality Groups

Cities	*Manufacturing*	*Commerce*	*Transportation*	*Government*	*Agriculture*	*Other Occupations*
Taipei	26	30	10	18	6	10
Chilung	16	21	23	9	4	27
Hsinchu	21	25	10	13	20	11
Taichung	23	28	10	19	14	6
Tainan	28	28	13	18	5	8
Chiayi	22	29	10	12	20	7
Kaohsiung	24	19	20	11	13	13
Total Seven Cities	24	27	13	15	9	12

Source: *Census of 1930, Statistical Tables*, Table 40.

divisions from rural conditions. Nevertheless, large blocs of Taiwan's urban population still supported themselves by farming. Only three Municipalities in 1930 had as few as one-twentieth of their working males engaged in agriculture. It is small wonder that these cities had failed to show symptoms of advanced urbanism in other respects.

Other types of employment in these cities also had certain special features. Government administration in Taipei, transshipping of seaport cargoes in Chilung and Kaohsiung, and sugar processing in Taichung and Tainan were reflected as important activities in their share of all male employment. These figures, pertaining to 1930, reveal nothing of the intensified industrial activity in these cities in the succeeding decade. They are the only available indication in demographic terms of the peculiarities of individual cities. In any event, we are less interested in these peculiar elements than in the relations between types of employment and urban settlement among Taiwanese. Since Table 31 does not show Taiwanese separately, it is affected by differences in the proportions of Japanese and in their work among the various cities. Hence the information, while illuminating, is less useful than one might wish.

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More information is available for the population of all seven cities combined. By means of some estimation, we can find the occupational

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162 anese usually had subordinate positions. Nevertheless, it seems con-
463 clusive that by moving into cities Taiwanese were able to narrow
563 the gap that separated their forms of livelihood from those of the Japanese.

The ethnic composition of occupied persons (appended to Table 32) indicates how the differences in occupational structure among these ethnic groups were weighted in the urban population. Taiwanese, of course, predominated in all lines except in government service and professional activities. Keeping these coveted positions in their own hands was one of the ways in which Japanese were able to live side by side with the rest of the population and avoid the pressure of competition.

Chinese nationals ("Other Nationalities" in Table 32) in these cities also appeared in a few types of work far more than in the working population as a whole. Their specialties were of an opposite kind: many worked as laborers in small manufacturing enterprises and as longshoremen, accounting for their large share of all "Manufacturing" and "Transportation" workers.

TABLE 33

OCCUPATIONAL DISTRIBUTION OF TAIWANESE MALES REPORTING AN OCCUPATION, INSIDE AND OUTSIDE MAJOR CITIES, 1905, 1920, 1930

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	1905		1920		1930	
	*Inside**	*Outside*	*Inside*†	*Outside*	*Inside*‡	*Outside*
Agriculture	2.3	72.1	13.2	71.9	13.1	74.0
Fishing	.6	2.9	1.2	2.3	2.1	2.0
Mining	28.4	5.4	1.1	1.4	2.1	1.3
Manufacturing			27.1	6.9	22.8	5.9
Commerce	37.7	6.4	28.9	6.4	29.1	8.2
Transportation	10.4	1.9	11.2	2.8	13.7	2.8
Govt. & Prof.	5.6	1.7	6.7	1.9	6.4	2.3
Other	15.0	9.6	10.6	6.4	10.7	3.5
Total Occup.	100.0	100.0	100.0	100.0	100.0	100.0

* Comprises the cities of Taipei, Taichung, and Tainan. The boundaries for Taipei in this tabulation were smaller than the city as subsequently organized.

† Cities of Taipei, Taichung, and Tainan, with the same boundaries used at later census dates.

‡ Cities of Taipei, Chilung [illegible] ung, Tainan, Chiayi, Kaohsiung.

Sources: *Census of 1905, Detailed Tabl[illegible], Prefectural Volume*, Table 17.
Census of 1920, Prefectural Volume, Table 16.
Census of 1930, Statistical Tables, Table 39.

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MIGRATION AND THE GROWTH OF CITIES

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Finally, the role of migration in social change can be clear only if we can make comparisons at different points of time. Occupational profiles of city and non-city working males are available in not quite the same form for three separate dates. The census reports of 1905 and 1920 each included a table of occupied persons in three cities (Taipei, Taichung and Tainan). Placed next to the corresponding figures in 1930 (Table 33), these early data are reasonably similar in all three years.

Not all of the same cities are included, and so the occupational distributions for cities alone do not stand close comparison with each other. One's attention is therefore drawn to the structure of occupations *outside* the cities involved. In Table 33, it appears that by removing the small group of urban working persons from the total population of Taiwanese, one in effect also removes most of the diversification in employment over time, and consequently a large share of the social changes that occurred in Taiwan. In other words, the new activities that resulted from Japanese occupation remained sealed up in the few urban centers. The Taiwanese population outside of these cities remained essentially as agrarian as at the beginning of Japanese rule.[22]

Even if as centers of innovation we did not consider Taiwan's cities important, a study of migration would have made them so. Permanent migration was rare among Taiwanese; but of those who migrated, a large proportion went to a few cities. Even though these cities were not growing fast enough to enlarge their share of all Taiwanese very substantially, they did the greatest part in redistributing the population.

The real significance of these shifts of residence arose from the fact that they were also shifts in activities. For the most part withdrawal from agriculture meant exit from rural communities. People departed every year to large towns or cities that had some provision for more diverse kinds of livelihood. It was primarily in these centers that the Japanese fostered modern enterprises and developed a need for labor. Migration was one of the forms of the response to

[22] Obviously, since more cities are represented in the 1930 figures, the figures themselves are biased and there is some chance of bias in the conclusion that we have drawn. By taking occupied men of all ethnic groups, the same comparison can be made based on the *same three cities* at all dates. This is possible because the table for all ethnic groups was published for each city separately (cf. Table 31, above). The result is the same, in that the data indicate no change in occupational structure outside even these three cities.

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these new opportunities for employment. It steadily brought more Taiwanese into contact with the modern side of the Japanese economic program.

Yet even though movement to the cities did widen the horizons of a few Taiwanese, it was surrounded by circumstances that tended to minimize this effect. The familial character of the migration made the break between country and city less sharp than it might have been. Removal to a city did not expose migrants very readily to whatever new influences were there. These were all dominated by Japanese, who kept most of their innovations to themselves and erected barriers against free intercourse with the rest of the population.

Urban growth therefore did not promote general social change among the Taiwanese. It removed into cities those who were to feel the strongest effects of contact with these alien elements. Migration thus helped to absorb the modern aspects of economic development so that they did not intrude into the affairs of rural communities.

4:Grajdanzev--27-28 S-4 (no date) 1942 Formosans-1-2
116, 167, 177.16 Japan
636.16

"Below we give a short survey of the efforts of the Japanese government to colonize the island with Japanese settlers. These were to be of two kinds: (a) farmers, (b) fishermen. Before 1907 no plans for colonization could be worked out because the country was not yet pacified and Japanese immigrants could not appear in the countryside unless supported by armed forces. In 1907 the government elaborated and put into force a plan for the emigration of farmers to Taiwan. Grants of land—about 38,000 hectares—were made to thirty-eight settlements, but only eight settlements were actually made, and even these ended in failure. Taiwan attracted many Japanese adventurers (see figures of immigration for 1898-1904 above) who sought a paradise in the new possession. Finding no outlet for their talents, they became restless, and the government-general decided to repatriate them to Japan, and the would-be farmers departed with them.

The second attempt, started in 1910, was relatively more successful. The government gave to immigrants in eastern Taiwan land, houses, roads, schools, hospitals, irrigation works, etc. on condition that they would repay all advances in ten years, but demanded that each immigrant should have been an independent farmer in Japan and have at least ¥250. The limitations were imposed because the official explanation of the first failure was that the immigrants had no money of their own and were poor tenants in Japan. Under this scheme only 3,368 persons were settled in three different villages. These villages still exist, but after twenty-five years have only 3,117 inhabitants. Conditions of

life on the land cannot have been too attractive.

Since 1915 the Taito Sugar Company, with the support of the government, has tried to attract Japanese colonists for the production of sugar cane. The Taito Colonization Company was established and became active, but all its efforts were unsuccessful, and up to 1936 only seventy-eight families among those who came under these schemes remained on the land. Yanaihara explains this failure by the low price for sugar cane offered by the company and by the difficulties of specialized [28] farming, but a more fundamental cause was that in a colonial society a mass immigration can succeed only if the immigrants lower their standard of living to that of the natives.

In 1931 the indefatigable government-general worked out a new plan of immigration, and up to 1936 brought to Taichu province 156 families, giving each 12.25 acres of land, a monetary subsidy and loans free of interest. Some of the immigrants were settled near Takao."

4:Grajdanzev--28 S-4 (no date) 1942 Formosans
116, 167, 311, 609, 177.16 Japan
636.16

"It should be noted that, even after the pacification of the island, Japanese immigrants were treated in a hostile manner by the Chinese population. Under this pressure many farmers were compelled to leave their villages, some of them renting their land to Chinese and becoming absentee landowners. The total number of Japanese occupied in agriculture in Taiwan in 1938 (including members of their families) was 8,065.

The colonization schemes for fishermen were not much more successful. In 1909 the government-general began its campaign, promising subsidies and other advantages. But those who answered the call preferred some occupation in Taiwan other than that of fishermen. In 1926 in Taihoku province 49 families (172 persons) were settled and most of them continue to work there. Since 1932, the government has again made efforts to attract fishermen to Taito province, and, up to 1937, 54 families had settled there. The plan for 1938 and 1939 foresaw the settlement of 25 families for each year. Such are the very modest results of the continuous efforts of the Japanese government.

Takahashi is of the opinion (1) (and his opinion reflects the ideas prevailing among

1. See his Gendai Taiwan Keizairon, pp. 8-9.

Japanese economists) that there is little room for the Japanese in Taiwan as long as the island remains an agricultural region; hence his belief that Taiwan should be industrialized."

"A few words should be devoted to the Chinese emigration from the island. In 1936 the number of the Chinese from Taiwan (i.e. Chinese born on Taiwan, subjects of Japan) living abroad was as follows:

Living in:			
Manchuria	303	British Malaya	187
China	13,492	Dutch East Indies	458
Hongkong, Macao	179	Other countries	138
Siam	92	Total	14,849

This number—about one-fourth of one per cent of the total population—is, of course, small. Taiwan itself was in the not distant past a colony to which emigrants from China flocked and, if it were not for restrictions introduced by the Japanese authorities, this movement would continue. The comparatively large number of Chinese from Taiwan residing in China is easily explained. Being Japanese subjects they enjoy extra-[32] territorial rights in China. This presents certain advantages and is in many cases very profitable. (1) In 1930 there were about 1,500 Chinese from Taiwan resident in Japan, mostly

1. The small number of Taiwanese residing abroad is explained chiefly by the fact that the government-general does not approve of natives going abroad; it fears possible political movements which the emigrants may start. All Taiwanese residing

in China are under the strict supervision of the government-general.

students and rich persons but very few workers."

4:Grajdanzev--87-88 S-4 (no date) 1942 Formosans
116, 167, 313, 423, 659, 177.31 Japan
636.31

When the Japanese occupied the island, the new administration immediately became interested in its forest resources. One part of forests was in the possession of the Chinese farmers, but the other, more important one was the area of the aborigines. The Chinese were required to register the documents of ownership of forest lands, and since in most cases they had no such documents—their possession and use of forests being based on [88] custom—this device enlarged the government forest reserves (1). It has

1. This is described in Section 3, Ch. 11, p. 1 of T. Yanaihara, Teikoku Shugishita no Taiwan, pp. 23-26.

already been mentioned that in order to use the forests, formerly occupied by the aborigines, the government began to settle the latter by force in the plains. It is said that the settlement of one family of aborigines on the plains cost only ¥70, and this may be compared with the ¥1,000 or more which are spent on the settlement of a Japanese family. Many hundred thousands of ko of forest were acquired in this way."

4:Grajdanzev--125 S-4 (no date) 1942 Formosans
116, 167, 171, 205, 563

"It is also noteworthy that the Japanese in Taiwan send on the average many more letters, parcels, telegrams and have better telephone facilities than the Japanese in Japan proper. This is an indirect proof that they are much better off than the average Japanese at home, a fact to be kept in mind when one is considering the causes for the failure of mass Japanese emigration to the island. The Japanese come to the island in order to secure a better living in Taiwan than they had at home, and not to compete with the low-paid Chinese."

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year——a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

7: Joest--55 [7] E-5 (no date) 1882 Formosans
116, 167, 634

Every year several thousand Chinese migrate from the overpopulated mainland to the Chinese section of Formosa, much of which is still virgin soil. The district of Tai-wan is controlled by a Tau-tai in Taiwanfu; he has several privileges which date from the period of Coxinga's Privileges.

15: U.S. Navy--21 [2] (no date) 1944 Formosans
116, 167, 563

"Two to three hundred Japanese live in each of the scattered small towns having district offices. A few, who are classed as farmers, live on the sugar plantations. A few cultivate rice as ordinary country people. They have emigrated under Government sponsorship and settled at designated places. Three East Coast villages, Yoshino, Toyoda, and Hoshina, have a total population of 3,136 Japanese. Near Taito (on the east coast) 473 individuals (79 households) have been settled. Fifty-six households (256 individuals) have been settled at Shasen-sho in Taichu Province. Twenty-five households (111 individuals) have been settled as tobacco-growers at Hinode-mura on reclaimed land along the Shimo-Tamsui River, near Heito."

15: U.S. Navy --21 [5] (no date) 1944 Formosans
116, 157, 167, 625, 177.18 Japanese
636.18

"The Japanese are exceptionally thorough and successful organizers, and have brought under their own control the economic life of the island. The police force and many of the urban commercial people came originally from Southern Kyushu and Shikoku, and speak the local dialects of those regions. The Japanese of the metropolitan areas in the homeland speak frankly of the hardness and unattractiveness of the colonial Japanese character in Taiwan."

15: U.S. Navy--23 [3] (no date) 1944 Formosans
116, 167, 175

"The Formosan-Chinese migrated to the island principally from the following places on the China coast:

(1) An-ch'i (Anki)
(2) Chia-ying (Chiaying, Kaying, Mei Hsien)
(3) Chang-chou (Changchow, Lungki)
(4) Ch'ao-chou (Chaochow, Chaoan)
(5) Hui-chou (Huichow, Waichow, Waiyueng)
(6) Hweian
(7) Nanan
(8) Sam Yup (San I)
(9) Tsingkiang
(10) Tungan"

15: U.S. Navy--23 [8] (no date) 1944 Formosans
116, 167, 221, 443, 177.16 Japanese
636.16

"The Japanese put an end to unregistered immigration and emigration when they took over the island in 1895.

All Chinese wishing to immigrate were required to register with a Japanese consular agent in China, and to register in Taiwan after arrival. Actually, a considerable clandestine unregistered traffic continued by small boats plying the Straits.

Until 1937 there was a seasonal movement of labor. Workers crossed from the mainland to work through the tea, sugar or pineapple seasons. After they had made enough to live on for some months, they returned to their legal homes on the China coast. A considerable number of merchants and day laborers engaged in urban enterprises were accustomed to pass back and forth between Canton and Taiwan, entering principally through Takao. As of July, 1935, there were on the island 11,327 households of Chinese holding Chinese citizenship, totaling 41,651 persons. Since 1937 (the outbreak of the China War) seasonal migration has been suspended."

15: U.S. Navy--23 [9] (no date) 1944 Formosans
116, 167

"There was a great rush of Japanese to the island when it was first taken over. After 1900 the number of immigrants dropped and the number of departures for the homeland reduced the total increase to a low figure. According to the most recent evidence, the increase of the Japanese population through immigration is not greater than 3,000 per year."

15: U.S. Navy--23 [10] (no date) 1944 Formosans
116, 167, 511, 609 Japanese
636.16

"Immigration of Japanese agricultural workers has been encouraged both by the Government, directly, and by the development companies in which the Government has large interests. Attempts have been made to establish agricultural villages here and there, in the hope that such settlements would help advance the assimilation and control program. These settlements have been a failure. Thirty-eight were projected, eight were actually established, and all had failed by 1910. The native Formosan-Chinese populace was too hostile and the competition in living standards too great for the Japanese immigrants to bear. A second colonization plan, begun in 1910, succeeded in establishing three villages with a total of 3,368 persons settled. These have not flourished, though they continue to exist. They now have fewer settlers than in 1910.

The Government has made several attempts to attract and establish Japanese fishermen, but with practically no success, despite the government subsidies granted to them."

15: U.S. Navy --23-24 (no date) 1944 Formosans
116, 167, 441, 464, 177.16 Japanese
636.16

"The majority of Japanese immigrants go to the island for [24] administrative work or business management. Japanese officialdom some years ago arrived at the reasonable conclusion that since the increase in the Formosan population was proportionately so much greater than the increase of the Japanese, only a program of industrialization (with accompanying influx of Japanese technical labor) would serve to strengthen substantially the Japanese population of the island. Presumably, large numbers of Japanese have immigrated to manage the new technical establishments known to have been established on a fairly large scale in and around Takao, near Shinchiku, and elsewhere since 1941."

15: U.S. Navy--31 [8] (no date) 1944 Formosans
116, 167, 464, 177.46 Japanese
636.46

"Labor problems are dealt with by the several offices of the Government-General. There is no 'Labor Bureau' as such.

Before the China 'Incident' there were few restrictions upon the employment of an alien within Taiwan provided the alien had entered the country legally, held a visa from a Japanese consul and was duly registered in Taiwan. All Chinese laborers entering were required to be licensed for labor by the immigration authorities. The government itself has attempted to employ local labor or semi-skilled and skilled labor from Japan. After August, 1937, steps were taken to end the immigration of Chinese, and in 1938 it was announced that all Chinese nationals who thereafter left Taiwan for any point outside of the Empire of Japan would automatically be barred from re-entry."

15: U.S. Navy--32 [7] (no date) 1944 Formosans
116, 464, 167, 177.16 Japanese
636.16

"The industrial program which has been developing since 1930 has received special stimulus since the China war broke out. Initially it had been retarded by an acute shortage of skilled or semi-skilled labor. To remedy this, a program for encouraging the migration of skilled and semi-skilled Japanese workmen from Japan to the island was inaugurated in 1937 by the Taiwan Government. The mining industry suffered most severely, as indicated by the fact that the percentage of increase in labor employed in the mines is greater than the percentage of increase in production."

162 Emigrants from Chuanchow came earliest, occupied the best places of the western plain, and engaged in commerce, trade and agriculture. The Hakkas came last. When they came, the most fertile soil of the plain was already claimed, so they had to settle in hilly places or mountain foothills. They mostly engaged in agriculture. People from Changchow came between these two in point of time, and also settled between the two in actual geographic regions. They engaged in commerce and agriculture. Hakka and Fukienese have different dialects; and even among the Fukienese, those from the prefecture of Chuanchow and those from the prefecture of Changchow speak with a different accent. The three groups have different patron gods, different associations, and have fought against each other in sanguinary wars. In daily contact, the same native town means higher affinity, higher consciousness of kind. Marriage takes place more frequently among people from the same original native town.

4. The Clan Village.

167 The Chinese seldom leave their ancestral shrines and graves behind them when they go abroad. Pressed by hard living conditions, one male member of the family may leave home for overseas, but the whole family seldom moves to a new place. Many came to Formosa only for a longer or shorter time, and having accumulated sufficient money, went back to their ancestral towns. Even if they settled permanently in the new land, they still kept an intimate contact with their kinsfolk in the old home town. This relationship was broken by the

167 Japanese colonial government, which wanted the Taiwanese to sever their ties with their fatherland.

167 618 The early Chinese settlers came mostly to Formosa with their kinsfolk or town's people. On arriving on the island, the family group settled in a new place, and frequently used its clan name (surname) as the name of the village. This is the clan village. At first the clan village may have had only kinsfolk with the same surname as its members. Later on families related by marriage might join the village. As the people with the same surname consider themselves as belonging to the same clan, and intermarriage within the clan was barred by custom, all in-laws necessarily had a different surname. In-laws were the first heterogeneous element in the homogeneous clan village, but their number was very small. More in-laws might come to live, craftsmen or itinerant merchants might come and stay for a longer or shorter time. As time passed, the proportion of heterogeneous elements increased, but the original clan was still dominant in numbers, and constituted the so-called influential surname of the village. For instance, there was a Lim-tso-liao (means the hamlet of the Lins) near Peikang, Tainan. A survey done in 1930 showed that there were 327 households, consisting of 18 different surnames. Of these households 76.6 per cent were the kinsfolk of the influential clan of the Lins, and the other 17 surnames made up only 23.4 per cent of the total households.[1]

1. Yoshio Tomita, "A Study on the Settlement in Taiwan," Symposium of the Culture of Taiwan, Vol. I, 1943, Taipei, p. 179.

167 618 Professor Y. Tomita found that even though there were many villages which did not have the clan name as their place name, nevertheless each still retained one influential clan.[2] It is evident that settlement with kinsfolk was fairly common in early times.

5. Villages Formed by the People of the Same Native Town.

167 A survey made by the Japanese administration in 1926 revealed that a great number of villages in Formosa were formed by Chinese immigrants from the same native town on the Mainland. This type of settlement was more general than the clan village.

Both the clan village and the village consisting of the people of the same native town were highly homogeneous. As time passed, heterogeneous elements gradually increased. If the village was located in some place convenient for commerce and transportation, the heterogeneous elements rapidly grew. In the meantime, in response to the current social situation, the village community became the basic unit of social life, whether it derived from a clan village or from a village consisting of the people of the same native town.

6. The Function of the Village.

621 In pre-modern China, governmental administrative activity practically ended at the prefecture level. Most local affairs were left to the local community in the village and town, except

2. Ibid., pp. 176-188. Tomita's study was based on census report of 1930.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD1~~ AD1

162 In Formosa, there are 105 males to every 100 females.[9] In 1940 when the population was more permanently settled, the ratio[10] was 102 to 100 females. The many male immigrants who came in after the war probably account for the present sex ratio.

C. Urban and Rural Population

369 167 Urbanization has increased rapidly in the past few decades. In 1920, four per cent of the population lived in cities of more than 100,000 inhabitants; in 1952, the number in such cities had increased to 21 per cent. Economic development in the last years of Japanese control and in the current postwar years, and the influx of Mainland people in the late 1940's and early 1950's, have contributed to growth in urban population. The preponderance of agricultural population has become less pronounced, and the high degree of ethnic and cultural homogeneity has been diminishing.

The majority of young people come to the cities with the hope of finding jobs; immigrants from the Mainland are mostly non-farmers and therefore flock to the cities; and most wives follow their husbands to the cities.

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9. China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], Vol. III, Taipei, 1954, p. 78.

10. Provincial Government of Taiwan, Results of the Seventh Population Census of Taiwan, 1940, Taipei, 1953, p. 40.

V. MIGRATORY MOVEMENTS

167 From the beginning of the seventeenth century to the end of the nineteenth century immigrants from the Chinese coast increased the population in Formosa. However, due to prohibitive measurs against immigration taken by the Japanese, the major increase after 1895 was caused by excess of births over deaths. In the post-war years, particularly when the Nationalist Government abandoned the China Mainland, a vast number of civilians and troops came to Formosa, swelling the population by about 20 per cent. It was estimated that in 1952 there were about 9,700,000 people on the island; of this number one-fifth were Mainlanders.[13]

166 Internal migration is largely limited to rural people moving to urban areas. Because of familial and local ties farmers rarely move unless they plan to change their occupation. Moreover, because of the lack of frontier lands, farmers do not gain by moving to other areas unless they change their livelihood. To the farmers, migration means departure from rural life and activities. As a result, most people tend to stay in or near the locality in which they were born. About 60 per cent of the 857 heads of households surveyed by the Joint Commission on Rural Reconstruction were born in the village in which they now live, 17 per cent were born in other villages in the same township (chen), and 10 per cent were born in other townships in the same

13. Arthur F. Raper, Rural Taiwan--Problem and Promise, Taipei, JCRR, 1953, p.290, Appendix B contributed by Profs. Ruey Yih-fu and Chen Shao-hsin of National Taiwan University.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

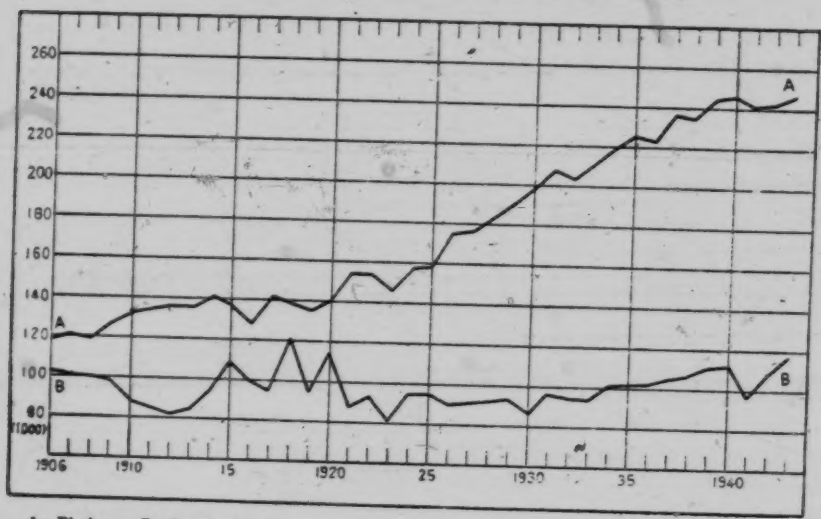
century and a half, and will attain the figure of present world population within two and a half centuries (1: p. 13; 2: p. 45; 4: p. 73–74). As a matter of course these suppositions assume that the present conditions will continue, and that a change of conditions will cause population growth to show another aspect. With regard to the estimation of future population, Sun-Ken Quo has a different point of view based on a different perspective (3). 161

5. *The Cause of Population Growth.*

Natural increase and immigration are two causes of population growth. Since the colonial government strictly controlled the emigration of Taiwanese to the mainland and the immigration of mainlanders to Taiwan, migration was quite insignificant for the population growth of Taiwanese, and 96% of its total growth was the result of natural increase[4]. 161 167

Now, how was this natural increase achieved? From Figure 1 we can see that between 1906 and 1943 the annual number of deaths of Taiwanese did not show any remarkable change, it remained around one hundred thousand. In contrast with this, 163 165

Fig. 1: Number of Births and Deaths of Taiwanese, 1906–1943



A: Births B: Deaths

Source, 14: Table 96

Note 4: The total of the annual increase of Taiwanese population between 1906 and 1943 was 3,078,406 (14: Table 49, 3). (The Taiwanese population in 1905 was 3,055,461, the increase between 1906 and 1943 was 3,078,406, and the grand total of these two figures, 6,133,867 was the Taiwanese population in 1943. 14: Table 49, 2. cf. Table 1, A, column 11 of this paper). Total of the annual natural increase of the Taiwanese between 1906 and 1943 was 2,947,998 (14: Table 96) was 95.76% of the total increase. Total annual increase other than natural increase of the same period was 130,408, and occupied only 4.24% of the total increase.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

By these actions the Japanese set apart from all others those who were descended from the original residents of Taiwan. This segregation in the statistics extended from the most obvious differentiation—that of Japanese nationals—down to fine distinctions within the Taiwanese population itself.[7] It was consistent in both the population censuses and vital statistics, making it possible to amalgamate the two systems of record-keeping continuously as long as they were maintained.

TABLE 1

TAIWANESE BORN OUTSIDE OF TAIWAN, 1920 AND 1930

Proportion of All Persons Who Have Been Born "Abroad," by Age and Sex

	Census of 1920		*Census of 1930*	
	Male	*Female*	*Male*	*Female*
All ages	0.2	0.1	0.1	0.0
0-9	0.0	0.0	0.0	0.0
10-19	0.0	0.0	0.0	0.0
20-29	0.1	0.0	0.0	0.0
30-39	0.1	0.0	0.0	0.0
40-49	0.5	0.1	0.1	0.1
50-59	1.3	0.2	0.3	0.1
60-69	1.9	0.3	0.8	0.1
70 and above	2.6	0.7	1.0	0.3

Sources: *Census of 1920, Descriptive Report with Appendix*, Table 79.
Census of 1930, Statistical Tables, Table 55.

Regulating the conduct of "alien" Chinese nationals in Taiwan was not the sole purpose in establishing the legal status of residents. The authorities also set out to halt the further migration of people from the mainland. In this they were apparently successful. Taiwanese were required to verify their nationality by certain proofs, chief of which was evidence of having been born in Taiwan. Taking this as a criterion, there seems to have been little admixture from the mainland to the category of "Taiwanese." For example, tables showing Taiwanese who were born "abroad" were published with the censuses of 1920 and 1930. If the information was accurate, practically the entire population of Taiwanese born after 1895 was ac-

[7] This fine detail was confined to a slightly different classification, based on "race." It provided categories within the group with Taiwanese nationality—aborigines, Taiwanese of Fukien origin, and Taiwanese of Kwangtung origin. The two classifications were not precisely the same, the one based on "nationality" being the more consistent at different times.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

659 tually born in Taiwan (see Table 1). Almost none under 25 years
167 of age in 1920, or under 35 in 1930, were recorded as having been born outside. Some who were older at these two dates had been
162 born in China, but they were very few and were probably living in Taiwan at the time of annexation. These figures imply that migration after 1895 was probably confined to people who were appropriately registered by nationality, and counted as *aliens* in census enumerations.[8]

Hence the census category of "Taiwanese" was defined so as to exclude migrants to and from the island. This is significant to know, for it means that Taiwanese counted in any census after 1905 were exactly the survivors of those who had been counted before (plus those who had been born in the meantime). It also means that the population of Taiwanese was for statistical purposes a "closed" population—one which neither gained nor lost people by migration. All change in the size of the Taiwanese population was therefore due to "natural increase," or the balance between births and deaths. One can thus speak precisely of population "growth" in Taiwan, without reference to migration as a complicating factor.

Half a Century of Rapid Growth

161 The total population, and the sub-total of Taiwanese, are shown in Table 2 as counted on October 1 of each census year, along with the annual geometric rates of growth that are implied at each intercensal stage. Every year showed an increase. The only setbacks were between 1915 and 1920, when the island suffered three near-epidemic attacks of disease. Even over this relatively poor span the average yearly rate of increase was close to one per cent. The original population of 1895 was more than doubled by 1945; when the vital statistics were discontinued in 1943, there were nearly six million Taiwanese.

[8] By evasion of the law some Chinese might conceivably have slipped into Taiwan and passed themselves off as Taiwanese. A further acquaintance with the regulatory system in later chapters, however, will make this appear most unlikely.

There is evidence of another sort that the Taiwanese were not diminished by removals to the mainland. Briefly, detailed testing of the validity of birth and death statistics has shown that practically all persons born in Taiwan were later accounted for in a census enumeration, or as registered deaths if they failed to survive. Practically all who were enumerated in one census were similarly accounted for at later dates. During the 1930's, Japanese permitted small numbers of Taiwanese to leave the island for special purposes. The effect of these departures was very small, and raises no difficulty in dealing with the data of earlier years. Thus, if there was emigration, it too was clandestine and very small.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

162 this small and obscure minority have been subjects for an immense amount of anthropological investigation during Japanese rule in Taiwan, while the peoples of Chinese origin (for whom accurate and precise information has been available these many years) have been almost entirely neglected. The increase of aborigines in census enumerations probably signifies nothing in the way of growth; it was not until the 1930's that they were brought fully within the scope of the census.

TABLE 3

ETHNIC COMPOSITION OF THE POPULATION OF TAIWAN

Censuses of 1905 and 1935

	1905			1935		
	Persons	*Per Cent of Total*	*Males per 100 Females*	*Persons*	*Per Cent of Total*	*Males per 100 Females*
Japanese	57,335	1.9	152	270,674	5.2	116
Korean*				1,479	0.0	60
Taiwanese						
Fukien Origin	2,492,784	82.0	112	3,939,966	75.6	103
Kwangtung Origin	397,195	13.1	108	735,334	14.1	103
Other Chinese Origin	506	0.0	218	265	0.0	109
Aborigines	82,795	2.7	96	207,900	4.0	101
"Others"	9,136	0.3	1,757	56,808	1.1	217

* Koreans included with "Others" in 1905.

Source: *Census of 1935, Statistical Tables*, Introduction, p. 32.

162 167 The numerical position of the Japanese community in Taiwan gives no clue to its strong influence in the course of events after 1895. Its growth was not of the same sort as that of Taiwanese. Few if any Japanese regularly lived in the island in 1895.[10] By 1905 a settlement of 57,335 was recorded for the census, increasing to 270,584 in 1935 and 312,386 in 1940, or five times its earlier size.[11] Japanese in Taiwan did not add to their numbers through natural increase alone, especially since their community was a highly masculine one (see Table 3).[12] As a matter of fact, their registered natural increase from

[10] One foreign writer at the time went so far as to assert that prior to 1895 "there was not in the whole island a single Japanese resident." See Davidson, James W. (1903), p. 592.

[11] The military garrison was supposed to be excluded from all of these enumerations.

[12] Marriages with Taiwanese were prohibited until 1932. Offspring of such illicit mixed unions were rarely if ever counted later as Japanese, making the shortage of women a serious restriction on the per capita reproduction of Japanese.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

1906 to 1940 amounted to only 146,597, and if accurate could account for only 57 per cent of the total gain. The numbers of Japanese in Taiwan therefore increased very largely by migration. As we shall see, this was a special type of migration, based on opportunities that did not prevail for others in Taiwan or for Japanese at home, and brought special kinds of migrants. By recruiting new members relatively faster than the natural increase of the Taiwanese, they also raised their proportion in the total population (see Table 3). 162 167

The only other non-Taiwanese group, excluding an insignificant number of Koreans, were the Chinese from the mainland. They are shown in Table 3 as "Aliens," mixed with a few other foreign nationalities. Numerically they were even smaller than the Japanese. Being the ones most likely to blur the ethnic boundaries, Chinese nationals were classified and marked out with great care from the rest of the population, as we have indicated. In census enumerations they would have been indistinguishable from Taiwanese, but for the necessity the Japanese felt to control their activities and forestall the development of close ties between Taiwanese and the mainland.[18] 162

The Taiwanese, however, were the group of major consequence for demographic study. Up to 1945 they comprised practically the whole of the population taken at large. The proportion of non-Taiwanese never reached 7 per cent. Distributed in the total, all these others were minor elements; only when special considerations are introduced do they become important. In the following pages, attention is given to the Taiwanese population almost exclusively, for their development under Japanese rule, which produced this natural increase, is the main problem to be investigated.

[18] [Taiwan.] Government of Formosa. *The Special Population Census of Formosa, 1905.* [English translation] p. 161.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER III

Economic Activities and Social Change

THE activities, interests, and aspirations of the Japanese community in Taiwan were things that existed apart from the indigenous population. These elements were never effectively communicated to the Taiwanese—partly through a design to withhold them, and partly through reluctance among the people of Taiwan to accept them. Consequently the conduct of Japanese residents is not of much help in understanding the accustomed modes of life among the island's people. It is the latter problem that has the more interest for demography, and makes it essential to consider the background of social order in Taiwan and the changes under colonial rule.

The Early Agrarian Order in Taiwan

The importance of agricultural pursuits in imposing a predominantly agrarian character on a society is not a thing that can be precisely measured. Short of perfect exactitude, a great deal can be learned with lesser devices, by describing the cultural setting of agriculture in Taiwan, and pointing out how it influenced the participation by Taiwanese in the island's economy. The basis of this setting lay in the conditions that prevailed before Taiwan became a colony of Japan.

By the mid-19th century, the lowland region of Taiwan was rapidly becoming fully settled. Piracy, which had made Taiwan a scourge to sea traffic along the China coast, gradually subsided into sedentary agriculture. Most of the Chinese population was already supporting itself by farming and the marketing of farm products. Since 1700 immigration had brought in a steady stream of Chinese from the mainland. In spite of sporadic prohibitions, hundreds of thousands of peasant farmers came to seek refuge from rural poverty in South China. Once arrived, they often reverted to this same condition, by reaching unfavorable terms with some of their countrymen already entrenched there as land speculators.

Poverty tended to reproduce itself among those who reached Taiwan, though there was also great wealth open to the few who rose from cultivation to commerce. Each settled family held an advantage over newcomers. This superior position placed new migrants in

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

167 563 423

some competition for the more desirable lands near the coast. In order to maintain their accustomed manner of farming, many were forced to move inland, where they gradually dispossessed aborigines and the earlier Hakka settlers and pushed eventually to the foothills of the interior. These many-sided conflicts of interest gave rise to land tenures more complicated than those usually found in China. The result was a set of property customs that was to become confused and encumbering in later years.[1]

With agrarian land tenures, however, it is all too easy to mistake form for substance. The system of land tenures in Taiwan gained several features that are distinctive to itself, arising to incorporate new parties into an old system—the aborigines who first occupied the area, and Chinese who acquired land titles to profit from the arrival of immigrants. But, since these landed property relationships are of little interest to us from an antiquarian point of view, their lasting effects are more important: they contributed to a form of village organization that survived through the entire Japanese occupation down to the present.

(3)

The flow of migrants is remarkable in that it populated Taiwan, with little variation over the years, closely after the model of the South China coastal area.[2] The resemblance to the mainland went beyond forms of settlement and land utilization. Politically, under Manchu control the island was supposed to be assimilated into the administration of the rest of China. It was governed as a regular political division—first as a prefecture of Fukien and later as a province itself—by officials appointed directly from Peking.

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Taiwan inevitably presented special problems of control. In the first place, it could be separated from easy communication with the continent; eventually it grew almost as accessible to the Western powers as to Peking. The device most relied upon to tie the area to China was a weak one. The authorities tried, futilely, to isolate it from all external contact. From time to time, they went as far as to restrict the entry of Chinese from across the Straits, though even this had little success.

[1] See Ch'en Cheng-hsiang (1950), pp. 41-43, and Kawada, Shiro (1928).

[2] The instances of alleged "radical transformation" of land tenures (Kawada, Shiro [December 1928], p. 88) were primarily fiscal measures to reassert the central government's share in revenues from the land. Such reforms often are superficial from the standpoint of village organization. By way of illustration, one of the early official acts of the Japanese in Taiwan was to sweep away a whole section of these archaic land titles. While these reforms cleared the way to regulate rural areas from outside, they scarcely made an impression on property relations within the villages.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

CHAPTER V

Migration and the Growth of Cities

177 DEPENDING on the way one looks at it, the history of colonial rule in Taiwan can give the appearance either of having brought great transformations to the island or of having left the indigenous social structure virtually intact. This apparent contrast comes from shifting attention between the two principal groups of people that were involved—from the Japanese, who had little to do with the archaic customs and usages of the population, to the Taiwanese, who had only small acquaintance with the modern changes that were being introduced. Here we shall be concerned with those of the latter who came into contact with the new elements.

Though the full force of these developments passed them by as a group, the Taiwanese were not all uninfluenced. The organization of farming, to be sure, continued as before with little modification. The activities most affected were those outside of agriculture. Hence the people must have moved to the new conditions, since the innovations did not move to them.

The Territorial Frame of Migration

659 Taiwan is a small island, and recording the migration of its people should not be a task of great magnitude or difficulty. Japanese regarded such a record as essential in keeping a close watch over the population. It was so important that they inaugurated continuous population registers for every village, every group of households. These reports were compiled in fine detail by the authorities and published in a single volume each year.[1] A certain amount of adaptation is needed to make these registers answer questions that are germane to our interests.

167 Japanese conquest began to provide not only the first reliable data for assessing movement in the population, but also a new type of control over it. It put an end to the historic influx of people from China that had been responsible for populating most of the island.

[1] The data proved to be more efficient for their purpose than for ours. The system faithfully counted the arrival of new persons in a community (the most important information from the standpoint of regulation) but did not expunge the records of all persons who left. The result was a more or less consistent bias toward *over*-estimating the number of people living in a given locality, and of course a somewhat distorted view of total migration.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

On a much smaller scale, Japanese replaced Chinese as immigrants. Chinese arriving from the mainland were given a distinct legal status as aliens. Their activities were restricted, and they were no longer allowed to merge with permanent Taiwanese residents. Practically all movement by Taiwanese thenceforth consisted of internal migration, redistributing the population that was already there.

Only a part of the island is level enough to have encouraged heavy agricultural settlement; almost half of the total area is more than 500 meters above sea level. For administration, and therefore for the census, Taiwan was separated from 1920 on into seven main divisions. Two of them, plus an eighth for P'enghu (the Pescadores Islands) off the West coast, were technically under a different sort of political organization; but for convenience we shall refer to all eight as *Prefectures*.[2] Most types of census and registration statistics were tabulated for each of these political units as well as for the total island.

Beneath the level of Prefectures, local administration was organized around a set of Districts and a smaller number of Municipalities. In the population statistics, these formed two parallel units: no District contained a Municipality, and both were subordinate to Prefectures.[3] There were seven Municipalities at the census date in 1930, raised to nine before 1935, and 53 Districts in both years; in comparisons of different years, all will be standardized to the arrangement in 1935. Inside each District were towns and villages. Few materials are available for these individually; for most purposes the smallest divisions that can be studied are the Districts.[4]

Finally, the mountainous interior region—the Aborigine Terri-

[2] If not literally accurate, the term is appropriate in that authority below the Government-General was highly centralized in the subordinate governors of these divisions. How they are designated here is a matter of no consequence, as it made little difference in the actual administration. P'enghu, scarcely known to Westerners except as the Pescadores Islands, was in 1926 made a separate division under the Government-General. Prior to this it had shifted between separate status and a subdivision of Kaohsiung Prefecture. Hence there is no unbroken series of data for it.

[3] Again, the details of political organization were not uniform, but that need not concern us here. Both terms are arbitrary: "District" for the term *chün* (in its Chinese reading), and "Municipality" for *shih*. It was the practice to form new municipalities by removing some important town of sufficient size as a unit from its surrounding District, sometimes adding some former villages, also intact. This practice gives a basis for identifying the population of cities for comparison over a period when such administrative changes were taking place.

[4] The area of towns and villages exhausted the entire area of Districts, leaving no space between their boundaries. Therefore they do not always refer to meaningful units of settlement, and the terms are not consistent.

1:Gallin E-4,5 (1957-1958) 1966
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Introduction

This book, primarily a study of a Hokkien Chinese agricultural community on the west-central coastal plain of Taiwan, is based on a field study carried on during sixteen months of actual residence in Hsin Hsing village. It is more than simply an ethnographic description, however, since it also provides a picture of the changing life of the Chinese peasant, at least in one area of the island.

Taiwan provides an especially unique opportunity for the study of the nature of Chinese culture change and its dynamics. In a relatively brief span of years it has evolved from a traditional, premodern society to an emerging urban-industrial society. As more and more scholars have come to realize, the essential material for the study of this dynamic process is available there for analysis.

At the same time, until fieldwork can be carried on again on the Chinese mainland, research in Taiwan is perhaps the closest one can come to studying a Chinese cultural group living in a Chinese context. This has unfortunately been the case since Western scholars were virtually halted in their firsthand ethnographic research on the mainland of China when the Communists assumed power in 1949. The several studies published before and since then, ranging in type from J. L. Buck's (1930, 1937) detailed land-utilization and farm family surveys to the anthropological and sociological community study type (see bibliography), are of scattered areas dotting the great Chinese land mass. For the extremely important area of southeastern China, Fukien and Kwangtung, where most of the Taiwanese came from, only three published Western language studies exist—those of Kulp (1925), Lin (1947), and C. K. Yang (1959). Other than some scattered general studies (discussed briefly in Chapter 2) and a number of brief works dealing with highly specific subjects, this book, which combines ethnography with detailed analysis, is the first of its kind to be made available for Taiwan.

Culturally, Taiwan has been and still is a part of China. Before the influx of Chinese between 1945 and 1949, immigration from the south-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

121 eastern part of the mainland to Taiwan had been going on for several
167 hundred years, beginning in the 1600's and virtually ending about
177 1900 when it was almost completely stopped by the Japanese regime.
178 Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 During the Japanese occupation of Taiwan, except for the period
177 just before and during World War II when they attempted to Jap-
178 anize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese population has been significant. The combination of relatively efficient gov-
[744] ernment, orderliness of life, and public health measures, together with
[20] an extensive system of communications on a relatively small island has
[161] greatly facilitated rapid population increase on a stable land base and
[369] a rapidly increasing growth of urban centers.

Out of these developments, the most significant changes for the rural
369 population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and with this an increased spread of urban influences or at least their
[169] effects into the rural villages. These increasingly significant extensions

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
People's Republic of China AF18

have taken the form of the villagers' increased involvement in the greater market economy, the necessary migration of more and more villagers to the expanding cities with their newly developing economic opportunities, and, of course, the increased impingement of the government on the rural areas.

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In this study of a peasant community, I will describe and analyze the manner in which the Taiwanese agricultural villager is being transformed from a peasant primarily involved in a basically subsistence type of agriculture to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. I will show how such developments are interrelated with and have increasingly effected certain changes in village social organization, community and kinship solidarity, and some of the general patterns of village life. However, we will also see that the cultural and social changes have been weighty in some areas of life and scant in others.

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These changes in the Taiwanese village are perhaps far less dramatic and less drastic than those which the Chinese Communists are now attempting to institute among the Chinese peasants on the mainland, where in the past social change was relatively slow due to its massive size, poor system of communications, and lack of an effective centralized government organization. In order to achieve a strong Communist state, the Chinese Communists are consciously attempting to accelerate the process of urbanization, breaking down the traditional large kinship-group oriented rural society and the provincialism of the entire Chinese population. They hold that a single-class Communist society can be achieved only through the total transformation of the agrarian population, dominated by a peasant mentality, into an agrarian proletariat with a national and social consciousness. The commune system has perhaps been one technique used to speed the urbanization process and to develop an "urban mentality" by transforming the thought processes of a large agrarian segment of the population through education, mass organizations, and group cooperation as well as by changing its standard of living. It is unfortunate that we are unable to observe this changing phenomenon on the mainland today, because we are undoubtedly missing much which would greatly contribute to our understanding of the process of change in such a complex society. There are, of course, qualitative and quantitative differences between the mainland and Taiwan, much as there are differences between various areas of the mainland. Nevertheless, by observing and analyzing the nature of culture change in Taiwan, we may not only be able to understand the changing Taiwanese situation but may also gain insights into the nature and development of Chinese culture and society generally and, perhaps also, by analogy derive

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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THE HISTORY OF THE VILLAGE AND AREA

The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[3] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
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With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

1:Gallin E-4,5 (1957-1958) 1966
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Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, *i.e.*, only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 3.93–5.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 39.37–59.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chroniclers, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1716), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1758), Wang Ying-ts'eng (1764), Hsieh Chin-luan (1807), and Chen Shu-chün (1852) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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4:Grajdanzev--24-25 S-4 (no date) 1942 Formosans-1-3
116, 162, 168, 656, 177.16 Japan
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"Racial Composition of the Population

Since Taiwan is a colonial territory, it is of more than ordinary interest to study the evolution of the racial composition of its population.

After more than forty years of Japanese domination the island thus remains Chinese in character. In 1938 Chinese made up 94 per cent of the population, while the Japanese, who constituted about 2 per cent of the total in 1905, now made up 5.3 per cent. Presumably this figure does not include Japanese soldiers stationed in Taiwan. At the time of the occupation [25] of the island the Japanese entertained high hopes for Japanese immigration

Racial Composition of The Population of Taiwan (1905-1938)

	Oct. 1, 1905 Census		Oct. 1, 1935 Census		Dec. 31, 1937		Dec. 31, 1938	
	Thousands	%	Thousands	%	Thousands	%	Thousands	%
Chinese	2,979.0	97.8	4,990.1	93.86	5,261.5	93.85	5,392.8	93.88
Japanese	59.6	1.93	271.4	5.12	229.3	5.33	308.8	5.37
Foreigners*	8.2	.27	54.1	1.02	46.2	.82	43.4	.75
Total	3,046.9	100.0	5,315.6	100.0	5,609.0	100.0	5,747.0	100.0

* Almost entirely Chinese who are citizens of the Republic of China.

Note:—For 1935, 1937 and 1938 'Chinese' includes also aborigines, numbering about 140,000.

into Taiwan. Climatic conditions are suitable, the density of the population at that time was relatively low and there was no doubt that the island could support much larger numbers than were there. Subsidies were granted to settlers in general and to fishermen in particular and it was thought that in this way the island would be speedily 'japanized.' The results of the first seven years had already brought disappointment:

	Total Japanese arrivals	Total Japanese departures	Remainder
1898	13,214	3,078	10,136
1899	20,743	7,903	12,840
1900	20,995	11,291	9,704
1901	17,841	14,054	3,787
1902	13,821	11,478	2,343
1903	15,892	13,149	2,743
1904	11,564	12,155	591

After the rush of the first three years, when the Japanese administration of the island was organized and many persons were needed for the governmental apparatus, the number of immigrants fell sharply. As was shown above, the growth of the Japanese population

on the island was not due to immigration alone, but also to natural increase. After subtracting this natural increase, the average annual number of immigrants is only 4,000 to 5,000."

4:Grajdanzev--25-26 S-4 (no date) 1942 Formosans
116, 168, 464, 656, 609, 177.16 Japan
636.16

"Since the occupation of the island, the Japanese authorities have forbidden the free immigration of Chinese. Coolies were [26] admitted in limited numbers each year for seasonal work but they were compelled to return to the mainland after the expiration of their contract. Besides the coolie class some Chinese could enter Taiwan for business purposes with the permission of Japanese consular authorities, but they remained Chinese citizens and were treated as foreigners. These two groups of Chinese make up most of the 'foreigners'. The fall in their numbers in 1937 and 1938 is connected with the Sino-Japanese war, for many then preferred to return to China and the total number of 'foreigners' is now comparatively small. Thus the purpose of the Japanese authorities —to exclude the Chinese from the island—has been accomplished, but this has been more than offset by the natural increase of the Chinese population."

4:Grajdanzev--28-29 S-4 (no date) 1942 Formosans
116, 168, 609, 701, 177.17 Japan
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"Greater numbers of Japanese in Taiwan are necessary both for military reasons and for the speedy 'japanization' of the islanders. The military considerations advanced by Takahashi [29] are very interesting for they show that, in spite of forty-five years of Japanese domination, there is still a certain anxiety concerning the loyalty among the Japanese rulers of the Chinese. The island is highly militarized and accustomed to martial discipline and yet the Japanese still consider it necessary to strengthen it militarily. But even Takahashi puts greater stress on the 'japanization' of the natives than on the Japanese immigration. After forty-five years of Japanese domination, after their continuous efforts to increase the number of Japanese there and to 'japanize' the natives, the island remains predominantly Chinese in character, the Japanese forming only about five per cent of the total population, and this state of affairs is bound to continue as long as the natural increase of the Chinese remains at its present high level."

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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VII. POPULATION GROWTH AND GOVERNMENT POLICY

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The outstanding feature of population growth in Formosa is the constant high birth rate as against the rapidly declining death rate. The natural rate of increase in population has been estimated at 25 or more per thousand.[23] However, in view of the statistics presented by the Department of Civil Affairs[24] and the United Nationas Statistical Office, the rate of natural increase for Formosa may be given as 30 or more. This rate of growth will probably continue as the result of medical improvements, interest in public health shown by the Joint Commission of Rural Reconstruction, the government's indifference to birth control, and the reluctance and financial inability of the people to restrict the number of their family. At this rate, the population will have doubled in less than a quarter of a century.

The results of the population upsurge are obvious. More educational and social institutions will be necessary, or their operations must be expanded, to take care of the increased population. There will be more people to farm the land. The number of jobs in cities and industrial areas probably will not increase as rapidly as the number of your people who seek work each year.

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23. This estimate is based on the vital statistics of the pre-war years as well as on statistics obtained from the household registry. Registration may lack accuracy because of a tendency to over-record the number of births and under-record the number of deaths.

24. China News Press, op. cit., p. 77.

168 Because agricultural frontiers are becoming scarce, a tremendous acceleration in industrialization and expansion of non-agricultural employment will be essential to the welfare of the people.

Although the problems of growth have been discussed by many people, the government has not taken any steps to regulate the increase in population. In fact, officials avoid discussion of birth control and attempts at public discussion of the subject are not encouraged.[25] Some war-minded leaders believe that high birth rates should be maintained so that there will be many young people available for conscription. The government does not prohibit the use of contraceptive devices, but many people do not have the opportunity to buy or the money to pay for these devices, which must be imported at the expense of the country's dollar reserve.[26] In the meantime, there is no prospect that the government will take strong countermeasures against the increase in population. Nor is there any urgent feeling on the part of the populace that this growth in population somehow must be halted.

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25. Geroge Barclay, A Report on Taiwan's Population to the Joint Commission on Rural Reconstruction, Princeton University Press, 1954, pp. 100-101.

26. Ibid.

1:Gallin E-4,5 (1957-1958) 1966
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Taiwan AD6
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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tsu* villages were quite powerful and frequently the de facto govern-

"The real explanation of the striking difference in birth and death rates is that the Japanese and the Chinese on the island form two separate groups, the living conditions and customs of which are completely different. But the figures reveal more than this. The birth rate of the Japanese in Taiwan is only slightly below that of the Japanese in Japan Proper, while the death rate of the Japanese in Japan is 17.0 (1937) and in Taiwan only 9.6 To some degree this may be explained by the fact that there are a smaller number of aged Japanese on the island, but this alone is not sufficient. It is well known that in the same population different social classes have different death rates. The social composition of the Japanese [31] on the island is such that they are better off than the Japanese in Japan, to say nothing of the Chinese in Taiwan, whose death rate is more than double that of the Japanese. The Japanese on the island live under better sanitary conditions, are better fed, have better medical treatment and more leisure than the masses of the Chinese. This does not mean, of course, that the death rate of the Chinese is stable: it is falling, and this fall, typical of all colonial countries similarly situated, is probably due to improved methods of combatting epidemic diseases.

Death Rates In Some Tropical Colonies
(per thousand)

	1911-13	1921-25	1926-30	1931-35	1937
Taiwan	...	24.0	22.0	20.6	19.3
Palestine	...	23.7	24.3	21.0	15.0 (1938)
Philippines	19.1	18.9	19.7	18.5	18.8
Ceylon	31.8	27.8	25.1	24.7	21.7
Straits Settlements	40.0	28.9	30.7	24.7	21.3

As regards mortality, Taiwan is in about the same position as other colonies, a fact which suggests that living conditions are comparable to those in any other colony named above."

4:Grajdanzev--32-34 S-4 (no date) 1942 Formosans-1-5
116, 162, 171, 463, 563

"Even in advanced countries occupational statistics are not precise, and in the colonies they are far less reliable. Nevertheless, if one wants to determine only the general characteristics of the population, occupational statistics for Taiwan reveal something. The following table divides the population into such broad categories as 'occupied in agriculture and forestry', 'occupied in industry and mining', etc. The division is given for the whole population and also, for the Chinese and the Japanese separately. The year taken is 1930, because no later figures are available, but it will be shown later that no great changes have taken place since that time. Unlike Korea, where the members of the family who do not take part in work are included in the same occupational group as that of the head of the family, in Taiwan they are registered as having 'no occupation'.

Occupational Statistics For Taiwan, 1930
(in thousands)

	Agriculture and forestry	Industry Fishing	Industry and mining	Trade	Communication	Public serv. & prof.	Others	No Occup.	Total
Japanese	4.4	1.6	15.2	18.1	9.1	37.6	4.5	137.7	228.2
Natives	1,191.7	26.8	144.2	151.0	49.8	37.4	67.6	2,645.1	4,313.6
Total (incl. others)*	1,197.1	28.6	173.6	178.3	63.1	76.0	73.4	2,802.4	4,592.5

* Includes 'foreigners', chiefly Chinese from China proper.

The same table is given below in percentages, taking the number of those occupied as 100 For the sake of comparison corresponding figures for Japan proper for the same year are given: [33]

Occupational Distribution Of Taiwan
(percentages, 1930)

	Agric. and forestry	Fishing	Industry and mining	Trade	Communications	Public serv. & prof.	Others	Total occupied
Taiwan								
Japanese	4.8	1.8	16.8	20.0	10.1	41.5	5.0	100.0
Natives	71.4	1.6	8.6	9.0	3.0	2.2	4.1	100.0
All, incl. others	67.0	1.6	9.7	10.0	3.5	4.2	4.1	100.0
Japan proper (1930)	47.7	1.8	20.0	15.1	3.7	6.9	4.5	100.0

In a condensed form this table indicates to us the most important problems of Taiwan. Taking the native population, we see that almost three-fourths are occupied in agriculture. Forestry as a rule serves only as subsidiary occupation to agriculture. At the same time only 8.6 per cent are occupied in industry and mining, and this also includes those occupied in domestic industries where the productivity of labor is almost as low as in Chinese agriculture. At the same time there are more persons occupied in trade in the broad sense than in industry (9.0 and 8.6 per cent respectively) while only three

per cent are occupied in transportation. This illustrates the low level of economic development of the country. In this respect comparison with Japan is interesting. Only a few decades ago Japan herself was at about the same stage of economic development as China. Now, we see that less than half of her population are engaged in agriculture and 20 per cent in industry and mining.

The occupational statistics prove once more that there are two distinct groups in the population; 41.5 per cent of the Japanese, as compared with only 2.2 per cent for the natives, are occupied in public service and the professions, i.e. they form the backbone of the administrative services of the island. We shall see later that only the lowest positions in these services are open to the Chinese. Almost 17 per cent of the Japanese are occupied in industry, and they occupy all the key positions. About 18 per cent of them are occupied in trade and 10 per cent in communications. Comparison with figures for 1905 indicates furthermore that no substantial changes have taken place since then. [34]

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Chinese					
1905	75.5	6.1	8.2	1.4	8.8
1930	73.0	8.6	12.2	2.2	4.1

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Japanese					
1905	*	23.5	32.5	37.8	6.2
1930	*	16.8	30.1	41.5	11.6

* Included in 'other occupations.'

More than 75 per cent of the Chinese were occupied in agriculture in 1905, and 73 per cent in 1930; there was a slight rise in the number occupied in industry—from 6.1 to 8.6—and a more pronounced increase of those occupied in trade. As is well known, trade is the refuge of the unemployed and under-employed and its rapid growth as compared with other professions is hardly a sign of strength.

In twenty-five years the number of Japanese occupied in government administration rose from 37.8 per cent to 41.5 per cent. The fall in the percentage of those occupied in industry may be due to the fact that in the period from 1896 to 1905 very many Japanese were obsessed with the idea of making money in Taiwan in the shortest possible time. Since then the potentialities of the island have become better known, large business organizations have squeezed out the independent ventures. In any case these figures illustrating the changes in Taiwan in twenty-five years do not show that with the passing of time the occupational composition of the Chinese and of the Japanese of the island tends to become similar. If data were available for each occupation showing how many Japanese

and how many Chinese are in important executive positions and how many in subordinate positions, the gap would appear much wider. Unfortunately, direct data are not available, but we shall see later that there is no indication that the division is becoming less sharp."

"It was mentioned above that an investigation of Taiwan's population statistics might throw some light on the population of China and that it is strange that demographers have not used the results of the six censuses that were taken on the island. We cannot analyse this question in detail here, but our results will point to some divergences from those obtained by Dr. Buck in his most extensive study of land utilization in China. (1)

1. J. L. Buck, Land Utilization in China, Chicago, 1937.

According to Buck's investigation, the average-sized [39] family in China is 5.3, with 6.3 persons per family in double-cropping rice areas. The following figures show that, contrary to the experience of most countries, the average size of family in Taiwan shows a tendency to grow:

	1905	1915	1920	1925	1930	1935
Persons per family:	5.2	5.3	5.2	5.5	5.7	5.8

Whether this increase is due to the improved technique of census-taking or to the change in the definition of family we do not know. If this increase really took place, it may be a symptom of deterioration of standards of living: young people cannot find employment, have no chance to establish their own homes, and are compelled to continue to live with their families.

Besides Taiwan, censuses were taken in Kwantung territory, (of South Manchuria) but they do not have the same value because the sex and age composition of the population there is not normal: many people are settling there without families, and leaving their wives and children in their native villages.

Comparison Of The Sex Ratios Of The Population (Men=100) (2)

2. In this and in the following tables the whole population of Taiwan and of Kwangtung, and not only its Chinese part, is taken, because no separate data are available, but this cannot make a substantial difference for Taiwan because there the Chinese make up 94 per cent of the total population.

	China, acc. to Buck	Taiwan census, 1935	Kwantung census, 1935
Women	92	96	66

It is clear that Kwantung is not normal in this respect, but comparison of Taiwan and China, as recorded by Buck, shows that females were probably underestimated in Buck's investigation: in Taiwan the difference in numbers is not great.

Age-Distribution Of The Population
(Percentages)

	China acc. to Buck	Taiwan census, 1935	Kwantung census, 1935
Under 10	25.0	31.1	22.0
10-19	19.3	20.4	19.6
20-29	17.0	17.3	23.6
30-39	13.8	12.3	15.8
40-49	11.4	8.3	9.7
50 and over	13.5	10.9	9.3
Total	100.0	100.0	100.0

[40] Comparison of these columns shows that in Kwantung territory the age distribution of the population is not normal--there are too few children and too many adults in the age groups between twenty and thirty-nine, and therefore we omit Kwantung from further investigation. But a comparison of China and Taiwan suggests that children were underestimated in Buck's investigation.

Comparison Of Crude Birth And Death Rates (3)

3. The figures for Taiwan are averages for ten years (1927-36), and include the whole population. The corresponding figures for the Chinese population only (five-year average for 1933-38) are as follows: birth rate, 45.8; death rate, 20.6

Birth rates		Death rates	
China (Buck)	Taiwan	China (Buck)	Taiwan
38.3	44.6	27.1	20.7

In Taiwan the death rate is lower and the birth rate higher than in China. The difference in respect of death rates is quite probable because the medical service in Taiwan cannot be compared with the more primitive conditions in China, but the lower birth rate in China is much less probable.

Birth rate per 1,000 married females, between the ages of 15 and 44 years is 207 in Buck's investigation, but for Taiwan in 1935 it is 297—a difference too great to be attributed to chance. All this demonstrates once more the importance of a study of Taiwan's censuses for those who are interested in the demography of China."

4:Grajdanzev--41 S-4 (no date) 1942 Formosans
116, 171

"In surveying agricultural conditions in Taiwan, we shall frequently make comparisons with Japan. The reasons for these comparisons are clear: Taiwan has for forty-five years been a part of the Japanese empire, and free movement of capital and, to some degree, of labor takes place between it and the mother country and it is part of the same monetary and banking system. The population which came under Japanese control was at about the same cultural level in 1895 as Japan herself ten to twenty years before. Its agricultural system, its ethics, religion, and literature resemble those of Japan, and therefore comparisons between the mother-country, and Taiwan, a colonial territory, are very instructive."

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-1-3
116, 171, 241, 454, 433, 177.24 Japan
636.24

"(3) Increased agricultural production may also be achieved by raising yields per unit of area. Below we give a comparison of yields in Taiwan and in Japan, and in the case of sugar cane, the area of which in Japan is too small, a comparison with Hawaii and the Netherlands Indies, where conditions are similar to those in Taiwan, while groundnut production in Taiwan is compared to that of Kwantung.

Crop Yields In Quintals Per Hectare in Taiwan and Other Countries.

		1928-32 average	1933-37 average	1937
Wheat	Taiwan	8.7	9.7	10.7
	Japan	17.7	19.1	19.1
Barley	Taiwan	6.4	8.0	7.4
	Japan	19.9	20.6	20.9
Maize	Taiwan	11.3	10.8	11.6
	Japan	14.1	14.7	16.7
Rice	Taiwan	22.2	25.1	26.1
	Japan	35.0	36.8	38.6
Sugar cane	Taiwan	684.4	654.4* Four-year average 1933-36.	...
	N. E. I.	1,308.0	1,374* Four-year average 1933-36.	...
	Hawaii	1,349.4	1,515* Four-year average 1933-36.	...

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-2
116, 171, 241, 454, 433, 177.24 Japan
636.24

		1928-32 average	1933-37 average	1937
Soya beans	Taiwan	5.6	5.7	6.2
	Japan	10.0	10.0	11.2
Groundnuts	Taiwan	16.2	17.1	18.4
	Kwantung	19.0	20.7	...
Sesamum	Taiwan	3.5	3.9	4.2
	Japan	7.3	7.5	7.5

The yields per hectare of the most important plants in Taiwan's economy are therefore thirty to fifty per cent less than in Japan, or, in the case of sugar, in Hawaii or the Netherlands East Indies, and yet all available sources mention the fertility of the soil in Taiwan, while climatic conditions are at least as good as in Japan or the Netherlands Indies.

The explanation lies in the primitive methods of Taiwan [47] agriculture, including the slight use of fertilizers. Judging by the cultivated area and the number of farmers, the island should have at least 300,000 to 400,000 ploughs, but in 1929 (1) almost all (except

1. The last data available, Nogyo nenkan, p. 642.

18,315 'improved' ploughs for deeper ploughing and 614 of the European type) were of the

primitive Chinese pattern. While in Japan proper an average of ¥170 to ¥180 per hectare is spent each year on commercial and home-prepared fertilizers, in Taiwan less than half that sum is spent for this purpose. These two examples—ploughs and fertilizers—for which quantitative data are available show clearly that Taiwan farming is under-capitalized, especially when we consider that the farmer is obliged to pay ¥2,000 per ko for good land.

This does not of course mean that there is no improvement in the agriculture of Taiwan. The government devotes much effort to increasing the productivity of the farms and the farmers are eager to respond. Yields are now higher than they were twenty years ago, as one may see from the tables given later in this chapter. But progress is slow. It is doubtful whether yields in Japan in 1895—the time of the annexation of the island—were higher than in Taiwan, whereas now they are considerably greater and relatively Taiwan is lagging further and further behind."

4:Grajdanzev--56 S-4 (no date) 1942 Formosans -1-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

"Taiwan is famous for its rice production of which it exports almost half. The opinion of Japanese economists is that exports of Taiwan's rice to Japan brought to the island such prosperity that some measures had to be taken to curb it. But the data presented in this table [See page 55--analyst] show quite a different picture. In 1905 the annual per capita consumption of rice in Taiwan was about 1.25 koku. Then it fell, but an increase in production brought it back to that level in 1925. At about that time the heavy exports of Taiwan's rice to Japan started: These exports brought a sharp fall in per capita consumption—it fell to 0.87 in 1935 and has remained on about the same level since that time. Now, 0.87 koku per year is about 0.8 pound per person per day. It was pointed out that the production of other cereals in Taiwan is almost nil. Only sweet potatoes form a significant addition to the diet (more than one lb. per person per day). Some wheat flour is imported but this amounts to only two to three per cent of the exports of rice (by weight).

These figures are for the total population. But the urban dwellers are probably better off than the farmers, so that the average for farmers should be less than 0.87 koku. Exports of rice from Taiwan to Japan cannot therefore be taken as a sign of Taiwan's prosperity, for they resulted in a fall in standards of living for the Chinese in Taiwan. Data for the last five years show that the annual average consumption of rice in Japan is about 1.10 koku, while in Taiwan it is 0.84. In other words, per capita consumption of rice in

Japan is thirty-one per cent higher than in Taiwan, though the Japanese consume in addition considerable amounts of wheat, barley, and other cereals, which are almost entirely absent in Taiwan, to say nothing of sweet potatoes."

4:Grajdanzev--64-65 S-4 (no date) 1942 Formosans
116, 171, 263, 511

"As with rice it is interesting to note the per capita consumption of sugar in Taiwan. Although almost ninety-five per cent of the sugar output is exported, per capita consumption of sugar in Taiwan was 15.9 kin in 1938, as compared with [65] 23.5 kin in Japan. In other words Japan's consumption is forty-three per cent higher than Taiwan's (1).

1. These figures are taken from Keizai nenkan, 1940, of Toyo keizai shimposha, pp. 205, 206."

4:Grajdanzev--66 S-4 (no date) 1942 Formosans
116, 171, 272

"Average consumption [of tea--analyst] in Taiwan was 676,000 kin or one-eighth of a kin per capita—not much for a tea-drinking nation and for a tea-producing island. In Japan the average annual per capita consumption of tea for the same period was 0.76 kin, (1)

1. The figure is calculated from the data on tea as given in the International Yearbook of Agricultural Statistics, 1939.

or five times as much as in Taiwan."

4:Grajdanzev--68-69 S-4 (no date) 1942 Formosans -1-2
116, 231, 492, 171

"The draft animals in Taiwan are the water buffalo and, second in importance, the 'yellow cow'. The water buffalo [69] is a strong animal, slow in movement, which likes to wade in water. and is satisfied with coarse fodder. Its meat is not very palatable. The yellow cow is less powerful but more alert, and its meat is much better than that of the buffalo. Milch cows in Taiwan are few in number—in 1938 they were estimated at 1,275. No statistics of the number of cows and buffaloes of working age are available, but the following total figures will suffice to show the trend (in thousands):

	1921	1932	1933	1934	1935	1936	1937	1938
Water buffaloes	307.9	286.3	302.2	306.9	305.8	292.3	282.1	259.7
Cows of all kinds	113.6	80.4	84.0	88.0	84.7	78.6	76.3	65.4
Total	421.5	366.7	386.2	394.3	390.5	370.9	358.4	325.1
Cultivated area (1,000 ko)	773.8*	839.7	845.5	851.3	856.8	872.3	883.3	884.4
Area per head of draft animals (in ko)	1.83	2.29	2.19	2.16	2.19	2.35	2.46	2.72

*1922.

The average number of ko per head of draft animals is therefore increasing and unless the quality of the buffalo is improving remarkably, the situation is becoming less and less

favorable. (1) Though official sources speak about improvement in the quality of pigs and

1. It is important to note also that the number of females among the draft animals is falling sharply: in 1921 there were 158,000; in 1933, 140,000; in 1937, 127,000.

horses, they are silent concerning the buffalo. In this respect Taiwan is worse off than the Philippines or the Netherlands Indies. In the table only cultivated land was taken into consideration; the crop area is in fact larger, and was growing faster than the arable area, so that the situation is actually worse than the figures suggest."

"The number of other animals in Taiwan may be seen from the following table (in thousands):

	1921	1932	1933	1935	1937	1938
Sheep	...	0.3	0.3	0.4	0.3	...
Goats	...	90.1	87.0	78.3	70.4	...
Pigs	1,281	1,754	1,807	1,873	1,849	1,827
Poultry	4,452	5,267	5,747	6,466	7,703	7,947
Geese	190	306.3	319.6	370.8	401.5	394.2
Ducks	890	1,379	1,496	1,772	1,958	2,225
Turkeys	...	9.2	11.2	18.5	30.8	35.3

As regards pigs and poultry the situation is more favorable: there was a considerable increase in pigs, poultry, geese, and ducks. On the average there are four pigs (including sucklings) and eighteen to nineteen hens per farming family (assuming that only farmers keep pigs and fowl). These are an important source of meat and income. (1) The develop-

1. The official estimate of an average per capita pork consumption of more than 28 kin a year (37 pounds) is probably an exaggeration. In 1938 one million pigs were killed. If consumption per capita averaged 28 kin, each pig must have weighed 160 kin, but the official estimate of the average weight is 130 kin.

ment is a consequence of the growth of the sugar industry—the cane waste can be utilized

on the farm as fodder. In this respect Taiwan is much better off than Korea. But one should not exaggerate the importance of these figures. It was officially estimated that in 1937 the gross value of products of animal breeding in Taiwan was ¥49.2 million or slightly more than twelve per cent of total agricultural production."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages may be considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

4:Grajdanzev--83 S-4 (no date) 1942 Formosans
116, 171, 427

"Rent is paid chiefly in kind, though payment in cash is spreading. Where two crops are raised, a proportion of 7:3 is usual, i.e. the tenant pays seventy per cent of the rent from the first crop and thirty from the second. Rents in Taiwan are somewhat lower than in Japan, and Takahashi attributes this to the greater investments in the form of land improvements in Japan as compared with Taiwan."

"As to the general supply of fish for the population of Taiwan, the Japan Year Book has the following to say: '. . . The Taiwanese are a fish-eating people, but the annual catch is so great that a large quantity is exported to Japan proper [87] and other countries' (1).

1. P. 941, 1939-40 edition.

Statistics of the industry tell a different story. Compared with Japan the natives of Taiwan are poorly supplied with fish, for in 1937 the value of fishery products in Japan proper was ¥660,807 or about ¥9.3 per capita as compared with ¥3.8 in Taiwan. It is true that an important part of this catch is exported from Japan and a part is used as fertilizer, but the same is true for Taiwan. As may be seen from the following table, Taiwan is a net importer of fish:

External Trade of Taiwan in Fish
(1,000 yen)

Year	Exports to Japan	Exports to other countries	Gross exports	Imports from Japan	Imports from other countries	Gross imports	Net imports
1937	4,111	832	4,943	10,095	687	10,782	5,839
1938	3,006	491	3,497	11,535	405	11,940	8,443

The secret of this coexistence of exports and imports of fish does not lie in any over-abundance. The Japanese in Taiwan export fresh fish to Japan which they sell for an average price of 26 sen a kin (0.6 kg.), and import two kinds of fish: (a) salted and dried fish at an average price of 12.5 sen a kin and (b) canned fish. It is clear that these two kinds of imported fish are not consumed by the same groups of the population.

We saw above that the population of Taiwan consumes more meat on the average than do the Japanese; ~~now~~ we see that the Japanese consume much more fish than the islanders (2).

2. It was mentioned above that the average consumption of pork in Taiwan is about 37 kin, while in Japan it is only 3 kin; but the average consumption of fish in Japan must be, on the most conservative estimate, 60 to 70 kin."

4:Grajdanzev--88-89 S-4 (no date) 1942 Formosans-1-2
116, 137, 171, 313, 435

"The present distribution of forests and waste lands (i.e. formerly forest or which can be afforested) may be seen from the following table:

Forest Area in Taiwan, December 1936
(1,000 ko)

	On the plains	In the aborigines' territory	Total
State: forests	399,086	1,312,562	1,711,648
waste land	195,529	308,137	503,666
Public: forests	12,112	...	12,112
waste land	3,529	...	3,529
Private: forests	219,095	1,568	220,663
waste land	45,131	...	45,131
Total: forests	630,293	1,314,130	1,944,423
waste land	244,189	308,137	552,326

The Japan Year Book say: 'Reckless cutting of trees was done by Chinese immigrants and this . . . resulted in the devastation of forest districts.' But it is surprising to find that the forest area on the plains (excluding waste land) is about three-quarters of the area under cultivation. However, the exploitation of this tremendous area—2,496,749 ko or about 5.8 million acres—leaves much to be desired. According to official

statistics. the total value of forest products in 1936 was only ¥15.1 million—much less than the value of fishery products or only two per cent of the gross value of the island's production. This sum was made up of the following items: [89] timber, ¥5.6 million; charcoal. 1.9 million; bamboo, 1.7 million; firewood, 2.7 million; and others 3.2 million. If these figures are correct, then of the 2,496,749 ko, one ko brings on the average only six yen, or less than half that in Japan."

"Having established the absolute size of industrial production of Taiwan, let us now compare it with gross value of industrial production of Korea and Japan and reduce it to a per capita basis.

This table shows that in 1937 and 1938 per capita industrial production in Taiwan was only one-fourth as large as that of [92] Japan, but was higher than in Korea. If we compare 1929 and 1937 we see that the difference between Taiwan and Japan was smaller in the former year than now, both absolutely and relatively, so that in spite of all talk of the industrialization of Taiwan, the difference between Japan and Taiwan in this respect is increasing. (1)

1. In An Inquiry into National Income of Japan, published by the Research Division of the Japan Economic Federation in 1939, we read on page 90; 'The rates at which production has increased in the Dependencies have been greater than those which have been the case with Japan proper. This fact suggests the youth of industry in the Dependencies.' But, the following comparison shows that the conclusion in the text is correct and that the rates of growth at least in Taiwan are not greater than in Japan proper (based on the absolute figures taken from the Inquiry).

Gross Value of Industrial Production in Japan, Korea and Taiwan, 1929 and 1937 (2)

	Total gross value (million yen)			Per capital [sic] (yen)		
	1929	1937	1938	1929	1937	1938
Taiwan	263.8	360.1	386.4*	58	64	67
Korea	280.5†	927.3	...	14	41	...
Japan	7,716.8	16,412.5	19,667.2	122.5	230	272

Sources: Dainippon teikoku nenkan and Takumu tokei.
*Approximate, because data for machine industry is not abailable.
†1930, no figures are available for earlier dates.

2. These figures for Taiwan differ slightly from those given in the previous table above (taken from Nogyo nenkan), but they are comparable with those of Japan and Korea.

4:Grajdanzev--91-92 S-4 (no date) 1942 Formosans-3
116, 171, 433

Comparison of Rates of Growth
(1930 = 100)

	Industrial production alone	Total production
Japan, 1937	255	229
Taiwan, 1937	194	170 "

"This predominance of the food industry, or, in other words, of the processing of agricultural products, may also be illustrated by the following figures of workers by industries in Taiwan for 1937 covering enterprises with five and more workers, (1) or with a prime-

1. Government enterprises are excluded.

mover. [94]

	Absolute figures	Per cent of total
Textile	3,951	4.5
Metals	2,884	3.3
Machinery	4,214	4.8
Ceramics	10,528	12.1
Chemical	4,988	5.7
Lumber	2,674	3.1
Printing	3,027	3.5
Food industry	48,615	55.7
Other	6,363	7.3
Total	87,244	100.0

Source: Dainippon teikoku nenkan, 1939.

4:Grajdanzev--93-94 S-4 (no date) 1942 Formosans-2
116, 171, 433, 463

"The total number of workers in 1937 was only 87,244, while in Japan in the same year it was 2,936,512, or 34 times as many, though the population of the latter in the same year was only 12.7 times as great as Taiwan's. The number of workers in the food industry made up 55.7 per cent of the total, a smaller proportion than that based on the gross value of production, while the proportion of ceramics in the total was unexpectedly high (12.1 per cent) and that of the chemical industry only 5.7 per cent. The divergence may be explained (1) by special conditions in the industries concerned (e.g. the relation between gross value and net value is different in different industries); (2) by the prominence of modern or of primitive types of industrial enterprises—those in ceramics, printing, bookbinding and the lumber industry, for example, are chiefly small enterprises without machinery where productivity per worker is small; but in the food industry as will be shown later on, and in the chemical industry new and efficient enterprises predominate; (3) by the monopolistic position in the market of certain industries, which permits them to exploit the consumers."

4:Grajdanzev--96-97 S-4 (no date) 1942 Formosans-1-2
116, 171, 454, 471, 473, 177.47 Japan
636.47

"It is also interesting to compare the size of the companies in Taiwan as regards capital with those in Japan proper and in Korea.

Industrial Companies, their Total and Average Capital in the Japanese Empire, December 31, 1937.

	Companies, number	Total paid-up capital and investments (million yen)	Capital per enterprise (1,000 yen)	Capital per capita of population (yen)
Japan proper	30,518	9,396.9	308	132
Korea	981	246.2	251	11
Taiwan	335	191.5	572	34
Kwantung	358	96.9	271	81
Karafuto	88	33.6	382	103

Source: Dainippon teikoku tokei nenkan, 1939.

It is clear that Taiwan and Korea are poorly supplied with capital per capita of population, but there is an important difference between them: the average capital per company in Taiwan is higher than in any other part of the Japanese Empire, including Japan proper. These are averages and include small as well as large companies, but behind them one may see the silhouettes of big corporations dominating the economic life of Taiwan,

corporations which have few equals even in industrially developed Japan (1).

1. By size of total paid-up capital the corporations and partnerships in industry in Taiwan were distributed as follows: [97]

Size	Number of companies	per cent of total	Total paid-up capital (1,000 yen)	per cent of total
Less than ¥10,000	50	14.9	253	0.1
¥ 10,000- 49,000	111	33.1	1,922	1.0
¥ 50,000- 99,000	34	10.2	1,276	0.7
¥ 100,000- 199,000	48	14.3	3,020	1.6
¥ 200,000- 499,000	40	11.9	4,878	2.5
¥ 500,000- 999,000	20	6.0	4,694	2.5
¥1,000,000- 4,999,000	25	7.5	24,077	12.6
¥ 5,000,000-9,999,000	2	0.6	5,700	3.0
Over ¥ 10,000,000	5	1.5	145,316	76.0
Total	335	100.0	191.1	100.0

Thus, 32 companies—9.6 per cent of the total number—had 91.6 per cent of the total capital of companies."

4:Grajdanzev--109 [21 S-4 (no date) 1942 Formosans
116, 135, 171, 315, 354

"From the local point of view the production of natural gas is more important[than that of oil--analyst]. The region richest in gas is Kinsui in Shinchiku province, and the gas is used for the production of benzine and carbon-black, as a fuel for sugar mills, and for domestic use. However, in 1937 only 7,411 families had gas facilities (as compared with 2,233,136 in Japan proper)."

4:Grajdanzev--112 S-4 (no date) 1942 Formosans -1-2
116, 171, 471, 563, 477, 655, 177.47 Japan
636.47

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929 Per cent	Korea 1938 Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital. and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

4:Grajdanzev--112-113 S-4 (no date) 1942 Formosans
116, 171, 563, 471

"According to Takahashi, (1) industry in Taiwan [113] is chiefly in Japanese hands because

1. Op. cit. p. 434 et seq.

(1) the Japanese are able to organize modern enterprises; (2) the Chinese are chiefly concentrated in domestic industry; (3) the national characteristics of the Chinese are such that they are unable to organize corporations; (4) any accumulations of capital which they may have are small because they came to the island recently and their chief occupation is agriculture; (5) they cannot compete in the Japanese market with the Japanese because they do not know the market; (6) in those cases where they do organize a corporation their aim is to get profits quickly, and this brings ruin to the corporation. This is a familiar argument in colonial countries. We make only a few comments below.

It is argued that the Chinese do not have the accumulation of capital necessary for modern industry, that they came to Taiwan recently (!) and that their chief occupation is agriculture. But in 1900-05, when the Japanese began to build up the industrial enterprises of Taiwan, the chief occupation of the Japanese in Japan was also agriculture. It would be a mistake to suppose that they exported a huge amount of capital to Taiwan. This question will be touched upon in the chapter on the external trade of Taiwan, where we shall show that the capital of corporations in Taiwan was 'created' chiefly in Taiwan itself."

"Japanese economists argue that the prosperous condition of the villagers makes it difficult for industry in Taiwan to secure female workers, so that in 1935, for example, women made up [114] only 30.6 per cent of all workers, (1) while in Japan the proportion

1. In 1936 women made up 32.6 per cent of all workers. Kagaku kogyo nenkan, 1939.

was 47 per cent. Let us make a closer examination of the figures.

Proportion of Women in Different Industries

	In Japan		In Taiwan	
	1935	1933	1935	1936
Textile industry	80.9	80.6	80.9	73.4
Metals	7.1	8.8	10.5	10.6
Machinery	8.5	0.5	0.7	1.2
Ceramics	20.6	13.7	15.2	18.6
Chemicals	35.1	23.4	23.4	26.4
Lumber	9.0	5.6	6.6	5.8
Foodstuffs	18.1	34.3	33.3	34.8
Printing	18.1	12.5	10.8	12.9
Gas and electricity	0.8	—	—	—
Others	51.4	66.0	62.2	68.2
Total	47.0	31.7	30.6	32.6

From this table it may be seen that in the textile and ceramic industries the percentage of women is about the same in Taiwan as in Japan; in metals, foodstuffs, and 'other' industries it is larger, while in machinery, chemicals, and printing it is smaller but is growing. The smaller percentage total (32.6 per cent in Taiwan and 47 per cent in Japan) is explained by the simple fact that in Taiwan there is no significant textile industry. If we exclude the textile industry, then in 1936 the proportion of women in industry was 30.6 per cent for Taiwan and only 18.7 per cent for Japan (2). It is no fault

2. The figure for Japan is calculated from the data of Nippon rodo nenkan, 1938.

of the Chinese women and it is not a sign of Taiwan's prosperity if the industries existing in Taiwan are less suited to women. To say, as Takahashi does, that the textile industry is absent in Taiwan because the women, being prosperous, do not want to work, is naive. Taiwan is in the sphere of the Japanese customs tariff and experiences all the pressure of Osaka and Nagoya competition; it has no cotton of its own, nor has it such good harbors and commercial organization that it could be supplied with cotton cheaper than Kobe. It is natural then [115] that the cotton industry has had no chance to develop. But, as was mentioned, in other branches of industry the proportion of women in industry is higher in Taiwan than in Japan."

"Japanese authors complain that wages in Taiwan are high, and that they are high because of the prosperous condition of the farmers. The farmers are so well off that they do not want to leave the farms. Takahashi tells a story, for example, of how government officials were not able to hire a sufficient number of laborers for irrigation works at the rate of wages prescribed by these officials. The chief obstacle to the development of industry, we are told, is high wages. Moreover, these wages are rising continuously. The official Taiwan Jijo says: 'wages of the islanders up to 1920 rose by 200 per cent in comparison with the prewar level, while in comparison with the period before the Japanese occupation the increase is wonderful' (odoroku-beki) (1). Below we give wages per

1. Op. cit., p. 610.

day for corresponding groups of workers in Tokyo and Nagoya in Japan, and Taihoku and Taichu in Taiwan.

Wages per Day in 1939
(yen)

	Japan		Taiwan	
	Tokyo	Nagoya	Taihoku	Taichu
Turners	4.20	2.84	1.60	no data
Cement workers	2.36	2.58	no data	0.95

Wages per Day in 1939 [Cont.]
(yen)

	Japan		Taiwan	
	Tokyo	Nagoya	Taihoku	Taichu
Foundry workers	4.01	2.38	1.20	no data
Millers	2.93	2.45	1.15	0.70
Dyers	3.07	1.78	1.09	no data
Printers	3.33	2.12	1.80	1.00
Day laborers, men	2.10	2.20	0.85	0.74
Day laborers, women	1.24	1.30	0.60	0.55

Sources: For Taiwan, Taiwan Jijo; for Japan, Rodo nenkan."

"As is well known, Japan is not a country of high wages. Yet wages there are from two to three times higher than the wages of the Chinese in Taiwan and do not seem to have been an obstacle to the development of industry. The wage level is closely connected with the level of retail prices and this we give below.

Retail Prices in Taihoku, May 1939

		(sen)
Sweet potatoes	(per kin)	6.4
Rice, horai	(per kin)	11
Sugar	(per kin)	29
Pork, average quality	(per kin)	43
Miso, per 100 momme	(0.827 lb.)	8
Fish	(per kin)	18-22
Eggs, each		6
Soap, per piece		10-17
Matches, per box		1.4
Firewood, per 100 kin		180
Muslin (per yard)		134

Now, let us take two workers—one skilled and one day laborer. For the skilled workers the average daily wage in the second half of 1938 was ¥1.43 per day, (1) for an

1. This is a simple arithmetic average of 60 different

categories of workers in Taihoku; in so far as highly paid categories are small in numbers, the weighted average would be lower. The official estimate of the average wage for Taihoku is ¥1.27.

unskilled worker ¥0.85. The average family in Taiwan consists of five to six persons. According to the prices given above, the skilled worker can buy with his daily wages, for example, either 17.2 lb. of rice or 4.4 lb. of pork, or 6.5 lb. of sugar. An unskilled worker can make such purchases as 10.2 lb. of rice, or 2.6 lb. of pork, or 3.9 lb. of sugar. By whatever standards, it is evident that the wages of the workers are very low.

The wages of Japanese workers, on the other hand, are at least double those of the Chinese for the same job. For Taihoku the official estimate of the average wage for the Chinese is ¥1.27, for Japanese, ¥2.41 (2). It is thus not profitable for the Japanese

2. A simple arithmetic average for 25 occupations of the Japanese in Taihoku gives ¥2.65.

entrepreneurs to use Japanese workers extensively."

4:Grajdanzev--118 [2] S-4 (no date) 1942 Formosans

116, 171, 496, 497

"Some Railroad Statistics of Taiwan and Japan for 1937

	Taiwan	Japan proper
Length of railroads (km.)	1,550	26,797
Same per 100 sq. km. (km.)	4.3	7.0
Passengers carried (1.000)	27,488	1,739,688
Trips per capita	4.9	24.1
Freight carried (1,000 tons)	8,187	130,813
Freight, per capita (tons)	1.5	1.8
Receipts from passengers (million yen)	11.2	391.1
Average cost per trip (yen)	0.41	0.22
Receipts from freight (million yen)	18.5	306.4
Average cost per ton (yen)	2.26	2.34"

4:Grajdanzev--119 S-4 (no date) 1942 Formosans
116, 171, 496

"The table above [see preceding note page 118--analyst] compares railroad data in Taiwan and in Japan.

These figures may appear unimportant, but they are essential for our investigation because only in this way is it possible to discover certain important relationships. It was already mentioned that in the last eleven years the total length of the railways in Taiwan increased only slightly—by five per cent, while in Japan in the last nine years (1928-37) the increase was thirty-nine per cent. The network of railways in Japan is now almost twice as dense as that of Taiwan."

4:Grajdanzev--119 [2] S-4 (no date) 1942 Formosans
116, 171, 497, 511, 563, 177.49 Japan
636.49

"From the table given above [see table on page 118 under category 116--analyst] we see that a Japanese makes almost five times as many trips a year as does a Taiwanese --whereas the movement of the freight appears relatively as large as in Japan. The movement of passengers reflects the conditions of life of the natives while the movement of freight in Taiwan is the movement of Japanese freight to and from ports--coal, sugar, rive, fertilizer, lumber, and sugar cane (1) (in the order of freight carried)--

1. Sugar cane is in sixth place because the bulk of its [sic] transported on special railroads.

which, as will be shown later in more detail, serve chiefly the Japanese economic machine. The statistics of revenue show that the average cost per ton of freight in Taiwan is less than in Japan (¥2.26 as compared with ¥2.34). It may be said that this is quite reasonable because in Taiwan average distance over which the freight is moved is less. On the other hand, the average passenger cost per trip in Taiwan is twice as high. In spite of the smaller scale of operation, the railways of Taiwan bring a net return of eight to nine per cent as compared with six per cent in Japan (1937)."

4:Grajdanzev--123-124 S-4 (no date) 1942 Formosans
116, 171, 205

"In seventeen years there has been no progress in the use of the means of communication by the population: the number of letters sent (per capita) fell from 16.2 in 1921 to 14.2 in 1938. while in Japan in 1937 the average was almost five times as great (65.1). In 1938 the population sent fewer telegrams [124] and parcels per capita than in 1921--only one person out of seven in Taiwan sending one parcel a year as compared with 1.13 parcels per person in Japan, and only one out of three persons in Taiwan sent one telegram a year. The number of telephone and radio users is small; there are in Japan forty times as many telephone users per capita and seven times as many radio listeners as in Taiwan. The difference may in part be explained by the absence of facilities, as may be seen from the following comparison:

Number of Inhabitants per Post Office in Taiwan and Japan

	Taiwan	Japan
1928	25,500	6,900
1937	32,200	6,200

The number of inhabitants per post office in Taiwan in the past ten years has increased from 25,500 to 32,200, while in Japan it fell from 6,900 to 6,200 indicating that the Japanese are five times better supplied with post offices. But the scarcity of facilities alone can not explain everything."

4:Grajdanzev--125 S-4 (no date) 1942 Formosans
116, 167, 171, 205, 563

"It is also noteworthy that the Japanese in Taiwan send on the average many more letters, parcels, telegrams and have better telephone facilities than the Japanese in Japan proper. This is an indirect proof that they are much better off than the average Japanese at home, a fact to be kept in mind when one is considering the causes for the failure of mass Japanese emigration to the island. The Japanese come to the island in order to secure a better living in Taiwan than they had at home, and not to compete with the low-paid Chinese."

4:Grajdanzev--136 S-4 (no date) 1942 Formosans
116, 171, 565

"We have no data on municipal taxes, but judging by those of the government-general and the provinces, the system is the same as in Japan, where municipal taxes in the budget of 1939 were distributed in the following way:

Land tax	11 . %
House tax	17.3%
Business tax	11.7%
Miscellaneous taxes	11.9%
Special tax	42.5%
Other Income tax	5.6%
Total tax receipts	100.0%"

4:Grajdanzev--139 S-4 (no date) 1942 Formosans
116, 171, 208, 658, 177.20 Japan
636.20

"Analogous to the war expenditures are the related expenditures on propaganda. In this group we included expenditures on broadcasting, including construction of new stations, on 'social education,' and on the 'spiritual mobilization of the population'. There may be some who wonder whether the expenditures on radio-broadcasting stations may be properly considered as expenditures on propaganda. But while in Japan the users of radio receivers must pay a certain annual fee, in Taiwan broadcasting is free because the government considers it a powerful instrument for 'spiritual mobilization' and for the Japanization of the population."

4:Grajdanzev--147 S-4 (no date) 1942 Formosans
116, 171, 477, 656, 177.47 Japan
636.47

"The establishment of a Japanese bank does not of itself mean that Japanese merchants would enjoy privileges in it in comparison with other clients. There remain then monopolies, subsidies, tariff walls and--we add--taxation policy, administrative pressure and other similar measures as causes of the Japanese commercial success. The same measures were applied in Korea, later on in Manchuria and are now being used in China."

"Two other aspects of Taiwan's exports should receive our attention. First, it is interesting to compare the gross value of Taiwan's production with its exports, keeping in mind that the gross value is considerably larger than its net value, i.e. by the cost of materials, fuel used in production, etc.

Comparison of the Gross Value of Production and Exports

	1903	1922	1929	1937
Gross value of production, million yen	84.5	354.2	598.6	890.5
Exports, million yen	20.7	158.4	272.0	440.2
Exports as percent of gross value	24.5	44.7	46.3	49.4

From this table it appears that in 1903 about one-fourth of the gross value was exported, while in 1937 the amount had risen to 49.4 percent. This probably means that in 1937 not less than three-fourths of the total net value of production of production[sic]of Taiwan was exported. Such a high ratio of exports to gross value of production is probably approached only [150] by Korea (1).

1. If Taiwan were to receive the equivalent in imports, the large exports would not constitute a problem. But we shall see later that this is not the case.

To see how far this situation was to the mutual advantage of the natives and the

Japanese, one should compare not only the ratio of exports to total production but also the absolute amounts which are not exported. In 1903 there remained 63.8 million yen worth of unexported goods, while in 1937 450.3 million were left. Let us now examine these figures in the light of price-changes. We have no index of prices for Taiwan in 1903, but we do have prices of rice--the most important product of the island--to which the authorities in 1937 gave a weight of 31 percent in the general index (2). A picul of

2. Actually it should be about 40 percent because the authorities gave sugar a weight of 25.3 percent, unduly large in view of the fact that more than 90 percent of the production is exported.

rice in 1903 cost 2.36 yen; in 1937, it cost 9.32 yen, or almost 4 times as much. If we also take into consideration the growth of population, the residual per capita gross production 'in rice prices' was 21.8 yen in 1903 and 19.8 yen in 1937. These are gross values of production, and since industry played a much greater part in 1937 than in 1903, the per capita net 'real' values in 1937 must actually be much smaller than in 1903. This is a startling conclusion. We emphasize again that these figures can only be approximate, yet they are sufficient to indicate the trend of events."

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans -1-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

4:Grajdanzev--155 S-4 (no date) 1942 Formosans

171

"The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

4:Grajdanzev--158-159 S-1 (no date) 1942 Formosans
116, 171, 457, 477, 661, 177.43 Japan
636.43

"The usual explanation of Japan's ability to obtain year after year tens of millions of yen worth of goods over and above what is sent from Japan to Taiwan is that this balance represents the interest on Japanese capital invested in Taiwan and the profits of the Japanese businessmen there. But a closer analysis of the figures given above reveals that this explanation is not satisfactory. It is important to understand that we are concerned here with investments and the returns on them, not from the point of view of an individual, but from the point of view of two regions—Taiwan and Japan. From 1896 to 1908. [159] inclusive, Japan sent goods to the value of 31,655,000 yen over and above her imports from the island and this represents her real outlay in the colony. She now receives from Taiwan sums which in every year since 1914 have been greater than this original 31,655,000 yen; which in every year since 1924 have been more than twice as great; and which in every year since 1934 three times as great, and in 1939 were six times as great as the original sum. Is this the legitimate interest on capital and profits of the entrepreneurs which are due to their energy, foresight and managerial ability?

Of course, we know that high profits are made not only in Taiwan, but, say, in the United States as well. Does this fact refute our thesis of exploitation? In no way. The existence of monopolies in the United States is a fact known to all. However, these monopolies are not permanent. Some of them appear, some disappear, every year."

4:Grajdanzev--162-163 S-4 (no date) 1942 Formosans
116, 171, 632, 641, 177.64 Japan
636.64

"The municipal or village councils have from 8 to 40 deputies (according to the population), half of whom are appointed by the government and half elected. The electorate is made up of male Empire subjects who have attained the age of twenty-five years, who are not dependent, who have lived continuously for at least six months in that particular locality and pay at least five yen in municipal or village taxes (house tax, land tax, or business tax). [163]

Thus it is clear that the only places in which there is some semblance of elections are the cities or villages. As has already been pointed out, the small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko. But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote. We have no data for Taiwan, but the example of Korea shows that by this device two per cent of the population—the Japanese—form the majority of the electorate."

4:Grajdanzev--163 [2] S-4 (no date) 1942 Formosans
116, 171, 625, 659, 871.177.62 Japan
636.62

"Many times on the preceding pages it has been shown that Taiwan is more poorly supplied with this or that commodity than is Japan proper. But in one respect Taiwan is better supplied——with policemen. According to Dainippon teikoku nenkan (Statistical Year Book of the Japanese Empire) for 1937, there was one policeman for every 1,052 persons in Japan proper in 1937, while in Taiwan there was one for every 580 persons. According to the same source there were more policemen than teachers in Taiwan—— 9,972 policemen in 1937 as compared with 9,651 teachers of all kinds in 1936—while in Japan proper the number of teachers was almost six times as large as the number of policemen. The number of policemen in Taiwan is almost three times the number of physicians."

4:Gra lanzev--169-170 S-4 (no date) 1942 Formosans
116, 171, 217, 346, 363

"Let us now consider briefly other cultural institutions in Taiwan. Below we give the data on libraries in Japan and in Taiwan.

Libraries in Japan and in Taiwan, 1936

	Japan	Taiwan
Number of Libraries	4,730	86
Books	12,647,973	369,961
Readers	24,124,344	886,084
Readers per year per capita of population	0.34	0.16

Source: Dainippon teikoku nenkan.

The libraries in Japan are not visited very often—on the average only one out of three persons visits a library once a year—but in Taiwan only one out of six persons finds his way to a library once during the year. There is nothing astonishing [170] in this when we recall that there are only eighty-six libraries for a country with a population of six millions; it means that only the cities, where the Japanese are concentrated, are supplied with them."

4:Grajdanzev--170 S-4 (no date) 1942 Formosans
116, 171, 345

"In Japan there were 32,338 theatres in 1937 and 94,853 cinemas (including temporary ones). In Taiwan there were only 120 theatres and 19 cinemas."

4:Grajdanzev--173-174 S-4 (no date) 1942 Formosans
116, 171, 278, 744, 759

"In the section on education it was shown that Chinese college students from Taiwan prefer to study medicine because this is a profession in which it is relatively easier to establish oneself than in others. Now we see that in spite of this attraction [174] there are two and a half times as many physicians per 10,000 population in Japan as there are in Taiwan. The same is true of midwives, though the need for midwives is greater in Taiwan, where the birth rate is one and a half times as high as in Japan. On the same per capita basis there are four times as many dentists and thirteen times as many pharmacists in Japan as in Taiwan. These and many other figures which could be quoted show that as regards health services Japan is several times better served than Taiwan. And actual conditions are even worse than these figures suggest because the equipment of hospitals is poorer and the physicians rely chiefly on advice and prepared drugs, which are sold by some 6,600 stores as well as 6,700 peddlers."

4:Grajdanzev--174 S-4 (no date) 1942 Formosans
116, 164, 171, 758

"In 1937 about 22 times as many cases of dysentery per 1,000 inhabitants, twice as many cases of typhoid fever, 9 times as many of paratyphoid, 17 times as many of scarlet fever, 3 times as many of diphtheria and 21 times as many cases of insanity were registered in Japan as in Taiwan. But this does not mean that Taiwan is a remarkably healthy place in which to live. There are more cases of epidemic diseases per 1,000 population in Taiwan than in Japan, but they are not registered because the masses of the population cannot afford to pay a physician, far less a hospital. From the official sources we know, for example, that each year out of 100-108 thousand deaths at least 9,000 are due to tuberculosis; probably far more because it is doubtful whether all cases are registered. According to the official estimates the number of tubercular persons is '80-90 thousand', but there are only 150 beds in the tuberculosis hospital for the whole island. Besides tuberculosis the island is ridden by trachoma, intestinal parasites, venereal diseases, leprosy, and malaria. Concerning the first two, official sources say only that they are 'widespread'. As to venereal diseases the chief means of their transmission is licensed and unlicensed prostitution."

10: Schumacher--226 [3] T-1 (ca. 1896) 1898 Formosans
116, 171, 174, 412

Several of the objects which I brought down from the mountains were thought to be old Chinese things even by some of the Chinese priests. I would not let the Chinese lie to me under any circumstances and asked them for proof of their statements, and they showed me pictures of objects on old temple decorations which showed definite similarity with my originals in spite of the fact that they had been strongly affected by the weather. I am referring to bamboo rakes, a wooden sprinkler which can be used simultaneously on two rows of plants in the field, and a device for lifting a primitive lamp of clay.

Is it not possible that the inhabitants of the mountains have, in the course of time, forgotten the things that keep them from being stamped as completely Chinese in the same manner as they adopted the elements which they have in common with the Chinese? In short, why would it not be possible that these inhabitants of the mountains be Chinese who have emigrated from the Chinese mainland and come to Formosa, where they found a new homeland and settled in the fresh air of the mountains.

15: U.S. Navy--27 [3] (no date) 1944 Formosans
116, 171, 595

"Marriage customs are generally similar to those prevailing in China. Monogamy is the legal standard and concubinage is discouraged in practice as well as in theory, for few can afford it."

4:Grajdanzev--9 [2] S-4 (no date) 1942 Formosans
116 , 144, 174

"Before the 16th century the island was peopled almost exclusively by tribes of Malayan or Polynesian origin, related to the primitive tribes of Mindanao and Borneo. These numerous tribes, separated from one another by high mountains and impassable subtropical forests, were not only disunited, but waged constant war among themselves. As a consequence they could not present a common front to invaders and finally were either conquered or driven into the mountain fastnesses."

4:Grajdanzev--9-10 S-4 (no date) 1942 Formosans
116, 174

"Japan was too far away from the island for permanent [10] occupation and colonization. Malayan tribes could reach the Japanese islands by means of the Riu-Kiu Islands, just as Japanese pirates were visiting Taiwan on their way to pillage the Chinese coast. A permanent occupation, however, demanded more systematic effort and better connections. Later, during the Tokugawa Shogunate it was forbidden for any Japanese subject to go abroad under the penalty of death and thus, in 1650-1750, when the fate of Taiwan hung in the balance, Japan was absent from the scene. As a consequence, her present domination is the result of recent efforts, quite unconnected with the adventures of Japanese pirates in the 16th and 17th centuries."

4:Grajdanzev--10 S-4 (no date) 1942 Formosans
116, 174

"The indifference of the Chinese to an island so near to their shores may seem even more strange. The Pescadores Islands, approximately twenty to thirty miles from Taiwan, were first occupied by the Chinese in the reign of the Emperor Wen (589-604) (1) and after

1. See for details 'Mélanges Critiques' by M.C. Hagenauer, in Bulletin de la Maison Franco-Japonaise, Tokyo 1930, Tome II, pp. 40 et seq.

A.D. 1300 they were already known as a part of the Empire."

"On the other hand the rulers of the Riu-Kiu Islands to the north of Taiwan had been paying tribute to the Chinese Emperor from the fifth century and, according to all evidence, were well known to the Chinese. Taiwan, however, remained virtually unknown to the Chinese for many centuries, a fact which is demonstrated by the absence of a special name for the island, and it is still an open question whether or not they considered it part of the Riu-Kiu Islands. (2) The cause of this indifference was probably the warlike spirit

2. According to G. Schlegel (Problèmes Géographiques, T'oung Pao, VI), the name Riu-Kiu was applied first to Taiwan, and only under the Ming Dynasty was it transferred to the Riu-Kiu Islands proper. According to Chinese historians, the eunuch Wan San-ho of the Peking court, returning from Siam, in 1430 was driven by storm to an island the position and the character of which, as described by Wan San-ho, correspond to Taiwan. But no action followed his report.

of the aborigines, who prevented peaceful settlement on the part of the Chinese. In times of peace private initiative was insufficient to overcome this obstacle, and the Chinese government, as we shall see, showed complete indifference to the fate of the island up to the end of the 19th century."

6: Kirchhoff--29 [2] U-4 (no date) 1895 Formosans
116, 174

Formosa, whose northern heights can be seen on clear days from the Fu-kien coast, did not remain unknown to the Chinese throughout the Middle Ages. They then called the island Liu-kiu or Great Liu-kiu (Ta-liu-kiu). According to the Chinese Annals, it first became known in 605 A. D. They found there a strange people whose language they did not understand; one year later an expedition set out from China for the island, at the order of the Emperor, but the islanders defended themselves valiantly, and the only thing achieved was a campaign of destruction and the taking of a few thousand prisoners.

10: Schumacher--226 [3] T-1 (ca. 1896) 1898 Formosans
116, 171, 174, 412

Several of the objects which I brought down from the mountains were thought to be old Chinese things even by some of the Chinese priests. I would not let the Chinese lie to me under any circumstances and asked them for proof of their statements, and they showed me pictures of objects on old temple decorations which showed definite similarity with my originals in spite of the fact that they had been strongly affected by the weather. I am referring to bamboo rakes, a wooden sprinkler which can be used simultaneously on two rows of plants in the field, and a device for lifting a primitive lamp of clay.

Is it not possible that the inhabitants of the mountains have, in the course of time, forgotten the things that keep them from being stamped as completely Chinese in the same manner as they adopted the elements which they have in common with the Chinese? In short, why would it not be possible that these inhabitants of the mountains be Chinese who have emigrated from the Chinese mainland and come to Formosa, where they found a new homeland and settled in the fresh air of the mountains.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

THE HISTORY OF THE VILLAGE AND AREA

T 174 The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

T F 174 167 The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[2] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

F 175 504 167 Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

F 175 162 167 504 442 443 In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

F T 369 464 In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

NOTES

Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, i.e., only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 3.93–5.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 39.37–59.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chroniclers, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1716), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1758), Wang Ying-ts'eng (1764), Hsieh Chin-luan (1807), and Chen Shu-chün (1852) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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4:Grajdanzev--3-4 S-4 (no date) 1942 Formosans
116, 132, 175

"Its climate and vegetation are tropical, a fact which was of special importance to Japan, which is situated in the temperate zone and which, before the World War, had no possessions in the tropics, except Taiwan. After the War she received a mandate over the German Pacific islands lying north of the equator, but their total area is only 2,149 sq. km. (830 sq. miles). Thus before the recent occupation of Kwangtung and Hainan Island, Taiwan was the only important Japanese possession in the tropics. As we see later, [4] this had an important bearing on Japanese economic policy there."

"Special circumstances contributed to the transformation of Taiwan into a Chinese island. In 1644 China was invaded by the Manchus. The Ming Dynasty was overthrown in the north, but the struggle continued for many years in the south and the population suffered all the horrors of the war. As a consequence more than 100,000 Chinese, according to some reports, fled to Taiwan, which by that time was well known to the inhabitants of Fukien and Canton as the base of operations by Japanese and Chinese pirates alike. This mass emigration to Taiwan changed the character of the island. The newcomers were resolute people, ready to fight aborigines and Manchus, and in their wake thousands of other Chinese followed annually from the densely populated southern provinces.

During the 16th and 17th centuries European Powers laid the foundations of their present Asiatic colonial possessions. Java became a Dutch colony, the Philippine Islands Spanish, and the Portuguese succeded [sic]in acquiring a base at Macao. Rivalry was keen and, after unsuccessful attempts to drive the Portuguese out of Macao, the Dutch established a base on the southwestern shore of Taiwan in 1624, near the present town of Tainan. They began to extend their control over the adjacent territory, to convert the aborigines to Protestantism, to tax the people, to encourage the planting of sugar cane and to develop the production of camphor. Dutch mastery over the island was contested by the Spaniards who in 1626 built Fort San Salvador at Keelung, in the north of the island, and three years later Fort San Domingo at Tamsui, in the northwest. At the same time Spanish missionaries also started preaching the Gospel, trying to convert the

natives to Catholicism. But the Dutch drove out the Spanish soldiers (1) by military force

1. The following correspondence between the Dutch and Spanish commanders is of interest, because it aptly illustrates the spirit of the time:
To Gonsolo Portilio,
Governor of the Spanish fortress in the island of Kelung.
Sir.
I have the honor to communicate to you that I have received the command of a considerable naval and military force with the view of making me master by civil means or otherwise of the fortress Santissima Trinidad in the isle of Kelung of which your Excellency is the Governor. [12]
In accordance with the usage of Christian nations to make known their intentions before commencing hostilities, I now summon your Excellency to surrender. If your Excellency is disposed to lend an ear to the terms of capitulation which we offer and to make delivery to me of the fortress of Santissima Trinidad and other citadels, your Excellency and your troops will be treated in good faith according to the usages and customs of war, but if your Excellency feigns to be deaf to this command there will be no other remedy than recourse to arms. I hope that your Excellency will give

careful consideration to the contents of this letter and avoid the useless effusion of blood, and I trust that without delay in a few words you will make known to me your intentions.

May God protect your Excellency many years.
The friend of your Excellency
Paulus Tradenius.

Fort Zelandia, August 26th, 1641.
To the Governor of Taiwan.
Sir,

I have duly received your communication of August 26th, and in response I have the honor to point out that as becomes a good Christian who respects the oath he has made before his king, I cannot and I will not surrender the forts demanded by your Excellency, as I and my garrison have determined to defend them. I am accustomed to find myself before great armies, and I have engaged in numerous battles in Flanders as well as other countries, and so I beg of you not to take the trouble of writing me further letters of like tenor. May each one defend himself as best he can. We are Spanish Christians and God in whom we trust is our protector.

May the Lord have mercy upon you.
Written in our principal fortress
San Salvador the 6th of September 1641.
(Signed) Gonsalo Portilis.

[12] and to all appearances became the sole masters of Taiwan. Had they retained the island, it might have become a base for further penetration into China and Japan. As has been mentioned, China was at that time in a turbulent state. As the conquering Manchus advanced southwards, many more Chinese fled to Taiwan. In the southwest resistance to the invading forces was carried on first by Cheng Chi-lung. Originally a tailor, he later migrated to Japan, where he married a Japanese girl. He then became a famous pirate and finally, as was often the case in China, a high official. His son Cheng Ch'eng-kung, better known as Koxinga, continued the struggle, but, being hard pressed by Manchu forces, decided to give up Fukien. On April 30, 1661, Koxinga, with a large fleet and an army of 25,000, appeared at Zeelandia, chief Dutch port in Taiwan, where he was supported by the discontented Chinese population. Only nine years before, there had been a serious uprising against the Dutch as a result of oppressive taxes and heavy export duties, and though the rebel-[13]lion had been crushed, the resentment remained. Koxinga besieged the fortress, which was garrisoned by 2,200 Dutch soldiers and a few settlers, and after a long siege the Dutch surrendered on February 1,1662, bringing to an end the attempt to secure a European base for an advance to the north. Within a few years all vestiges of Dutch influence had disappeared, the forts fell to ruins and the aboriginal converts returned to their old practices.

The reasons for the failure of both the Dutch and Spaniards are not far to seek. The purpose of colonial possessions was trade, whilst preaching the Gospel was only an

auxiliary method of subjugation and control. The needs of the local inhabitants were neglected—they were looked upon only as a source of income. The smallness of military forces stationed in the colonies and the great distance from bases prevented speedy reinforcement of the garrison, and the Dutch were compelled to give up in the face of the strong native force.

In 1683 the island fell into the hands of Manchu rulers, and for 212 years it was a part of the Manchu Empire. But little attention was paid by the rulers to the island, for it was made only a fu—a prefecture—of Fukien province, the governors of which did not trouble themselves with visits to a distant island.

The population was unruly and turbulent. The Chinese inhabitants consisted of two group which did not easily mingle with one another. The earlier settlers were the Hakkas from Kwangtung province, the remnants of the native tribes which were sinified to some degree as they came under Chinese domination. Their name itself means 'stranger', and in China they were the pariahs of society. In the new possession they were able to secure better conditions, and it has been estimated that one third of the Hakkas in Kwangtung province emigrated to Taiwan. (2). Another group was made up of emigrants from the opposite

2. Davidson, J., The Island of Formosa, 1903, p. 8.

shore of Fukien province, called Puntis. Both groups of the Chinese population brought

with them the customs, beliefs, and superstitions which they had [14] known on the continent and thus reproduced on the island the life they had led in China. The Chinese in South China, for example, were organised into clans, and the population of Taiwan was likewise thus divided.

From the occupation of the island by Koxinga to the coming of the Japanese some 220 years later the Chinese were constantly at war with the natives who had once occupied the whole island, including the fertile plains of the west, and who were now forced to give up their lands. Some of the aborigines were absorbed by the Chinese, some annihilated, while the most indomitable were driven step by step into the mountainous regions. As a result of this cruel treatment, they developed a hatred for the Chinese and tried to kill them at every opportunity, raiding their villages or hunting the inhabitants down when they dared to penetrate the dense forests in search of camphor trees. The Chinese organized some kind of semi-volunteer guards, whose duty it was to keep the 'savages' within a pale. But the 'savages', composed of many tribes, were fighting not only against the Chinese, but also among themselves and as a result of these unfavorable conditions, their numbers either remained stationary or decreased, while the Chinese population on the plains, living if not a life of opulence, yet under comparatively easy conditions, was increasing by natural growth as well as by immigration from China. At the end of the period of Chinese sovereignty, the aborigines, who had once made up the whole population of the island, formed only about three to four per cent of the total, so that the island acquired an entirely Chinese character."

"The Chinese, however, were not a homogeneous group with identical interests. The difference between the Hakkas and the Fukienese has already been mentioned [see category 116, p. 13--Analyst] and this difference often found expression in bloody conflicts. Within each of these two groups clans were fighting one another, often for seemingly trivial reasons but most commonly for land and for influence in local affairs. There was also cleavage between the old settlers who possessed the land and the newcomers who had been compelled to rent it and borrow money at exorbitant [15] rates. Finally, there were frequent rebellions against the local officials of the Manchu government who ruled the island with the support of 10,000 to 15,000 poorly trained and badly paid soldiers.

At the time of conquest the Manchu rulers did not resemble the Chinese either in appearance or in language. The Manchus were a warlike Tungus tribe inhabiting North Manchuria and now almost completely assimilated by the Chinese. At least during the first century after the invasion they did not speak the Chinese language, far less the Fukienese dialect. The Hakkas hardly understood the Puntis, and both, as a rule, did not understand the numerous aboriginal dialects. The officials communicated with the population only through interpreters who often abused their position, a bribe being sufficient to change the interpretation of a case before the mandarin. These mandarins and their entourage, coming from distant Peking, looked upon Taiwan as a source of speedy enrichment, and at times their exactions and misrule became so oppressive that revolts followed. A Chinese saying of those days concerning Taiwan sums up the situation:

116, 175, 563

'Every three years a disorder, and every five years a rebellion.' (1) Indeed the history

1. Quoted by De Bunsen, 'Formosa,' Geographical Journal, 1928, p. 268.

of Taiwan is represented by some writers as a succession of rebellions."

4:Grajdanzev--15-16 S-4 (no date) 1942 Formosans
116, 162, 175, 439

"However, it would be a mistake to overemphasize these uprisings. Life was not easy under the conditions described above, but it was better than in Fukien and a definite development was taking place. Before 1600 hardly a thousand Chinese lived on the island; in the middle of the 18th century there were, according to Luchow, two and a half million. This may be an exaggeration, but it is a fact that at the end of the 19th century there were three million Chinese in Taiwan, engaged mainly in the cultivation of rice and sugar. About four hundred vessels were then plying between Taiwan and the mainland exchanging the produce of the island for that of China and in 1893, for example, 21 million lbs. of tea, 5.3 million lbs. of camphor and 98 million lbs. of sugar were ex-[16]ported. Taiwan rice played an important part in the economy of Fukien, as did oilcake, which was used as fertilizer. Taiwan sugar made up a great part of the sugar consumed in North China, and her camphor was a not unimportant item in China's foreign trade. This brief inventory is very important because it shows that the present-day character of Taiwan is not the creation of its present rulers, but is the result of a long historical process, though the progress under Chinese administration was slow in comparison with later developments."

"As has been mentioned above, the development of the island was due exclusively to the energy of the local population, for the Peking government neglected this far-away district of Fukien province. However, several events demonstrated to the Chinese government the dangers of this neglect.

The second half of the 19th century witnessed a revival of the struggle for colonies among the Powers. This was the period of the division of Africa, but Asia was not overlooked. In 1842 the British acquired Hongkong, twelve years later Commodore Perry 'opened' Japan to foreign commerce, about the same time the Russians again appeared on the north bank of the Amur, and in 1859 France got a foothold in Cochin China. It was an open secret that the Powers were again alive to the strategic importance of Taiwan. To find excuses for interference was not very difficult. The unruly state of the aborigines and the Chinese distrust of foreigners caused many critical situations and even tragedies for foreign shipping; shipwrecked sailors being maltreated and sometimes killed (1).

1. The fault was not always on the side of Taiwan's inhabitants. For example, in 1869 marines from the Prussian ship 'Elbe' were landed on the Taiwanese coast, though they had no need nor in fact any right to do so. The aborigines fired on them and compelled them to return to the ship, whereupon the commander landed a strong party of marines, destroyed the nearest village and killed those who did not flee.

The foreign nations retaliated with bombardments of the coast and temporary occupation of certain points on the island. In 1874 Japanese forces spent several months on the island and evacuated it only after the friendly intervention of other [17] Powers. This acquaintance of the army with the island was put to good use by the Japanese twenty years later."

"Simultaneously with these military clashes commercial penetration of Taiwan was going on. By the treaty of Tientsin with Great Britain, Taiwan, the former capital of the island (now Tainan), was opened to foreign commerce. In 1860, the year of the ratification of the Tientsin treaty with France, Tamsui was also opened to trade (1). The pioneers

1. Regarding the causes of this opening it is stated in Article VI of the treaty: 'Experience having demonstrated that the opening of new ports for commerce is one of the necessities of the age, it has been agreed that the ports...'

were Jardine Matheson and Company and Dent and Company, two well-known and influential British firms in Hongkong, which in 1858 established trade connections with Taiwan and in 1860 opened offices there. The chief article of export from Taiwan in which they were interested was camphor, while in imports their interests were limited to opium (2). Opium was known in Taiwan before that date, but the years 1860-95 saw

2. Opium was 'practically the only import in which foreigners were interested' wrote Davidson, the American consul in Taiwan for some years.

the greatest spread of this evil. To support the interests of the business firms, British and later American and other consulates were opened in Taiwan. In 1863 the Imperial

Chinese Maritime Customs—actually a foreign-controlled agency in China to service the debts of the Chinese government—began to function at Tamsui. It is interesting to note that at first the customs office was opened on board the opium-receiving hulk Pathfinder, property of Jardine Matheson and Company; at about the same time the British consul opened his offices at Takao on board the opium-receiving hulk Ternate belonging to Messrs Dent and Company. This illustrates the close connection which at that time existed between the Customs, British officials, merchants, and the opium trade. These merchants on several occasions used their own force to compel the Chinese to accept their demands. In 1868 after one such 'small local war' (3) in which British marines had

3. The pretexts for such 'wars' were not difficult to find. Two gentlemen, for example, forced their way into Chinese property to which they had some claim, breaking down the door which was fastened by nails, but were met by 'a mob of [18] some 500 coolies.' 'The two gentlemen attempted immediate flight, but before they had gained many steps they were assailed in the most violent manner with guns, knives, spears and stones by the ferocious ruffians. Mr. Bird was struck down by a stone and beaten and stabbed with spears and muskets,' etc., etc. (Davidson, op. cit., p. 200). Miraculously, both gentlemen remained alive and in command of their faculties. Gunboats appeared on the scene to lend very effective support to their claims.

taken part, although there [18] was not a shadow of hostilities between China and Great Britain at that time, the British compelled the Chinese officials to abolish the camphor monopoly, to recognize the right of foreigners to travel and buy freely, the right of the missionaries to reside and work in the island, etc."

4:Grajdanzev--18 S-4 (no date) 1942 Formosans
116, 175, 177.65 China
636.65

"In 1884 began the Sino-French war, the purpose of which was to compel the Chinese government to agree to the French version of Tonkin's boundary. Activities spread to Taiwan, which was blockaded by the French navy. The war was not very glorious for French arms, but it brought home to the Chinese government the need for improvements in Taiwan. The island was raised to the rank of a province in 1887, and the energetic Liu Ming-chuan, commander of the Chinese forces during the French blockade, became the first governor. He worked out a plan of substantial improvements and during his short rule the construction of the first railway on the island was begun, a telegraph network was constructed and a cable connecting with Amoy laid; harbors were also improved and fortifications built. But all this was done without any attempt to improve the condition of the masses, to educate them, or to give them some voice in the government. The cost of the reforms Liu Ming-chuan wanted to place upon the local population through the introduction of 'likin' (1) and through a revision of the land tax. This caused disturbances

1. A tax on goods moved across administrative boundaries.

among the population. Liu Ming-chuan was removed from office and the Chinese administration of the island returned to the original state of inaction; but the menace was already at hand."

"In 1894 the war between Japan and China began. China suffered defeat. and by the Treaty of Shimonoseki of April 18, 1895, Liaotung peninsula and Taiwan were ceded to Japan. Though the Pescadores Islands had been occupied by Japanese [19] marines, there were no Japanese troops on the island of Taiwan at the time the treaty was signed, and when the news reached Taiwan, the administration and the population decided not to submit to the cession. It is quite possible that Peking encouraged local authorities to do this and there were rumors that in order to avoid the transfer of the island to the Japanese, the government was ready to give it to the British or to the French. In fact, the British are said to have declined the offer, (1) and under the circumstances, the French too

1. In view of the interest which the British had in the island (as was shown above) the natural question arises as to why they declined this offer. The answer is given in the work of Mr. W.A. Pickering, an important official in British service, of whom none other than Sir Robert Hart said in 1878 that 'no single European had ever possessed such opportunities of learning the Chinese character in all its phases,' and who from 1877 to 1888 'was virtually the ruler of some hundreds of thousands of Chinese in the Straits Settlements and in native States' (See his Pioneering in Formosa, London, 1898, p. 257). Mr. Pickering writes: 'Well, Japan is an Asiatic nation in spite of her modern civilization and her Western

ideas. Against any European power Japan can do absolutely nothing, in fact there is no European nation that has any reason to fear anything from any Asiatic race, however civilized. Japan, however, would be splendid as an ally; and, per contra, she would be just as dangerous in alliance with any other European power. That she would be a splendid ally to us I have not the least doubt.' And further (p.258, op.cit.): 'And Formosa? Well we have had lots of chances to take Formosa. Certainly, we can't allow Russia or France to take it, and it could not be in better hands than those of Japan or in worse than those of China.' The gift of Taiwan to Japan was to pave the ground for a coming alliance. The British were sure of Japan's inability to rule there without British assistance and capital. The Pickerings who thought they knew the Chinese character so well badly misjudged the Japanese.

showed no special inclination to take it. Nevertheless the Chinese of Taiwan decided to act on their own. On May 23, 1895, the Taiwan republic (for which China's treaty was not binding) came into existence with the governor of the province Tang Ching-sung as its president.

But the republic of Taiwan lasted in the north less than three weeks. The president of the republic fled after the first defeat of his troops, and the army was left disorganized and leaderless. It is true that General Liu Yung-fu proclaimed himself president in the south, but at the approach of the Japanese he fled in the same manner as Tang Ching-sung.

As subsequent events clearly showed, it was not the absence of enthusiasm on the part of soldiers and of the people to fight for Taiwan that caused the collapse of the Republic. Describ-[20]ing the guerilla war which took place after the flight of the president, Yosaburo Takekoshi says: 'Whenever our troops were defeated, the inhabitants of the surrounding villages instantly became our enemies, every one, even the young women, arming themselves and joining the ranks with shouts of defiance. Our opponents were very stubborn and not at all afraid of death.' (2)Chinese mandarins showed their inability

2. Japanese Rule in Formosa, p. 88.

to rule the country in time of peace; they proved also their complete inability to organize its defenses in time of war. (3)In better hands Taiwan could have shown incomparably

3. The following rewards promised by the governor of Taiwan may serve as an illustration of his military knowledge: for the capture of a big man-of-war, 70,000 taels; for the capture of a small cruiser, 4,600 taels.

better resistance. The president fled on June 11, but Taiwan (in the south) was not taken until November 18, 1895, and four to six more years were necessary in order to subdue the guerilla warriors whom the Japanese contemptuously called 'brigands'. Japanese

losses in the pacification were not small. Takekoshi gives the following figures: died of disease in Taiwan, 4,642; sent to Japan for treatment, 21,748; remaining in hospitals in Taiwan, 5,246; killed in battle, 164; wounded, 515. This does not include losses suffered after November 1895 (4).

> 4. Engagements of the period of 1895-1901 were often on a quite large scale. In December 1895 General Yamaguchi, suppressing the 'insurrection of Hakkas armed only with long poles... shot five or six hundred of them and forced the rest to submit.' (Takekoshi, op. cit., p. 92.)

The strikingly small number of killed and wounded, as compared with those who died of disease or were treated for illness is possibly the result of the habit of the Japanese command in understating losses in war. Chinese losses up to December 1895 were estimated by Japanese at six to seven thousand killed in action."

4:Grajdanzev--20-21 S-4 (no date) 1942 Formosans
116, 175, 563, 177.65 Japan
636.65

"Thus Taiwan became the first Japanese colony. Many problems faced the new masters of the island, one being the aborigines and the territory occupied by them. About half of the island, sparsely populated by aboriginal tribes, was practically outside Chinese authority and the occupation of the western part by Japanese in 1895 did not bring them nearer to [21] the solution of the problem. It took decades of effort and even now is not finally solved. The Chinese part was easier to control, but several years were spent in the suppression of rebellions, and special measures were required to keep order among the population. Even the pacified population presented many problems. They were foreign in speech, in customs, outlook and allegiance, and no policy worked out in advance could be applied at once."

4:Grajdanzev--21 S-4 (no date) 1942 Formosans
116, 175, 177.65 Japan
636.65

"Finally, a not less important problem was how to make the island pay, for the new masters came to the island not so much in order to benefit the islanders as to benefit themselves. Owen Rutter, explaining the existence of good roads, railways, good streets and other amenities of life in Taiwan, says that 'Money has been poured into Formosa by the Japanese; to them it is like a ewe lamb'. (1) In the following pages however it will be

1. Geographical Journal, London, 1928, p. 286, quoted in the discussion of the report of E. H. Bunsen.

shown that Japan spent relatively very little in Taiwan and received very much from it; that most of what has been done in Taiwan has been done on money raised there.

The history of the island after Japanese occupation will be given along with a description of various phases of human activity in Taiwan."

4:Grajdanzev--170-171 S-4 (no date) 1942 Formosans
116, 175, 114, 204, 177.72 Japan
636.72

"Tadao Yanaihara, writing in 1929 when no Chinese newspaper was published, tried to find the cause of the difference between Taiwan and Korea (in the latter newspapers in Korean language are published). He thinks that the cause lies in the former independence of Korea and a resulting [171] Japanese deference to world public opinion, whereas Taiwan was a former Chinese colony and thus Japan did not have to make the same concessions to world opinion (1). We believe that this explanation is inadequate. The Japan-

1. Page 229. op. cit.

ese government had few scruples concerning world opinion for example in 1919 when it brutally suppressed the national movement of the same Korean people. The explanation is simpler. Korea was sold out peacefully by her rulers to Japan and at the time her people acquiesced in this sale. whereas the people of Taiwan did not recognize the cession of Taiwan to Japan. It is important to note that the act of cession took place not in Taiwan, but on the sea. The representative of the Peking government transferred Taiwan to the Japanese plenipotentiary on the open sea because Taiwan was in a state of turmoil. Abandoned by the government, betrayed by militarists, the islanders continued the unequal struggle for several years."

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans -1-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

"Political Movements (1)

1. The information concerning these movements is taken chiefly from Yanaihara, op. cit., and from Sekai nenkan, 1939.

As was shown in the historical section of this book, the island was not actually acquired by the treaty of Shimonoseki, but was conquered by the Japanese. This conquest took seven years and the Japanese recognize that the island was pacified only about 1902. However, in 1907 the Peipu rebellion broke out, the immediate cause being an attempt on the part of the officials to use the paochia in the subjugation of the savages. In 1912 the Linchi rebellion broke out in connection with the felling of the bamboo forest by Mitsui interests, and in 1915 [177] there was a new rebellion at Hsilaian. All these rebellions were suppressed by the government. These and other spontaneous movements, the information concerning which was withheld by the government, are classified by the Japanese as rebellions of the old type, to distinguish them from newer movements guided by persons with modern education and ideas. The first of these movements was led by a Japanese, Taisuke Itagaki, who came to Taiwan in November 1914 and organized Dokakai, the Assimilation Society. The purpose of Itagaki was not a revolutionary one; he wanted to see the Chinese of the island assimilated by the Japanese. He realized however, that this assimilation could not take place unless the Chinese of the island

were given equal treatment and equal opportunities in education. But such ideas appeared too dangerous to the government-general and the movement was suppressed in February 1915. Another stimulus to the awakening of political consciousness in the Chinese was given by Lin Hsien-t'ang, a wealthy Chinese who petitioned the government to permit him to open a private middle school in Taichu for the Chinese. The idea was evidently so strange and radical to the Japanese that they consider this application an important stage in the political development of the island. In 1918 the Chinese from Taiwan who studied in Tokyo organized the Domeikai, an organization the primary purpose of which was to effect the abolition of some especially harsh laws in Taiwan. In 1919 this organization started a monthly publication Taiwan Youth, which a few years later was changed into a weekly. At that time the attempt to transfer its publication to Taiwan failed, but the organ became the spearhead of the educational movement and in the 'liberal' years of 1927-30 this publication succeeded in moving to Taiwan and turned into a daily newspaper, the fate of which has already been described."

6: Kirchhoff --29 [4] U-4 (no date) 1895 Formosans
116, 175

In the course of the centuries, Formosa had quietly received settlers from the neighboring coasts of South China for pirates or anyone else who had had a rift with the Chinese Government, the island offered a place of refuge similar to that offered by Iceland and Greenland to the old Norwegians; but besides that, the amazing fertility of the island must have proved attractive to the inhabitants of the scanty and rocky soil of Fukien. But even after 1564, when an Imperial fleet, occupied in pursuing a bold pirate, had occupied the Pescadores, for which a Chinese Governor was thereupon appointed, Formosa remained untouched by any fresh attempts on the part of the Chinese Government to extend its power.

6: Kirchhoff--29-30 U-4 (no date) 1895 Formosans
116, 175

The 17th century brought the decisive turning point. After a Japanese attempt to colonize the Formosan coast (1620) had disappeared without a trace, the Dutch, who had become acquainted with the island on their journeys from Batavia to Japan, [30] established themselves on it. Their East Indian Company first took possession, in 1624, of the island in the sea where An-ping is now found, and there they built their fort of Zelandia. They soon established themselves in the southwest of Formosa also, and once again (1642) forced out the Spanish rival, who had set up the fort of San Salvador on the bay of Ki-lung in 1626. The Company now set up permanent establishments in the north of Formosa, at both Ki-lung and Tam-sui. The Dutch established satisfactory relations with the brown-skinned natives; every village chieftain within the area they controlled (this did not extend far inland, and never touched the east coast) was given, as a mark of the office he exercised in their name, a staff with a silver mounting on which the arms of the Company were engraved; thousands were won over to Christianity by the Dutch preachers, and in the village schools Dutch teachers taught the reading and writing of Dutch. But the Chinese settlers, on the other hand, were far from pleased by the demands of the "red-headed," as they called the Dutch, least of all by the poll tax laid on each of them from the seventh year on. At this very time thousands of refugees came over from South China (the figure of 25,000 is given for the period between 1624 and 1644); for the Manchus had broken through the Great Wall and had dethroned the Ming dynasty, an act that was followed by civil war lasting for decades.

The Dutch commercial company in the meantime busied itself with a profitable smuggling trade from Formosa to China. Their badly paid officials took an active part in this, for their own personal gain, making a clear profit of 100%. Raw silk was shipped to Japan, and silken materials via Batavia to the Netherlands. The average money value of this secret trade with China amounted to 4 million marks a year. And the colonial administration of Formosa did not cost the Dutch more than 357,000 marks a year, and brought in 142,000 marks in revenue. Admittedly, however, owing to the commercial economy practised in Batavia (not until 1660 did one proceed to raise the garrison of Zelandia to 1,500 men), the Dutch were in no position to withstand a serious attack from outside. And this was undertaken in 1662. The powerful opponent of the Manchu dynasty, whom we usually refer to by the Portuguese version of his name, Koschinga, saw the collapse of his ambitious plans in China, whose coasts he had threatened with a fleet of more than 3,000 junks. So now he hurled himself on Formosa, where he was naturally received with open arms by the Chinese population. After a valiant resistance, the fort of Zelandia fell on February 1, and with this there was an end to Dutch rule in Formosa.

Koschinga enjoyed this final triumph of his agitated life for but a few months. He died on July 1662. Several scions of his race successively wore the crown of Formosa, until in 1683 the Manchus seized both the Pung-hu Islands and Formosa, making them into a governmental district (a Fu) of the province of Fu-kien.

6: Kirchhoff-30 [2] U-4 (no date) 1895 Formosans
116, 175

For the last twenty years the assertion, constantly repeated among us, that China laid claim to the western part only of Formosa has been false. That changed, after the danger of a Japanese seizure of the east coast became a reality. The Butang, the Formosan natives living in the southeast of the island, had plundered Japanese ships forced ashore, and in 1873 a Japanese mission was despatched to Peking to ask for satisfaction. The reply of the Tsung-li-jamen that the Chinese Government did not feel itself responsible for misdeeds committed by savages it had not subjected obviously suited the cabinet in Tokyo. Under the pretext of punishing the Butang, a well equipped Japanese expedition put out to sea in March, 1874, landed on Formosa's Southeast coast and set up an encampment there. The Butang tribes soon submitted to the Japanese; but in China this turn of events attracted much attention, a sign of the importance the Chinese attached to Formosa. The hasty purchase of weapons and the speedy shipping of Chinese troops numbering between 8,000 and 10,000 to Formosa seemed to be the prelude to an armed clash. But this did not occur; repeated lengthy diplomatic negotiations in Peking, conducted by the Japanese with pride and energy, led in the Autumn of 1874 to Japan's expressing itself satisfied with a considerable financial indemnity and recognizing China's sovereign rights over all Formosa.

6: Kirchhoff--35 U-4 (no date) 1895 Formosans
116, 133, 175, 361

On the eastern side of the lagoon of Tai-uan lay the small locality of Sakkam (in Chinese: Tsche-kan), a native village of about 100 houses. In front of this the Dutch erected another fort, called Provintia or Providentia, exactly opposite Fort Zelandia, so that the lagoon was dominated on either side. After the collapse of Dutch power in Formosa, Zelandia still remained the key to the entry of the lagoon, behind which little Sakkam had grown to be the most important trading center on the island. For this reason Koschinga made it his residence and the Chinese, when they took possession in 1683, made it the seat of government and consequently called it Tai-uan-fu. But the continued growth of sandbanks that gradually rose above sea level, to the west of Fort Zelandia, made this fort useless as a coastal protection, so that it was dismantled in 1874 and a new fort built of its materials 1 1/2 km. to the south, close to the present coastline. Fort Provintia, in which the consul Swinhoe saw the Chinese temple in 1863, and which was built as a protection against the maleficent influences of the wandering spirits of the hung maô ("redhaired," the Dutch), has also been demolished since that time. It had long before been absorbed in the big irregular rectangle of Tai-uan-fu.

6: Kirchhoff--37 [2] U-4 (no date) 1895 Formosans
116, 175, 311, 361

Chinese settlement on the east coast is quite new, and so are the roads laid down on this coast and to the coast. Since the beginning of the 19th century Chinese settlers, for the most part people who had to expect punishment for some offense if they stopped longer in the region controlled by the Chinese Government, went round the northeast point of Formosa to the coastal plain of Kapsulan, now officially called Komalan. This plain is at most 10 to 12 km. broad. The fertility of this plain for crops of rice was soon recognized; so settlers came also who had not taken to flight, and here too, although in a hard struggle with the natives, Chinese villages gradually grew up, as far as the bay of Su-aô in the south. The favorable position of the little village of Su-aô (i. e., Su Bay), on this fine bay, was first recognized during the Japanese expedition of 1874, when it became the headquarters of the commander of the Chinese observation corps. Today Su-aô is a thriving town at the mouth of the river of the same name, whose valley forms a route for several kilometers to the southwest, towards the foot of the coastal range; all around are green rice fields, and the tea plant does well on the cleared forest soil of the surrounding heights.

6: Kirchhoff--37 [4] U-4 (no date) 1895 Formosans
116, 175, 563

So, at this time, the coasts of Formosa are practically in Chinese hands. About 2/3 of the whole island has become subject to China, and the fate of the native Tschehuan [MC: savage] appears to be sealed. Either their freedom disappears, for with their unceasing feuds, they are unable to protect it or like the proud camphor trees of their native woods they themselves fall beneath the murderous blows of the Chinese, who press them ever closer.

7: Joest--61 [7] E-5 (no date) 1882 Formosans
116, 175, 721

Often several tribes form an alliance against a common enemy, especially against the Chinese.

These feuds often result in bloody battles. In 1874-75 the Chinese sent an expedition of 9,000 men of which 2,000 were killed; many of the victims, however, died from the effects of the climate.

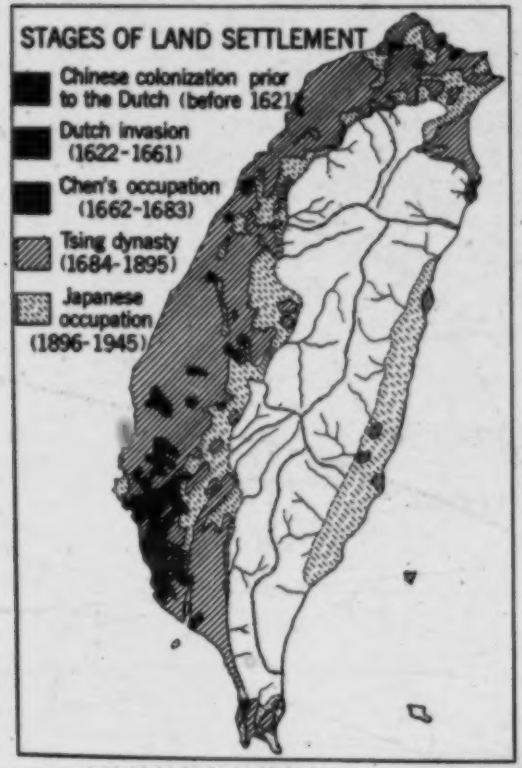
STAGES OF LAND SETTLEMENT
Chinese colonization prior to the Dutch (before 1621)
Dutch invasion (1622-1661)
Chen's occupation (1662-1683)
Tsing dynasty (1684-1895)
Japanese occupation (1896-1945)

FIG. 4

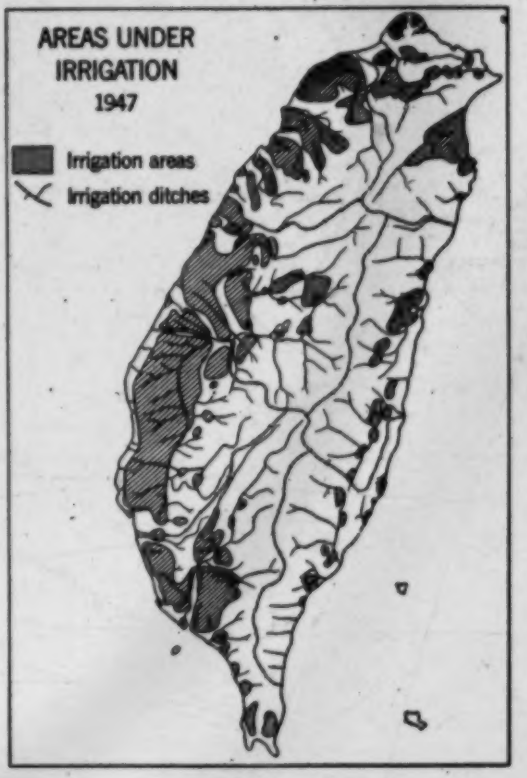
AREAS UNDER IRRIGATION
1947
Irrigation areas
Irrigation ditches

FIG. 5

9. Yamasaki--221[2] N-5 (1896-1897) 1900 Formosans
116, 175

The settling of the western half of Taiwan by the Chinese occurred in the 17th century. From that time on China, in her dealings with other powers, laid claim to the whole island, including the mountainous east, where Malayan clans nevertheless preserved their independence and no foreigner forced his way in, either Chinese or European. So our knowledge of the island also remained limited almost entirely to the low-lying western half cultivated by the Chinese.

9: Yamasaki--227 [2] N-5 (1896-1897) 1900 Formosans
116, 175

The Dutch, who at the beginning of the 17th century founded their commercial rule in the East Indian Islands, also traveled farther north to Taiwan. There they built two strongholds, Zeelandia in 1630 and Providentia in 1650. There remains can still be seen in the town of Tainan.

9: Yamasaki--233 [7] N-5 (1896-1897) 1900 Formosans
116, 135, 175

Important minerals found in Taiwan are gold, coal and sulphur. The chief sites are in North Taiwan, particularly in the surroundings of Kilung. Gold is found in two forms, as river-gold and in veins. It was first dound in Kilung-kei in 1890 by a Chinese workman who had formerly been in a Californian mine and who was occupied in constructing a railroad bridge over the river. From this time on, thousands of gold-washers have visited a long stretch of the Kilung-kei about 16 km. from its upper course at the Sanshōrei to the Shichito railroad bridge. Later gold deposits were also discovered in the mountains of Kyūfun-san and Kinkaseki, in the Zuihō region lying to the east of the port of Kilung. We learn through Dr. Ishii, the Taiwan Government geologist, that the metal is found in Kinkaseki in the zone of contact between Tertiary layers, in the main sandstone and slate, and the projecting volcanic rock, while in Kyūfun-san there are veins that are traversed by Tertiary layers. In addition gold-bearing sand was also found near Shinjō and in the Shūkoran-kei on the east coast.

10: Schumacher--223 [4] T-1 (ca. 1896) 1898 Formosans
116, 164, 175

I want to state that the extremely high mortality rate among the Chinese and the Japanese is not due to unalterable circumstances. The Japanese, to quote some figures, lost 66% of their men in the course of the campaign, who were simply victims of disease. The Japanese guard division left the rough climate of Korea in the spring equipped with winter-uniforms. This factor, combined with a scarcity of provisions following the capture of Kelung, resulted in a period of terrible suffering for the division. In spite of it all the men tried to deal with a task that was beyond their powers at this state of the game. Weakened by fevers, hunger, dysentery and long marches, the group had advanced to Tschang-hua, but was in such a pitiful condition that cholera, plague, elefantiasis, and small pox found easy victims.

10: Schumacher--224 [4] T-1 (ca. 1896) 1898 Formosans
116, 175, 226, 505

The Chinese fishermen of Lokkang are born on their boats and probably have never set foot in a town. They must be the direct descendants of the dangerous and powerful pirates who even hundreds of years ago were forbidden to enter Chinese ports and rivers. Now they are poverty stricken and on the way to becoming extinct because it is not quite so simple to seize ocean liners made of iron and steel as it was to catch barges and galleys. Now they sail along the coasts with their junks and pick up freight which must be unloaded the next day if they are eager to make a business of freight transportation. Carried by the flood they continue these voyages until the storm throws them on the beach or casts them adrift on the open sea where the waves are more regular than near the shallow shores, but still high enough to embrace the junks and to crush them like rotten match-boxes.

10: Schumacher--225 [12] T-1 (ca. 1896) 1898 Formosans
116, 175, 652

Ten months after completion of the conquest of Formosa, the Japanese colonial budget showed an income of sixteen million Mark from the island at a time when no capital whatsoever had been invested... There can be no doubt that within the period of ten months mentioned Japan extended its control quite arbitrarily; and the mere sum of 16 million Mark that was added to the Japanese treasury proves the inexhaustible wealth of Formosa.

15: U.S. Navy--22 [8] (no date) 1944 Formosans
116, 181, 175, 362, 563

"The Hakka Chinese people. The ancestors of the Hakka people came to the island from the hinterland of Fukien and Kwangtung provinces. They remain distinct from other Formosans in dialect, dress and some ways of village life. They were an audacious and bellicose people when they arrived, and in the southern part of the island particularly they had to push through earlier Chinese settlements along the coast to the marginal land beyond, between the settled Chinese and the aborigines who were gradually and forcefully being dispossessed. As a consequence, even today the Hakka settlements are among the foothills rather than on the plains. This sequence of immigration has caused the Hakka to intermarry more freely with the aborigines."

15: U.S. Navy--23 [3] (no date) 1944 Formosans
116, 167, 175

"The Formosan-Chinese migrated to the island principally from the following places on the China coast:

(1) An-ch'i (Anki)
(2) Chia-ying (Chiaying, Kaying, Mei Hsien)
(3) Chang-chou (Changchow, Lungki)
(4) Ch'ao-chou (Chaochow, Chaoan)
(5) Hui-chou (Huichow, Waichow, Waiyueng)
(6) Hweian
(7) Nanan
(8) Sam Yup (San I)
(9) Tsingkiang
(10) Tungan"

15: U.S. Navy--28 [11] (no date) 1944 Formosans
116, 175, 178, 361

"The first Chinese settled in Taiwan along the southwest coast, in and about the Tainan region. Because early settlement among the aborigines was dangerous, the settlers kept their dwellings together in defensible clusters, often selecting a prominent elevation or point overlooking a stream which could serve as a moat about a compact settlement. Further north the later settlements tended to become elongated strings of houses on either side of a road or street, often along a river bank. Often they were an extension of a settlement around a temple or the walled house of a wealthy family. Throughout the north the scattered farmhouse is most common, solitary dwellings depending upon their walls and hedges for defense. Near the borders of the aborigine territory the villages still retain a fortress arrangement of many houses within a highly defensible area."

"The history of Formosa, as commonly known by Western historians, seems to commence in the XVIth century. It was then that first appeared the name 'Formosa', which is undoubtedly of Portuguese origin. Yet no evidence can be found in Portuguese history that this name was first applied by Portuguese to the island. The same may be said with respect to the discoverer who first saw the shores of Formosa. Nor do we know, whether the motive by which that navigator was compelled to land on those far shores to which he gave a name so much in accord with the real beauty of the island was fatal or purposive.

Among the peoples of the Far East, the Chinese and Japanese have for many centuries known the island, as in their respective histories are preserved names, such as Piisaye, Pak-kando and Taiwan (1). The latter appellation first appeared in the XVIth century,

1. Taiwan, according to the Chinese characters in use at present, means: 'bay of earthy cover', or 'high bay', though one can see no relation between this denomination and the object to which it is applied, a fact altogether contrary to Chinese custom of namegiving. It is to be presumed that the tribe called Paiwan, in whose territory the first Chinese invaders had established themselves, might have given origin to that name; or, that the word Pairan, the nickname applied by the Formosan aboriginal inhabitants to the Chinese, induced the latter to call the island by this name. The Chinese dialect of

> Formosa locks the R, and the interchange of P and T, in order to soften the pronunciation, make that supposition very probable.

and it is still in use among the Chinese and Japanese. The latter of course had already known the island under the name Takasago, 'a place most beautiful and famous in Japan', according to a Japanese author. Taikosama, who in 1592 sent an expedition with the object of subjecting the island to his empire, called it Takasago, viz., 'Kingdom of the great mountains'. This took place long before the arrival of Europans [sic] at Formosa. These possessed the island for a short time only; the Spaniards occupied the northern part from 1626 to 1641, while the Dutch, first established in the south and afterwards possessing the whole eastern section from 1624 to 1661, were expelled by the wild Koxinka, or Ti-kok-sieng. From now on Formosa formed an independent kingdom under the name of Tong-to, or Tonglieng, viz., 'Oriental Metropolis'. Here reference is surely made to its geographical position with respect to that of China."

20: Alvarez--249-250 (no date) 1927 Formosans
116, 175

"In 1683, Kochuan, a grandson of Koxinga, was obliged to cede the sceptre he had inherited from his grandfather, to the Tartaric dynasty. The latter then usurped the power in the Celestial Empire, and Formosa, united with China, since that time became a mere colony of the same. This state of affairs was prolonged until the last war, in 1895, when the Japanese annexed the [250]island. At present they continue with pride to be the lords of beautiful Formosa."

25: Plaut--28 U-4 (no date) 1903 Formosans
116, 175

During the course of her history, Japan had made two attempts to gain a foothold on Formosa before the much praised and highly abused island finally passed into her possession; the first time was in 1614-5, when the Shogun Iyeyasu ordered the Governor of Nagasaki, Murayama Toan to take 3-4,000 men, and to seize Takasago, as the Japanese called Formosa at that period. He succeeded in establishing himself, but a few years later he abandoned his conquered territory as he was not receiving sufficient support from his homeland. The second landing of Japanese troops occurred in 1874. Some shipwrecked Japanese had been murdered by the wild Butangs, and as the Chinese Government refused to make any compensation, General Saigo Tsugumichi was dispatched to Formosa with 3500 men. His forces conquered the savages without much difficulty, and then began to settle in the territory which they had conquered; but they were recalled that same year after China had pledged to pay an indemnity.

28: Hervey de Saint-Denys--106-107 S-4 (no date) 1874 Formosans-1-2
116, 114, 175

Since the earliest days of our history, Chinese vessels cruised in the Chinese and Japanese waters...and in 109 B.C. a fleet of the Emperor Hiao-ou-ti transported an army of 50,000 men across the Pe-tche-li gulf to Korea.

When we consider all the facts, it is logical to believe that the Chinese did not know anything about Formosa until 1430? Klaproth's memoire [EJ: Tableaux historiques de l'Asie.] declares that this is incredible, but I think that it is just as impossible to assume, as he does, that Ma-touan-lin did not even mention the large island of Formosa, which is separated from Fo-kien by a narrow strait. This Ma-touan-lin enumerates and describes all of the countries which the Chinese knew and visited, and some of them were so far distant that it took six months, eight months, or even a year to reach them. He speaks of Luzon, Borneo, the Moluccas and perhaps even of California, which he calls by the mysterious name of Fou-sang. [107]

Klaproth says: "The Chinese historians did not mention Formosa because its inhabitants did not send any embassies, or pay any tribute."

We shall see later that this assertion contains a double error, and Ma-touan-lin mentions a large number of little countries which had never sent any ambassadors, or paid any tribute.

In my opinion, the question simply became a matter of deciding what name Ma-touan-lin had used for Formosa (as Taï-ouan, the modern name for the island, was not

28: Hervey de Saint-Denys--106-107 S-4 (no date) 1874 Formosans-2
116, 114, 175

employed until long after Ma-touan-lin's time).

According to Klaproth and his Tableaux historiques de l'Asie, the inhabitants of Formosa may have been called Man-ti from the third century B.C. until the fifth century of our era; but this term cannot be used as the title for any particular articles for the name Man-ti was a generic one which the Chinese authors used to designate all the foreigners in the south. From the fifth century to the twelfth, the Tableaux historiques omit Formosa, as if the Chinese had lost even the vague information which they had previously possessed about the island....

28: Hervey de Saint-Denys--107-111 S-4 (no date) 1874 Formosans-1-3
116, 175

But I felt that I had to keep looking for some reference to Formosa in Ma-touan-lin before deciding to accept such an extraordinary fact as [108] the complete omission of the island. Finally I read this under the title of Lieou-kieou:

" The Lieou-kieou kingdom consists of an island or islands (the Chinese text does not show whether this should be singular or plural), which are in the open sea east of the city of Tsiouen-tcheou (Chinese province of Fo-kien). As you approach the coast of Fo-kien, there are some islands called Peng-hou, and from them you can see the smoke of the dwellings in this kingdom. It takes five days to sail there."

"During the Soui dynasty, the first of the Chinese years ta-nie (605 of our era), a sailor named Ho-man and several other Chinese of the same profession said: when the sky is fair and the sea is calm if you look east, it seems as if you can see some smoke rising from dwellings. About this same time the emperor Yang-ti ordered the military mandarin Tchu-kouan to sail in quest of unknown lands. Tchu-kouan had heard this tale of Ho-man, so he took this sailor with him, and they went together to the kingdom of Lieou-kieou. They could not understand the language of the inhabitants but they seized a native, who had come on board, and returned to China. [109]

The next year (606), the Emperor ordered Admiral Tchin-ling to assemble his forces and to lead an expedition to the Lieou-kieou kingdom. Tchin-ling left Y-ngan (now Tchao-tcheou-fou, in Kouang-tong province), sailed across the sea and stopped first

on the small island called Kao-hoa; then he sailed one day more, and reached the kingdom of Lieou-kieou.

The inhabitants of this kingdom refused to surrender. Then Tchin-ling attacked them, beat them, burned their houses and palaces, took several thousand prisoners and came back to China. Ma-touan-lin adds that after this time there was no connection with this kingdom."

If you look at a map you will see that the Chinese fleet must have landed on Formosa.

The fleet goes first from Y-ngan to Kao-hoa which is the most southern island of the Peng-hou group, that still bear this name today. The distance is about thirty-eight myriameters in a straight line, and it took them two days to make this voyage. Then they sail another two days and reach Youen-peï, at the northern tip of the Peng-hou archipelago. (The little island Youen-peï has not changed its name either, and you still find it on the Chinese maps). This time the distance seems short for the amount of time expended, but the navigating conditions in these waters [110] explain the difficulties which the expedition encountered.

The shores of Formosa are so steep and studded with reefs that they are practically inaccessible to anyone who is unfamiliar with them. Moreoever, from south to north, there are such strong and dangerous currents that even a steamboat does not dare risk them today without an excellent pilot. So it is very probable that the expedition was

carried north while it was hunting for a good anchorage, and that the two days from Kao-hoa to Youen-pei were spent tacking and making fruitless attempts to land.

Finally on the fifth day the Chinese leave the anchorage at Youen-pei and that very day they land at the kingdom of Lieou-kieou.

This last statement furnishes adequate proof that Lieou-kieou must designate Formosa. We already kenw that it would have been impossible to see the smoke of the modern islands of Lieou-kieou from the Peng-hou islands; the distance is over two hundred leagues, and they are separated by Formosa, which raises its curtain of mountainous peaks between these two archipelagoes. As no ship can make that trip in one day (even Klaproth admits that it takes at least four, and then you have to have a good wind), we can say that the proof is sufficient and that [111] Formosa is the only place where the Chinese could have landed.

Accordingly, Lieuou-kieou is the original name which the Chinese gave to Formosa, and everything that Ma-touan-lin and his predecessors told about the kingdom of Lieou-kieou applies to Formosa.

Here we must refer to the mistake which Klaproth made both in his memoire on Formosa and in the description of the Lieou-kieou islands. [EJ: i.e., in his Tableaux historique de l'Asie.] As he was deceived by the name Lieou-kieou, he assumed that the Chinese expedition of 606 had visited these islands, and as he attributed to them what was really the ancient history of Formosa, he did not have any documents to use for the history of the island. He thought that there was a gap in the accounts of the Chinese historians, whereas he was making this gap himself; and while he criticized the Peking missionaries for setting the discovery of Formosa at a much too recent date he made the error which must have motivated their statements.

Now that we have established the main fact, we find that there is a great deal of supplementary proof to corroborate it....

The Chinese text says that the Lieou-kieou country has a great many mountains and caves, that it is governed by a large number of petty kings, that you find wolves, tigers and bears there, and that the customs of the natives in the northern part of the land were quite different from those of the inhabitants [112] in the central and southern portions of the kingdom. Such statements are perfectly applicable to such a large island as Formosa, but they do not fit the Lieou-kieou group, where the largest island is scarcely eighteen leagues long by eight leagues wide; it does not have a single wild animal, and the only mountain is in the north. This is according to the description

which Father Furet gave us recently.

The account of Ma-touan-lin adds that the inhabitants of the country spoke a language which they could not understand. Again this applies to Formosa, because its Oceanic population had never dealt with the Chinese, but it would not fit the people of the Lieou-kieou, whose language is simply a Japanese dialect. Then the Japanese annals show that these islanders had been on intimate terms with the empire since ancient times, since the mother of the famous first mikado, Zin-mou, came from there.

Finally Ma-touan-lin's account accuses the inhabitants of this island of being cannibals, and this has never been imputed to the Lou-tchouans or to the Japanese populations. Then Klaproth mentions this very fact in his account of Formosa. He says that "Rightly or wrongly, the Chinese accuse the Formosans of being anthropophagous; they claim that the villagers gather to [113] feast upon the men who were slain in battle and even on the invalids, old men and orphans."

Ma-touan-lin says about the Lieou-kieou: "After a combat the dead are piled up together, and people gather to eat them. When a person dies in the southern part of the kingdom, the inhabitants of the village and the surrounding countryside collect to devour him."

On the contrary, when Klaproth describes the residents of the real Lieou-kieou islands, he writes: "The inhabitants are like the Chinese in venerating the dead. They

burn the bodies and preserve the ashes."

This contradiction, and several other similar ones, did not escape the scholar, but they did not show him the whole truth. He merely deleted from Ma-touan-lin's article about the Lieou-kieou the passages which were absolutely incompatible with the ethnography of these islands.

It is equally interesting to compare several passages of this article of Ma-touan-lin with a description of Taï-ouan of Formosa which was published by Father du Halde in 1735.

Father du Halde writes: "Although the Formosan islanders are subject to the Chinese, they have preserved some traces of their former government. Each village selects four or five of the elders who are reputed to be very honest, [114] and they become the chiefs of the village.

Ma-touan-lin wrote:."There are four or five head chiefs who govern each center or village. The villages select their own chiefs."

Father du Halde says: "You are amazed at the speed of these islanders; they can outrun galloping horses."

Ma-touan-lin wrote: "The men in the kingdom can run extraordinarily fast." Father du Halde said: "The men wear a cylindrical hat, and over it they have an aigrette of chicken or pheasant feathers."

Ma-touan-lin wrote: "The men wear high hats which they adorn with a tuft of feathers."
Father du Halde said: "They put several strange floral or animal designs on their skin."
Ma-touan-lin wrote: "They use a needle and a special kind of ink to mark their skin with figures of insects and snakes."
Father du Halde, and then Klaproth said: "Like many of the inhabitants of the Indian islands, the Formosans behead their dead enemies and keep these trophies."
Ma-touan-lin wrote: "They pile skulls around the dwelling of their king, and [115] they believe that this constitues a glorious monument.
Father du Halde says: "When a young man has found a girl whom he wants to marry, he takes a musical instrument to her door, and he does this several days in a row. If the girl loves him, she goes outside to join her suitor. They make their plans themselves, and then tell their fathers and mothers about them."
Ma-touan-lin wrote: "When a boy and girl love each other, they decide to get married and then tell their parents."

This final characteristic is interesting because it is so different from the Japanese customs which are observed on the Lieou-kieou islands, and which resemble the Chinese fashion of having the parents arrange the match; frequently the young people have never met before the wedding in that land.

28: Hervey de Saint-Denys--112-115 S-4 (no date) 1874 Formosans-5
116, 114, 175

Someone may think that Father du Halde simply drew these details from the work of Ma-touan-lin, but I do not believe that this is the case. I think that Father du Halde gathered the data which was available at his time. But even if we should admit this supposition, it would even serve to stregthen the evidence of this scholarly Jesuit, for it would show that Father du Halde did as I have done, that is, he applied to Formosa some Chinese documents which were recorded under the title of Lieou-kieou.

It would be a simple matter to give more quotations [116] but it seems to me that I have given abundant proof that Tai-ouan or Formosa is indeed the land which the Chinese first visited in 605 or 606, and which had no further connection with the compatriots of Ma-touan-lin until the time of this writer. (1)

1. It is possible to raise the objection that Ma-touan-lin says that it took five days to go from the harbor of Y-ngan (Tchao-tcheou-fou) to the kingdom of Lieou-kieou by way of the Peng-hou islands, while that crossing can be done in a much shorter time today; but a vessel which is seeking its way is not like one following a definite course. Moreover, Ma-touan-lin himself says that at that time there was no communication with Lieou-kieou kingdom as no one had gone back there since 606; accordingly, the five days sailing is based on the amount of time which the expedition required in the seventh century.

We still have to explain a few obscurities and apparent contradictions which appear if you try to apply everything recorded by the Chinese writers, who came after Ma-touan-lin, to one country. Klaproth made this attempt.
In the seventh century, especially, there were envoys from Lieou-kieou at the Chinese

court, and they did not come from Formosa. But gradually we see that the identity of names makes it easy to get confused, and that the Chinese used the term Lieou-kieou for the whole group of islands formed by the chain of submarine mountains that extends from Fo-kien to Japan (Formosa, the Madjikosima and [117] the Lieou-kieou). This was true until the 16th century when they turned their attention on Formosa again, and finally gave it a special name; at first they called it Ki-long, from the Dutch port, and then Tai-ouan (the high peaks), its present name; this comes from the capital and the mountain at whose foot it lies.

Here are the proofs for this statement:

Ma-touan-lin explains why the name Lieou-kieou was applied to the country, which the expedition visited in 606. He declares that the Japanese embassy happened to be at the Chinese court at the time. When people asked them about the islands lying between Japan and China, they spoke of Riou-kiou (Chinese Lieou-kieou) islands, with which the Japanese had dealt for centuries. The Chinese evidently thought that the island which they had discovered was a prolongation of the archipelago to which the Japanese had referred, and so they use this collective name, which caused a number of errors.

Now let us look at the large Chinese geography Tai-tsing-y-tong-tchi, which was published during the last century. In the article entitled Lieou-kieou, it states that the central part of the island, where the expedition landed in 606, is in the same latitude

[118] as the Mei-ling chain of mountains, which separates the Chinese provinces of Fo-kien and Kouang-tong; this is true of Formosa. Then this same geography says that on the whole the Lieou-kieou islands lie east of the Chinese territories of Tchang-tcheou, Tsiouen-tcheou-Hing-tcheou and Fou-tcheou. If we look at good map, it is easy to see that Formosa is east of Tchang and Tsiouen-tcheou, while you find the Lieou-kieou islands east of Hing and Fou-tcheou.

Finally the Tai-tsing-y-tong-tchi geography observes that formerly there were two kingdom of Lieou-kieou, and that they were inhabited by barbarians of different colors; one group was similar to the Japanese, while the other was a coppery red in hue. This ethnographic indication shows the division between the yellow race of the modern Lieou-kieou islands and the Oceanic race of Formosa.

Let us add that on all the Chinese maps an islet placed south of Formosa is still called little Lieou-kieou (siao Lieou-kieou), and Klaproth himself had to mention the fact that Formosa was called big Lieou-kieou (ta Lieou-kieou) on a Chinese map of the sixteenth century, which he used to make his 25th picture of Tableaux historiques de l'-Asie. So there was a large and a small Lieou-kieou at least, in addition to the real Lieou-kieou, and [119] these two facts tally with each other....

We may accept these facts as proved:

1. Klaproth was wrong in believing that the names Fan and Man-ti were terms

which the Chinese applied particularly to the inhabitants of Formosa; they [120] were generic names for all the foreigners from the south.

2. It would be wrong to think that the Chinese had no term whatsoever to designate the island from the 5th to the 12th century.

3. The Chinese paid their first visit to Formosa in 605. They made an expedition to it the next year, and in Ma-touan-lin's description of it he refers to the island as Lieou-kieou.

4. During Ma-touan-lin's lifetime, no other Chinese expedition went to the country of Lieou-kieou and no embassy came from there. So Formosa was the only Lieou-kieou island which was known to the Chinese; we cannot tell exactly when they discovered the real Lieou-kieou islands, but we believe that it was not before the middle of the thirteenth century.

5. Gradually the Chinese made the acquaintance of the Madjikosima and Lieou-kieou archipelagoes, which lie in the direction of Japan, but for a long time this did not influence them to look for the new name. They included all of these islands under the same name until the 16th century, when they gave a special name to Formosa. [121]

6. Accordingly, all Chinese documents which referred to Lieou-kieou before the 13th century may be applied to Formosa.

29: Hervey de Saint-Denys--435-441 S-4 (no date) 1875 Formosans-1-7
116, 175

The review of the meeting of the Société asiatique, which was held on November 13, 1874, appeared in the Journal asiatique of last December, and it contained this note:

"In his article on Formosa [EJ: this article is source 28: Hervey de Saint Denys.] (Journal asiatique, August-September issue, 1874, p.119), M. d'Hervey de Saint-Denys expressed regret at not having been able to consult the Taï-tsing y-tong-tchi geography on the ancient history of Taï-ouan, and he added that the two leaves which he needed to examine were missing from the copy which is in the National Library. M. Specht says that the National Library has two copies of this Chinese work, one of which, catalogued as number 289, is a second edition which was published in 1764, and has several missing pages at the beginning of the kiouen 337; but the second copy, which is a first edition and appeared in 1744, has this article in the kiouen 271, column 21." [436]

I was busy teaching and working on the notes for my translation of Ma-touan-lin, which is is being published, and so I did not have time to refer to this at once; but I have just read these pages, and I am most grateful to M. Specht for having called my attention to the fact that there was a second copy of the Tai-tsing y-tong-tchi geography in the National Library. The historic section of the article on Tai-ouan is too brief to be of value, but a geographic appendix confirms what I have stated about the identity of Formosa with the country which the Chinese called Lieou-Kieou for a long time.

29: Hervey de Saint-Denys--435-441 S-4 (no date) 1875 Formosans-2
116, 175

After describing Formosa as a department of the province of Fo-kien, and bearing the name Tai-ouan-fou, the Tai-tsing y-tong-tchi geography mentions the Peng-hou islands (the Pescadores) which belong to it, and says this:

"Peng-hou Islands. They lie in the sea, west of the district of Tai-ouan; and across from these islands, but still toward the west, is the place called Kin-men-so, which belongs to Tsiouen-tcheou (Fo-kien). In the Histoire des Song (1) we read that the kingdom

1. The Song dynasty reigned over China from 960 to 1279.

of Lieou-kieou is east of Tsiouen-tcheou, and that you can see the fires and smoke from the islands of Peng-hou. [437] The Histoire des Youen (2) says this: the Peng-hou

2. The Youen dynasty reigned from 1260 to 1279 with the Songs, and then alone from 1279 to 1368.

islands, which are across from the Lieou-kieou, are in the limits of the four territories of Tchang-tcheou, Tsiouen-tcheou, Hing-tcheou and Foutcheou. On the farther side of

the Peng-hou islands there is a current (or there are currents) which becomes (become) very strong as you approach the shores of Lieou-kieou. It is (or they are) called Lo-tsi (which throws at the coast). The waters drop rapidly and do not come back, so it is a very dangerous region. During the twenty-eighth year of tchi-youen (1293), Ou-tchi-teou, who was a native of Fo-kien, said that if they wanted to get possession of Lieou-kieou, they would have to get a foothold on the Peng-hou islands and send vessels (full of troops) from there. The next year (1294) an expedition set out from Ting-tcheou to do this. It failed, and the boats returned to the anchorage of the Peng-hou. According to an old geography (continues the Taï-tsing y-tong-tchi), the main island contains mountains which have a gentle slope and fertile valleys. It measures about fifty li from east to west and about twenty li from north to south. It is surrounded by a large number of islets. If you sail east from the city of Tsiouen-tcheou, you can reach it in three days."

[438] Every line of this document is important, but let us examine the date of publication first. Formosa is no longer the foreign land which the Chinese had formerly included in the collective term of the Lieou-kieou archipelago. The island has become the Chinese department of Tai-ouan, which contains a district of the same name, both of which are named for the very modern city of Taï-ouan which is the capital of the island. When it wants to give the location of the Peng-hou islands, the Taï-tsing y-tong-tchi

begins by stating that they are west of the Taï-ouan district, in the direction of Kin-men (the gates of gold), a harbor which is south and in the limits of Tsiouen-tcheou. After giving the contemporary place names, the geography of Tsin quotes two old books which tell some interesting information about the Peng-hou islands, and in both of these statements Formosa is naturally called Lieou-kieou, just as a Latin author would refer to Portugal as Lusitania.

Could anything be clearer and more precise:

He has just said that "the Peng-hou islands are west of Tai-ouan, and farther west is the Chinse city of Tsiouen-tcheou;" then he gives it another form by adding: "The Song history says that the kingdom of Lieou-kieou is east of Tsiouen-tcheou, and that you can see the fires and smoke from various places on the Peng-hou islands." And then he goes on to say that [439] the same fact is recorded in the History of the Youen, where it is written that "The Peng-hou islands, which are also across from Lieou-kieou, (3) are

3. The space occupied by the Peng-hou islands is much smaller than the History of the Youen assumes. They are all between lat. 23° and 24°, whereas Formosa extends from lat. 22° to 25° and beyond, so on the eastern side they cannot face any other country

than Formosa (Lieou-kieou). Moreover, these waters do not have any other islands or islets with which you could confuse them.

within the coastal limits of the four territories of Tchang-tcheou, Tsiouen-tcheou, Hing-tcheou and Fou-tcheou, that is in the canal of Fo-kien and Formosa."

That ought to be sufficient proof to dispel any doubts. However, the Tai-tsing y-tong-tchi does not stop there, and he becomes even more explicit; he speaks of the violent currents which you find between the Peng-hou islands and the shores of Lieou-kieou (Formosa), and he says that these currents are called Lo-tsi; Chinese sailors still use that name for them today. (4)

4. I obtained this decisive evidence from Baron de Méritens, who was formerly head of the southern customs for the Chinese Government; he lived for twelve years in Fou-tcheou, which is the capital of Fo-kien, and he made several trips from the Chinese coasts to Formosa, passing by way of the Peng-hou islands. For further information about the nature of the currents, which the Chinese call lo-tsi, and which cast vessels on the Formosan coast, see the Nautical Instructions, which were published by the Navy Department, no. 426, p. 21, 24, etc.

29: Hervey de Saint-Denys--435-441 S-4 (no date) 1875 Formosans-6
116, 175

[440] He depicts the Chinese fleet which gathered on the Peng-hou islands to attempt a landing on the neighboring shores, and then its return to the same anchorage after the failure of the expedition. Finally he tells how long it took to make the trip in the Chinese vessels: "If you sail from Tsiouen-tcheou, you can reach the Peng-hou islands in three days." You could not have a better confirmation of what Ma-touan-lin tells in his article on the Lieou-kieou kingdom, and in his description of the Chinese expedition of 606, I have taken the essential facts about this from my memoire: Sur Formose et sur les iles appelées en chinois Lieou-kieou. [EJ: source 28: Hervey de Saint-Denys.]

The Chinese expedition of 606 left Y-ngan and sailed three days before it arrived at Youen-pei (one of the Peng-hou islands). Y-ngan, which is now called Tsiouen-tcheou-fou, is about the same distance from the Peng-hou islands as Tsiouen-tcheou (about forty myriameters, as the crow flies), while the distance from the Peng-hou islands to the real Lieou-kieou islands is four times as great. If it takes a ship three days to go from Y-ngan or Tsiouen-tcheou to the Peng-hou islands, it could not go from the Peng-hou to the real Lieou-kieou in less than ten or twelve days; yet Ma-touan-lin says definitely that 1) they went from Tsiouen-tcheou to Lieou-kieou in five days, and that 2) the expedition of 606 spent one day crossing from the Youen-pei (Peng-hou islands) anchorage [441] to the place where the Chinese soldiers landed on the Lieou-kieou soil.

29: Hervey de Saint-Denys--435-441 S-4 (no date) 1875 Formosans-7
116, 175

I have already presented this last point in my memoir, but the fragment of the Tai-tsing y-tong-tchi that I have just been reading stresses this fact, and then even a glance at the maps of the Chinese Sea will show you that no vessel from the Tsiouen-tcheou territory could ever have sailed toward the Peng-hou islands to go to the ones which are called the Lieou-kieou today.

This is the information which I found in the Tai-tsing y-tong-tchi. But I also consulted the special Fo-kien geography which is entitled Fo-kien tong-tchi. And the expedition of 606 against Lieou-kieou, which was undertaken at the command of Emperor Yang-ti and was under the orders of Tchin-ling, is described in the historical notice about Tai-ouan (K. 64, folio 1, verso), with the additional information that the fleet passed little Lieou-kieou (siao Lieou-kieou), and that you could still see on Kao-hoa the vestiges of the brick and stone constructions which the Chinese soldiers of the expeditionary force built; since they could not take possession of Formosa, they evidently tried to establish a naval base in this little harbor.

45:Stanford U. S-4, 5 1956 AD1 Formosa AD1

PART II

HISTORICAL SETTING

I. EARLY RELATIONS WITH MAINLAND CHINA

175 Because they possess no written language, the aboriginal people of Formosa cannot account for their own emergence on the island. Although the island of Formosa must have been known to the Chinese from time immemorial (its mountains are discernible on a clear day and its coast lies less than a day's sail from the Mainland), ancient Chinese chronicles contain few references to the island. Obscurity is heightened by the confusion of Formosa with the Ryu-kyu islands in ancient times. Most historians date the known history of Formosa from 605 when the Chinese Emperor Sui-Yang Ti dispatched the first official mission to assert his authority over the island.[1] The direction taken by the voyagers and their description of the life of early inhabitants leave no doubt that Formosa was the island on which the imperial

1. Lien Heng, T'aiwan t'ung-shih [General History of Taiwan], Shanghai Commercial Press, 2nd ed., 1936, Vol. I, p. 2.

175 emissaries landed. Since then Formosa has been the destination of a number of similar expeditions, but none appear to have succeeded in subduing the hostile natives. During the reign of Kublai Khan (1263-1294), the first civil administration under a local official, given the rank of Hsü-chien-ssu [Inspector], was established in the neighboring Pescadores.[2] Despite the fact that Formosa and the Ryu-Kyu islands were discovered to be separate and distinct, the name Ryu-Kyu or Liu-ch'iu was still used for Formosa.[3]

During the Ming Dynasty (1368-1644), Formosa emerged as a retreat for Japanese and Chinese outlaws and malcontents. The Chinese rovers settled in the southwest region around the present city of Tainan; their Japanese counterparts made Keelung their headquarters. With superior armanent these men of the high seas had no difficulty in ousting the aborigines from the coastal areas. Combining piracy with legitimate trade, they grew in strength and

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2. Ibid., p. 6.

3. T'ai-wan Sheng T'ung-chih-kao [Gazeteer of Taiwan Province], Taiwan Sheng wen-hsien wei-yüan-hui [Historical Research Commission of Taiwan Province], Taipei, 1950-52, Premier Series, Book II, p. 8.

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175 wealth. They became so formidable that the Ming emperor tried to pacify them by offering them government commissions. One such chief who diverted his activities to government service was Cheng Chih-lung, the father of Cheng Ch'eng-kung (Koxinga), whose regime as ruler of Formosa lasted from 1662 to 1683.

II. UNDER THE DUTCH, 1623-1661

The Portuguese were the pioneers among Europeans exploring Far Eastern waters. Their permanent settlement was established at Macao in 1557. While trading along the coast of China and with Japan, they often sighted the island of Formosa, and despite the fact that they bestowed upon it the western name it bears, they never attempted to establish a settlement there.[4] Toward the end of the sixteenth century, the Dutch began to dispute the monopoly of commerce held by the Portuguese. However, repeated Dutch expeditions failed to dislodge the Portuguese in Macao. Encountering a typhoon during one of those unsuccessful missions, the Dutch fleet ran for shelter to the Pescadores. Thus acquainted with the islands, they later seized them and used them as a base from which

4. James W. Davidson, Formosa, Past and Present, London and New York, Macmillan & Co., 1903, p. 10.

175 to raid the China coast and disrupt commerce between China, Japan, and the Philippines. The interference with regular trade had become so serious by 1624 that the Chinese were compelled to offer a treaty which gave to the Dutch certain commercial privileges with China if they would agree to leave the Pescadores and occupy a trading post on Formosa.[5]

In Formosa, the Dutch acquired a strategic location, from which Spanish commerce between Manila and China and Portuguese commerce between Macao and Japan could be made so precarious by constant attacks that much of it would be thrown into the hands of the Dutch, and thus Dutch trade with China and Japan could continue without interruption.[6] For defense, two forts were constructed, one called Fort Zelandia, at the entrance of Anping harbor, and another further inland, called Fort Provintia.[7]

Fearing the loss of the Chinese market and sensing the potential threat to the Philippines, the Spaniards seized the port of

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5. T'ai-wan Sheng Cheng-fu Hsin-Wen Ch'u [Information Bureau, Taipei Provincial Government of Taiwan], T'ai-wan Hsin-chih [A New Account of Taiwan], Taipei, 1903, p. 3.

6. James W. Davidson, op. cit., p. 13.

7. Fort Zelandia was located within the present confines of Anping, and Fort Provintia in present Tainan.

45:Stanford U. S-4, 5 1956 AD1 Formosa AD1

175 Keelung in northern Formosa in 1626 and later extended their domain to Tamsui. Tamsui, the port nearest the China Mainland, was already inhabited by a large number of Chinese merchants. The Dutch had no wish to tolerate the presence of a rival, but they were involved with England in a bitter struggle. For fifteen years they made no serious attempt to rid themselves of the Spanish.[8] In 1639, part of the Spanish garrison was transferred from northern Formosa to the Philippines to fight rebellious tribesmen in Jolo and Mindanao, and the fort at Tamsui was demolished.[9] Seizing this opportunity, the Dutch captured Northern Formosa after a brief seige in June 1653.

With the entire island under their control, Dutch trade flourished. Although enormous profits were derived from commerce, the Council of the Dutch East Indies Company also tried to extract as much wealth as possible from the island. The Chinese inhabitants, who numbered more than 50,000, were required to pay a head tax which yielded 200,000 guilders annually.[10] Heavy duties were levied on rice

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8. Jose M. Alvarez, Formosa, Geografica E Historicamente Considerada, Barcelona, 1930, Vol. II, p. 80.

9. Ibid., p. 81.

10. Frederick Coyett; Verwaerloosde Formosa, Amsterdam, 1675, p. 15.

175 and sugar, the two staple products of the island. There was also a hunting tax, and a number of other taxes; "even the unfortunate fishermen... [were] obliged to give to the government a portion of their catch."[11] Resentment among the Chinese was high. In 1656 there was a revolt led by Kuo Huai, also known as Fayet, but he was defeated in fourteen days and over 4,000 Chinese were slaughtered.[12] After this incident the Dutch redoubled their oppression. On the least pretext Chinese settlers were thrown into prison and cruelly tortured. This mistreatment led the Chinese to look to their countrymen on the Mainland for deliverance.

As previously mentioned, Cheng Chih-lung, one of the former leaders of the Chinese settlement in Formosa, had entered the service of the Ming emperor. In 1644, Peking was captured by the Manchus, who established the Ch'ing dynasty (1644-1912). Loyal supporters of the Ming Dynasty (1368-1644) attempted to oppose the Manchu invasion in South China, and Cheng was given the command of all loyalist forces. Cheng Chih-lung, having received a lucrative offer from the Manchus, surrendered to the invaders in 1646. He was succeeded by

11. J. W. Davidson, op. cit., p. 24.
12. Lien Heng, op. cit., vol. i, p. 13.

175 his son, Cheng Ch'eng-kung, whom the Dutch named Koxinga,[13] one of the most extraordinary characters ever to appear in China.[14] The young Cheng was born of a Japanese mother and was educated at the Academy of Learning at Nanking. When his father was taken to Peking by the Ch'ing forces, he dramatically discarded his scholastic robe in the Temple of Confucius and vowed to continue armed opposition. Establishing his headquarters at Amoy and Quemoy, he gathered around him many able Ming supporters. He waged vigorous campaigns against the coastal provinces, retook a number of cities in Fukien, Chekiang, and Kwangtung provinces, and later advanced on Nanking. Although he suffered heavy losses before the wall of the old capital, his military powers were feared by the Manchus.

Unable to subdue Cheng Ch'eng-kung by military means, the Manchus resorted to the

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13. When presented to the court at the age of twenty-two, he so impressed the Emperor that he was given the imperial family name, a signal honor. Ever since, the young Cheng has been hailed as Kuo-hsing-yeh or Lord of the Imperial Surname, from which the Dutch derived the name Koxinga and the Spanish Cotsen.

14. Davidson, op. cit., p. 31.

•175 "scorched earth" policy. By an imperial mandate, all the people from Kwangtung to Shantung who lived within ten or fifteen miles of the sea were ordered to demolish their homes and to move inland. Along the coast forts were erected every three miles, and each was garrisoned by one hundred men. No unauthorized person was allowed to pass into the restricted zone, so that Cheng's supplies would be completely cut off.[15] Deprived of provisions, Cheng Ch'eng-kung was compelled to look to other quarters for maintenance. The fertile island of Formosa, which his father once controlled, came to the attention of Cheng Ch'eng-kung. Preparations were made to establish a foothold across the strait.

The concentration of military power in Amoy aroused the apprehension of the Dutch authorities on Formosa. In 1660 the Dutch governor, Frederick Coyett, appealed to the Dutch East Indies Company at Batavia for help. Twelve ships were dispatched to Formosa, but the commander, Admiral Jan Van der Laan, had no respect for the military power of the Chinese. Leaving four of his ships in Formosa, he returned with the remainder of his fleet to Batavia and accused Governor Coyett of

15. Lien Heng, op. cit., p. 23.

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175 cowardice.[16] On April 24, 1661, twenty days after the departure of the Dutch fleet, Cheng Ch'eng-kung appeared in the Pescadores with 25,000 of his best troops and entered Anping harbor five days later.[17] All communications between the forts of Zelandia and Provintia were immediately intercepted. After some ineffectual resistance, Fort Provintia and the deputy-governor who commanded it surrendered on May 4, 1661, and Fort Zelandia on February 1, 1662.

III. CHENG CH'ENG-KUNG'S KINGDOM 1662-1683

Leaving his son Cheng Ching in control of Amoy and vicinity, Cheng Ch'eng-kung to whom the last Ming emperor had given the title of the Prince of Yen Ping, moved his court to Formosa. The village of Sakkam where Fort Provintia was located was renamed Sheng-tien-fu[18] and made the capital of the island. Chinese laws, customs, and forms of government were introduced.[19] The pledge to regain the lost territory of the old dynasty was renewed, and faithful Ming adherents were placed in charge of the administrative departments.

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16. Davidson, op. cit., p. 35.

17. T'ai-wan Sheng T'ung-chih-kao, op. cit., Vol. IX, 1, pp. 174-204.

18. Present-day Tainan.

19. All traces of the Dutch occupation have been obliterated. The Dutch had taught the

[see following page]

45:Stanford U. S-4, 5 1956 AD1 Formosa
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•175 To acquaint himself with the conditions of his new domain, Cheng Ch'eng-kung conducted an inspection tour of northern Formosa. Having early suffered privation of food, Cheng devoted his first attention to the development of agriculture. Plots of land were allotted to his soldiers and liberal treatment was accorded to migrants from the Mainland, who were given land to cultivate exempt from taxation for three years. In return, they were obliged to undergo military training and would be expected to join the army should the necessity arise.[20] New schools, new roads, and markets were built, and prosperous settlements sprang up along the coast.

Encouraged by his triumph in Formosa, Cheng Ch'eng-kung aspired to add the Philippines to his kingdom. He asked an Italian missionary, Vittorio Riccio, to take a letter to Manila, demanding submission. When the ultimatum was delivered, the Spaniards

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19. [continued] natives to write their own language in Roman characters. Some land contracts written in Romanized native languages, which are on exhibit in the Taipei public museum, form the only Dutch relics. No Dutch words exist in the savage dialects. J. W. Davidson, op. cit., p. 48.

20. Lien Heng, op. cit. Vol. 1, p. 22.

•175 massacred very nearly all of the Chinese in the Philippines.[21] Only a handful escaped in small boats. Cheng Ch'eng-kung was infuriated by their reports and immediately launched preparations for an expedition of vengeance. Another landmark in history might have been created[22] had not death abruptly put an end to his ambition.

Cheng Ch'eng-kung, who died at the age of thirty-nine, was a strict disciplinarian. For some misconduct he is said to have ordered the execution of his own son, whose life was saved only by his father's sudden death.[23] Cheng Ching, the son, strengthened defenses of the island, established an effective administration, revived friendly relations with foreign powers, and attempted to invade the Mainland. At last, after a number of battles in the three coastal provinces of Fukien,

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21. "No less than 24,000 Chinese were killed in cold blood." Japan in the Beginning of the 20th Century, the Japanese government, Tokyo, 1904, p. 779.

22. The Spanish forces in Manila were not superior in strength to those the Dutch had possessed in Formosa, and it is not unlikely that Koxinga would have had like success, had he landed his party in the Philippines. Davidson, op. cit., p. 52.

23. Ibid.

•175 Chekiang, and Kwangtung, the Manchus, aided by the Dutch fleet, succeeded in ousting Cheng Ching from Amoy in 1680. He died in Formosa in 1681. Taking advantage of a family quarrel over the succession, the Manchus captured the Pescadores in July 1683. Cheng Ching's son surrendered in September.

IV. AN INTEGRAL PART OF THE CHINESE EMPIRE 1683-1895

In 1683, when the whole island came under Manchu rule, it was made part of Fukien Province. The capital was renamed Taiwanfu, and the island, Taiwan.[24] For administrative purposes the island was divided into three hsien (districts), namely, Taiwan, Fengshan and Chulo, each under a civil magistrate. The magistrates were under the authority of the prefect of Taiwanfu, who in turn was subordinate to the Taotai, or Imperial Commissioner, at Amoy and the Governor of Fukien Province. A garrison of 8,000 men, later increased to 14,000, was stationed in Formosa and the Pescadores. In view of the independent character of the populace and the stubborn opposition offered to the Manchu regime, the

24. Under the Dutch, the name of Taiwan applied to the region surrounding the bay. The island was always referred to by most Dutch writers as Formosa.

175 Ch'ing emperors refrained from introducing drastic government measures toward the reorganization or the development of the island. Nevertheless, there were a number of rebellions during the two hundred and twelve years of Manchu rule. Some had the objective of the restoration of the Ming Dynasty and others were uprisings against misrule and excessive taxation.

V. POPULAR REBELLIONS

The most notable insurrections against the authorities occurred in 1722 and 1787. The leader of one such insurrection was Chu I-kuei, who was of humble origin and made his living by raising ducks. Claiming to be a descendant of the dethroned Ming dynasty and rallying around him a number of Ming loyalists, he rose in 1722 against the Manchu magistrate at Fengshan who had executed two hundred persons for violating the new law instituted to preserve the camphor trees. The revolt soon spread to other parts of the island. In three months the rebels captured both Taiwanfu and Chulo. The government officers fled to Amoy. When Chu I-kuei was crowned Chung-hsing Wang, or Restoration King, the Manchu court was thoroughly alarmed. A large detachment,

175 dispatched from Amoy and Namoy to Formosa to quench the rebellion, took two years to restore complete order.[25]

Another important disturbance was the insurrection engineered by a secret society called T'ien-ti Hui, established to overthrow the Manchu rule in China. It is said that it was originally organized by Cheng Ch'eng-kung himself.[26] Lin Shuang-wen was the head of T'ien-ti Hui in northern Formosa and Chuang Ta-t'ien was in charge of the same organization in the southern part of the island.

In 1786, the magistrate at Changhua, alarmed at the growing influence of the society, arrested a few of its members and put them to death. Protesting against their prosecution, Lin Shuang-wen raised the standard of rebellion and killed the local governor. In due course, Chulo and Hsiuchu were captured by the rebels. Members of the society in southern Formosa, led by Chuang Ta-t'ien, drove out the government forces from Fengshan. With the exception of Taiwanfu, the whole island fell under the control of the rebels. Four thousand

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25. T'ai-wan Sheng T'ung-chi Kao, op. cit., p. 80.

26. Hsiao I-shan, "Tien-ti Hui Kao" [Study of Tienti Hui] in T'ai-wan Wen-hua Lun-chi [Collection of essays on the Culture of Formosa], Taipei, 1954, pp. 215-24.

175 troops from Kwangtung, three thousand from Chekiang, and one thousand Manchu regulars were rushed to relieve the seige on Taiwanfu, but were unable to stop the rebellion. The number of rebels gradually swelled to over one hundred thousand.[27] Emperor Ch'ien Lung (1736-1796), realizing the seriousness of the situation, called for reinforcements from the provinces of Szechwan, Hunan, Kwangtung, and Kweichow and placed these troops under the command of his ablest Manchu general, Fu-k'ang-an. After nine months of battling, the rebels were driven from the settled districts and the leaders were captured and put to death.[28]

Besides the numerous political uprisings, there were also feuds between emigrants from Fukien, the Haklos, and those from Kwangtung, the Hakkas. Among the settlers from Fukien Province there were rivalries between those who came from Ch'üanchou and those who came from Chang-chou districts. As the Chinese colonists spread toward the interior of the island, they also came into conflict with the aborigines, with attendant murders and reprisals. In this connection, mention should

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27. T'ai-wan Sheng T'ung-chi Kao, op. cit., p. 81.

28. In memory of the victory of the Imperial forces, the city Chulo was renamed Chia-i, meaning "commendable loyalty."

.175 be made of the saintly figure of Wu Feng. A native of Chiayi, Wu Feng was a learned and respected man and was versed in the aboriginal languages. He went to live with the tribesmen as official interpreter and tried to persuade them to discard the barbarous practice of headhunting. Failing in his efforts and animated by a spirit of sacrifice, We Feng, at the age of 71, voluntarily made himself a victim. The aborigines were deeply distrubed when they discovered that they had killed their beloved friend, and they henceforth gave up headhunting. In commemoration of his martyrdom, which occurred on August 10, 1769, Wu Feng was deified as the god of Mount Ali. Temples were erected to perpetuate his memory, and he is revered and honored by the people on Formosa today.

IX. PROGRESSIVE POLICY UNDER LIU MING-CH'UAN

175 The success of the Chinese defense in warding off the French attack[35] owed much to the leadership of the new governor, Liu Ming-ch'uan. Liu, a good soldier and an able administrator, had been transferred from Fukien Province, arriving at his new post only a few days before the commencement of hostilities. In 1885 Formosa was formally made an independent province and divided into four fu (prefectures), and eleven hsien (districts). The prefectures were: Taiwan, Taipei, Tainan, and Taitung; the districts were: Changhua, Taiwan (Taichung), Miaoli, Yunlin, Tamsui, Yilan, Hsinchu, Anping, Chiayi, Fengshan, and Hengchun.

Taichung was chosen as the future capital of the province and named Taiwanfu, while the former Taiwanfu, capital of the island since the Dutch period, was renamed Tainanfu.

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35. "The campaign was unique in that the foreign forces were not always the victors, and that France, one of the greatest military powers in the world, was forced to admit that the actual results of the campaign frequently failed to correspond with the carefully laid plans, that the anticipated victories, in at least two instances, were victories of China -- and that altogether, from a military standpoint, the war was a failure." Davidson, op. cit., p. 220.

•176 Pending the construction of the new capital city, Taipei was made the temporary capital, and so it has remained to the present day.

Governor Liu applied himself to the strengthening of the island defense and the improvement of communications. Keelung was developed into a modern harbor. A railway linking Keelung with Taipei, later extended to Hsinchu, was constructed. Telegraph lines joined Taipei with Tainan and Kaohsiung, uniting the north and south. Cables were laid between Anping and the Pescadores and between Tamsui and Foochow, joining Formosa to the world's telegraphic system. Work on several highways was begun, and streets were paved inside the city wall of Taipei. To introduce jinrickshas, the government ran them at its own expense for some time and then turned them over to the coolies.[36] The government also introduced modern street lighting.

Reconstruction work imposed a heavy financial burden on the newly instituted province. Export duty on sugar, in addition to that on tea and camphor, was levied. New tax on riceland was collected. Camphor was again declared

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36. Davidson, op. cit., p. 280.

176 a government monopoly in 1886. Opposition both from the people and foreign traders became very marked. In June 1891, Liu Ming-ch'uan retired. His successor, trying by extensive economy to win popularity among the islanders, made no effort to carry out Liu's progressive program. Camphor monopoly was again abolished and coal mines which had been operated by the government were closed.

War broke out between China and Japan over Korea in July 1894. China was defeated, and forced to accept the Treaty of Shimonoseki in April 1895. The treaty provided for the cession to Japan of Formosa and the Pescadores, and was bitterly resented by local Chinese. A deputation of prominent residents was sent to Peking, presenting protests to the Emperor. When their protests proved of no avail, the Formosans declared the island an independent Republic. A local army of 50,000 men was raised to resist Japanese occupation. Dispatches were sent to foreign powers for recognition and support.[37] Because no outside aid was forthcoming, the new republic offered little resistance when the Japanese landed at San-tiao-chiao in May 1895 and advanced from Keelung to Taipei. T'ang Chin-sung, the president of the

37. Ibid.

175 Formosan republic, escaped to the Mainland. General Liu Yung-fu took up his work in southern Formosa and continued the organized opposition for another five months.

V. HALF CENTURY OF JAPANESE OCCUPATION (1896-1945)

Although the Japanese conquest of the island was completed early in 1896, underground movements to resist subjection to Japanese rule remained strong among the populace. Armed uprisings were frequent. "As fast as one band was broken up, new bands arose in other places, and both soldiers and police were wearied out without having apparently accomplished anything. The fact that occasionally peaceable inhabitants were mistaken for brigands and treated accordingly by punitive expeditions, finally led some of these people to turn brigands. Thus the end seemed as far off as ever."[38] During the first twenty years of Japanese occupation, 1895-1915, there were at least fourteen important revolts, all ruthlessly suppressed. As a result of indiscriminate slaughter following each rebellion, it has been

38. Yosaburo Takekoshi, Japanese Rule in Formosa, trans. by George Braithwaite, London, Longmans & Co., 1907, p. 4.

175 estimated that 650,000 Formosan Chinese lost their lives in the half century of Japanese rule.[39]

No less ruthless was the Japanese persecution of the aborigines. Since 1910 the Japanese have launched many campaigns to quash revolts and to drive away tribesmen from regions which the Japanese timber companies desired to exploit. However, despite their ruthless tactics,[40] the Japanese were unable to achieve their objective with complete success. As observed by a foreign missionary, "These courageous and liberty-loving people were the only group in the island who were not conquered by the Japanese arms."[41]

In addition to the revolutionary movement, since 1918 there has been agitation, mainly among students, for representative government and for the modification of harsh laws. Petitions for political reforms were presented to the Japanese Diet, but the liberal movement was soon suppressed by the Japanese police. Leaders were thrown into prison, and new restrictive measures were proclaimed.

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39. Li Chi-fei, Taiwan, Shanghai Commercial Press, 4th printing, 1947, pp. 110-11.

40. J. W. Ballatine, Formosa, A Problem for United States Foreign Policy, Washington, D.C. The Brookings Institution 1952, footnote, p. 32.

41. James Dickson, missionary in Formosa, in his pamphlet, Stranger than Fiction, quoted by Han Lih-wu, Taiwan Today, Taipei, Hwa Kuo Publishing Co., 1952, rev. ed., p. 41.

175 Although Japan did succeed in establishing order, the people had never been allowed any political freedom. In 1941, the Institute of Pacific Relations made a study of how the Chinese population lived under forty-five years of Japanese rule. The investigator, Mr. Andrew J. Grajdanzev, reported in 1942 in his book, Formosa Today:

> "In the Western world British policy in India evoked much criticism. Yet conditions in British India cannot even be compared with those in Formosa. The Indian people can organize; they use their own languages in middle schools and even in the universities; they publish their own newspapers and books in their own languages; they have their own political groups and parties, their voice and their criticisms are heard in the political assemblies; certain important industries of India are now in the hands of Indians. However limited all these rights and opportunities to use them may be in India, they are infinitely greater than those of the people of Formosa."[42]

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42. Andrew J. Grajdanzev, Formosa Today, New York, Institute of Pacific Relations, 1942, vi.

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A - ECONOMIC DEVELOPMENT UNDER THE JAPANESE

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Japan's exploitation of Formosa falls into two periods: (1) from 1895 to 1936; (2) from 1936 to 1945. During the first period, Formosa's economy was geared to the demands of the Japanese homeland. The island was developed to export sugar, rice, salt, and other primary products in exchange for Japanese manufactured goods and fertilizers. Japan took between 90-95 per cent of the exports and supplied 85-90 per cent of the island's imports.[43] To facilitate transportation, a network of excellent railroads and highways was constructed, and the harbors, especially those at Keelung and Kaohsiung, were modernized. Industries were owned and operated either by the government or by large Japanese corporations, with very little participation by the local people. Chinese workers were paid wages 50 per cent lower than those paid Japanese workers on a similar job.[44]

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43. Taiwan, A geographical Appreciation, compiled by the Dept. of Mining and Technical Survey, the Canadian Government, Ottawa, 1952, p. 15.

44. Grajdanzev, op. cit., p. 116.

175 During the second period Formosa became
185 the base for Japan's southward expansion. In 1936, Admiral Kobahashi was made the seventeenth Governor-General of Formosa. His appointment marked the return of military government.[45] In his first public speech, the Governor-General laid down a new two-point program for Formosa: cultural assimilation and industrial development.[46] An intensive campaign was launched to assimilate Formosan Chinese, who were encouraged to discard their own customs, religion, and language. The Japanese language was used in the schools. Chinese language newspapers were prohibited, and even banking had to be conducted in Japanese. Simultaneously the industrialization of the island was accelerated; mining and industrial enterprises were encouraged, and commercial crops such as cotton and ramie were raised. Machinery and raw materials were imported from Japan and other parts of the Japanese Empire in order to make the island self-sufficient industrially and to meet the demands of Japanese military efforts.

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45. The first seven governors-general in the period 1895-1919 were either admirals or generals. From 1919 to 1936 the governors-general were chosen from civilian officials. From 1936 on they were admirals.

46. Hideo Naitor, Taiwan- A Unique Colonial Record, 1937-38 Ed., Tokyo, Kokusai Nippon Kyokai, 1938, Ch. VI, pp. 53-54.

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B. FORMOSA'S ROLE IN THE SECOND WORLD WAR

176 With a view to the maximum utilization of the manpower in Formosa, the Japanese administration took a census of Formosa's population every five years, beginning in 1920. [162] The population totalled 5,872,084 in 1950; the number of males between the ages of 19 and 40 was estimated to be over 928,000.[47] The invasion of China by Japan was resumed in 1937, and war in the Pacific broke out in 1941. Despite their efforts at assimilation, the Japanese in Formosa exercised great caution in mobilizing the vast reservoir of manpower available in Formosa. Until 1942, no Formosan was allowed to own or harbor firearms of any kind. In June 1942, the Japanese imperial government called for voluntary military service. Japanese sources[48] claimed that hundreds of thousands of Formosan Chinese had registered, but because the Japanese would not trust the latter with arms, only a few hundred were accepted for training. It was not until February 1944 that the Japanese granted the first army commission to a Formosan Chinese, who was a sub-lieutenant in the Army medical service.

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47. Chen Cheng-hsiang, "Taiwan Chih Jen-kou" ["The Population of Taiwan"], Taiwan Yin-hang Chi Kan [Bank of Taiwan Quarterly], Vol. 4, No. 1, March 1951, p. 47-49.

48. Tokyo, Domei English broadcast, Jan. 11, 1943.

175 Except for a small contingent of aborigines who took part in jungle warfare in Southeast Asia, the Formosans were used principally in non-combat service. They worked with the labor corps, carrying supplies and serving the army as auxiliaries. On the Chinese Mainland, the Japanese did employ Formosan Chinese extensively in espionage work. Many of the latter took advantage of this opportunity to work as double-agents to extort money and to engage in other dangerous activities. "This led to bad blood between the islanders and the rigorousness with which the islanders were treated after the Chinese reoccupied the island in 1945."[49]

Formosa was of value to Japan in World War II because of its strategic position. It formed the training ground for the army and a base for trans-shipment to the war theaters in South China and Southeast Asia. Many new airfields were constructed from which surprise attacks on Manila and Hong Kong were launched. The naval base at Makung in the Pescadores was transferred to Kaohsiung, where the harbor had undergone extensive development. In 1943, when the war was growing in intensity, there was a plan to incorporate the Formosan

49. Ballantine, op. cit., pp. 45-46.

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175 Chinese and the tribesmen into a volunteer army. In 1944 the island of Formosa became the target of American planes. Although it was bypassed by American land forces, the damage inflicted by aerial bombings was so extensive that only 20 per cent of Formosa's industrial plants are said to have been in operation[50] when the Chinese assumed control after Japan's surrender in September 1945.

VI. CHINESE REOCCUPATION, 1945

On December 1, 1943, after the Cairo Conference, Roosevelt, Churchill, and President Chiang issued a declaration, subsequently accepted by Stalin, that "all the territory of Japan stolen from the Chinese, such as Manchuria,

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50. Of 42 sugar refineries, "only eight narrowly escaped from bombings by American Air Forces." "At the time of Japanese surrender in August 1945, generating capacity of the western power system was reduced to 32,000 kw out of total installed capacity of 308,000 kw as a result of allied air bombing." Industrial Enterprises of National Resources Commission in Taiwan, Nat'l Resources Comm., Taipei, 1951, Part I, chap. 6, p. 1 and cahp. 7, p. 2.

175 Formosa, and the Pescadores, shall be returned to the Republic of China." Accordingly, after the surrender of the Japanese in 1945, Formosa and the Pescadores were restored to China.

The first postwar Chinese governor of Formosa was General Chen Yi. The Nationalist Government was at that time engaged in a life-and-death struggle with the Communists. The resources of Formosa were diverted to carry on the warfare on the Mainland. As a result, little was done to encourage the rehabilitation work so badly needed in Formosa. The Formosan Chinese, who had rejoiced at reunion with their mother country, were disappointed because they had been denied the opportunity to participate in the control of confiscated Japanese enterprises. Friction arose between the Mainlanders and the islanders, culminating in a riot on February 28, 1947, in which many Mainlanders and native Formosans were killed.[51] Chen Yi was replaced by Dr. Wei Tao-ming, former Chinese Ambassador to the United States. When the Chinese Mainland war overrun by the Communists in 1949, the central government of the Republic of China moved to Formosa. General Chen Cheng,

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51. George Kerr, "Formosa's Return to China," Far Eastern Survey, Oct. 15, 1947, pp. 205-08; "Formosa: the March Massacre," Far Eastern Survey, Nov. 5, pp. 224-26.

175 Chiang Kai-shek's chief lieutenant, was appointed governor. The influx of a flood of refugees and retreating troops created many difficulties. Chen's most notable achievement during his brief tenure of office was the introduction of agrarian reforms, which limited the rental on farm land to 37 1/2 per cent, as an initial step toward the implementation of the "land-to-the-tiller" policy. Chen Cheng was elevated to the presidency of the Executive Yuan (prime minister) in December 1949. He was succeeded as governor by Dr. K. C. Wu, former mayor of Shanghai.

Under the Japanese, Formosa was divided into five provinces (Japanese, Chu) which were subdivided into fifty-one counties (Japanese, Gun) and five incorporated cities (Japanese, Shi) and three districts (Japanese, Cho). The districts administered undeveloped regions. Administrative power was invested in an autocratic governor-general directly appointed by the emperor of Japan. There was an advisory council of forty members appointed by the governor-general, who was its chairman. All high officials, civil or military, were Japanese and were appointed and dismissed at the recommendation of the governor-general. The people of Taiwan had no representative organization and no voice in the legislation or administration of the island.

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Following the revolt of February 28, 1947, the new Chinese provincial administration accepted seven Formosan Chinese as commissioners in a total of fifteen. When K. C. Wu became governor, another effort was made to broaden the participation of local Chinese in government. The provincial commission was enlarged to include seventeen Formosans in a total of twenty-three. Greater number of local people were employed in the civil service. By June 1950, of the total of 81,006 persons employed by the provincial government, Formosans accounted for 53,024.[52] On August 16, 1950 the administrative areas were revised from eight hsien and nine municipalities directly under the province to sixteen hsien and five municipalities. Steps were immediately taken to promote self government in the province. The popular election of the magistrates of the sixteen hsien, the mayors of the five municipalities, the members of the hsien and municipal councils, and the members of the Provincial council was held for the first time in July 1950 and completed in March 1951. A new election took place in 1953-54. Since that time the election law has been modified so that future elections will take place on the same day in all sections of Formosa.

52. Fred W. Riggs, Formosa under Chinese Nationalist Rule, New York, The Macmillan Company, 1952, p. 49.

000 same day in all sections of Formosa.

• 175 K. C. Wu resigned as governor in 1953 and was replaced by O. K. Yui. The term of Generalissimo Chiang as first president of the Republic of China under China's new constitution expired in May 1954. A second session of the First National Assembly was convened in Taipei in February 1954. Chiang was re-elected and Premier Chen Cheng was elected vice-president. Governor O. K. Yui succeeded Chen as president of the Executive Yuan. Yen Chia-kan was appointed governor and he is still in office today. Yen has served for many years on the Council for United States Aid (CUSA) of the Executive Yuan. It is expected that there will be closer Sino-American co-operation during his administration.

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Annex "A," Subparagraph 2a',
Political Background

HISTORICAL DEVELOPMENT OF THE GOVERNMENT

175 Formosa has been the habitat of primitive people and lawless Chinese and Japanese since the dawn of its recorded history. In the early part of the seventeenth century, the Dutch and the Spaniards founded trading posts in Formosa and establishing the first organized community on the island. After a rule of 38 years, the Dutch were forced from Formosa by a group of Chinese who were loyal to the fallen Ming Dynasty (1368-1644). Chinese governmental institutions modelled after those prevailing during the Ming period superseded the Dutch, until the Ming adherents were themselves ousted by the Manchu conquerors.

175 631 For two centuries, beginning in 1683, the island of Formosa was a fu or prefecture of the Chinese province of Fukien. In 1887, by imperial decree, it was made a separate province. The island was ceded to Japan in 1895 following the Sino-Japanese War. During the first twenty-five years of Japanese occupation the island was under military rule: the government was preoccupied with the quelling of revolts, and the governors-general were all military men. From 1919 to 1936 civilian officials were chosen as governors-general.

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115 631 After 1936, in line with Japan's southward expansion policy, the appointees were all admirals. The administrative system had undergone several revisions, the last revision occurring in November 1943.

631 Under the Japanese, Formosa was divided into five provinces (Japanese shu) and three districts (Japanese cho). The five provinces were located in the western part of the island, each placed under the supervision of a provincial governor. The eastern part of the island, which is mountainous and sparsely populated, formed two districts and the Penghu Islands (Pescadores) the third. The five provinces were subdivided into nine cities (Janapese shi) and forty-five counties (Japanese gun). The counties were further divided into towns (Japanese gai) and villages (Japanese sho). The administrative area of towns often embraced a considerable rural area. All areas not within a city or a town fell within the political boundary of a village. The two districts of eastern Formosa were subdivided into ten counties, and the counties into towns and villages.[1]

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1. Hideo Naito, Taiwan, a Unique Colonial Record, 1937-38 edition, Tokyo, Kokusai Nippon Kyokai, 1938, pp. 64-74.

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CHAPTER I

The Growth of Population

101 In the last century and again in modern times, Taiwan has repeatedly become the object of rivalries among some of the most powerful nations of the world. Though its history has been a succession of disruptive incidents resulting from such contacts, by its size alone the island scarcely seems to merit the covetous attention that outsiders have given to it. It is not large—only 250 miles from north to [131] south, and about 90 miles across at the widest point. The area that it covers is only 14,000 square miles, or slightly less than that of the Netherlands. There is little in the way of precious minerals that would arouse the desire of industrial countries. It offers no great area into which other peoples can expand. It has only its significant location in the path of transportation routes off the coast of China, and a territory potentially rich in agricultural output. While the former of these has had the greater attraction to foreign nations, it is the latter that actually yielded—perhaps exceeded—the full measure of wealth that was expected.

132 The topography and climate of Taiwan in the past have combined to make the island inhospitable to settlement. Being at the fringe of the tropics, the climate is hot and rainy, with marked changes of season and variations from one section to another. The greater part of its surface is not readily put to human use. Over half of this area consists of rugged mountains, rising steeply from a plain along the western coast and extending to the Pacific Ocean in the east. Heavy rainfall therefore runs off very quickly, creating torrential floods and occasional droughts in between. Large parts of the island are frequently swept by typhoons and shaken by earthquakes.

175 Within the span of recorded history, the difficulties presented by the physical environment never succeeded in discouraging human habitation. There were vague reports of residents there before A.D. 1000. When Taiwan first came officially to the attention of China, during the Ming dynasty, some tribes of primitives were known to be living near the western coast. Since the 16th century people swarmed to Taiwan from the relatively crowded parts of South China, and prospered there as agriculturists. The Japanese, who ruled the island from 1895 to 1945 and exploited its possibilities

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

175 more thoroughly, developed it into a highly profitable colonial enterprise.

There was some solution to each of its principal deterrents to settlement; but the deliberative and organized approach that many of these solutions required was adopted only by the Japanese. Under them production expanded and population increased at a rate that was prodigious, until the very success of these solutions created its own uncertainty—how and when the increase of people would cease.

Early Settlement in Taiwan

Piecing together the history of Taiwan's population before 1895 is a difficult task. It cannot be pursued very far, since relevant information is lacking. There is no reliable record to show even the number of people on the island before the 20th century. The dimensions of population growth, and its nature, must therefore be surmised from the reports of travelers, tradesmen and Western missionaries.

Prior to 1600 Taiwan was sparsely occupied by a few tribes of "savages," of origins that are unknown. The island at this time had attracted very few people from China, though its mountains were actually visible from the mainland, and its coast less than a full day's sail with the tide. Some Chinese and Japanese used it as a base for commerce and piracy against other shipping along the coast. The early tribes of non-Chinese ranged over most of the inhabited area, sometimes repelling visits by curious foreigners, sometimes warring among themselves. These were forebears of the present aborigines of the interior, the "real" Taiwanese.

At about this time the Dutch entered regular and quasi-legitimate trade in the Far East, and became interested in Taiwan as a base for this purpose. In 1622 they established a few fortified outposts on the island, commenced trading across the straits, and formed a limited government to minister to what they took to be the civil and religious needs of the native population. Their rule left nothing of lasting importance in Taiwan except the early chronicles that they faithfully kept of their experiences, which form the safest repository of information about contemporary events.

From such sources we are informed of a growing influx of migrants from the mainland. These were a special category of Chinese, the so-called Hakka people from Kwangtung Province. They were an ethnic minority in China, and as such they occasionally were targets

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of organized abuse. Following an outbreak of such disturbance in Kwangtung a considerable number went to Taiwan for refuge, where they were not easily persuaded to respect Dutch rule, and hence were not eagerly received. But even while Taiwan was nominally in the hands of a Western power, these migrants represented a substantial Chinese settlement there.

The Dutch were not able to remain very long in Taiwan. As an aftermath of a change of dynasties in China, the slow stream of Hakka people became engulfed in an organized movement of a defeated faction from South China. Led by the celebrated personage Cheng Ch'eng-kung, the newcomers drove out all Westerners from Taiwan in 1662, only to succumb after some years to control by the new Manchu regime in China. These events were followed by continuous migration of Chinese. Most of this flow started from Fukien Province, the new base for administration of Taiwan.

These new migrants soon outnumbered by far the previous settlers. Thereafter, the Chinese coming into Taiwan gradually spread out over the flat area most suitable to intensive farming. Little by little they displaced aborigines from the lowlands, and pushed them back into the mountains. Steady movement from the mainland raised the population of Taiwan from a few thousand in 1600 to more than two million by 1895.

The occupied area was enlarged during this period from a few scattered points along the western coast to the entire level portion of the island.[1] More important, in the process of this settlement Taiwan was changed into a land that was thoroughly Chinese, imprinted permanently with the characteristics of Chinese culture. The aboriginal people of Taiwan became a small minority, and remained apart in the interior where they could better hold off further incursions on their territory.[2] Hence the "Taiwanese" that one can speak of at any later date consisted almost entirely of these early migrants from China and their descendants.

By the time Taiwan was ceded to Japan, this population had made it culturally an extension of China. From the sphere of politics and economic activities, as we shall see in later chapters, to matters of

[1] See Ch'en Cheng-hsiang, *Atlas* (1950), Fig. 15.

[2] They made good use of the advantages of rough terrain in protecting themselves. In spite of the fact that the tribes quarreled among themselves and failed to present a united front against conquest, it later took the Japanese over thirty years to subdue this interior part of the island, in a campaign with modern weapons, airplanes, and reportedly even poison gas.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

1175 village life and family relationships, the people of Taiwan retained the heritage of tradition and custom that they had brought from the mainland. These cultural institutions did not succeed so well in maintaining order in Taiwan as in China, for there were new situations to be met and resolved. Chief among these, for example, was the constant arrival of new persons for whom the obligations of a particular locality might not be binding. But once established in Taiwan, there is no evidence that these institutions underwent any major change throughout the 200 years while Manchu authorities ruled the island.

Historical accounts of this period are little but repetitions of the same events. They show a sequence of misrule, intrigue by privileged groups or classes, frequent bloody insurrections, and strife with the aborigines. The island gained a continual atmosphere of violence and unrest. By one important circumstance the disorders were prevented from being an invitation to social change—they were not revolutions, but rebellions. They arose from dissatisfaction with particular persons in the social order—landlords, officials, or members of rival clans or villages—rather than dissatisfaction with the social order itself.[3] As a result, the disorders often served in the end to establish tradition more firmly.

Taiwan under the Japanese

648 The most decisive event in the history of Taiwan after being opened to Chinese immigration was its annexation into the Japanese Empire. Japan in the 1890's was newly arrived as a nation to compete in Far Eastern political rivalries, and many of its leaders were eager to find areas for its expansion as a respectable colonial power. They magnified a relatively minor incident in Taiwan, together with other grievances, into a pretext for provoking war with China in 1894.[4] It was a brief war of several quick military victories for the Japanese. When peace was negotiated in 1895, they insisted that Taiwan be ceded to them, and in the same year they took possession of

[3] Rebellions were ultimately settled by reasserting the established order, though often not without the use of force in the form of troops. Many of them, however, were actually organized within its framework from the beginning. Much of the disturbance was apparently created by the type of large clan organization found in South China, and by secret societies that were able to develop rivalries on a large scale between formidable groups.

[4] Japanese forces had as early as 1874 made an exploratory expedition to Taiwan, under a similar pretext, that formed the basis for expansionist designs on the island and provided valuable information about its terrain.

1:Gallin E-4,5 (1957-1958) 1966
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The Setting

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In any community study there is always the question of where to begin outlining the picture of village life: on what does one focus first? While the question is perhaps just as urgent during the actual fieldwork, in the field it is possible to observe and ask questions on many subjects at the same time and to move from one subject to another in the course of an interview. But in attempting to put the ethnography down on paper, the decision must be made where to begin.

I have chosen to begin this book as I began my fieldwork—with a general picture of village life that will provide a context which can give meaning to particular aspects of village life. This picture will be followed in Chapters 3 and 4 by a description of the village livelihood, although it has perhaps been more common to begin Chinese ethnographies with a discussion of family and kinship (here Chapters 5 and 6). The importance of the economic sphere in Hsin Hsing is explicit in the very purposes of this book as noted in Chapter 1 and the conclusions of Chapter 9; its importance was implicit throughout the fieldwork as it will be throughout this book. We now turn then to the setting of the village so that specific topical chapters which follow will have some contextual meaning.

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Travel to Hsin Hsing village from the capital city, Taipei, is neither easy nor brief. The approximately one hundred and seventeen-mile trip to Chang-hua, the closest major city, must be made mostly by train via the seacoast or by the interior route through Taichung City. This takes about three hours by diesel express or six hours or more by a local train. It is generally possible to find a seat on the diesel express, but on the local trains one must almost always stand a good part of the way.

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Once out of Taipei the countryside is almost all rice paddies and farmland. Even in the mountain area between Taipei and Taichung, terraced rice paddies form a part of the green and lush vegetation typical of Taiwan. The train goes through a series of tunnels in these rugged mountains, and if one happens to be traveling with a Taiwanese companion, he will probably point out that these tunnels, like the railroad lines, were all built during the Japanese occupation.

1:Gallin E-4,5 (1957-1958) 1966
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THE HISTORY OF THE VILLAGE AND AREA

174 The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

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167 The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[8] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

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167 Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

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443 In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

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464 In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
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With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable. 175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan. 175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu. 464 389 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were 175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

1:Gallin E-4,5 (1957-1958) 1966
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greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

1:Gallin E-4,5 (1957-1958) 1966
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F 175 648 ists brought a change in regime to Taiwan. This is known as the "Restoration." At the outset the Taiwanese people welcomed the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been killed in the war in Southeast Asia. The other villagers from Hsin Hsing who had surrendered or been taken as prisoners while working in Japanese labor groups were returned to Taiwan in ships. The return of these men to the land was followed by a general population increase, and in the Hsin Hsing area this quickly aggravated the problem of land scarcity; tenancy became a greater problem than ever before. Families could neither buy nor rent enough land to support themselves adequately, and, in addition, the war period had brought about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

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Tn 175 423 [648] [241] [434] Tn [161] After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

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LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

1:Gallin E-4,5 (1957-1958) 1966
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Taiwan AD6
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to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the acrent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

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Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

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Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1943, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1951b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

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In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

F [873] [556] Tn [197] [554]

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
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words in Japanese, such as expressions to be used when entering the predominantly Japanese-manned police stations and other official places. Some uneducated men, however, learned a modicum of Japanese when they served in the Japanese army labor corps during the war period.

Under the Japanese the teaching of the Chinese written language as well as the traditional Chinese classical literature in the schools was illegal. However, village men tell about a Chinese school "secretly" conducted in a temple in Lukang even through the late 1930's. There children and teenagers were taught to read and write Chinese and to study the Chinese classics. Only a very limited number of people from Hsin Hsing and the neighboring villages attended such schools, and there were few who attended the Chinese school who did not attend the Japanese primary schools as well.

In the Hsin Hsing area, then, except for the few Taiwanese who managed to attend secondary schools or colleges or who were laborers during the war, the number of persons able to read and speak Japanese (or read Chinese) was small. Grajdanzev, mostly on the basis of Japanese sources, noted that "after 1937 five and one half million Chinese (in Taiwan) could not read a newspaper in their own language, though most of them do not know Japanese" (1942:170). The effectiveness of the Japanese educational system for much of the population of the rural area has perhaps been exaggerated. Although the Japanese school system was greatly expanded between 1937 and 1945, it appears that it did not have time to develop any depth in its effect on the peasant.

Under the Nationalist government's theoretically "compulsory" education, almost all students and former students of the present school system can now speak some Mandarin, which is the only language used in the school after the first or second year. Some of the younger middle-aged men have developed a functional knowledge of simple Mandarin as a result of recent work contacts in Taipei or service in the Chinese army.

The language situation in Hsin Hsing and the surrounding rural area is as follows (for 1958): Very young children speak only Taiwanese (Min-nan) up through the first few years of school. Children in higher grades and young people up to the age of about twenty-six speak Mandarin with varying degrees of fluency in addition to their native Taiwanese. Their fluency depends upon the amount of schooling they have had, how long they have been out of school, and the amount of contact they have had with the language at work or in other special situations after leaving school.

Some men and a few women between twenty-four and forty-five speak some Japanese in addition to Taiwanese. The men learned it

1:Gallin E-4,5 (1957-1958) 1966
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and seeing the show, and only partially because of the cost. When the villagers do attend, they generally go in small groups of young boys, or young girls, or a group of older women.

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CLOTHING

The villagers' clothing, like their food, is marked by simplicity and a show of thrift. It is not at all uncommon to see a villager wearing work clothes which have been patched several times. Even for special occasions such as a marriage or a large *pai-pai* festival most villagers still dress very simply.

T 291

The style of clothing usually varies with age. Older villagers generally wear the traditional Chinese clothing of pantaloons and jacket, although in very hot weather men of all ages wear shorts and a T-shirt when working. In colder weather boys and men (other than the older and more traditionally dressed men) wear ordinary khaki wash pants and several shirts, and a sweater or jacket if they happen to own one. For protection against the cold, a villager depends on a number of layers of clothing, usually cotton, rather than a few layers of woolen items. The cotton padded jacket is worn more by older men and women than by young people.

While older women wear the more traditional clothing, younger women and girls prefer and usually wear the Western-style dresses, skirts, and blouses which have become very popular since the war. Such clothes are usually made to order either by village seamstresses or in Lukang. Young girls and women wear the Chinese tunic dress (*ch'i p'ao*) on the occasion of their marriage, on special outings to Lukang or Taipei, and during important village festivals. Many of the older villagers tell of the old days when "everyone, including the rich, wore coarse cloth, since in those days people were thrifty." But today, these old people complain, "people are no longer satisfied with coarse cloth and want to wear the better cloth."

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Still, few villagers remember ever having made their own cloth. "Cloth has practically always been purchased in Lukang or from itinerant merchants." Before the Japanese period, inexpensive undyed cloth was apparently imported from the mainland, and during the Japanese period, cloth manufactured in Japan was used. Since the end of the war, the Taiwanese textile industry has grown rapidly, mainly in the vicinity of Chang-hua City and Ho-mei, and today all the cloth used by villagers is Taiwanese-made.

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Nowadays there is a great deal of specialization, and it is both uneconomical and difficult for villagers to make their own clothing unless a member of the household, usually one of the daughters, has studied sewing. A family's clothing is usually made to order by locally

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1:Gallin E-4,5 (1957-1958) 1966
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Changing Land Tenure and Its Effect on Community Organization

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The traditional (Ch'ing) land tenure system in Taiwan has undergone a number of modifications over the years. Each was instituted with the advent of a new regime, and marked the inception of major changes in other aspects of rural life. As we have seen, the colonial administration policies of the Japanese were instrumental in producing the first significant involvement of the Taiwanese peasant in the market economy. Nevertheless, it was not until the restoration of Chinese rule, when the population growth began to exert noticeable pressures and the Nationalist Chinese sponsored the Land Reform Program, that major changes took place in the economy which reached directly into most of the areas of Taiwanese rural life.

The system of land tenure in Taiwan has always been a controlling factor in the lives of the agricultural population, and to understand Taiwanese life fully it is necessary to understand the land tenure system and its history. From the late nineteenth century onwards the rural villagers suffered the results of the concentration of landownership into too few hands. This situation culminated finally in the Land Reform Program of 1949–1953, which, for the first time, secured the Taiwanese tenants' rights to the land they tilled through firm rental contracts, reductions in rent, and the Land-to-the-Tiller Program.

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Putting untilled land under cultivation became a great concern of the government at the time of the Manchu conquest of Taiwan in 1683, according to T'ang (1954:23–27). Under the Manchu (Ch'ing) dynasty, any person applying for rights to occupy uncultivated land was considered the owner as long as he kept his acres under proper cultivation. Not surprisingly, this program led to a situation in which people with enough capital, "a relatively small number of great families" (Ginsburg, 1953:32), obtained rights to large amounts of land

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
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and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

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In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

F 175 177 648 423 427

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

F 175 648 427

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Tn 175 427 161

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tn 423 427

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:53; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

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1:Gallin E-4,5 (1957-1958) 1966
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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tzu* villages were quite powerful and frequently the de facto govern-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

NOTES

Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, i.e., only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 3.93–5.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 39.37–59.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chroniclers, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1716), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1758), Wang Ying-ts'eng (1764), Hsieh Chin-luan (1807), and Chen Shu-chün (1852) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

picture of life rather than ethnographic-type studies of any one area.

During the Japanese period in Taiwan (1895–1945), Japanese police, administrators, and academic researchers also made extensive detailed studies in Taiwan. These works, such as the *Taiwan Szu Fa* (1910–1911), also were usually composite studies. But these more often dealt with specific aspects of Taiwanese (Chinese) life, such as: family, civil law, economics and agricultural processes, religion and magic (frequently viewing the local people as superstitious and backward), and general customs and habits of the Taiwanese. In these studies, the researchers frequently used scattered illustrative material drawn from either the cities and/or the rural areas of Taiwan.

Thus, a number of the Chinese and Japanese studies are generally valuable for providing a picture of early conditions for some general areas and on many specific subjects in Taiwan. They are, of course, also valuable for comparative purposes. Unfortunately, rarely, if ever, do any of them furnish any ethnographic or contextual picture of Taiwanese life for any particular area in Taiwan, and especially not for the area of Hsin Hsing village. This has meant, therefore, that the available material has been of only limited value in the historical reconstruction of life in the immediate area of Hsin Hsing. It is also unfortunate that either during or after World War II, the historical records for Hsin Hsing and its immediate area which, during Japanese times, were usually kept in the district police station were apparently destroyed or lost.

[4] *Pu Yen Chuang Yen Ke Chih*, no author, Ta Chen 15 or 1925, handwritten in Japanese with additions made in Chinese after the war. Found in the Pu Yen Hsiang Public Office. This source notes that in the Pu Yen area only about 600 *chia* of land were irrigated in the early 1900's. But by 1922 there were 2,100 *chia* of land irrigated, and in 1923 another irrigation system, the Er Pao Chen, was added.

[5] Barclay discussed how Taiwan was built up economically as a colonial area of Japan.

[6] Demographic figures for the whole island of Taiwan are based on local statistics from district public offices such as the Pu Yen Hsiang office.

The 1958 village population figures, the most recent ones cited in this section, differ from those 1959 figures used in the material in Chapter 5 on social organization. Figures from the earlier date are used in this section because they are the ones most comparable with the census figures available for the *hsiang* and all of Taiwan. On the other hand, the 1959 figures were the only ones specific and complete enough to be useful for the breakdown in social organization and family.

[7] These population growth rate figures are for Taiwanese only; aboriginals are not included.

[8] This population growth rate figure is only for Taiwanese and mainlanders in Taiwan; aboriginals are not included.

[9] Based on a discussion in May, 1959, with Professor Chen Shao-hsing, sociologist and demographer at the National Taiwan University. Some of the social factors affecting the birthrate and the trends in population growth will be examined in the chapters on social organization and especially on life cycle.

"Production of sugar in modern mills is concentrated in the hands of nine Japanese corporations, [99] and of these, six produce ninety-seven per cent of all the sugar produced in modern mills and ninety-five per cent of all that produced in Taiwan. In the table on page 100 information is given concerning each of these six largest corporations. Unfortunately this information is not complete. These corporations are closely connected with many other enterprises in Taiwan and also have enterprises in the Pacific Islands under Japanese mandate, in Java and in other southern colonies (1). Many of these enterprises have nothing to do with sugar. But even so, the information given is interesting because it does throw some light on their activities. The paid-up capital and reserves of three of these corporations is about ¥100 million each. The amount of reserves is explained by the remarkable rate of profit which they receive—34 to 40 per cent is 'normal' for them. A lower rate of profit, as in the case of Ensuiko Seito Corporation (20.2 per cent) may be explained by the fact that the corporation has recently doubled its capital, investing it in new enterprises which do not yet bring profit. Thus the rate of profit in the sugar industry is extraordinarily high for all companies. It was shown above that the farmers did not receive any benefits either from the increase of the sugar

1. They also have refineries in Japan proper. Sugar produced in Taiwan is not refined there.

content of the cane, nor from the increase of protection; it now becomes clear that these benefits fell to the manufacturers, for only in this way were these huge profits possible (2).

2. But a certain part of these profits is the result of higher prices paid by the Japanese population for the benefit of these companies, protected by the tariff wall."

"It may be thought that the figures of students in secondary schools and colleges[see table on page 168, category 116--analyst] are not complete because they do not include those who are studying in schools and colleges in Japan proper. It is quite natural that those who have the means prefer to send their children to Japan to get their education at the centre of the Empire. We know that many Japanese from Taiwan are studying in Japan; probably their number far [169] exceeds the number of those who study in Taiwan, but unfortunately, we have no statistics. However, we have complete statistics of the Chinese from Taiwan who are students of Japanese colleges and universities. In 1936 there were in Japan 1,113 Chinese pupils from Taiwan in secondary schools of all types and 952 students in colleges and universities. These students studied: law 204 persons, medicine 507 persons, literature 27 persons, political science and economics 66 persons, commerce 71 persons, music 3 persons, art 7 persons, religion 6 persons, housekeeping 13 persons, physical culture 3 persons, all other subjects 45 persons, or a total of 952 persons.

These figures reflect the views of the students as to their future chances in life. The corresponding figures for the university in Taiwan are not so instructive because there the choice is very limited, while in Japanese they may choose in accordance with their future plans. The great majority of the students select courses leading to liberal professions—law, medicine, etc. They do this because they know that all other roads in

Taiwan are closed to them. These figures show also that the inclusion of those who study in Japan in the number of pupils and students in Taiwan does not materially change the picture."

4:Grajdanzev--174-175 S-4 (no date) 1942 Formosans
116, 164, 177, 548

"Before the coming of the Japanese, prostitution was practically unknown (1). In [175]

1 Franck, H. A., Glimpses of Japan and Formosa, 1924. pp. 178-181. The author quotes also the testimony of a Spanish missionary who spent many years in Formosa.

1938 out of 45,582 examinations of licensed prostitutes by the police 4.26 per cent were found to be victims of these diseases (2). Beside these licensed prostitutes (who do their

2. The officials mention that in Japan only 2.15 per cent of the prostitutes are infected.

part in contributing to the state treasury) there are an unknown number of unlicensed prostitutes who from times to time are caught and examined by the police. In 1938 more than one thousand of these were examined, 31.6 per cent of whom were infected. The difference between these two groups is explained very simply: those among the licensed who cannot be cured enter the ranks of the unlicensed."

4:Grajdanzev--176 S-4 (no date) 1942 Formosans
116, 177, 797

"There is a widespread but false belief that the Japanese lack the missionary spirit and that because of this, at least in the field of religion, the islanders may cling to the faith of their forefathers. The Japanese have their own societies for the propagation of the faith, missions and other implements of spiritual conquest, but the results are not very encouraging:

Number of Followers of Japanese Sects and Churches in Taiwan

	Japanese	Chinese
Various Buddhist sects (incl. nichiren, sodoshu, etc.)	73,504	27,398
Shinto and other churches)*	18,159	13,024
Buddhist churches †	40,025	17,008

* But there were only 5 Chinese as against 573 Japanese followers of pure shintoism.

†This does not include followers of Chinese Buddhism.

These figures show that the successes of the Japanese missionaries have not been conspicuous, especially if we compare them with the 41,708 Chinese followers of the Presbyterian Church and 7,399 of the Catholic Church, neither of which have a state organisation behind them. But with the increasing pressure being put on foreign Christian churches in Japan. the work of the Taiwan Christian missions is now endangered."

15: U.S. Navy --21 (no date) 1944 Formosans
116, 177, 563

"In pursuing the assimilation program which they have announced to be one of the two basic policies of government, the Japanese have not been notably successful. They have carried out a negative program, destroying non-Japanese institutions and customs, making an active attack upon local practices which have no political significance. The result has been the arousing of antagonism which is neutralized, to some extent only, by the obvious and manifest economic benefits which the Japanese have brought to the rural peasant class. There is a feeling of mutual suspicion and distrust among the three ethnic groups, Japanese, Formosan-Chinese and aborigines. The Japanese minority is, of course, the ruling class, socially and politically, and treats the Formosan-Chinese with open discrimination and ill-disguised contempt. Few of the natives have wealth, but all of them live in much greater general security of life and property than they did under Chinese administration. This the educated Formosan will admit. Recently the Japanese have begun to publish formal programs regarding the assimilation of the subject people."

15: U.S. Navy --21 [4] (no date) 1944 Formosans
116, 177, 867, 563

"Social life among the younger generation of Japanese of both sexes is more liberal than in the homeland and their outlook less traditional. Improved educational opportunities, local temples, cemeteries and other social institutions now tend to lessen the attraction of the homeland for the middle-aged."

15: U.S. Navy --21-22 (no date) 1944 Formosans
116, 177, 304, 563

"The Formosan-Chinese are divided into three main groups, the Hakka Chinese, the Cantonese Chinese, and the Fukien Chinese. In addition to differences in dialect between the three divisions, there are differences in costume and folkways. The Hakka women, for instance, have never bound their feet, and are notable for the [22] work they do in the fields and woods with the men. The Fukien women, on the other hand, formerly submitted to foot-binding, which the Japanese have forbidden. It is now rare to observe any woman under forty years of age so crippled. Many who have had bound feet now attempt to treat the foot normally. The Fukien women have never worked in the fields regularly, although they assist with the harvest and in other special circumstances. In the cities both men and women of the lowest economic classes do exceedingly heavy work."

15: U.S. Navy--24 [2] (no date) 1944 Formosans
116, 166, 177, 221

"In normal times population movements which entail permanent shifts in residence or occupation have been (a) from farms to urban centers; (b) from older residences to new industrial sites and into war industry; (c) subsidized movements of both farm and industrial labor to the East Coast valley; (d) compulsory movement of aborigines from scattered mountain settlements to villages established by the police; (e) movements of families and individuals returning to Japan; and (f) movements of traders, merchants, and seasonal labor to and from the China coast before 1938."

15: U.S. Navy --26 [5] (no date) 1944 Formosans
116, 177, 191

"An unknown but considerable number of Formosan-Chinese (students, clerks, typists, accountants and general assistants) have studied English successfully, either through interest in a non-Japanese foreign language, as an 'entertainment' language (motion pictures, etc.) or as a business language."

15: U.S. Navy --27 [5] (no date) 1944 Formosans
116, 591, 177, 554, 596

"As a usual thing Formosan-Chinese sons remain at home when they marry, bringing in their wives and rearing their children under the guidance of the eldest member of the family. Hence many individuals make up one family, living in patriarchal style. All members of the family share in the work and in the returns from the land, which is held in joint title. Some wealthy Formosans who have profited by cooperating with the Japanese have, as a matter of policy, added Japanese living quarters to their homes or attempt to live in Japanese fashion."

15: U.S. Navy --27 [11] (no date) 1944 Formosans
116, 177, 291, 302, 293

"The peasants wear loose two-piece cotton garments--trousers and coat. Undergarments are optional. A conical wide-brimmed straw hat which serves as an excellent sunshade and as a shelter in rain is a usual item of dress. Bare feet are the rule in the country. In the towns cloth shoes, straw sandals or Japanese wooden clogs (geta) are usually worn. The old Chinese queue ('pigtail') is very rarely seen, having been abolished by the Japanese. Sometimes a very old man will be seen wearing his hair in a stringy plait, wound up about his head in a thin cloth turban. Country people on the road are rarely seen without a large black cloth umbrella."

15: U.S. Navy--27 [12] (no date) 1944 Formosans
116, 177, 714

"Young men and boys who have been in Japanese schools wear the uniform which is required of all students and officials, and which gives them a military air. The hair is cropped close in military fashion."

15: U.S. Navy--31 (no date) 1944 Formosans
116, 511, 177, 563, 342

"The Japanese have the highest average living standards. Insofar as their mode of living is concerned there is little to distinguish the Japanese here from the Japanese in the homeland, except that the wage scale of the former is higher. Without modification the Japanese retain their native style of architecture, which is admirably suited to a subtropical climate. A platform is raised about two feet over the ground. On it a layer of thick straw mats is laid. A tile roof is erected over this and the space between roof and floor enclosed by light planking and sliding panels of glass panes or paper."

15: U.S. Navy--31 [7] (no date) 1944 Formosans
116, 162, 241, 177

"Approximately 53 percent (2,880,410) of the population of Taiwan was engaged in agriculture at the end of 1937. The remaining 47 percent was engaged chiefly in trade and commerce.

In 1937 the number of persons employed in industry had grown to 87,244, an increase which reflects the rapid expansion of industrial enterprise. The distribution of labor was then as follows:

Table 24: Distribution of Labor in Industry

Industry	No. of Persons Employed	Percentage
Food (including sugar and pineapple processing workers)	48,615	55.6
Chemicals	4,988	5.7
Textiles (including hemp processing)	4,000	4.5
Mining	4,214	4.7
'Others'	25,427	29.5
	87,244	100.0"

15: U.S. Navy--32 [4] (no date) 1944 Formosans
116, 177, 467, 369

"No contact appears to have existed between peasant and labor groups. Actually they were in conflict with each other on a number of issues. Peasant unions were closely tied up with the Japanese peasant unions, which had a strong Marxist element motivating them. The urban organizations--the Taiwan Minshuto and various trade unions--accepted the principles of Sun Yat-Sen of China, but were not connected with any organization outside of Taiwan."

42: Schetelig--386-387 T-2 (no date) 1868 Formosans
116, 135, 177, 361, 439

Kilung is a Chinese town with walls and gates. It is open to European commerce and is distinguished for the by no means inconsiderable beds of coal in the neighborhood and by the traces of a Spanish fort. For as, in the south near Taiwan-fu and in the north near Tamsui, quite substantial remains of Dutch strongholds are to be found, similarly the Spaniards, [387] during their brief period of settlement in the 17th century, seem to have made Kilung the chief point for their operations.

42 Schetelig--387 [2] T-2 (no date) 1868 Formosans
116, 114, 177, 504

The harbor of Sawo has been repeatedly visited by warships and on some occasions by trading vessels, generally only for passing protection against wind and weather or in order to survey the coast. The transport "Elbe," belonging to the Prussian fleet, was also there in 1860 (1). Shortly before us the "Sylvia" had left the harbor, this being

1. This is a mistake, commited also by Dr. Hermann Maron, Japan und China, Berlin 1863, Vol. II, p. 73. The "Elbe" touched only at the south and southwest coasts of Formosa, but the Prussian frigate "Thetis" was involved in an incident with Chinese pirate junks in the neighborhood of Sawo Bay (see Die preuss. Edpedition nach Ost-Asien, Vol. II, 1866, pp. 112 ff.).

an English survey ship which, be it remarked in parenthesis, has just now finished the survey of the Formosan coast begun about one and one half years ago. This survey will considerably transform the shape of the west coast on the map.

B. CONTACT WITH THE OUTSIDE WORLD

•177 In spite of governmental misrule and frequent disturbance, the natural wealth of Formosa attracted a steady migration from the Mainland. As a result of the energetic efforts of the hard-working new settlers, agriculture, commerce, and industry made remarkable developments on the island. About the middle of the eighteenth century, according to one authority, "nearly two millions of Chinese in Formosa engaged in the cultivation of sugar and rice, and about four hundred vessels were plying continually between the island and the Mainland Chinese coast.... A great part of the sugar consumed in the northern provinces of China was produced in the island, and the rice upon which millions of people in Fokien (Fukien) at that time depended almost entirely for their support, was derived from the same source."[29] Camphor was also a principal article of export and was declared a government

29. Davidson, op. cit., p. 66.

1777 monopoly in 1720. The commercial potentialities began to attract the attention of Western nations searching for new fields of commercial expansion and colonial achievement.

Among the foreigners who came to Formosa during the eighteenth century was an Hungarian adventurer, Count Maurice de Benyowsky.[30] Having escaped from a prison camp in eastern Siberia, the count and his followers landed on the eastern shore of Formosa in August 1771. Hoping to found a colony for some European power willing to extend him support at favorable terms, he killed a thousand or more aborigines who opposed his exploration. He was met inland by a party of natives headed by a Spaniard, Don Hiernimo, a fugitive from Manila. Don Hiernimo introduced the count to a native chief, Huapo, with whom he formed an alliance to defeat an enemy tribe. For his assistance, Huapo presented Benyowsky with many precious gifts. The count embarked for Europe, taking a native along to serve as his guide for his return trip. But

30. As described in Maurice de Benyowsky, Memoirs and Travels in Siberia, Kamtschotka, Japan, the Liukiu Islands and Formosa, 2 vols., London, 1790. Since no other record of his visit exists, there is no way to verify the accuracy of his statements.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

177 his scheme to found a colony on Formosa was of no great interest to European statesmen, who were not convinced the island was worth exploitation.

During the Opium War of 1840-42, the British on successive occasions bombarded Keelung and Taichung. Two British ships, Nerbudda and Ann, were wrecked on the coast, and the crews (261 men in all) were decapitated by the Chinese.[31] At the conclusion of another war with the British and French in 1860, four seaports of Formosa -- Tamsui, Keelung, Tainan, and Kaohsiung -- were open for trade. This began an era of commercial rivalry among the foreign powers. Camphor, sugar, rice, and gold were the principal exports. Surveys for the exploration of coal fields in northern Formosa were undertaken, and tea plantations were introduced from An-chi in Fukien. In 1868-70, the annual export of camphor amounted to 14,240 piculs (1,875,000 lbs.), and in 1870 sugar export was 74,000,000 lbs., increasing to 141,500,000 lbs.[32] in 1880.

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31. Yen Hsing Taiwan Chien Sheng Ch'ien-hou chih Kuo chi Kuan-hsi [Formosa's International Relations preceding and Following the Elevation to Provincial Status]. T'ai-wan Wen-hua Lun-chi [Collection of essays on the Culture of Formosa], Taipei, p. 171.

32. Davidson, op. cit., pp. 405, 445-46.

1177 The increase of foreign shipping also led to more frequent shipwrecks in the treacherous waters of the Formosa Strait. When a wreck occurred near the coast inhabited by the aborigines, the castaways often were captured and traded as slaves. Among the ill-fated vessels, several were American. The local Chinese authorities were unable to devise effective measures to prevent the maltreatment of the shipwrecked people. In March 1867 an American ship, the Rover, sank in a severe gale near the southeatern shore of Formosa. The captain, his wife, and the crew landed in a territory occupied by the Koalut tribe and were brutally murdered. The American government sent two ships, the Hartford and the Wyoming, and the combined crews landed and advanced inland. But the intense heat, the hostile jungle, and the fierce attacks of the natives soon forced them to withdraw. Seeing the futility of obtaining redress by military means, the American Consul at Amoy, General C. W. Le Gendre, ventured into the savage territory and conducted negotiations with the tribesmen. He succeeded in concluding a treaty of peace, according to which the headhunters promised from that time on to give shelter and assistance

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD2

177 to castaways found on their shores.[33]

C. JAPANESE EXPEDITION OF 1874

The Japanese conducted a similar expedition in 1874, but with other motives. In 1871, fifty-four members of the crew of a Ryukyu fishing vessel had been murdered by the Botan tribe in southern Formosa. The Chinese government in Peking disclaimed any responsibility, saying that the tribesmen were not under their jurisdiction. The Japanese, who had declared a protectorate over the Kyu-kyus in 1872, saw this as opportunity to further their aggressive designs. Count Okuma Shigenobu of the Imperial Council carefully prepared a scheme for the eventual seizure of Formosa. In January 1874, a special Formosan department was installed in the Tokyo government with Okuma as the head.

Lieutenant General Saigo Yorimichi was appointed commander-in-chief of the military expedition. Advance agents, disguised as merchants, surveyed the entire island and collected military intelligence. A large contingent of Japanese troops landed in

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33. Le Gendre, Report on Amoy and the Island of Formosa, Washington, 1891, and "First Visit to the Interior of Formosa," U.S. Diplomatic Correspondence for 1868.

177 Liangk'ou (Liang-kiau) Bay on May 9, 1874, crushing the Botan tribesmen at Shih-men (the Stone Gate). The savages resisted fiercely, but they could not withstand the heavy artillery fire of the Japanese. The losses on both sides were heavy. During the campaign many Japanese soldiers also perished from disease. Unwilling to risk further penetration into the mountain fastness, the Japanese proceeded with their plan for a permanent encampment in Southern Formosa. The anxiety of the Chinese was aroused. Two Chinese warships arrived in June, and 25,000 troops under the command of the governor of Fukien were used to reinforce the garrison at Taiwanfu. Rumors spread of imminent war between China and Japan. Foreign powers were prepared to intervene. Count Okuma was sent by the Japanese emperor to negotiate a settlement with the Chinese government, and he demanded an indemnity of three million taels (approximately two million gold dollars) to cover the expenses of the expedition. Agreement between the two governments was finally reached on October 31 and the amount of the indemnity was fixed at 500,000 taels.[34]

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34. Yen Hsing, op. cit., p. 177.

45:Stanford U. S-4, 5 1956 AD1 Formosa
AD1

D. THE FRENCH BLOCKADE OF 1884

177 The Japanese campaign awakened Chinese authorities to the urgent need for a thorough reorganization of Formosa's administration. It was decided that the island should be elevated to provincial status, new fortifications constructed along the coast and linked by telegraph lines and highways, and modern machinery utilized in coal fields and sulphur pits. Sulphur was declared a government monopoly in 1877.

Before the new measures could be introduced, Formosa was involved in another international incident. War broke out over Annan (Indo-China) between China and France. At the end of the war, under the pretense of occupying Formosa as material security for the payment of indemnity, the French attempted to seize the island. After heavy bombardments, 3,000 French marines landed at Keelung. The Chinese fortified themselves behind earthworks on hills surrounding the port. Unable to make any appreciable advance toward Taipei, the French were driven back to their boats. A blackade of the island, unusual since war had not been declared, was subsequently instituted by the French and continued through the winter. In June 1885, a treaty was signed and the French agreed to lift the blockade and withdraw from Keelung.

241 on the island work every day of the year. The
461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

• 177 A majority of city dwellers have running water and electric lights. Most families in the cities own sewing machines and bicycles. As the islanders acquire Western conveniences and possessions, their patterns of living take on the configurations common to the occidental world.

526 Sports -- soccer, basketball, and baseball -- are popular among the younger generation. A Formosan basketball team toured the United States and countries in Southeast Asia in 1955. A soccer team from Formosa is to participate in the Olympics in Australia.

524 Mah-jongg and chess, traditional games
517 of the leisured class, have retained their popularity among the older generation. The young favor motion pictures and dancing.
517 Government officials and wealthy persons of
529 other classes take their families to one of the numerous scenic resorts or hot springs in

IV. TAIWAN AND KOREA

THE HERITAGE OF THE JAPANESE EMPIRE

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The preceding chapter showed that although the population problem of Japan Proper is clear-cut, its solution is conjectural. It is the problem of population growth from a current 80 million to a future 100 million or possibly 125 million. It is the problem of an industrial people too numerous to subsist on the products of their own land. Demographically, the Japanese people are in midtransition from the familial values of the rice lands of Asia to the individual values of a Western urban milieu, i.e. from mortality-dominated to fertility-controlled rates of population increase. The Japanese Empire bequeathed more than 80 million Japanese to a land and a culture ill-prepared to maintain them. It also stimulated population growth in all the conquered areas without developing the material base to sustain such growth or the psychological changes to terminate it. Taiwan had 2.6 million inhabitants in 1896 and 5.9 million in 1940. Korea had 14.8 million in 1912 and 24.3 million in 1940. The subject peoples of the Empire as a whole numbered 21.8 million in 1920 and 32.1 million in 1940, an increase of over 10 million or 48 per cent within 20 years.

The process that generated this growth was the same throughout the Empire: the decline of mortality within a social and economic setting that preserved intact the high fertility of the peasant East. This was a necessary by-product of political control and economic development. Today's people, whose numbers have already doubled or trebled, still face a long period of growth checked only by mortality.

Asian imperialism had its positive aspects. The defeated Japanese left to their former colonies the improved agriculture, the incipient industrialization and the roads, railroads and buildings in which the forced savings of the Empire had been invested since the initial conquest of Taiwan. The Japanese also left great university plants to which some "natives" had gone, a more widely diffused literacy than that prevalent elsewhere in the Far East and a substantial number of workers with industrial experience.

The peoples temporarily united under the rule of the Japanese had long histories behind them. They face divergent futures. The Japanese period was an interlude, but the political domination was so complete and the

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development plan so uniform that similar demographic consequences resulted from the occupation and similar population problems plague the future. Moreover, for the period of Japanese rule there are censuses and vital statistics of unusual accuracy, for Japan's statistical system was always among the paraphernalia of her export. Hence it is possible in each instance to secure a minimum picture of the population when the Japanese came, to trace its expansion during their rule and to assess the magnitude of the population problem bequeathed to the future.

The description of the demographic impasse of Taiwan précedes that of Korea, for Taiwan is a striking demonstration of demographic principles and problems. Its Chinese people contributed the labor force for the most successful of Japan's colonies. As death rates dropped lower and lower, the population increase approached that geometric pattern which Malthus believed to be the potential of human reproduction. A long series of censuses and vital statistics document this expansion of a Chinese people under almost optimal conditions for population increase. An analysis is sobering, though, for there was only China's ancient pao-chia system to record the demographic aspects of the fluctuations in economy, public health and political cohesion that followed the Japanese withdrawal and the re-establishment of Chinese suzerainty.

177 Polynesian peoples inhabited Taiwan for centuries, and perhaps for millenia, unable to develop any effective political organization but sufficiently warlike to prevent the infiltration of peasants from the Mainland. In the sixteenth century the Portuguese came to the Ilna Formosa but did little more than give it the name. The Dutch, who ruled from 1624 to 1661, reported an immigration of Chinese sufficiently strong to be troublesome. This was a period of crisis in China, for the Manchus had replaced the Ming Dynasty in the North and were pushing southward. The exodus of Ming civilians and soldiers across the narrow waters to Taiwan increased until there was a sufficient concentration of strength to capture the Dutch fortresses. In 1683 Taiwan became a district of Fukien Province, a tiny segment of the great Empire of the Manchus.

161 177 The patterns of demographic and economic development that made modern Taiwan evolved in the two centuries of Manchu suzerainty. Population growth was appreciable as immigrants from the crowded provinces of Fukien and Kwantung re-enforced the natural increase of the earlier settlers. By the latter part of the nineteenth century, when Japan had awakened from Seclusion and was ascertaining the areas available for Empire, Taiwan was considered a prize worth acquiring. Three million Chinese peasants were occupied in the production of rice, sugar, camphor, oilcake and other tropical products. "Incidents" occurred, war ensued and the Treaty of Shimonoseki gave Taiwan to the Japanese in 1895.

ECONOMIC DEVELOPMENT

177 433 The economic development of Taiwan required the expansion of health and sanitary facilities that would permit the residence of Japanese and guarantee the expansion of a cheap and docile labor force to produce the agricultural surpluses that were the goal of conquest. The achievement of military and, ultimately, civilian control necessitated roads and transport facilities. These were built before products were available for movement to the coast and shipment to Japan. The cultivated area was expanded, great irrigation systems built, techniques improved, more efficient varieties of rice and sugar developed and fertilizers introduced. Numerous agricultural experiment stations insured the necessary research, while hundreds of Japanese men in the field supervised the productive process from the initial preparation of the soil to the final processing and marketing. The Chinese had

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,600 physicians were registered as engaged in private practice or public service. There were about 600 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per cent in this 35-year period and virtually all 161 241 177

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 376 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

433 241 439 resources would have to be supplemented by the integration of Taiwanese and Koreans into the industrial nexus of Empire.

THE CONTEMPORARY PROSPECTS

178 727 Today the plans of the Japanese for the further development of Taiwan are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

● 177 198 The political travesty of the Chinese liberation of the Chinese population of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

36: Rowe S-4 (no date) 1955 AF1 China AF1
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Although reliable statistics and a full picture of what is happening behind the Bamboo Curtain is difficult to piece together, it seems probable that the nation's real national income has increased under the Communist regime. This gain, however, must be set off against the drain upon the national economy occasioned by the Korean War, so that benefits that might have accrued to the average man have not, with the higher taxes and the emulation "contributions," been forthcoming. Whether he is a farmer, an industrial worker, or a merchant, the average man is beginning to realize that his actual lot is not what he was promised before the Communists came to power. Instead of living better, he finds himself tightening his belt — in a situation in which he dares not complain about it. Even passive resistance has ceased to be a realistic alternative, because it will be punished just as relentlessly when it is discovered as the more active types of oppositionist activity; and, under present conditions of surveillance and general lack of privacy, it will be discovered.

The fact that the average Chinese still has some spirit left, despite these grievances, is evidenced by the anecdotes and jokes which continue to filter through the Bamboo Curtain. Says one industrial worker to another, with a sad smile: "In past days, everybody exploited everybody. Nowadays, one man does all the exploiting." A ricksha coolie remarked, "In former days, we were tortoises, slow perhaps but still able to advance. Nowadays, the tortoise has turned over [*fan shêng*, a Communist expression for taking over leadership], and he can no longer budge."

SOCIAL ORDER UNDER THE NATIONALISTS 1949–

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Evacuation to Formosa

Some two million Chinese who felt they could not accept Communism fled to Taiwan (Formosa) with the Nationalist government before the onslaught of the Communist Army in 1949. Many others have since followed. A small number of these were close associates of President Chiang Kai-shek. Some were private business men who believed that state Communism and private enterprise are incompatible. Some were men and women who, because of their personal experience or knowledge of Communism, were afraid to remain inside the Bamboo Curtain. There is a strong presumption that most if not all of them value freedom and democracy.

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The present population of Taiwan is approximately nine million, some seven million of whom are Taiwanese natives of pure Chinese descent. (There are a few non-Chinese aborigines.)

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Effect of Japanese Occupation

To appreciate fully what the National government has accomplished in Taiwan, a word should be said about the state of affairs there just after the Second World War. As of V-J Day, Taiwan's economy was in full chaos. Its industrial plant had been bombed out. The Taiwanese, after 50 years of subjugation by the Japanese, had neither the training nor the experience they needed in order to take over from the Japanese. The island's currency was inflated. Its normal trade was geared to that of Japan, where SCAP was prohibiting the resumption of normal operations.

Japan had taken great pains to teach the Taiwanese to regard their struggling compatriots on the mainland with contempt and disdain. They did not, therefore, expect much help from the Chinese government, and the latter, weakened by eight years of continuous war and thrown off balance by the onslaught of Chinese Communism, could indeed do little to help the once well-off Taiwanese get back on their feet. A further important complication

36: Rowe S-4 (no date) 1955 AF1 China AF1
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was that the Taiwanese were accustomed to the peace and order of a country under a foreign tyranny, and could not, at first, understand the "lack of uniformity" and "the complexities" of democratic rule (thanks to the Japanese, on the other hand, they had no illusions about or yearnings after Communism). Finally, the men who governed Taiwan immediately after the retrocession gave every evidence of being more interested in increasing their power and lining their pockets than in providing good management. When, therefore, the Nationalist government moved to Taiwan in 1949, it found that it had taken on numerous grave local problems in addition to those it had brought with it from the mainland.

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Political Reform

The Kuomintang, the leading political party, prepared itself to deal with these problems by putting itself through a reorganization. Its younger, more liberal leaders were, to this end, appointed to a Central Reform Committee, the main task of which was to strengthen and tighten party organization and eliminate corrupt elements, opportunists, and bureaucratic politicians. On 1 September 1950, the Nationalist government was ready to announce a new political program. Its objectives were to

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encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; to establish a democratic industrial system in which the workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprise; to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; to carry out local self-government and to protect civil rights.

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Local self-government and land reform were the fields in which the government brought about the most spectacular changes. It first removed all the social barriers and segregation measures that had been created and maintained by the Japanese. The native Taiwanese were no longer barred from institutions of higher learning, or from the worthwhile positions in commerce and politics. They were encouraged to participate in local self-government, and to think for themselves. By 6 May 1951, 21 mayors and magistrates in 16 counties and 5 municipalities had been elected to their respective offices by popular vote. There are now 6304 village and *li* (comparable to urban wards) assemblies, in which the Taiwanese are learning the art of self-government. Representing them in town and district assemblies are 8024 village and *li* delegates. On the county and municipal levels, there are about 541 popularly elected councilmen. Of an estimated 2,650,000 qualified men and women voters, some 2,416,072 are registered. In keeping with the government's policy of economy, the total number of government employees was reduced in June, 1950 to 81,000. The percentage of indigenous citizens in the government service rose to 65.46 percent.

There has also been a marked change in the importance and responsibility of the posts held by Taiwanese. In the category of first class officials, indigenous personnel have increased from 0.92 percent under Japanese rule to 17.45 percent in the present government. In the category of second class officials, indigenous personnel rose from 1.29 percent to 25 percent.

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Land Reform

The other outstanding reform accomplished by the government has been the carrying out of a new land reform program, which has greatly benefited the lot of the farmers, who are no less than 60 percent of the population. For the 70 percent of the farmers who are

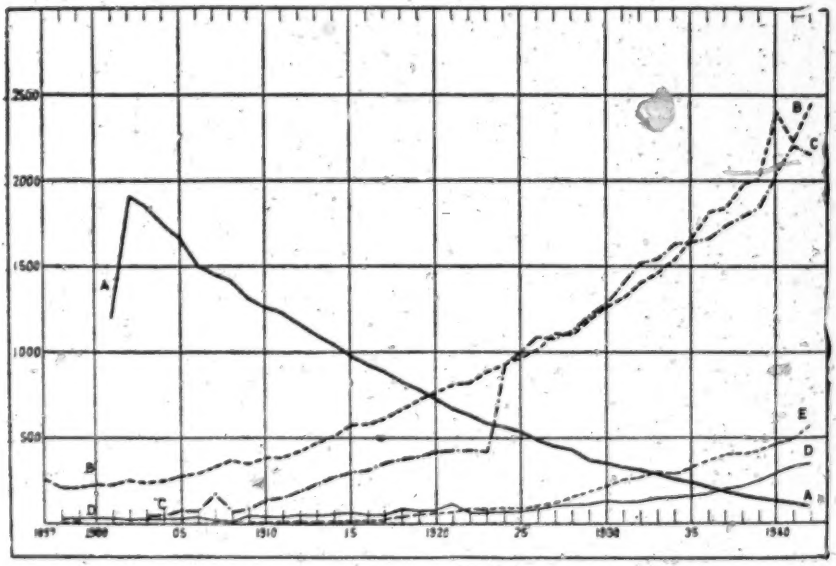
48: Chen E-4 (no date) 1955 ADl Formosa ADl

759 was raised to a medical vocational school, to a medical college, and at last became a school of the Taipei Imperial University. Within the 47 years between 1899 and 1945, a total of 2,813 doctors (1,888 Taiwanese doctors and 925 Japanese doctors) were trained by the school.[8]

759 The trend of change in the number of medical personnel in Taiwan is given in Figure 3. The decrease in the number of doctors of Chinese medicine and the increase 177 of doctors of western medicine is interesting. It is also significant to note that, the 162 number of the latter exceeded the number of the former by 1920. As to the ratio of inhabitants to doctors (of western medicine), the number of inhabitants per doctor was as follows:

years	number of inhabitants per doctor
1897–1906	10,000–12,000
1907–1911	8,000– 9,000
1912–1913	around 7,000
1914–1916	around 6,000
1917–1919	around 5,000
1920–1926	around 4,000
1927–1935	around 3,000
after 1936	around 2,000

Fig. 3 Number of Medical Personnel, Taiwan, 1897–1942



A: Doctors of Chinese Medicine B: Doctors of Western Medicine C: Midwives
D: Pharmacists E: Dentists
Source, 14: Table 484

Note 8: Li Ting-yeh: Part on Sanitation, Manuscript of the History of Taiwan Province, 1952, Taipei, p. 10.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

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In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

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Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W. S. Thompson, who stayed some months in Nanking, China, in 1930-31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67-68).

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Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation

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Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparison of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Corporation, Vol. 1, No. 5, 1952, Taipei, p. 66.

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Introduction

TAIWAN, or "Formosa," as the island is still widely known to Westerners, has been the scene of international contention as long as it has had a recorded history. From its discovery by curious Chinese and Japanese before 1600 down to the present time, the island has repeatedly been visited, occupied and fought over. No one can claim that Taiwan has failed to receive its full share of attention by the outside world. The people of the island would be the last to make this complaint, for, while opinions may differ as to whether the intrusions have been beneficial to the population, it is certain that they have not been welcome. 177

But for people who have long felt the disadvantages of being small and weak with large and powerful neighbors, the inhabitants of Taiwan have in some respects fared remarkably well. They avoided, through hardly more than chance, the domination by Western nations that has called forth great bitterness and aroused quixotic nationalism in many parts of Asia. They fell under the control of Japan at a time when that country was willing to invest strong efforts in developing Taiwan's productive resources. So far they have emerged from the war that destroyed the Japanese Empire without suffering the mass bloodshed or wide devastation that followed the regular military operations elsewhere in the Far East. And, ironically, during the fifty years of "exploitation" and "oppression" by Japan, they enjoyed more peace and prosperity than their former countrymen on the mainland of China.

As the aftermath of these events Taiwan has acquired a status that is uneasy and insecure, poised again as a prize desired by rival powers. It is not the purpose of this book to trace the sequence of steps leading up to this situation, or to speculate about the future international status of the island. Because prominence has not come to them of their own seeking, the Taiwanese have usually played a passive part in shaping their position in world affairs. Knowledge of the island's external relations therefore does not offer much in understanding the social order of its people, and information about the internal structure of the society fails to contribute anything of great value in appreciating its present international position. 121

For similar reasons, this book will not be concerned with the prospects for the island under the present Chinese Nationalist govern-

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167 some competition for the more desirable lands near the coast. In order to maintain their accustomed manner of farming, many were 563 forced to move inland, where they gradually dispossessed aborigines and the earlier Hakka settlers and pushed eventually to the foothills 423 of the interior. These many-sided conflicts of interest gave rise to land tenures more complicated than those usually found in China. The result was a set of property customs that was to become confused and encumbering in later years.[1]

With agrarian land tenures, however, it is all too easy to mistake form for substance. The system of land tenures in Taiwan gained several features that are distinctive to itself, arising to incorporate new parties into an old system—the aborigines who first occupied the area, and Chinese who acquired land titles to profit from the arrival of immigrants. But, since these landed property relationships are of little interest to us from an antiquarian point of view, their lasting effects are more important: they contributed to a form of village organization that survived through the entire Japanese occupation down to the present.

(31) The flow of migrants is remarkable in that it populated Taiwan, with little variation over the years, closely after the model of the South China coastal area.[2] The resemblance to the mainland went beyond forms of settlement and land utilization. Politically, under Manchu control the island was supposed to be assimilated into the administration of the rest of China. It was governed as a regular political division—first as a prefecture of Fukien and later as a province itself—by officials appointed directly from Peking.

177 Taiwan inevitably presented special problems of control. In the first place, it could be separated from easy communication with the continent; eventually it grew almost as accessible to the Western powers as to Peking. The device most relied upon to tie the area to China was a weak one. The authorities tried, futilely, to isolate it from all external contact. From time to time, they went as far as to restrict the entry of Chinese from across the Straits, though even this had little success.

[1] See Ch'en Cheng-hsiang (1950), pp. 41-43, and Kawada, Shiro (1928).

[2] The instances of alleged "radical transformation" of land tenures (Kawada, Shiro [December 1928], p. 88) were primarily fiscal measures to reassert the central government's share in revenues from the land. Such reforms often are superficial from the standpoint of village organization. By way of illustration, one of the early official acts of the Japanese in Taiwan was to sweep away a whole section of these archaic land titles. While these reforms cleared the way to regulate rural areas from outside, they scarcely made an impression on property relations within the villages.

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Furthermore, higher officials were themselves aliens, responsible ultimately to the Manchu court. Their tenure depended on their standing in Peking. Special competence or energy in office was not an advantage—it could even be dangerous, by making them targets of rumor and innuendo. Careers were sometimes ruined on the suspicion that certain officials had separatist leanings or were friendly to foreigners. Personnel were transferred regularly, as in China, to remove them from temptations of familiarity with their offices. Their only safe path to success was to maintain stability in local affairs, and somehow to prevent civil discontent from turning into civil disturbance. 631

This system was calculated to engross its key officers in their personal relations with Peking. It proved to be more effective in ensuring loyalty than in promoting careful government or preventing corruption. There were few deterrents to peculation in office, which was respectable if prudently pursued, and surrounded by many opportunities—such as legal monopolies and illicit export trade—not present in China itself.

These limited and negative objectives of government invited continual lapses of internal rule. Being unfamiliar with local conditions, officials simply did not govern in rural villages. Throughout the countryside they kept the peace by intrigue with powerful families rather than through actual administration—families that relied heavily on property obligations among the peasantry to uphold their influence. The situation put a strain on the administration's own underpinnings, and led to severity in abuses and civil strife to which the mainland itself was unaccustomed. It is a testimony to the serviceability of traditional Chinese institutions that they survived this test. 631 621

Whatever its internal shortcomings, this scheme of political order was well suited to rebuff foreigners, at least foreigners whose advances were not backed by force. Acute frustration among the Western commercial agents in Taiwan stands as evidence that it was accomplishing this part of its purpose. They complained bitterly that officials had connived at Taiwanese violence against Europeans and had even incited such incidents.[8] 439 177

The best information available about Taiwan's external contacts is contained in the published reminiscences and travel accounts of foreign trading representatives. The literary interests of these men throw light on the main preoccupation of their trading activities.

[8] For example, see Pickering, W. A. (1898), Ch. 17.

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439 Though their books have a wealth of illuminating anecdotes about
• 1777 the export trade, they provide almost no observations of any value about the ordinary affairs of the population. One might imagine from reading such sources that everyone in Taiwan was engaged in foreign commerce or some form of government service.[4]

These informants were, up to a point, honest men. They were not trying to mislead, and deserve credit for considerable acuteness and sincerity. The most likely reason for their failure to inform us about the Taiwanese is that they never had a chance to find out for themselves. Western merchants simply had no occasion to form more than special business associations with Taiwanese. Practically all of their transactions were conducted by contract merchants ("compradors") as middlemen. Foreigners not infrequently made efforts to interfere in internal affairs, but these all arose over specific issues. They were attempts to make the social order more nearly serve their ends, not to alter it.

As in China, trading relations carried on in this manner did not further the exchange of ideas along with commodities. They were contrived so as to minimize such interchange. This mutual aloofness worked both ways: it enabled outsiders to get along in ignorance of conditions prevailing in the island, and at the same time shielded the general population from contact with the outside world. Foreign commerce, the foremost potential channel for innovation until the conquest by Japan, was severely circumscribed by seclusiveness of the parties on both sides.

1777 The reasons for this isolation are not all to be found in the hos-
438 tility of officials or in the provincialism of Westerners. The foreigners were eager to obtrude their presence further into foreign trade, even if only on their own terms. Government officers were too inept as administrators, their conduct too deeply undermined by directives from above, to succeed in stifling any positive tendencies toward change if such had arisen. The real bulwark of conservatism behind

[4] These authors made better traders than ethnographers. They often did not go beyond expressing impatience that Taiwanese should not follow 19th century English trading conventions. The best and most comprehensive of these works (Davidson, James W. [1905]), out of a total of 32 chapters, devoted only a single superficial one to "The Inhabitants of Formosa," where the author did little more than describe the aborigines.

The apparent exceptions prove the rule. If good material about those Taiwanese of Chinese origin is scarce, books about the aborigines of the interior (of varying quality) are not. Few Westerners penetrated to the dangerous mountain regions of Taiwan, but all of them developed immense curiosity about the customs of these "savages," which was not held toward the Chinese. See, for example, the titles in Takekoshi, Yosaburo (1907), pp. 321-342.

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this nominal government policy existed within Taiwan's rural villages. The bulk of the population was made up of peasant farmers and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands.

The rural population led a settled existence. Taiwan being a small area, travel between places was not uncommon, but it was rare for families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island.

Local stability fostered local solidarities. The inconvenience of communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6]

Property institutions helped to buttress the stability in these small communities. In Taiwan, as in China, land ownership was the only durable form that substantial wealth could take. It was durable

[5] Takekoshi, Yosaburo (1907), pp. 252 and 269-270.

[6] The turbulent history of Taiwan has been carelessly represented as one of indiscriminate civil disorder, its early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

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2. As capitalist, he secures 14 per cent. to 24 per cent. interest on all the money he may have loaned to his tenant. 565
3. In order to cover the running expenses of the sugar factory he, as master, appropriates half the cane brought in by his tenants. 426 427

"These vast profits leave very little for the poor tenants, who have therefore no means of improving the soil, but fall deeper into debt, until at length they become mere slaves of the sugar factor. This system has proved the greatest hindrance to the growth of the business."[9]

Establishment of Japanese Authority

Japan's objectives in enlarging its Empire required a more energetic administration. With the background of past failures, it is understandable that the Japanese who first arrived in Taiwan met difficulty in trying to impose this kind of rule. It quickly became evident that neither profit nor political dominion was assured to them without some extraordinary measures. 177 631

Japanese first installed themselves in economic life exactly where outsiders had done so in the past—at the periphery of traditional marketing and property relations. They remained most active, as we have seen, outside the realm of agriculture proper. Through their steps in gaining access to the old agrarian institutions, we can now begin to see how far these changes impinged on agriculture itself. The Japanese did not proceed by sheer force, nor simply in a form of "economic penetration." The control was made effective by wedding the two channels—business and government—and by manipulating the pre-existing situation from a few vantage points at the outside. To make a success of this endeavor, the Japanese found it expedient to leave much of this rural social structure almost intact, and turn its basic features to their own account.

Histories of Taiwan over this period usually emphasize only the opposition to the new government that was overt and armed. But it was not by military conquest that the Japanese eventually secured the lowland area of the island. The military aspect was over quickly. Organized resistance collapsed by the end of 1895. Within a year or so after formally taking possession, Japanese became aware that direct attempts to alter the old rural state of affairs were too costly and slow, and were ineffectual against guerrilla bands that had wide-

[9] Takekoshi, Yosaburo (1907), p. 243.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

spread local support. Their program to govern the countryside directly was a recognized failure as early as 1898.[10]

Starting with the issuance of *pao-chia* regulations in that year, the policy was revised with a view to getting less ambitious results, but more quickly. These were rules of conduct imposed on inhabitants of villages and smaller towns, under the threat of punitive action against the whole community. Virtually all Taiwanese outside the Aborigine Territory (with special provisions applying to certain cities) were assigned to household groups (*chia*), which were in turn grouped into village units (*pao*) for supervision. Responsibility for law observance and public order was allotted jointly among the households of each village. Positions of authority, carrying explicitly defined duties, were conferred on heads of prominent (i.e., wealthy and influential) families.

The system was based on a shrewd practical knowledge of those customary obligations that were most binding among Taiwanese. It was a move toward fitting the treatment of opposition to its roots instead of to its symptoms. By making the regulation of villages follow lines of kinship and property, these measures in effect were insinuated into the indigenous social structure of the population.

The rules placed a multitude of specific duties upon each *chia* as a group. The *chia*, through its head, was responsible for reporting all events such as births and deaths occurring within it, for reporting and controlling all movements of persons in and out of its area along with the conduct of the permanent residents; it put into effect the earnest health and sanitation rules that were often promulgated; it mobilized labor from its ranks for road-building and irrigation projects as directed from above; it was required to disseminate instructions for crop improvement and soil maintenance, bearing its own expenses; it supplied men for auxiliary police service, supported its own school facilities, assessed fines among its members, collected many taxes, and could be called upon to enforce additional rules decreed by prefectural governors.[11] These latter features in fact proved so attractive in avoiding the costs of more formal administration that the Japanese kept the regulations in full force throughout the entire span of their rule.

[10] Yanaihara, Tadao (1929), pp. 220-223.

[11] See OPNAV, Civil Affairs Handbook, *Takao Province* (1944), pp. 49-51; also Hsü Tzu-wei (1946), p. 160 ff. This latter author calls the *pao-chia* system "the most effective instrument for destroying organized Chinese resistance to the Japanese."

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CHAPTER V

Migration and the Growth of Cities

177 DEPENDING on the way one looks at it, the history of colonial rule in Taiwan can give the appearance either of having brought great transformations to the island or of having left the indigenous social structure virtually intact. This apparent contrast comes from shifting attention between the two principal groups of people that were involved—from the Japanese, who had little to do with the archaic customs and usages of the population, to the Taiwanese, who had only small acquaintance with the modern changes that were being introduced. Here we shall be concerned with those of the latter who came into contact with the new elements.

Though the full force of these developments passed them by as a group, the Taiwanese were not all uninfluenced. The organization of farming, to be sure, continued as before with little modification. The activities most affected were those outside of agriculture. Hence the people must have moved to the new conditions, since the innovations did not move to them.

The Territorial Frame of Migration

659 Taiwan is a small island, and recording the migration of its people should not be a task of great magnitude or difficulty. Japanese regarded such a record as essential in keeping a close watch over the population. It was so important that they inaugurated continuous population registers for every village, every group of households. These reports were compiled in fine detail by the authorities and published in a single volume each year.[1] A certain amount of adaptation is needed to make these registers answer questions that are germane to our interests.

167 Japanese conquest began to provide not only the first reliable data for assessing movement in the population, but also a new type of control over it. It put an end to the historic influx of people from China that had been responsible for populating most of the island.

[1] The data proved to be more efficient for their purpose than for ours. The system faithfully counted the arrival of new persons in a community (the most important information from the standpoint of regulation) but did not expunge the records of all persons who left. The result was a more or less consistent bias toward *over*-estimating the number of people living in a given locality, and of course a somewhat distorted view of total migration.

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CHAPTER IX

The Fertility of the Taiwanese

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JUDGED by appropriate standards, the Japanese made an impressive success of improving health in Taiwan. In less than 50 years they transformed the island from a turbulent and pestilential area into a place where the major hazards to existence in former times were removed. It was a place where the Japanese themselves could live more healthily on the average than their countrymen did in Japan.[1] Measured in any conventional way, mortality among the Taiwanese was sharply reduced. Its decline was as rapid as almost any other contemporary case for which there is a record.

Like the economic program of the Japanese, the health program was carefully designed to function through the society that existed in Taiwan, and not to reform it. Therefore, the policies that made deaths less prevalent in the population did substantially nothing to the incidence of births. The result was the growth of population described in Chapter I, which doubled the number of Taiwanese in less than half a century.

Improvement in mortality would not have had this consequence if it had not been for the high level of fertility among the Taiwanese. Birth rates, as illustrated in Fig. 21, remained about the same throughout this period, fluctuating from year to year, perhaps even rising slightly from the beginning.[2] Though the fertility of Taiwanese was not the highest that has been recorded, and their mortality was far from the lowest, in conjunction these two factors created a natural increase that became as rapid as any yet known.

Steady high fertility produced more than a steady flow of births. While death rates fell and birth rates persisted at former levels, the total annual deaths stayed at almost the same number and the births that occurred each year mounted sharply (Fig. 21). Many people remained living who previously would have died, and thus had opportunity to give birth to children who otherwise would never have entered the world.

[1] See Taiwan, Government-General, Research Bureau, *Life Tables of Taiwan, 1926-1930* (First Issue) (1936). The health of Japanese in Taiwan may appear better than it actually was, for their deaths were not always registered in Taiwan. Many were recorded back at the legal residence of their families in Japan.

[2] The trend takes on a slightly different appearance when measured in different terms, as we shall presently see.

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CHAPTER X

Conclusion

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THE results of Japanese rule in Taiwan are of little consequence to social science as an isolated series of events. They gain their strongest claim to importance by revealing some social and demographic implications of policies that are often urged and undertaken towards non-industrial peoples. Whether through sinister and selfish motives or through a benign desire for improvements "to fit the needs" of the recipients, such policies can equally well have the same effect. They all may be tempted to eschew any radical social changes and may run the risk of starting an uncontrollable growth of population—growth that is initially gratifying but cannot be maintained, and can be checked only through disaster.

In order to give these findings a wider application, we have therefore stressed those points of Taiwan's development which are of general significance, and have dwelt less on problems that are peculiar to this one example. We have not supplied a chronicle of events or a source book of information about Taiwan. Facts have been presented so as to illustrate the general problem: what are the consequences of introducing "backward" peoples to certain advantages of modern technology without its counterparts in social organization? We have shown, for example, that it is possible to "raise the levels of living" by measures having the least interference with indigenous custom, without affecting the formidable structure of familial institutions that the poorer peoples have relied upon in the past for survival. If policies either of betterment or of exploitation follow this course, they may reduce mortality but not fertility, and must eventually face the consequences of population growth where it is the last thing that is needed.

From both a demographic and a sociological point of view, the outstanding fact about the Taiwanese population has been its phenomenal increase in recent decades. After setting forth the dimensions of this growth in the first chapter, we have proceeded to search out some of the factors which were responsible. This inquiry has led through an examination of the social structure of the Taiwanese, of the types of innovations that were imposed upon it, and of the modes of response to these changes by the people of the island. By

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CONCLUSION

177 this time it should be possible to review some of the salient points and to see how they are pertinent to problems encountered elsewhere.

Taiwanese entered the twentieth century as an agrarian people, one that had just come under the rule of a colonial regime dedicated to instituting change. The Japanese who controlled the island were determined to make its economy more efficient, but also to concentrate rather than distribute the gains. Though their success in devising an orderly program of development was unique, and though the response of Taiwanese was likewise so, the objectives of the program and the type of reactions to it had a close resemblance to those in other areas. Japanese took their lessons in overseas administration from the record of European powers in the last century, particularly of Dutch policies in Indonesia. As a colonial dependency they governed Taiwan in a manner that was nothing short of exemplary by these standards—indeed, they excited the admiration of Old Colonial Hands who had a chance to witness their methods.

Their experience in Taiwan thus embodied the aspirations of most colonial rulers since the Industrial Revolution. With the benefit of past experience of others, and the advantage of their own firm determination, Japanese made strides that were sure and exceedingly quick. Their success represented the techniques and policies of others carried to a new degree of refinement.

In fact they succeeded too well, for their endeavor was out of date. The techniques of colonial rule that they shrewdly adapted and developed in Taiwan were capable of promoting individual survival in the population more effectively than before. Their methods also frustrated the types of social changes that might have induced Taiwanese to lower their fertility. Unabated growth at the rate attained by 1940 ultimately would have disrupted the goals of the Japanese themselves, for Taiwanese could not have continued to increase at this pace indefinitely—the world itself in a few centuries would not have been large enough to hold all of them.

Achievement of Japanese economic goals in Taiwan turned on their energy in building up investment in the island and their ingenuity in finding cheap ways to aid its agriculture. As we have seen, extended industrial development was an afterthought. The steps that they took to gain these ends improved the health of Taiwanese and reduced the hazards of dying—sometimes directly as with medicine and sanitation, sometimes as a by-product of ordinary administration.

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CONCLUSION

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As investment began to expand, they also took steps to concentrate it in a few hands. This was the more remarkable since capital was not poured in from outside. As we have seen, through heavy taxation, charges for capital services, conscription of labor, and manipulation of farm prices, the authorities and businessmen managed to defray the expenses of their program and to secure net proceeds for export to Japan. Taiwanese more than paid their own way in economic development.

The Japanese, who initiated most of the social changes in Taiwan after 1895, kept the greater part to themselves. When it came to their overt policies toward the population, practically all indications have pointed in this direction: they systematically avoided modifying the social structure except for separate and specific purposes. After discovering where and how to apply authority in rural villages, they approached most details of local government by indirection (e.g., through the *pao-chia* system), and husbanded their administrative resources for more urgent objectives. By confining their modern changes to a few major cities, Japanese obstructed the spread of these influences to the rural parts of the island. Even in the cities, barriers like favoritism in employment and segregation of the two groups prevented free intercourse between them. At every turn, the forces that might have drawn Taiwanese into more varied types of activities were consistently deflected from this result. Farming never ceased to be their main source of support, and the operation of individual farms was scarcely altered by the improvements around the fringes of agriculture.

The only aspect in the lives of Taiwanese subject to marked and unequivocal change was their mortality. The chances of surviving were steadily improved at all ages. Levels of living must have increased to some extent, denying poverty its former part in undermining health. Japanese also brought to Taiwan the knowledge and the drugs of modern Western medicine, with which they treated disease and forestalled its spread. The quality of their medical practice fell far short of usual standards in Western countries, and the expenditures on actual medical equipment were modest. But Japanese health authorities put these limited resources to use in a way that made spectacular progress against the risks of death. Their health effort, so niggardly with its facilities, succeeded largely because of the energy that was devoted to its administration.

In former times, the Taiwanese population had survived in spite

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177 of its high mortality. One of the conditions thus imposed on the society was the maintenance of high fertility. It contained a complex and pervasive set of injunctions to preserve the continuity of family lines, traditions of fondness and indulgence for children, pressures to marry, and incentives to rear large families. Family membership became a status through which an individual was linked to most other activities. The portions of the social structure where these ties were strongest were the portions that the Japanese left intact. Many were features that Japanese depended on for keeping order and making their administration effective.

Since nothing occurred to diminish the strength of these familial institutions, there is no reason why fertility should have declined. Mortality was lowered by simple measures applied on a mass scale. They could be carried out cheaply and through the social order as it existed—indeed, these were the two greatest virtues of the program. Consequently, fertility remained sufficient to offset the risks of death that had prevailed in the past. The result was a natural increase in population as rapid as any that had yet been recorded.

Starting out with this increase in the Taiwanese population, inquiry into other aspects of the society has necessarily come full circle, and returned to the factors that were most conspicuous in making the growth possible—steady high fertility and persistence of the family system that maintained it. Using the best measurements that are available, the findings of Chapter IX have shown that average fertility declined inconsiderably as time went on, if at all.

If we know less about variation of fertility among Taiwanese at any one time, it is partly because the data are limited, partly because there is less to know. The entire range of our measurements for civil divisions in Taiwan would fall within what is today regarded as very "high" fertility. Even in cities, where birth rates in other countries have tended to be the first to decline, Taiwanese showed almost no desire to reduce the size of their families: urban conditions either had very little effect on fertility, or affected the fertility of only a few people.

It would be welcome if studying the demographic and social events of the past were to yield predictions about the future. Such questions are continually put to demographers, who must exercise all their scruples if they are to avoid giving answers that will mislead. In the case of Taiwan, half a century of rapid and accelerating growth has unfortunately given little indication of what is in store for later

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

years. To predict actual trends in population implies some prognostication of events in related spheres. These events in turn will be the outcome of decisions that are not yet made, political tensions that are not yet resolved, and perhaps even wars that are not yet fought.

The Japanese made many contributions to the ability of the Taiwanese population to support itself on an increasing scale. Although one hears a great deal today about Japanese oppression in Taiwan, little is said about the large physical plant that they constructed. But the fact is that they bequeathed almost all of this, albeit in somewhat run-down and damaged condition, to the future of Taiwan and whatever power holds control of the island. On the other hand, the greatest factor, and the one they did not leave behind (though they would have been happy to do so), was the fund of skills residing in the Japanese community. Without these, or appropriate substitutes and watchful care, the island's economy could never be made to yield as before.

The removal of the Japanese left a great deal that still could be accomplished by a more enlightened regime. The best part of this opportunity was lost by the Chinese from the mainland who replaced them. The war-time deterioration of physical equipment under the Japanese was as nothing compared to the wanton destruction and almost deliberate undermining of the economy in the early postwar years. More recently the Nationalist government, since Taiwan became its refuge from Communist expansion in China, has acquired a stake in the island's future that it did not have before. Through creditable effort and outside assistance, it has restored most of the former productive facilities and in many ways has improved upon them. But in order to feed the population and their own nationals, the present authorities have found it necessary to fall back upon the island's agricultural resources, and have kept as much of an agrarian emphasis in their methods as did the Japanese. Under them, for example, industrial management has apparently been still further concentrated under official control, and has not become more widespread among the Taiwanese. Insofar as this amounts to a population policy, it seems to favor a continuance of high fertility and, if unchanged, to offer very little promise of a decline in the rate of growth from this source.

If more concrete predictions are to be made, however, it is safer to begin by guessing what will *not* happen. For example, natural

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Introduction

This book, primarily a study of a Hokkien Chinese agricultural community on the west-central coastal plain of Taiwan, is based on a field study carried on during sixteen months of actual residence in Hsin Hsing village. It is more than simply an ethnographic description, however, since it also provides a picture of the changing life of the Chinese peasant, at least in one area of the island.

Taiwan provides an especially unique opportunity for the study of the nature of Chinese culture change and its dynamics. In a relatively brief span of years it has evolved from a traditional, premodern society to an emerging urban-industrial society. As more and more scholars have come to realize, the essential material for the study of this dynamic process is available there for analysis.

At the same time, until fieldwork can be carried on again on the Chinese mainland, research in Taiwan is perhaps the closest one can come to studying a Chinese cultural group living in a Chinese context. This has unfortunately been the case since Western scholars were virtually halted in their firsthand ethnographic research on the mainland of China when the Communists assumed power in 1949. The several studies published before and since then, ranging in type from J. L. Buck's (1930, 1937) detailed land-utilization and farm family surveys to the anthropological and sociological community study type (see bibliography), are of scattered areas dotting the great Chinese land mass. For the extremely important area of southeastern China, Fukien and Kwangtung, where most of the Taiwanese came from, only three published Western language studies exist—those of Kulp (1925), Lin (1947), and C. K. Yang (1959). Other than some scattered general studies (discussed briefly in Chapter 2) and a number of brief works dealing with highly specific subjects, this book, which combines ethnography with detailed analysis, is the first of its kind to be made available for Taiwan.

Culturally, Taiwan has been and still is a part of China. Before the influx of Chinese between 1945 and 1949, immigration from the south-

1:Gallin E-4,5 (1957-1958) 1966
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121 eastern part of the mainland to Taiwan had been going on for several
167 hundred years, beginning in the 1600's and virtually ending about
177 1900 when it was almost completely stopped by the Japanese regime.
178 Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 During the Japanese occupation of Taiwan, except for the period
179 just before and during World War II when they attempted to Jap-
178 anize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese popula-
[744] tion has been significant. The combination of relatively efficient gov-
[20] ernment, orderliness of life, and public health measures, together with
[161] an extensive system of communications on a relatively small island has greatly facilitated rapid population increase on a stable land base and
[369] *a rapidly increasing growth of urban centers.*

Out of these developments, the most significant changes for the rural
369 population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and, with this an increased spread of urban influences or at least their
[167] effects into the rural villages. These increasingly significant extensions

1:Gallin E-4,5 (1957-1958) 1966
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the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to [illegible]ve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as p[illegible] their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

1:Gallin E-4,5 (1957-1958) 1966
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greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

1:Gallin E-4,5 (1957-1958) 1966
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to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the accent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1943, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1954b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

1:Gallin E-4,5 (1957-1958) 1966
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words in Japanese, such as expressions to be used when entering the predominantly Japanese-manned police stations and other official places. Some uneducated men, however, learned a modicum of Japanese when they served in the Japanese army labor corps during the war period.

Under the Japanese the teaching of the Chinese written language as well as the traditional Chinese classical literature in the schools was illegal. However, village men tell about a Chinese school "secretly" conducted in a temple in Lukang even through the late 1930's. There children and teenagers were taught to read and write Chinese and to study the Chinese classics. Only a very limited number of people from Hsin Hsing and the neighboring villages attended such schools, and there were few who attended the Chinese school who did not attend the Japanese primary schools as well.

In the Hsin Hsing area, then, except for the few Taiwanese who managed to attend secondary schools or colleges or who were laborers during the war, the number of persons able to read and speak Japanese (or read Chinese) was small. Grajdanzev, mostly on the basis of Japanese sources, noted that "after 1937 five and one half million Chinese (in Taiwan) could not read a newspaper in their own language, though most of them do not know Japanese" (1942:170). The effectiveness of the Japanese educational system for much of the population of the rural area has perhaps been exaggerated. Although the Japanese school system was greatly expanded between 1937 and 1943, it appears that it did not have time to develop any depth in its effect on the peasant.

Under the Nationalist government's theoretically "compulsory" education, almost all students and former students of the present school system can now speak some Mandarin, which is the only language used in the school after the first or second year. Some of the younger middle-aged men have developed a functional knowledge of simple Mandarin as a result of recent work contacts in Taipei or service in the Chinese army.

The language situation in Hsin Hsing and the surrounding rural area is as follows (for 1958): Very young children speak only Taiwanese (Min-nan) up through the first few years of school. Children in higher grades and young people up to the age of about twenty-six speak Mandarin with varying degrees of fluency in addition to their native Taiwanese. Their fluency depends upon the amount of schooling they have had, how long they have been out of school, and the amount of contact they have had with the language at work or in other special situations after leaving school.

Some men and a few women between twenty-four and forty-five speak some Japanese in addition to Taiwanese. The men learned it

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Changing Land Tenure and Its Effect on Community Organization

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The traditional (Ch'ing) land tenure system in Taiwan has undergone a number of modifications over the years. Each was instituted with the advent of a new regime, and marked the inception of major changes in other aspects of rural life. As we have seen, the colonial administration policies of the Japanese were instrumental in producing the first significant involvement of the Taiwanese peasant in the market economy. Nevertheless, it was not until the restoration of Chinese rule, when the population growth began to exert noticeable pressures and the Nationalist Chinese sponsored the Land Reform Program, that major changes took place in the economy which reached directly into most of the areas of Taiwanese rural life.

The system of land tenure in Taiwan has always been a controlling factor in the lives of the agricultural population, and to understand Taiwanese life fully it is necessary to understand the land tenure system and its history. From the late nineteenth century onwards the rural villagers suffered the results of the concentration of landownership into too few hands. This situation culminated finally in the Land Reform Program of 1949–1953, which, for the first time, secured the Taiwanese tenants' rights to the land they tilled through firm rental contracts, reductions in rent, and the Land-to-the-Tiller Program.

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Putting untilled land under cultivation became a great concern of the government at the time of the Manchu conquest of Taiwan in 1683, according to T'ang (1954:23–27). Under the Manchu (Ch'ing) dynasty, any person applying for rights to occupy uncultivated land was considered the owner as long as he kept his acres under proper cultivation. Not surprisingly, this program led to a situation in which people with enough capital, "a relatively small number of great families" (Ginsburg, 1953:32), obtained rights to large amounts of land

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and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:53; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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eating, while continuing to push more food on him. When old people talk, even though the younger people may consider their words pure nonsense, they merely smile and agree. When the evening is over there is usually some young grandchild waiting to lead the old man back over the dark paths to his house.

Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

ILLNESS, DISEASE, AND MEDICINE

As has already been shown in Chapter 2, the tremendous increase in population on Taiwan is a reflection of the great reduction in the death rate, which results, primarily, from the lower incidence of fatal diseases. The control of disease has been effected by such factors as public health programs which have helped eliminate diseases like cholera and malaria, an increase in the number of Western-style doctors, an increased reliance on Western medicine and medical techniques, and somewhat better sanitation as a result of education of the public and governmental enforcement of health standards.

It was during the Japanese period that Taiwan saw the advent of Western-style doctors and medicines, especially in the 1930's. However, they were few, and their practice was limited mainly to the wealthy. The benefits of their knowledge, therefore, and the everyday use of Western-style medicines did not reach many of the rural people. During this period the rural people continued to rely primarily on Chinese doctors and herbal medicines, as well as magical cures effected by shamans and healing priests. (The magical techniques are discussed more fully in Chapter 8.) However, public health measures introduced by the Japanese government to combat epidemic diseases did benefit

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

the rural people. Some forms of improved sanitation reached the rural areas through the schools and, perhaps more effectively, through the publishing of government edicts enforcing practices of sanitation. Semiannual government inspections forced villagers to clean up their houses and the villages twice a year. The inspections were carried out by the Japanese police and civil officials, and any family which did not pass the inspection was subject to fine and to reinspection, which meant that "the party was punished by having to clean up all over again." The policy of inspections instituted by the Japanese has been continued under the Nationalist Chinese regime.

During the latter part of the war, and especially after the restoration of Chinese rule to Taiwan, there was a marked increase in the incidence of disease, particularly communicable diseases. There was even a recurrence of cholera. This was a direct result of the poor living conditions brought about by the war and, with the coming of the Chinese government, a chaotic administration which was unable or unwilling to deal with health problems. However, the situation gradually began to improve after 1948 and 1949 when Taiwan became the new stronghold of the Nationalist Chinese regime. This improvement is evidenced by the general situation in the Hsin Hsing area. Beginning in the early 1950's the number of Western-style doctors practicing in the area increased. At this date, there are a number of such doctors, and the villagers consider their fees reasonable and within their means. The reason for this great increase lies in the different licensing practices of the Japanese and the Nationalist governments. Under the Japanese a man had to be a graduate of a medical school before he could practice medicine; under the Chinese government, the applicant is required only to pass a practical examination. This means that people who have worked in hospitals as aides or technicians and have had some opportunity to observe others practicing medicine may have accumulated enough knowledge to pass the examination and obtain a license. Therefore, while there are now a large number of licensed doctors practicing in the Hsin Hsing area, only a few who went to school in Japan have had formal medical training.

In addition to the great increase in the number of doctors practicing in the local area, in recent years there has also been a marked expansion in the number of private and public hospitals in the cities. These hospitals, which are sometimes very large, can accommodate many patients, house relatively modern facilities such as operating rooms, X-ray and other equipment, and provide modern drugs for patients. Although most of the patients treated in these hospitals are city people, village people sometimes go to them for treatment. They are usually referred there by a local doctor who is capable of diagnosing an illness as one requiring hospital care or who is honest enough to

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
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NOTES

Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, i.e., only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 3.93–5.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 39.57–59.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chroniclers, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1716), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1758), Wang Ying-ts'eng (1764), Hsieh Chin-luan (1807), and Chen Shu-chün (1852) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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52:Steiner S-4 (no date) 1951
AF1 China
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655 471 ments or sold to private industrialists by means of competitive bidding.[40]

Taiwan's industrial growth in recent years reflects mostly the development of government enterprises. Such state industries as gasoline, kerosene, and Diesel oil have registered considerable increase over the peak year production figures under the Japanese.[41] Other government-operated industries such as electric power, sugar, alcohol, cement, and camphor, though lower in production volume than in the prewar peak year, have made extensive recoveries in contrast to their chaotic conditions at the conclusion of World War II.[42] Augmented by ECA assistance, the over-all industrial picture may be described as one of steady growth.

Educational Policies

871 177 [212] The Nationalist government inherited from Japan an educational legacy which comprises a mixture of salutary and disadvantageous factors. Of the former is a more than 70 per cent literacy among the people.[43] A framework of primary and secondary schools scatters over the island. A fair foundation of vocational education has been laid. There are also several higher institutions of learning. A tradition of discipline, hard work, and thriftiness prevails among the students.

871 177 197 On the disadvantageous side is the predominant position of the Japanese language, both spoken and written, as a medium of learning. Many island inhabitants can hardly read Chinese or speak their native Fukien tongue flu-

[40] *Taiwan Reconstruction*, Vol. 2, pp. 408–547.

[41] *Ibid.*

[42] *Ibid.*; also *Taiwan Today*, pp. 99–122.

[43] *Taiwan Reconstruction*, Vol. 1, p. 89; also for a general treatment of the subject, see Taiwan Provincial Government, *The Administration of Planned Education*, Taipeh, 1949.

[p. 220 (A)]

871 177 197 ently. Besides, the key educational personnel was composed mostly of Japanese. To fill their vacated posts with competent indigenous educators is a time-consuming process.

872 A review of existing educational regulations indicates a policy to extend equal opportunity for free education to all the people, beginning with primary education and gradually extending to junior high school level. Of children in primary schools, 79.08 per cent were being given free education as of September 1949, in contrast to 71 per cent during 873 the pre-Nationalist period. Under the Japanese, higher education for Taiwanese youths was discouraged by means of admission technicalities. This restriction has since been removed. Government scholarships are available to deserving youths with inadequate financial means. The current problem is to provide additional facilities to relieve congestion in secondary and higher institutions of learning. It has been made more acute by the influx of some 100,000 refugee students from the mainland.[44]

871 The over-all Nationalist objective in education is to implement the political, economic, and social policies of the National Government. To meet the current emergency, a series of regulations have been adopted to "establish a central thought," "to strengthen Nationalist concepts," "to carry out reconstruction and defeat Communism," and to link education with various extension programs.[45]

The "central thought" policy revolves around Dr. Sun Yat-sen's *San-min*

[44] Data in this paragraph drawn from *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 83–146; *Taiwan Today*, cited note 11 *supra*, pp. 147–48; *The Administration of Planned Education**, cited note 43 *supra*, p. 7.

[45] "Educational Program of Taiwan during Emergency Period"* (text appears in *Taiwan Reconstruction**, Vol. 1, pp. 84–88).

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4:Grajdanzev--24-25 S-4 (no date) 1942 Formosans-1-3
116, 162, 168, 656, 177.16 Japan
636.16

"Racial Composition of the Population

Since Taiwan is a colonial territory, it is of more than ordinary interest to study the evolution of the racial composition of its population.

After more than forty years of Japanese domination the island thus remains Chinese in character. In 1938 Chinese made up 94 per cent of the population, while the Japanese, who constituted about 2 per cent of the total in 1905, now made up 5.3 per cent. Presumably this figure does not include Japanese soldiers stationed in Taiwan. At the time of the occupation [25] of the island the Japanese entertained high hopes for Japanese immigration

Racial Composition of The Population of Taiwan (1905-1938)

	Oct. 1, 1905 Census		Oct. 1, 1935 Census		Dec. 31, 1937		Dec. 31, 1938	
	Thousands	%	Thousands	%	Thousands	%	Thousands	%
Chinese	2,979.0	97.8	4,990.1	93.86	5,261.5	93.85	5,392.8	93.88
Japanese	59.6	1.93	271.4	5.12	229.3	5.33	308.8	5.37
Foreigners*	8.2	.27	54.1	1.02	46.2	.82	43.4	.75
Total	3,046.9	100.0	5, 315.6	100.0	5,609.0	100.0	5,747.0	100.0

* Almost entirely Chinese who are citizens of the Republic of China.

Note:—For 1935, 1937 and 1938 'Chinese' includes also aborigines, numbering about 140,000.

into Taiwan. Climatic conditions are suitable, the density of the population at that time was relatively low and there was no doubt that the island could support much larger numbers than were there. Subsidies were granted to settlers in general and to fishermen in particular and it was thought that in this way the island would be speedily 'japanized.' The results of the first seven years had already brought disappointment:

	Total Japanese arrivals	Total Japanese departures	Remainder
1898	13,214	3,078	10,136
1899	20,743	7,903	12,840
1900	20,995	11,291	9,704
1901	17,841	14,054	3,787
1902	13,821	11,478	2,343
1903	15,892	13,149	2,743
1904	11,564	12,155	591

After the rush of the first three years, when the Japanese administration of the island was organized and many persons were needed for the governmental apparatus, the number of immigrants fell sharply. As was shown above, the growth of the Japanese population

on the island was not due to immigration alone, but also to natural increase. After subtracting this natural increase, the average annual number of immigrants is only 4,000 to 5,000."

4:Grajdanzev--25-26 S-4 (no date) 1942 Formosans
116, 168, 464, 656, 609, 177.16 Japan
636.16

"Since the occupation of the island, the Japanese authorities have forbidden the free immigration of Chinese. Coolies were [26] admitted in limited numbers each year for seasonal work but they were compelled to return to the mainland after the expiration of their contract. Besides the coolie class some Chinese could enter Taiwan for business purposes with the permission of Japanese consular authorities, but they remained Chinese citizens and were treated as foreigners. These two groups of Chinese make up most of the 'foreigners'. The fall in their numbers in 1937 and 1938 is connected with the Sino-Japanese war, for many then preferred to return to China and the total number of 'foreigners' is now comparatively small. Thus the purpose of the Japanese authorities —to exclude the Chinese from the island—has been accomplished, but this has been more than offset by the natural increase of the Chinese population."

4:Grajdanzev--27-28 S-4 (no date) 1942 Formosans-1-2
116, 167, 177.16 Japan
636.16

"Below we give a short survey of the efforts of the Japanese government to colonize the island with Japanese settlers. These were to be of two kinds: (a) farmers, (b) fishermen. Before 1907 no plans for colonization could be worked out because the country was not yet pacified and Japanese immigrants could not appear in the countryside unless supported by armed forces. In 1907 the government elaborated and put into force a plan for the emigration of farmers to Taiwan. Grants of land—about 38,000 hectares—were made to thirty-eight settlements, but only eight settlements were actually made, and even these ended in failure. Taiwan attracted many Japanese adventurers (see figures of immigration for 1898-1904 above) who sought a paradise in the new possession. Finding no outlet for their talents, they became restless, and the government-general decided to repatriate them to Japan, and the would-be farmers departed with them.

The second attempt, started in 1910, was relatively more successful. The government gave to immigrants in eastern Taiwan land, houses, roads, schools, hospitals, irrigation works, etc. on condition that they would repay all advances in ten years, but demanded that each immigrant should have been an independent farmer in Japan and have at least ¥250. The limitations were imposed because the official explanation of the first failure was that the immigrants had no money of their own and were poor tenants in Japan. Under this scheme only 3,368 persons were settled in three different villages. These villages still exist, but after twenty-five years have only 3,117 inhabitants. Conditions of

life on the land cannot have been too attractive.

Since 1915 the Taito Sugar Company, with the support of the government, has tried to attract Japanese colonists for the production of sugar cane. The Taito Colonization Company was established and became active, but all its efforts were unsuccessful, and up to 1936 only seventy-eight families among those who came under these schemes remained on the land. Yanaihara explains this failure by the low price for sugar cane offered by the company and by the difficulties of specialized [28] farming, but a more fundamental cause was that in a colonial society a mass immigration can succeed only if the immigrants lower their standard of living to that of the natives.

In 1931 the indefatigable government-general worked out a new plan of immigration, and up to 1936 brought to Taichu province 156 families, giving each 12.25 acres of land, a monetary subsidy and loans free of interest. Some of the immigrants were settled near Takao."

4:Grajdanzev--28 S-4 (no date) 1942 Formosans
116, 167, 311, 609, 177.16 Japan
636.16

"It should be noted that, even after the pacification of the island, Japanese immigrants were treated in a hostile manner by the Chinese population. Under this pressure many farmers were compelled to leave their villages, some of them renting their land to Chinese and becoming absentee landowners. The total number of Japanese occupied in agriculture in Taiwan in 1938 (including members of their families) was 8,065.

The colonization schemes for fishermen were not much more successful. In 1909 the government-general began its campaign, promising subsidies and other advantages. But those who answered the call preferred some occupation in Taiwan other than that of fishermen. In 1926 in Taihoku province 49 families (172 persons) were settled and most of them continue to work there. Since 1932, the government has again made efforts to attract fishermen to Taito province, and, up to 1937, 54 families had settled there. The plan for 1938 and 1939 foresaw the settlement of 25 families for each year. Such are the very modest results of the continuous efforts of the Japanese government.

Takahashi is of the opinion (1) (and his opinion reflects the ideas prevailing among

1. See his Gendai Taiwan Keizairon, pp. 8-9.

Japanese economists) that there is little room for the Japanese in Taiwan as long as the island remains an agricultural region; hence his belief that Taiwan should be industrialized."

15: U.S. Navy--23 [8] (no date) 1944 Formosans
116, 167, 221, 443, 177.16 Japanese
636.16

"The Japanese put an end to unregistered immigration and emigration when they took over the island in 1895.

All Chinese wishing to immigrate were required to register with a Japanese consular agent in China, and to register in Taiwan after arrival. Actually, a considerable clandestine unregistered traffic continued by small boats plying the Straits.

Until 1937 there was a seasonal movement of labor. Workers crossed from the mainland to work through the tea, sugar or pineapple seasons. After they had made enough to live on for some months, they returned to their legal homes on the China coast. A considerable number of merchants and day laborers engaged in urban enterprises were accustomed to pass back and forth between Canton and Taiwan, entering principally through Takao. As of July, 1935, there were on the island 11,327 households of Chinese holding Chinese citizenship, totaling 41,651 persons. Since 1937 (the outbreak of the China War) seasonal migration has been suspended."

15: U.S. Navy --23-24 (no date) 1944 Formosans
116, 167, 441, 464, 177.16 Japanese
636.16

"The majority of Japanese immigrants go to the island for [24] administrative work or business management. Japanese officialdom some years ago arrived at the reasonable conclusion that since the increase in the Formosan population was proportionately so much greater than the increase of the Japanese, only a program of industrialization (with accompanying influx of Japanese technical labor) would serve to strengthen substantially the Japanese population of the island. Presumably, large numbers of Japanese have immigrated to manage the new technical establishments known to have been established on a fairly large scale in and around Takao, near Shinchiku, and elsewhere since 1941."

15: U.S. Navy--32 [7] (no date) 1944 Formosans
116, 464, 167, 177.16 Japanese
636.16

"The industrial program which has been developing since 1930 has received special stimulus since the China war broke out. Initially it had been retarded by an acute shortage of skilled or semi-skilled labor. To remedy this, a program for encouraging the migration of skilled and semi-skilled Japanese workmen from Japan to the island was inaugurated in 1937 by the Taiwan Government. The mining industry suffered most severely, as indicated by the fact that the percentage of increase in labor employed in the mines is greater than the percentage of increase in production."

15: U.S. Navy--32 [10] (no date) 1944 Formosans
116, 166, 464, 177.16 Japanese
636.16

"The labor shortage is especially acute on the east coast where major industrial developments are planned for the next few years. To alleviate the shortage a bureau has been set up which attempts to engage workers on the west coast, send them around to the east, and there settle them in advantageous places.

In January, 1939, an employment bureau organized in Karenko (capital ¥200,000), brought 500 labor immigrants from the west coast of the island and put them to work in the Japan Aluminum Company's factory. They were given land (1/2 acre to each house) and were required to raise hogs, for there is a shortage of pork on the East Coast. A government bureau plans to continue this resettlement work."

4:Grajdanzev--28-29 S-4 (no date) 1942 Formosans
116, 168, 609, 701, 177.17 Japan
636.17

"Greater numbers of Japanese in Taiwan are necessary both for military reasons and for the speedy 'japanization' of the islanders. The military considerations advanced by Takahashi [29] are very interesting for they show that, in spite of forty-five years of Japanese domination, there is still a certain anxiety concerning the loyalty among the Japanese rulers of the Chinese. The island is highly militarized and accustomed to martial discipline and yet the Japanese still consider it necessary to strengthen it militarily. But even Takahashi puts greater stress on the 'japanization' of the natives than on the Japanese immigration. After forty-five years of Japanese domination, after their continuous efforts to increase the number of Japanese there and to 'japanize' the natives, the island remains predominantly Chinese in character, the Japanese forming only about five per cent of the total population, and this state of affairs is bound to continue as long as the natural increase of the Chinese remains at its present high level."

15; U.S. Navy--21 [5] (no date) 1944 Formosans
116, 157, 167, 625, 177.18 Japanese
636.18

"The Japanese are exceptionally thorough and successful organizers, and have brought under their own control the economic life of the island. The police force and many of the urban commercial people came originally from Southern Kyushu and Shikoku, and speak the local dialects of those regions. The Japanese of the metropolitan areas in the homeland speak frankly of the hardness and unattractiveness of the colonial Japanese character in Taiwan."

15: U.S. Navy --21 [9] (no date) 1944 Formosans
116, 563, 177.18 Japanese
636.18

"Many Japanese are sincere in their effort to raise Formosan-Chinese living standards and honest in their desire to have the island become a real part of the Empire in spirit as well as in political name and military bondage. Hundreds of Japanese doctors, teachers, and minor officials have devoted their lives to the welfare of Taiwan. Unfortunately they have been a minority and have had little influence on the makers of overall policy."

40: Kirk--21-22 S-2 (no date) 1941 Formosans-1-2
116, 185, 656, 177.18 Japanese

"Chinese culture. The government officials of Taiwan are trying to abolish the Chinese culture patterns of the Formosan people. The 'Spiritual Mobilization' program formulated as a result of the 'China Incident' involves radical changes in social customs and religion as well as the substitution of Japanese for the Formosan language. A number of social customs are particularly objectionable to the Taiwan government. (1) Foot-binding is still practiced among the Taiwanese women, especially among those whose forefathers came originally from Fukien, China, although the custom is now prohibited by law. In 1905, according to official statistics, 59.6 per cent of the entire female population had deformed feet, in 1915 the percentage had dropped to 17.4 per cent, and in 1920 only 11.8 per cent of the women were victims of foot-binding. Today the young women are practically free from this affliction, but many of the older women are cruelly misshapen and walk with extreme difficulty. (2) The Japanese are trying to change the burial customs of the Formosans by urging cremation to promote sanitation and to conserve the land. The Chinese are reluctant to give up [22] the time-honored practice of depositing their dead in concrete mounds and vaults, and resent any interference on the part of the government. (3) Firecrackers, so dear to young and old, are no longer permitted. The Chinese find that the noise quickly brings the military police to the scene; so they comply with this law. (4) Another law which the subject people frequently disobey, however, is the prohibition of gold and silver religious papers, which the

Chinese persist in burning at their temple ceremonies. (5) Traditional Chinese costumes no longer meet with the approval of the ruling class. The Taiwanese who discard their native dress are more apt to receive favors from the military police. Guardians of the law have been known to cut cloth buttons from the garments of Formosan Chinese in public. (6) The traditional Chinese theater is no longer free to give performances of classical plays in the old style. Actors must appear in modern or Japanese clothes, and preferably in plays which dwell upon Japanese themes of loyalty and Bushido. The Taiwan puppet plays are illegal except by police permission. (7) 'Due to the present situation,' storytellers are no longer allowed free speech. (8) The Japanese are opposed to betel-nut chewing and are anxious to put a stop to the habit, but they have not yet taken positive action. The natives buy and use betel nuts without police interference. (9) As opium is a government monopoly, the Japanese are in a position to exercise strict control. Opium smoking, it is claimed, is declining rapidly. (10) The Taiwan officials do not approve of native dances and festivals, but permit a few savage tribes to stage their traditional dances under close supervision."

40: Kirk--24 S-2 (no date) 1941 Formosans
116, 185, 208, 177.18 Japanese

"Spiritual mobilization. As an integral part of the Japanization program, the 'Ten Commandments of Taiwan' are given wide publicity.

1. Revere the Emperor. Make your body, as well as soul, that of a Japanese.
2. Revere the Shinto Shrine. Discard superstition.
3. Use the Japanese language. Discard Formosan Chinese.
4. Keep your body clean. Be neat in your dress.
5. Pay attention to hygiene. Stop the habit of eating in public.
6. Build sanitary facilities.
7. Think of the comfort of others; do good to them.
8. Follow the path of an honest man. Let us abolish thieves and liars.
9. Stop gambling. Work hard and earnestly.
10. Be polite and quiet. Stop quarrels and avoid speaking in loud tones."

40: Kirk--24-25 S-2 (no date) 1941 Formosans
116, 157, 185, 177.18 Japanese

"The Japanese are ambitious and aggressive; the Formosan Chinese are good natured and easygoing. The general opinion seems to be that Japan will succeed in its policy of assimilation, although old-timers whisper that the Formosan temperament is outwardly docile, but inwardly rebellious, and often finds ways of getting what it wants [25] in spite of official regulations. This control by force, combined with the passive temperament of the people, makes open resistance extremely unlikely, but as one Formosan told the writer, 'Many reforms are changes in outward appearance only. They do not transform the spirit within.'

It is probable that many specially qualified Formosans who have accepted the 'New Order' in Taiwan will find increasing opportunity to participate in the 'reconstruction' of China under Japanese rule; for the Taiwan plan of administration may by extended to the mainland in pursuit of a 'New Order' for South China."

15: U.S. Navy --22 [4] (no date) 1944 Formosans
116, 198, 484, 563, 177.19 Japanese
636.19

"By making use of the Japanese language necessary in business, education and communication, the administrators of the island have created the foundation of a unity unknown in pre-occupation days. The ease of travel throughout the island is tending to blur rapidly the lines of cultural differences among the educated Formosans. All three Chinese groups are represented among the settlements along the east coast, to which many have been encouraged to move by Japanese interests."

15: U.S. Navy --24-25 (no date) 1944 Formosans
116, 191, 212, 872, 186, 177.19 Japanese
636.19

"Japanese, spoken by the 323,148 Japanese, is the official language of the island, and is spoken by a high percentage of the middle-aged and younger Formosan-Chinese in urban centers, but by few of the older agricultural community. About 42 percent of the Formosan-Chinese children attend elementary public schools to learn the Japanese [25] language and doctrines. They learn very little Japanese and at the same time lose the opportunity, when young, to learn something of written Chinese. Hence these younger Chinese are technically 'literate', and can understand orders issued in simple Japanese. Japanese is supposed to be compulsory for all who know it, and it is true that Japanese has become the lingua franca of the island. It may be said that Japanese, as the official language, will be understood by someone in any large gathering of people or in every village outside of the most remote savage territory, although the Formosan-Chinese avoid using it when they can."

15: U.S. Navy —25 (no date) 1944 Formosans
116, 191, 177.19 Japanese
636.19

"Japan is engaged in the stupendous task of changing the language of nearly six million people. While the Formosans continue to use their native tongue in social and business intercourse with one another, it is undoubtedly true that the number of those who have some knowledge of Japanese is increasing at a very rapid rate."

15: U.S. Navy --25 [2] (no date) 1944 Formosans
116, 162, 191, 177.19 Japanese
636.19

"The percentage of Japanese-speaking Formosans is said to have increased from .4 percent in 1905 to 8.5 percent in 1930, to 37.8 percent by 1937 and to be over 45 percent at the present time.

Table 20: Numbers of Formosan men and women who speak Japanese.

	Men	Women	Total	Percentage of total Formosan population
1905	10,801	469	11,270	.4
1915	50,143	4,194	54,337	1.6
1920	87,897	11,168	99,065	2.9
1930	394,677	70,750	365,427	8.5
1937	---	---	---	37.8
1938	---	---	---	41.9
1939	---	---	---	45.6 "

15: U.S. Navy —25 [3] (no date) 1944 Formosans
116, 191, 554, 662, 177.19 Japanese
636.19

"No information is available as to the standard used in determining knowledge of Japanese. Consequently the official figure of 45.6 percent may be an exaggeration. It is nevertheless true that the campaign to promote the use of Japanese has greatly intensified since the beginning of the China 'Incident' in 1937.

Various methods are used. Town and village police stations record the names of inhabitants considered conversant with Japanese. Periodical inspection of homes and oral questioning determines eligibility for the book. Whenever a Formosan needs recourse to the local authorities for licenses, business purposes, appeals, or other matters, reference is invariably made to the 'blue book'. If the applicant's name appears in the book, he is usually granted his request; if not, he is refused. Obviously there is room for graft and the shutting of official eyes in judging eligibility for the book. A foreigner with a wide acquaintance among Formosan-Chinese states that he knows of a number of instances where a man of some financial influence in the community is listed in the 'blue book' although his knowledge of Japanese is decidedly open to question. Nevertheless, it is understood that the system, only recently inaugurated, is producing results. Formosans have come to realize that without a listing in the book privileges and opportunities are denied."

15: U.S. Navy--25 [4] (no date) 1944 Formosans
116, 191, 624, 177.19 Japanese
636.19

"The hosei or head of the Ho must have a knowledge of Japanese. One can not now hold office or participate in local meetings or assemblies without being able to speak Japanese, the 'national language.' Newspapers daily publish reports from various localities emphasizing local pride in the spread of Japanese. An example is an item from Rato, a town in Taihoku Province, stating that a forthcoming election would remove from town and village offices every non-Japanese speaker. A census in Heito, Takao Province, revealed that only 32 percent of the Formosan population knew the national language. To remedy the situation, a school was opened for every ten homes and instruction was to be given by members of the young men's association to persons over 10 years of age."

15: U.S. Navy--25 [5] (no date) 1944 Formosans
116, 191, 208, 554, 177.19 Japanese
636.19

"Use of Japanese only is permitted in banks and government offices. Even though a Formosan speaks with a clerk who is also Formosan, the language must be Japanese. If the former is unable to converse, an interpreter is required. To stimulate language learning, insignia bearing the legend 'This household speaks the national language' are placed above the door of Formosan homes. Other signs such as 'Speak only the national language' are seen frequently in buses and public places.

A commandant of the Keelung Base said to the press, 'The basis of Japanization is dissemination of the national language. To do this, I believe we must immediately mobilize the motherhood of Taiwan under the slogan 'Raise our children in Japanese'. Even though one may know the national language, to use Taiwanese at all does not befit a soldier of the Imperial Army.'"

15: U.S. Navy --26 [2] (no date) 1944 Formosans
116, 191, 177.19 Japanese
636.19

"While the people of Taiwan are far from using Japanese in their daily life, knowledge of the language is increasing rapidly. Within a few generations it would doubtlessly supplant Formosan-Chinese among the educated to a large degree."

15: U.S. Navy--26 [4] (no date) 1944 Formosans
116, 198, 873, 177.19 Japanese
636.19

"English has been taught in the private mission schools and in the government schools for many years. It has been a compulsory subject in all middle and higher Schools, i.e., affecting the student age-group from 13 years upward. Pidgin English is not generally known; those who speak it will be found among the clerks and compradores who have worked for foreign firms.

The Imperial University at Taihoku, the High School at Taihoku and the Higher Commercial Colleges at Taihoku and Takao have trained small numbers of Japanese and Formosan students in Malay, Dutch, German, Thai, French, and two dialects of Chinese."

40: Kirk--19-20 S-2 (no date) 1941 Formosans
116, 191, 626, 177.19 Japanese

"The Japanese language. Japan has undertaken the immense task of changing the language of nearly 5,000,000 people. First of all, those who are struggling to acquire a workable knowledge of Japanese are listed in the 'blue book' and are given special privileges and exemp- [20] tions. Those who speak no Japanese have little chance of holding any elective political office. In banks and government offices Japanese alone is spoken. Above the doorways of Formosan homes where Japanese is spoken appears the legend: 'This household speaks the national language.' Signs frequently appear in busses and public places admonishing the people to 'Speak only the National Language.'"

40: Kirk--21 S-2 (no date) 1941 Formosans
116, 191, 177.19 Japanese

"Japanese-speaking Formosans

Year	Men	Women	Total	Per cent of Total Population
1905	10,801	469	11,270	0.4
1915	50,143	4,194	54,337	1.6
1920	87,897	11,168	99,065	2.9
1930	294,677	70,750	365,427	8.5
1937	...	...	...	37.8
1938	...	...	...	41.9
1939	...	...	...	45.6"

4:Grajdanzev--139 S-4 (no date) 1942 Formosans
116, 171, 208, 658, 177.20 Japan
636.20

"Analogous to the war expenditures are the related expenditures on propaganda. In this group we included expenditures on broadcasting, including construction of new stations, on 'social education,' and on the 'spiritual mobilization of the population'. There may be some who wonder whether the expenditures on radio-broadcasting stations may be properly considered as expenditures on propaganda. But while in Japan the users of radio receivers must pay a certain annual fee, in Taiwan broadcasting is free because the government considers it a powerful instrument for 'spiritual mobilization' and for the Japanization of the population."

"Now let us turn to another important sphere of cultural activities—newspapers. In Taiwan no newspaper can be published without the permission of the government-general, and the government-general has established a 'custom' of permitting only one newspaper to a city, so that up to 1932 there were only four newspapers in Taiwan, all in the Japanese language, though they sometimes carried a column in Chinese (1). Five

1. In 1937 a fifth one was permitted for Takao.

million Chinese in Taiwan had no newspaper of their own. In 1932 permission was granted to a Chinese weekly to appear as a daily, so that for the first time since the Japanese conquest the Chinese could read their own newspaper—Taiwan Shin-minpao. However, this experiment was short-lived. In 1937 it was decided that the people now know the Japanese language so well that no obstacles should exist to the japanization of the islanders. On March 1, 1937, all Japanese newspapers and the Chinese one carried a notice to the effect that after April 1 (for the Chinese newspaper, after June 1,) they were to cease publication of columns in Chinese (2).

2. Information on the newspapers is taken from Nippon shimbun nenkan, 1939, pp. 143-145. It is confirmed also by Sekai nenkan, 1929.

4:Grajdanzev--170 [21 S-4 (no date) 1942 Formosans-2
116, 204, 563, 656, 177.20 Japan
636.20

Thus after 1937 five and one half million Chinese could not read a newspaper in their own language, though most of them do not know Japanese."

15: U.S. Navy--22 [3] (no date) 1944 Formosans
116, 208, 609, 873, 177.20 Japanese
636.20

"The general population knows little of the outside world. The United Nations have individually and consistently been placed in an unfavorable light by the Japanese press, radio and educational policies. However, the Formosans who have reached the Middle and Higher Schools and those who have studied in Japan Proper, where they have had access to more evidence of American standards of living and national character, uniformly seem to admire the United States and what they understand of its liberal policies. The record of America's administration in the Philippines has made a considerable impression on educated Formosans. A few Formosans have received their higher education in America colleges and universities. For some years now they have been subject to strict surveillance."

40: Kirk --18 S-2 (no date) 1941 Formosans
116, 208, 177.20 Japanese

"Japanization of the people of Taiwan. The social significance of these attempts on the part of Japan to assimilate the savages will stand out much more clearly if we look upon this process as part of a much larger movement known as ko-min-ka, which means literally 'change to Imperial people.'

This economic, social, political, and religious movement dates from the beginning of the China incident and is of particular importance because the Japanese are planning to apply this same program with variations to the conquered and occupied territories of Asia.

First of all, certain slogans appear again and again in newspapers, in theaters, in public addresses, and in public places, which are intended to take the place of independent thinking on the part of the masses.

'Spiritual Mobilization,' 'The New Order in East Asia,' '100,000,000 People of 1 Mind,' 'The Great Mission of Taiwan,' 'The Resolve of the People of Taiwan,' 'Annihilate the Unsound Doctrines Which Oppose Understanding of the Present Situation' are popular phrases which every Japanese in Formosa hears or sees several times a day."

40: Kirk --19 S-2 (no date) 1941 Formosans
116, 185, 208, 461, 656, 177.20 Japanese

"The common people today are called upon to make so many sacrifices that the government is appealing to their sense of loyalty to the Empire and to their intense national patriotism to keep the masses united and in a mood to endure further privations. The present campaign for 'Spiritual Mobilization' includes (1) encouragement of savings, spending nothing for luxuries and very little for necessities ; (2) mobilization of gold; (3) free gifts of labor, money, and materials to help carry on the war; (4) improvement of health and training to increase the stature. Very few persons are exempt from labor services. Road and bridge building, flood prevention, cleaning and caring for shrines and shrine grounds, clearing and cleaning airports, and tree planting are types of labor which any ablebodied person may be called upon to do. When a worker receives notice to report on a certain day and at a certain time and place, he usually thinks twice before he dares to ignore the summons."

4:Grajdanzev--85 S-4 (no date) 1942 Formosans
116, 221, 226, 433, 471, 177.22 Japan
636.22

"Fishing, which did not demand an elaborate equipment, was an important auxiliary occupation for the Chinese farmers, especially in slack seasons. The sea around Taiwan is rich in fish and the Chinese are expert fishermen. It is natural, then, that fishing has become an important element in the economy of the coastal farmers. But at the time of their conquest of Taiwan the Japanese were not interested in the fisheries because at that time the seas around Japan proper and near Kamchatka had not been sufficiently utilized. Petty regulations, the taxing of fishermen, and other measures brought a decline in this ancient Chinese occupation and only recently, when the Japanese felt a need for more fisheries, and when their huge corporations with their mechanized equipment turned to the South, did the government become interested in fishing. The results were the same as in all other spheres of the economic life of Taiwan: Japanese fishing grew at the expense of Chinese."

4:Grajdanzev--68 S-4 (no date) 1942 Formosans
116, 231, 492, 177.23 Japan
636.23

"Although it has been said that Taiwan is well stocked with domestic animals and fowls, this requires some qualification. The animals bred are for draft purposes and for production of foodstuffs. In Taiwan either the water buffalo or some type of cow is used for draft purposes. Horses, donkeys and mules are almost entirely absent. The immigrant from Fukien had no place for the horse in his economy, but the Japanese government, in its efforts to supply the army with horses, worked out a ten-year plan and a thirty-year plan for Taiwan. According to the first, the number of horses was to be increased to 9,000; according to the second presumably to be applied simultaneously, the number of horses was to be raised to 110,000 head. In a region where rice occupies sixty per cent of the area, horses cannot be used for work and it is hardly conceivable that the poor farmers of Taiwan will begin to raise Arabian and Anglo-Norman horses as the plan foresees (1). The actual number of horses in 1938 was rather more than 300 while forty

1. Taiwan Jijo, p. 479; figures for the plans are taken from Sekai Nenkan, 1939.

years ago there were two hundred to three hundred horses."

4:Grajdanzev--70-71 S-4 (no date) 1942 Formosans
116, 231, 177.23 Japan
636.23

"The government also expends much effort in encouraging sericulture. Its experts point out that conditions in Taiwan [71] are very favorable for this industry: the mulberry tree has leaves the year round, there are no pests as in Japan, and production costs are low. But the farmers do not seem to take willingly to this occupation, for in 1933 the value of raw silk produced in Taiwan was ¥74,000 whereas in 1937 it had fallen to ¥50,000."

4:Grajdanzev--45-46 S-4 (no date) 1942 Formosans
116, 241, 651, 661, 177.24 Japan
636.24

"Beneficial as these irrigation works are, in many cases they curtail the farmer's freedom to select his crops. The government often compels the farmers to raise crops which they do not want to raise (as, for example, sugar cane). Takahashi tries hard to prove that this compulsion, which in Taiwan is [46] called simply exploitation (sakushu), is to their benefit, (1) but his arguments are not convincing.

1. Takahashi, op. cit., p. 280."

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-1-3
116, 171, 241, 454, 433, 177.24 Japan
636.24

"(3) Increased agricultural production may also be achieved by raising yields per unit of area. Below we give a comparison of yields in Taiwan and in Japan, and in the case of sugar cane, the area of which in Japan is too small, a comparison with Hawaii and the Netherlands Indies, where conditions are similar to those in Taiwan, while groundnut production in Taiwan is compared to that of Kwantung.

Crop Yields In Quintals Per Hectare in Taiwan and Other Countries.

		1928-32 average	1933-37 average	1937
Wheat	Taiwan	8.7	9.7	10.7
	Japan	17.7	19.1	19.1
Barley	Taiwan	6.4	8.0	7.4
	Japan	19.9	20.6	20.9
Maize	Taiwan	11.3	10.8	11.6
	Japan	14.1	14.7	16.7
Rice	Taiwan	22.2	25.1	26.1
	Japan	35.0	36.8	38.6
Sugar cane	Taiwan	684.4	654.4* Four-year average 1933-36.	...
	N. E. I.	1,308.0	1,374* Four-year average 1933-36.	...
	Hawaii	1,349.4	1,515* Four-year average 1933-36.	...

		1928-32 average	1933-37 average	1937
Soya beans	Taiwan	5.6	5.7	6.2
	Japan	10.0	10.0	11.2
Groundnuts	Taiwan	16.2	17.1	18.4
	Kwantung	19.0	20.7	...
Sesamum	Taiwan	3.5	3.9	4.2
	Japan	7.3	7.5	7.5

The yields per hectare of the most important plants in Taiwan's economy are therefore thirty to fifty per cent less than in Japan, or, in the case of sugar, in Hawaii or the Netherlands East Indies, and yet all available sources mention the fertility of the soil in Taiwan, while climatic conditions are at least as good as in Japan or the Netherlands Indies.

The explanation lies in the primitive methods of Taiwan [47] agriculture, including the slight use of fertilizers. Judging by the cultivated area and the number of farmers, the island should have at least 300,000 to 400,000 ploughs, but in 1929 (1) almost all (except

1. The last data available, Nogyo nenkan, p. 642.

18,315 'improved' ploughs for deeper ploughing and 614 of the European type) were of the

primitive Chinese pattern. While in Japan proper an average of ¥170 to ¥180 per hectare is spent each year on commercial and home-prepared fertilizers, in Taiwan less than half that sum is spent for this purpose. These two examples—ploughs and fertilizers—for which quantitative data are available show clearly that Taiwan farming is under-capitalized, especially when we consider that the farmer is obliged to pay ¥2,000 per ko for good land.

This does not of course mean that there is no improvement in the agriculture of Taiwan. The government devotes much effort to increasing the productivity of the farms and the farmers are eager to respond. Yields are now higher than they were twenty years ago, as one may see from the tables given later in this chapter. But progress is slow. It is doubtful whether yields in Japan in 1895—the time of the annexation of the island—were higher than in Taiwan, whereas now they are considerably greater and relatively Taiwan is lagging further and further behind."

4:Grajdanzev--52-53 S-4 (no date) 1942 Formosans
116, 243, 311, 656, 177.24 Japan
636.24

"Thus from 1905 to 1920 the area under rice expanded slowly and the yield per ko showed no increase, while from 1920 to 1935 the area under rice increased by thirty-seven per cent and the yield per ko of paddy increased also by thirty-seven per cent. The explanation of this difference does not lie in Taiwan, but in Japan proper. After 1920 the leaders of the Japanese government became worried over the rice supply of the Empire. The rapid growth of population and the insufficiency of domestic production brought a sharp increase of rice imports from abroad. From the annual average of ¥16.6 million in 1913-17 Japan's imports of rice rose to an annual average of ¥72.0 million in the period 1918-22.

Besides the difficulty of balancing payments abroad, the government did not like this dependence on foreign supplies in time of war. A program for the increase of rice production in Japan proper, Korea and Taiwan was worked out and the necessary measures applied, such as the construction of dams and canals for irrigation purposes, the enlargement of the net-[53] work of agricultural experimental stations, the distribution of small subsidies to new producers of rice as well as to those who would produce new varieties of rice selected by the stations. The fact that these measures were quite effective shows not only the efficiency of the administration but also the ability of the Chinese farmers to act in response to economic factors."

4:Grajdanzev--54-55 S-4 (no date) 1942 Formosans -1-2
116 243, 435, 655, 177.24
636.24

"Space does not permit us to analyse the rice situation in detail. The table below shows the rapid process of displacement of other kinds of rice in Taiwan by horai.

Crop Area Under Various Kinds of Rice in Taiwan
(In thousand ko)

	1905	1915	1920	1925	1930	1935
Common Taiwan rice	393	423	417	370	370	263
Clutinous, round	24	39	53	81	68	73
Glutinous, long	...	...	...	...	19	18
Horai	0	0	0	72	135	305
Total	417	462	472	523	592	659

Yields of Various Sorts of Rice in Taiwan were as Follows
(1930-35 average)

	(koku per ko)
Common Taiwanese	12.1
Round glutinous	10.2
Long glutinous	11.7
Horai	14.6

As may be seen, the difference is quite pronounced—from 2.5 to 4.4 additional koku per ko, or an increase in yield of twenty to forty per cent as compared with other

varieties.

But on the other side, the production costs of one ko of common rice in 1925 were ¥223.8, while for horai the amount was ¥342.0, and—what is also very important—whereas thirty-four per cent of the production costs of common rice consisted of the farmer's own labor, home-prepared fertilizers (which the farmer does not buy) etc., these costs in the production of horai amounted to only twenty-two per cent. In other words a much greater part of the expenses on horai consisted of sums paid for commercial fertilizers, etc. and as a result, the farmer does not receive so much profit from horai. but is compelled to plant it because he cannot sell his own [55] kind of rice in the Japanese market. The expansion of area under horai is therefore not so much a sign of prosperity, as it would at first sight appear, as a sign of the growing need of the farmer for money to pay taxes, to pay for irrigation, and to pay for the tobacco which he formerly produced himself (and is now a state monopoly)."

4:Grajdanzev--57 S-4 (no date) 1942 Formosans
116, 249, 474, 177.24 Japan
636.24

"The culture of sugar cane and the development of the sugar industry is considered one of the most spectacular achievements of the Japanese administration in Taiwan. Here we shall discuss only the culture of sugar cane; the sugar industry as such will be examined later in the section on industry. Sugar cane is an indigenous culture and was not introduced into Taiwan by the Japanese. The Dutch found it there in the 17th century and encouraged it. Before the advent of the Japanese it was produced by Chinese producers' cooperatives, which well deserve a special investigation because of their original character. They not only raised sugar cane, but also extracted the sugar in their old-fashioned mills. The industry had so developed that in 1893, ninety-eight million pounds of sugar were exported and probably not less than that amount was consumed in Taiwan, so that total production may be estimated at about 200 million pounds. This amount was not reached again until twenty years later. (1) With the coming of the Japanese the guerilla

1. Japanese sources say that at the time of Japan's occupation of Taiwan the annual output was only about 80,000,000 kin (104 million pounds). This can hardly be true if in 1893 exports alone equalled 98,000,000 pounds. In 1880 exports equalled 141.5 million pounds.

war continued for several years and ruined the industry."

"At the time of annexation the Japanese [58] government was anxious to improve their 'unfavorable' balance of trade with foreign countries, and the cultivation of sugar cane in Taiwan appeared to be an excellent means of doing this. Japan's imports of sugar at that time were in excess of twenty million yen—about ten per cent of her total imports, and at times equal to the 'unfavorable' balance of trade. Sugar cane is grown in Japan, but climatic conditions and limited area make it impossible to increase the total production significantly. At the most it can supply only a small percentage of the domestic demand for sugar. But Taiwan with its tropical climate could be successfully used for this purpose.

As early as 1896 seeds of improved types of sugar cane were imported from the Hawaiian Islands. In 1898, Kodama, the Governor-General of Taiwan, and his energetic Governor Goto began conferences with Japanese financiers on the question of investment in the sugar industry of Taiwan. A special investigation of the outlook for sugar cane culture in Taiwan was entrusted to Dr. Inazo Nitobe, who presented his report in 1901. In this report Dr. Nitobe recommended that the irrigated area and the area under cultivation be increased through various measures of encouragement, assistance, and direct government action, the establishment of sugar research stations, and the introduction of improved varieties of sugar cane, while other recommendations were made concerning sugar manufacture. The government followed these recommendations, established experimental

stations, imported new varieties of sugar cane from Hawaii and Java, and paid special subsidies and grants to the manufacturers and farmers to induce them to follow its policy. Up to March 31, 1932, it had paid about thirteen million yen in subsidies. Moreover, in 1903 a relatively moderate protective tariff on sugar imported into the Japanese Empire was introduced, the rate being 0.8 sen per kin (0.6 kg.) on No. 20 standard and higher. This rate was increased to 4.65 sen per kin in 1911 on No. 21 standard and higher, to 5.3 sen in 1927 on No. 22 standard and higher, and to 7.15 sen in 1932. As a result—this is the official version—wealth came to the sugar [59] industry and to the island 'and this has resulted in the present industrial prosperity'."

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-1-2
116, 249, 433, 458, 654, 177.24 Japan
636.24

"There can be no doubt as to the importance of sugar cane cultivation and of the sugar industry in Taiwan and the degree of success achieved by the Japanese government and Chinese cultivators.

However, a close examination of the table [See page 59, category 116--analyst] reveals some interesting features. It was pointed out how much effort was expended by the officials on the improvement of sugar cane culture. But in spite of all the efforts of the government and of the experimental stations the yield per ko did not show any signs of improvement during the first fifteen years. If the development was as steady as is officially described, why then was the increase of production up to 1921 taking place exclusively as a result of the increase in the planted area?

Further, the increase in sugar production may also come through the increase of sugar content in the juice of the sugar cane. It is interesting to note that in this respect too, little, if any, improvement is noticed up to 1922, but that after that year the sugar content rose from 9.5 per cent in 1922 to 13.2 per cent in 1935 and in this year was considerably higher than in Java or Cuba (12.3 and 11.6 per cent respectively). Finally, the table shows that after the peak of production (and area) was reached in 1917-18, production fell, then rose slowly up to 1928-29, fell sharply by almost thirty per cent and then began to rise again.

The explanation of these fluctuations is that the Taiwan sugar industry (and, as a consequence, also the cultivation of sugar cane) passed through several crises of the most severe character. 'Overproduction' is a word familiar to this industry, and to the planters also. Of course, it must be emphasized that this 'overproduction' is of a speci character, because the consumption of sugar in Japan is relatively low and, though physically the demand of the population for sugar [61] is not satisfied, there is insufficient purchasing power available to buy it.

All this is very important for the problem in hand. The government's efforts were probably as great from 1900 to 1922 as afterward, subsidies were given more lavishly than later on, but the results in the first twenty years were rather meagre. In other words, the development was due not so much to the government's and the manufacturers efforts as to some other factors inherent in the development of the economy of Taiwan and Japan."

4:Grajdanzev--62-63 S-4 (no date) 1942 Formosans
116, 241, 312, 471, 177.24 Japan
636.24

"By putting irrigation works at the service of the farmers (at a price) the government, the local bodies, and the companies [63] impose a condition that a certain part of the newly-irrigated area should be devoted to sugar cane. This stipulation may be to the advantage of the farmer or to his disadvantage, but it is clear that he is not free to decide."

4:Grajdanzev--65 S-4 (no date) 1942 Formosans
116, 245, 177.24 Japan
636.24

"Tea is an old Taiwan crop brought by the Chinese emigrants from Fukien. It was flourishing before the coming of the Japanese and in 1893 about twenty-one million pounds of tea (about sixteen million kin) were exported. It is largely a plantation culture and is now almost completely in Japanese hands, but exports under Japanese rule have not shown improved results. The total area under tea is 45,000 to 46,000 ko. In 1927 the Mitsui Gomei Kaisha alone held 17,000 ko of tea plantations and the Taiwan Takushoku Seicha Company 1,000 ko (1). Japanese plantation holdings are now probably much larger.

1. Yanaihara, op. cit., p. 34.

Tea plantations, which are chiefly in Taihoku and Shinchaku prefectures, occupy hill slopes and generally do not compete with other agricultural plants for area."

4:Grajdanzev--66-67 S-4 (no date) 1942 Formosans
116, 245, 255, 464, 471, 177.24 Japan
636.24

"Pineapples were cultivated in Taiwan before the occupation of the island by the Japanese, but only after the introduction of canning did the industry begin to expand rapidly. The fruit is raised on the hill slopes and thus does not compete with [67] cereals or sugar cane. The authorities estimate that more than 20,000 ko can be used for pineapple plantations, but the area under cultivation is now only 9,000 ko. Data on production are given below.

Pineapple Production in Taiwan

	1921	1935	1936	1937	1938
Area under pineapples (1,000 ko)	1.3	7.0	8.0	8.9	9.9
Crop (1,000,000 kin)	8.9	87.1	110.2	107.8	116.0
Value (1,000 yen)	367	2,626	3,129	3,115	...
Value of exports of (¥1,000) canned pineapples	865	7,306	5,857	7,600	10,620*

* Exports of canned and fresh pineapples.

Sources: Nogyo Nenkan; for 1938, Taiwan Jijo.

Production, chiefly of the plantation type using hired labor, is chiefly in Japanese hands."

4:Grajdanzev--67-68 S-4 (no date) 1942 Formosans
116, 248, 433, 656, 177.24 Japan
636.24

"As will be seen, cotton does not occupy an important place in Taiwan's economy. But it does play an important part in Japanese imperial policy. As was mentioned, the Japanese authorities did not spare efforts to encourage the production of sugar cane and rice in Taiwan, not because it was in the interests of the island, but because it benefited Japan proper. Since 1927 the sugar industry has suffered from overproduction and in 1935-36 another spectre appeared on the Japanese horizon--the overproduction of rice. A discussion began as to how the production of rice in Taiwan might be limited. A rice monopoly was suggested and was later applied, but for a somewhat different purpose. Instead of rice, the authorities proposed to encourage the production of textile fibers and oilseeds in Taiwan and, partly owing to the shortage of foreign exchange in time of war, more attention was given to cotton than to anything else. A plan was worked out for the production of 100 million kin of cotton at the end of the ten-year period beginning with 1937, on an area of 100,000 ko, i.e. more than ten per cent of the cultivated area of the island. The first year's crop (according to the Japan Year Book, 1939-40 [68] is estimated at about 6 million kin, or, already six per cent of the goal. We do not know on what the data of the Japan Year Book are based, but in Taiwan Jijo, published in December 1939, the plan provided for an area of only 50,000 ko in 1946 and the production of only 35 million kin. According to the same source, there were 4,800 ko under cotton in 1938 and the crop was 1,816,983 kin--as one may see, very far from 6 million kin. The average yield was 2.26 quintals per hectare--a low figure for a region of intensive agriculture."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages may be considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

4:Grajdanzev--149 [2] S-4 (no date) 1942 Formosans
116, 433, 439, 177.24 Japan
636.24

"In 1939 about 81 percent of Taiwan's exports consisted of agricultural raw materials and products manufactured from them such as sugar, tea, and tobacco. In fact the island is practically an agricultural appendage of the Japanese economy."

15: U.S. Navy--33 [2] (no date) 1944 Formosans
116, 651, 241, 177.24 Japanese
636.24

"Compulsory service takes an indirect, though no less effective form in the forced contribution of produce. For instance, a village headman notifies the farmers that their district is expected to provide a certain quota of hay for army horses, which must be forthcoming by a certain date. Castor beans are another example. By requiring this crop (which has no value in the economy of the individual farmer) the production has increased from 126,893 pounds in 1936 to 4,148,364 in 1938, which represents an impressive labor contribution. Through this method a goal of 23,000,000 pounds has been set for 1949. Each year more time and more labor and more space must be given to producing castor oil for the air service. Each household tends a few plants from which the children carry the beans to school for collection. In many instances no compensation is given for the produce, and in the instances where compensation is given, it is wholly inadequate to reimburse the costs of production."

22: Wiedfeldt--10[3] F-5 (1913) 1914 Formosan Aborigines
116, 264, 576, 177.26 Japanese
636.26

The Atayals have two meals a day, which serve to set a beginning and an end to their day. One is in the early morning, after they get up, and the second is in the evening, before they go to bed. Men, women, and children eat together. A guest eats with his host, while the women and children eat afterward. The hollow of the hand serves as their cup, and as knife, fork, and spoon [illegible] use the five-pronged fork with which they were born. In the Japanese school which has recently been organized the young Schimptonoff are receiving their first instructions in the use of table implements and drinking vessels.

15: U.S. Navy--27 [13] (no date) 1944 Formosans
116, 291, 511, 177.29 Japanese
636.29

"For years the Japanese have tried to encourage the wearing of Japanese clothing, or at least to abandon traditional Chinese dress for western style clothing. After the war with China began in 1937 the requirement was made mandatory, but had little or no effect. The population is generally too poor to change its entire wardrobe at the wish of the Japanese."

15: U.S. Navy--27 (no date) 1944 Formosans
177.30 Japanese
636.30

"The old Chinese queue ('pigtail') is very rarely seen, having been abolished by the Japanese."

4:Grajdanzev--45 S-4 (no date) 1942 Formosans
116, 312, 471, 655, 177.31 Japan
636.31

"In any case the success in irrigation should be recognized as conspicuous, and it is not less striking that it was achieved with the relatively modest investment of about fifty million yen by the state since 1908. But the state has gradually withdrawn from the field, leaving irrigation works to private enterprise and to special irrigation associations. In 1937 the irrigated area was divided among three groups as follows: 140,500 ko were irrigated from the public canals, 132,000 ko from canals belonging to private persons, 259,000 ko from those of irrigation associations. The last are under the influence of landowners and of the owners of enterprises processing agricultural products."

4:Grajdanzev--87-88 S-4 (no date) 1942 Formosans
116, 167, 313, 423, 659, 177.31 Japan
636.31

"When the Japanese occupied the island, the new administration immediately became interested in its forest resources. One part of forests was in the possession of the Chinese farmers, but the other, more important one was the area of the aborigines. The Chinese were required to register the documents of ownership of forest lands, and since in most cases they had no such documents—their possession and use of forests being based on [88] custom—this device enlarged the government forest reserves (1). It has

1. This is described in Section 3, Ch. 11, p. 1 of T. Yanaihara, Teikoku Shugishita no Taiwan, pp. 23-26.

already been mentioned that in order to use the forests, formerly occupied by the aborigines, the government began to settle the latter by force in the plains. It is said that the settlement of one family of aborigines on the plains cost only ¥70, and this may be compared with the ¥1,000 or more which are spent on the settlement of a Japanese family. Many hundred thousands of ko of forest were acquired in this way."

4:Grajdanzev--106-107 S-4 (no date) 1942 Formosans
116, 316, 433, 454, 177.31 Japan
636.31

"Mining occupies a relatively unimportant position in Taiwan. In 1936, the last year for which data are available, the gross value of mineral products was Y28,727,000, less than ten per cent of the value of industrial production and less than one per cent of total production. But as regards the capital invested, the attention given by the government to oil and, recently, to gold, and the subsidies lavished on actual and potential producers of oil, it occupies quite a prominent position. The caiptal of the mining industry at the end of 1937 was Y46,635,000 (1). There were twenty-four companies, [107] but, just

1. It is not clear whether this is subscribed or paid-up capital, or whether this sum includes reserves and other investments.

as in other fields, three companies dominated the field; Taiyo Kogyo, Taiwan Kogyo, and Keelung Tanko (coal), (2) each having capital of over Y5,000,000.

2. The paid-up capital of this corporation is Y7 million and out of 140,000 shares 43,473 are in the hands of Mitsui Kosan and 41,656 in the hands of Mitsui Bussan."

4:Grajdanzev--109 S-4 (no date) 1942 Formosans
116, 135, 315, 382, 177.31 Japan
636.31

"Since 1908 the Taiwan government-general and the Japanese navy have paid special attention to oil production in Taiwan, but up to now this branch of mining has been more productive of subsidies to oil producers than of oil itself. It was mentioned above that in 1936 the value of oil produced in Taiwan was ¥312,000 and that of gasoline, ¥456,000. However, in the 1937 budget of the government-general ¥1,005,000 was earmarked as subsidies for oil producers and prospectors. Daily production of oil in the last few years has been about 5,000 American gallons."

4:Grajdanzev--149 S-4 (no date) 1942 Formosans
116, 314, 439, 655, 177.31 Japan
636.31

"The government, desiring to utilize the unique position occupied by Taiwan in the supply of camphor, made it a government monopoly. However, in the last few years synthethic camphor production has made striking progress and the monopoly is now definitely broken. This does not mean that natural camphor will lose its market for the expanding celluloid industry can successfully absorb the surplus, but the former advantageous position of the Japanese government is lost."

8: Chen--455-456 N-3 (no date) 1951 Formosans--1-2
116, 241, 312, 177.31 Japan
636.31

"To a certain extent, irrigation in Formosa was well developed long before the Japanese occupation. As recorded in the twenty-seventh volume of the 'General History of Taiwan' in the later years of the Tsing dynasty, the total number of irrigation reservoirs and ditches was 234. After the occupation the Japanese paid considerable attention to irrigation and drainage. In 1901 'Regulations Governing Public Irrigation Systems' were promulgated, and since then the area under irrigation and drainage has increased annually (Table VIII). In 1903 the total area under irrigation and drainage was 150,456 hectares, 28 per cent of the total cultivated area; in 1942 it had increased to 545,094 hectares, about 64 per cent of the total cultivated area. In area under irrigation and drainage Tainan is first among the hsiens (1948); Taichung comes next; then follow Hsinchu, Kaohsiung, Taipei, Hwalien, and Taitung; Penghu has no irrigation (Table IX). In percentage of cultivated land under irrigation and drainage Tainan is again highest, Taitung lowest.

Among irrigation works in Formosa, the Kianan system, in western Tainan, is the most famous. Construction was begun in 1920 and was finished in 1930, at a total cost of 54,013,000 yen. Today 140,000 hectares of cultivated land are irrigated from the Chenven and Chuhsiu Rivers. Since completion of the Kianan system, land price and land rent within its irrigating area have greatly increased. In 1920 the average land price was

313 yen per hectare, in 1935 it was 1144 yen; land rent rose from an average of [456] 36 yen per hectare to 128 yen; and the value of the yield per hectare increased from an average of 90 yen to 361 yen.

Before the Kianan irrigation system was completed, the average per hectare yield of the rice grown in the western part of Tainan was only 19 quintals. After its completion, because there were still limitations on water supply, paddy rice was grown with sugar cane and sweet potato in a three-year rotation; the yield increased to 27 quintals per hectare. The annual profit on paddy rice, when grown alone, had been 194 yen, totaling 582 yen in three years, but the profit on the rotation was 524 yen for the first year, 272 yen for the second year, and 454 yen for the third, totaling 1250 yen — more than twice the original three years' profit."

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

15: U.S. Navy--28-29 (no date) 1944 Formosans
116, 346, 363, 499, 177.33 Japanese
636.33

"In many villages, especially the elongated type built between rivers and irrigation canals, the temples of the patron saints are constructed at corners or bends in the main streets, making them visible from some distance. These have proved a great obstacle in the construction of new streets for motor-[29]ized traffic. Public opinion strongly opposes drastic changes.

The Japanese have not always been considerate of popular sentiment in clearing lands adjacent to some Japanese enterprise. In road-building, Formosan cemeteries have frequently been disturbed and the owners of burial plots forced to move graves to land of little economic use. Many temples and large mansions obstructing government projects have been torn away with little effort to explain or to compensate."

15: U.S. Navy --24 [3] (no date) 1944 Formosans
116, 166, 369, 464, 177.36 Japanese
636.36

"The industrial centers at Keelung, Shinchiku, Takao and Karenko have attracted many voluntarily. The better paid technical and supervisory personnel are Japanese, but the common labor is Formosan-Chinese drawn from local rural communities. There is evidence that the creation of a number of new air establishments has necessitated the development of servicing communities near them, either at the fields' borders or in nearby villages. The development of a town at Toshien, just north of Takao, is the most important example of a 'war town' on the west coast. Karenko's new industries and the hinterland development of villages on a Japanese pattern and with Japanese names are examples of a more permanent new development."

15: U.S. Navy--29 (no date) 1944 Formosans
116, 361, 369, 177.36 Japanese
636.36

"Many city or town planning ordinances are in effect in Taiwan. The Japanese have drawn up overall schemes for the modernization of urban life everywhere, but these have gone into effect only in the larger settlements. Hence a sharp contrast is presented between the excellence of some city arrangements and the extreme primitiveness of nearby settlements."

15: U.S. Navy--29 [2] (no date) 1944 Formosans
116, 361, 349, 177.36 Japanese
636.36

"Before the Japanese took over the island, all the cities and many of the towns were surrounded by great walls, pierced by well-defended gates. The Japanese have torn down most of the walls, preserving only the gates as decorative monuments. Settlement and development have gone forward rapidly. The result is a quadrilateral or circular arrangement of city streets within the old town areas and a very irregular pattern of streets and alleys developed outside. The Japanese have been cutting through old settlements and imposing a well-developed grid and radiation system of streets and roads upon many towns."

4:Grajdanzev--190-191 S-4 (no date) 1942 Formosans
116, 392, 724, 177.39 Japan
636.39

"Any good [Military--analyst] base must also have a well developed industry, especially a metal industry. Taiwan's supply of munitions, tanks, airplanes comes from the industrial centers of Japan Proper. It is, of course, impossible to change this situation. However, the more can be made or repaired, or assembled in Taiwan, the better. It was shown above that in spite of the rapid growth of industry in the last years the metal and machine industry of the island is small in size. We have no data on the years 1939, 1940 and 1941 when industrialization of the island was declared to be one of the basic policies in the construction of the base for southern advance. Yet indirect data (changes in bank credits, movement of railway goods, imports of the island, etc.,) do not suggest any very rapid change. Undoubtedly some growth took place, and it was well-oriented, but there were many obstacles to the realization of the plans: shortage of metals and machinery; shortage of labor, in some cases due to the unwillingness of the military authorities to pay higher wages; difficulties in the public finances of Taiwan [191] Government-General in view of the several bad harvests of rice and extraordinarily low production of sugar. All this suggests that by 1941 the development of machine and metal industry has hardly made great progress since 1938."

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-1-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

"The division of families occupied in agriculture into owners, part-owners and tenants may be seen from the following table: (1)

1. Here and in the following tables the official figures of families occupied in agriculture are used, though, as was pointed out, they are probably underestimates. The statistics of landowners in Taiwan should be more or less correct because the land is surveyed and change of title involves a complicated procedure. The statistics may be incomplete only as regards tenants and agricultural workers (which they omit completely), and if one takes these into consideration one comes to the conclusion that official statistics probably give a brighter picture than is justified.

Division of Agricultural Families in Taiwan
(thousands)

	1932	1933	1935	1937	1938
Owners	132.2	129.4	132.1	131.1	130.2
Part-owners	119.3	121.7	128.4	134.8	135.6
Tenants (2)	152.4	155.0	159.4	161.5	158.7
Total	403.9	406.1	419.9	427.4	424.5

Footnote (2) on next page.

Division of Agricultural Families in Taiwan [Cont.]
(thousands)

2. Those who have read Japanese Rule in Formosa by Yosaburo Takekoshi may be astonished to discover that there are tenants in Taiwan. Takekoshi wrote in 1905 '. . . The tenants [in Taiwan, after the reform by the Japanese administration] came to enjoy the absolute ownership of the land they or their ancestors have been farming for three centuries. Such a change certainly amounted to a social revolution. Most of the revolutions recorded in history required sacrifices, but the present one was entirely bloodless. This change has given the tenant absolute ownership, thus insuring securing of property. . . . ' (p 132). But what Takekoshi described as a social revolution, was actually only a very modest reform: the government abolished the rights of the taiso--owners who had only doubtful title to land. This reform made transfer of real estate more secure and paved the way for Japanese penetration.

As percentages of total

Owners	32.7	31.9	31.4	30.7	30.7
Part-owners	29.6	29.9	30.6	31.5	31.9
Tenants	37.7	38.2	38.0	37.8	37.4
Total	100	100	100	100	100

Source: Takumu Tokei, 1938.

[77] As this table shows, about forty per cent of all farmers in Taiwan own no land at all and must rent it from landlords and farmer-owners; about thirty per cent have plots so small that they are compelled to rent land, and barely thirty per cent of the farmers till only their own land. These figures are striking. Taiwan does not know rich tenants of the British type. Those who rent land are mostly poor farmers, but even those who cultivate their own land, are not all rich. As to the relative changes, there is a noticeable fall in the percentage of owners in six years--from 32.7 per cent in 1932 to 30.7 per cent in 1938. For the same period the percentage of tenants is the almost the same (37.7 and 37.4 per cent respectively), while the percentage of part-owners rose from 29.6 per cent to 31.9 per cent. It would seem that the farmer-owners are gradually losing their position and sinking to the level of tenants, but a six-year period is not a sufficiently long time to ascertain definitely whether such a trend exists.

However, it is not only the number of owners and tenants which is important, but also the area which they respectively till. Statistics of area are divided into only two categories—owned and rented.

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

Area Owned and Rented in Taiwan in 1932
(1,000 ko)

	Dry fields		Paddy		Total	
	Area	%	Area	%	Area	%
Owned	230.2	60.0	132.2	33.3	362.4	46.5
Rented	153.8	40.0	264.0	66.7	417.8	53.5
Total	384.0	100	396.2	100	780.2	100

Source: Nogyo Nenkan, 1939-40, p. 641.

In 1932 the area cultivated by owners constituted 46.5 per cent, the area rented by tenants 53.5 per cent. But it is important to emphasize that owners cultivated chiefly dry land while the tenants cultivated paddy. Paddy brings much higher yields than dry fields; in 1937 the average yield of rice per ko of paddy was about 14 koku while that per ko of dry land was only 7.8 koku, and, further, many paddy fields [78] produce two crops a year. In other words, one ko of paddy yields, on the average, more than twice as much as one of dry land, so that the tenants produce about sixty-five to seventy per cent of the total crop of Taiwan on rented land, and the owners not more than thirty-five to thirty per cent."

"The tenancy contract in Taiwan, as it was a few years ago, had the following features: (1) (1) It was a short-term contract—for the most part for one year only and cases were

1. For a more detailed description see K. Takahashi Gendai Taiwan Keizairon, pp. 293-303.

frequent where the landlords broke the contract before its expiry. It is possible for them to do this because the tenants are more numerous, there is stiff competition among them, and they cling to the plots which they are able to secure. There have [81] been cases when the term was six years and even ten years (opening of new land or reclaimed land), but these were exceptional. (2) It was almost exclusively an oral contract and in case of conflict the landlords were more successful than the tenants in securing their own interpretation of it. (3) The landlord usually received security from the tenant in money or in kind, amounting to from forty to sixty per cent of the rent, deposited with the owner at the time the contract is made. No interest is paid on this amount. This deposit represents a heavy additional burden on the tenants, who, as a rule, have no cash and are compelled to borrow the money at high interest rates while they themselves do not receive any interest on it. In many cases this results in sub-tenancy—a rich farmer renting land and sub-letting it to poor tenants.

Through the efforts of the government these general features were somewhat changed. The government policy was as follows: (I) the term of tenancy should be five to six years or more; (2) if, after the expiry of the contract, the contracting parties do not denounce the contract within six months, it must be regarded as automatically renewed; (3) in time of crop failure the rent is to be reduced by mutual agreement; (4) in case of arrears (without a justifiable reason) or misuse of soil, the contract may be voided by the landowner; (5) no transfer of land by the tenant can be made without agreement and approval by the landowner; (6) changes in the form of the plot and other changes influencing the productive capacity of the land must be approved by the landowner; (7) if improvements are approved by the landowner, he must bear the expenses of the improvements fully or in part; (8) no contract may be declared void before expiry without sufficient reasons; otherwise compensation must be paid; (9) disputes are to be settled by special arbitration committees.

It is unwise to attach too much importance to these government efforts, however good their purpose may be. True, in 1935 sixty-eight per cent of all area leased was leased under written contracts, while in 1938-39 the percentage had risen to 76.6 per cent. Arbitration committees are established, as well [82] as societies of landowners and tenants, the purpose of which is to bring social peace to the relations between the landowners and tenants as well as to effect a change in the ideology of the farmers. Money

grants from the government-general are made to aid these societies and officials appointed to direct them. But all this does not touch the core of the problem. The problem of tenancy is not to secure the tenant in his lease for one year, or how to distribute the costs of improvements, as this touches chiefly the misuse of power by the landlord. With a secure contract for three or five years, the tenant must still pay the rent, and he has no assurance that the lease will be extended after expiry of the contract. The policy states that in case of crop failure the rent should be reduced by mutual agreement, but in Taiwan it used to be customary for the farmer to pay the rent whether the crop failed or not, and there is no guarantee that this custom will not form the basis of the 'mutual agreement'. In this agreement there is no equality between the opposing parties. The same should be said about the arbitration committees--everything depends upon the degree of influence of the landowners in these committees."

4:Grajdanzev--126-128 S-4 (no date) 1942 Formosans
116, 426, 453, 656, 177.42 Japan
636.42

"Another bank whose loans are far above deposits is Nippon Kangyo Bank, or the Japanese Bank for the Encouragement of Business. Actually this bank is a mortgage institution and [128] is in the forefront of the organizations which extend Japanese control over real property in Taiwan."

4: Grajdanzev--47-48 S-4 (no date) 1942 Formosans
116, 433, 435, 177.43 Japan
636.43

"Furthermore, as will be shown later, the results of the improvements which did take place brought most profit to landowners, traders and the Japanese administration. This may appear to be contradicted by the fact that the gross value of agricultural production in Taiwan for the last five years increased from ¥237.9 million in 1933 to ¥413.7 million in 1937 (seventy-four per cent), and if later data were available they would certainly be still higher. Unfortunately, we do not have at our disposal an index of agricultural prices in Taiwan (1). However, we do know that the average price of [48]

1. The general index of wholesale prices in Taihoku had increased, compared with 1933, by 33 per cent in 1937 and 58 per cent in 1938. Taiwan Jijo, 1939 pp. 606, 607.

rice for the same period rose from ¥14.98 per koku to ¥22.74, or by fifty-two per cent, and rice makes up about half of the gross value of agricultural production in Taiwan. In the same years population increased by only thirteen per cent. By deflating prices to the level of 1933 and dividing by an index of population, we find some evidence that production per capita was less in real value in 1937 than in 1933. How generally this is true is difficult to say because of the paucity and unreliable character of the data. But one thing is clear: no rapid rise in the per capita value of agricultural production has taken place in the last few years."

4: Grajdanzev--51 S-4 (no date) 1942 Formosans
116, 243, 439, 177.43 Japan
636.43

"The unique position of rice in the economy of Taiwan justifies a more detailed discussion. Rice culture was important before the Japanese came to the island and rice exports to China were quite considerable. However, since the Japanese took control the production of rice has doubled in about a quarter of a century and more than half of the total production now goes to Japan. The credit for this achievement is usually given to the Japanese administration and the expansion has been taken as proof of the beneficent results of Japanese rule."

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464, 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

Japan is thirty one per cent higher than in Taiwan, though the Japanese consume in addition considerable amounts of wheat, barley, and other cereals, which are almost entirely absent in Taiwan, to say nothing of sweet potatoes."

4:Grajdanzev--56 S-4 (no date) 1942 Formosans -1-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

"Taiwan is famous for its rice production of which it exports almost half. The opinion of Japanese economists is that exports of Taiwan's rice to Japan brought to the island such prosperity that some measures had to be taken to curb it. But the data presented in this table [See page 55--analyst] show quite a different picture. In 1905 the annual per capita consumption of rice in Taiwan was about 1.25 koku. Then it fell, but an increase in production brought it back to that level in 1925. At about that time the heavy exports of Taiwan's rice to Japan started: These exports brought a sharp fall in per capita consumption—it fell to 0.87 in 1935 and has remained on about the same level since that time. Now, 0.87 koku per year is about 0.8 pound per person per day. It was pointed out that the production of other cereals in Taiwan is almost nil. Only sweet potatoes form a significant addition to the diet (more than one lb. per person per day). Some wheat flour is imported but this amounts to only two to three per cent of the exports of rice (by weight).

These figures are for the total population. But the urban dwellers are probably better off than the farmers, so that the average for farmers should be less than 0.87 koku. Exports of rice from Taiwan to Japan cannot therefore be taken as a sign of Taiwan's prosperity, for they resulted in a fall in standards of living for the Chinese in Taiwan. Data for the last five years show that the annual average consumption of rice in Japan is about 1.10 koku, while in Taiwan it is 0.84. In other words, per capita consumption of rice in

4:Grajdanzev--56-57 S-4 (no date) 1942 Formosans
116, 241, 439, 441, 655, 177.43 Japan
636.43

"The price ruling on the Tokyo market is, however, not the price which the farmer in Taiwan receives. Between him and the Tokyo or Osaka market are landlords, usurers, a chain of local dealers in rice, big Japanese importers and exporters, and Japanese shipping companies. Each one of them makes profits, [57] and good profits, so that little remains for the farmer, and especially the tenant-farmer.

However, the advice of Takahashi and others fell on fertile ground and, beginning with November 1, 1939, the export of rice from Taiwan to Japan became a government monopoly. The government-general decides how much rice should be produced, works out a plan of exports for each month, buys rice from the special local organizations, and sells it to a Japanese company, Nippon Beikoku Kabushiki Kaisha (Japan Rice Corporation). The other suggestion of the Japanese economists concerning the lowering of the price of rice in Taiwan may also be attempted, though it will be difficult to realize in a time of war inflation and rice shortage in Japan."

4:Grajdanzev--142 S-4 (no date) 1942 Formosans
116, 439, 177.43 Japan
636.43

"We use the term 'external trade' of Taiwan because trade with Japan, cannot from the legal point of view be considered as 'foreign' trade. Throughout the following pages 'external trade' includes the trade of Taiwan with all other countries (including Japan)."

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-1-3
116, 439, 656, 722, 177.43 Japan
636.43

"These tables [pages 143-144 in category 116--analyst] are of some value beyond the topic of immediate interest. Elaborate theories of international trade have been constructed, the purpose of which is to explain the movement of international trade as distinct from internal trade, but these theories pay little or no attention to factors of political control which are so often of paramount importance in this sphere. Before the occupation of Taiwan, Japan occupied a very modest [145] place in the trade of the island and even after the conquest, her share was at first small; in the period 1896-1900 imports from Japan made up on the average only 27 percent of the total and exports to Japan, only 19.6 percent. It is true that these figures are rather too low because of the absence of data on Japan's trade in 1896, but if these data were available, they would probably increase Japan's share by only 4 or 5 percent. The fact is that even after the occupation of the island, and in spite of the presence of large detachments of troops and swarms of Japanese officials and adventurers, trade continued for some time to flow chiefly in the old channels. However, this situation was soon changed. In 1926-1930 exports to Japan amounted to 85.5 percent of total exports and in 1937 reached a maximum of 93.2 percent, a figure probably unsurpassed in the history of other colonial countries. The same development was achieved in imports. In 1926-30 Japan's share was 68.3 percent, in 1931-35 it was 83.4, and in 1938 it reached a maximum of 89.4. The slight fall

in Japan's share in 1938 and 1939 is apparent rather than real, for in these years Kwantung, Manchoukuo, and maritime China became to all intents and purposes Japanese colonies and for the Japanese in Taiwan it makes no difference from the point of view of profits and foreign exchange whether they trade with Japan or with these regions. In 1939 the share of this 'yen bloc area' of Taiwan's trade was 97.8 percent of her exports and 96.5 percent of her imports. For comparison let us look at the share of China. In 1896-1900 her share in Taiwan exports averaged 63.1 percent, in 1926-30, only 7.0, in 1936, 2.0, and in 1937, 1.3. The same picture appears in the case of imports, for which the corresponding percentages are 37.4, 13.8, 2.9, and 1.9. China is near, --just across the Taiwan Strait, her population is vast her cities are growing, her products are held in high esteem by the Chinese population of the island, she is in great need of Taiwan's products, and yet the trade between these two regions continued to fall catastrophically, But in 1937-1938 the most important points on the Chinese coast were occupied by the Japanese. By 1939 the area under the latter's domination has increased further, and a surprising change is occuring [sic]--the trade of Taiwan with China now shows a remarkable increase.[146]In 1937 exports from Taiwan to China were valued at 5,575,000 yen, but by 1939 they had risen to 33,840,000. Imports from China in 1938 were valued at 1,954,000 yen, in 1939, at 4,253,000. Although China experienced war in the last three years, though many of her cities were ruined, and the purchasing power of the population has fallen, the trade is better than at the start of the conflict. The reason for this reversal

lies not in the economic situation; it is rooted in the change in the political conditions for now maritime China is virtually a Japanese colony.

This will help us to understand why the foreigners--British, Americans, and others--were gradually ousted from Taiwan. Before 1895 British and American trade with the island was larger than that of Japan, the most important branches of trade, as well as shipping, were in British hands. The British owned Douglas Co. monopolized shipping, the Hongkong and Shanghai Banking Corporation dominated the financial sphere, Jardine Matheson, Dent, and Samuel Samuel traded in camphor, sugar, tea, and other products, while the trade in rice was chiefly in the hands of Chinese. Mitsui Bussan--the pioneer Japanese firm--did not appear on the island till 1898. The share of Great Britain in Taiwan's imports fell from 7.3 percent in 1896-1900 to 0.1 in 1936 and to almost zero in 1939, while in the same period that of the United States fell in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. from 5.3 to 1 and to 0.4. [sic] In 1896-1900 Taiwan's average annual imports from Great Britain were valued at 1,326,000 yen, in 1926-30 (in depreciated yen) at 3,083,000 yen and in 1936, at 392,000. The imports from the U.S.A. amounted to 957,000 yen in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. (The purchasing power of the yen of 1939 is probably not more than one-fourth of what it was in 1896-1900.)"

4:Grajdanzev--149-150 S-4 (no date) 1942 Formosans-1-2
116. 171, 435, 439, 177.43 Japan
636.43

"Two other aspects of Taiwan's exports should receive our attention. First, it is interesting to compare the gross value of Taiwan's production with its exports, keeping in mind that the gross value is considerably larger than its net value, i.e. by the cost of materials, fuel used in production, etc.

Comparison of the Gross Value of Production and Exports

Gross value of production,	1903	1922	1929	1937
million yen	84.5	354.2	598.6	890.5
Exports, million yen	20.7	158.4	272.0	440.2
Exports as percent of gross value	24.5	44.7	46.3	49.4

From this table it appears that in 1903 about one-fourth of the gross value was exported, while in 1937 the amount had risen to 49.4 percent. This probably means that in 1937 not less than three-fourths of the total net value of production of production[sic]of Taiwan was exported. Such a high ratio of exports to gross value of production is probably approached only [150] by Korea (1).

1. If Taiwan were to receive the equivalent in imports, the large exports would not constitute a problem. But we shall see later that this is not the case.

To see how far this situation was to the mutual advantage of the natives and the

Japanese, one should compare not only the ratio of exports to total production but also the absolute amounts which are not exported. In 1903 there remained 63.8 million yen worth of unexported goods, while in 1937 450.3 million were left. Let us now examine these figures in the light of price-changes. We have no index of prices for Taiwan in 1903, but we do have prices of rice--the most important product of the island--to which the authorities in 1937 gave a weight of 31 percent in the general index (2). A picul of

2. Actually it should be about 40 percent because the authorities gave sugar a weight of 25.3 percent, unduly large in view of the fact that more than 90 percent of the production is exported.

rice in 1903 cost 2.36 yen; in 1937, it cost 9.32 yen, or almost 4 times as much. If we also take into consideration the growth of population, the residual per capita gross production 'in rice prices' was 21.8 yen in 1903 and 19.8 yen in 1937. These are gross values of production, and since industry played a much greater part in 1937 than in 1903, the per capita net 'real' values in 1937 must actually be much smaller than in 1903. This is a startling conclusion. We emphasize again that these figures can only be approximate, yet they are sufficient to indicate the trend of events."

4:Grajdanzev--151-152 S 4 (no date) 1942 Formosans -1-2
116, 439, 722, 177.43 Japan
636.43

"In return for exports to the value of 593 million yen in 1939 Taiwan received only 409 million yen worth of imports (69 percent). In order to move these exports to Japan certain conditions are obviously necessary. Taiwan must import rails, railway equipment, harbor equipment, bags for rice and sugar, fertilizers, etc. Taiwan's exports--rice, bananas, sugar, tea, pineapples, fresh fish, etc. --are foodstuffs. But most of the imports enumerated are of no direct use to the islanders themselves; they are beneficial only insofar as they help them to secure other goods. They are really costs of production. In 1939 at least 60.7 million yen worth of fertilizers, including bean cakes and other cakes, (included in 'all others' in the table above) and about 8 million yen worth of gunny sacks were imported. Another group of imports is connected with the effort to turn the island into a powerful base for further advances into China [152] and the Southern countries. Port facilities far beyond the needs of Taiwan itself, powerful radio stations, fortresses, strategic railways, factories producing war materials are being built. Again we cannot determine exactly how great this group of imports is, though we can guess its growth by following the growth of 'ores, metals and manufactures thereof', etc. These two groups, which in themselves contribute little to the welfare of the islanders, increased from 28 million yen in 1925-1929 to 62 million in 1936, to 70 million in 1937, to 78 million in 1938 and to 86 million in 1939. To some extent this growth is purely illusory since it reflects the rise in prices in these years, but we know that in the Japanese colonies just as in Japan, the consumption of metals, machines, for peace time uses,

etc., was reduced or stopped completely, so that the greater part is now available for military purposes."

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

4:Grajdanzev--155 S-4 (no date) 1942 Formosans
116, 434, 556, 177.43 Japan
636.43

"The amount of profits collected [by the Japanese--analyst] may be calculated more or less precisely. We know that the exports from Taiwan are greater than the imports into the island and there can be only one explanation: considerable real wealth is transferred from Taiwan to Japan each year, wealth which represents the profits and savings of the Japanese in Taiwan."

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year—a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

4:Grajdanzev--158 S-4 (no date) 1942 Formosans
116, 457, 563, 661, 177.43 Japan
636.43

"Of course, some part of the [trade--analyst] balance is made up by the remittances of the Japanese on the island to Japan-proper, remittances which may be presented as 'earned income' and not an income from investment. However, the thousands of Chinese citizens who reside on the island remit home to China only paltry sums. They are unable to earn as much as the Japanese, mainly because the privileged position of the Japanese is the result of the colonial status of the island. The services performed now by the Japanese in most cases could be as well performed by the islanders, but their part is to be servants of the ruling nation. It should be clear than that this 'earned income' can be considered as a special form of the general income from the colonial exploitation of the island."

4:Grajdanzev--158-159 S-4 (no date) 1942 Formosans
116, 171, 457, 477, 661, 177.43 Japan
636.43

"The usual explanation of Japan's ability to obtain year after year tens of millions of yen worth of goods over and above what is sent from Japan to Taiwan is that this balance represents the interest on Japanese capital invested in Taiwan and the profits of the Japanese businessmen there. But a closer analysis of the figures given above reveals that this explanation is not satisfactory. It is important to understand that we are concerned here with investments and the returns on them, not from the point of view of an individual, but from the point of view of two regions——Taiwan and Japan. From 1896 to 1908, [159] inclusive, Japan sent goods to the value of 31,655,000 yen over and above her imports from the island and this represents her real outlay in the colony. She now receives from Taiwan sums which in every year since 1914 have been greater than this original 31,655,000 yen; which in every year since 1924 have been more than twice as great; and which in every year since 1934 three times as great, and in 1939 were six times as great as the original sum. Is this the legitimate interest on capital and profits of the entrepreneurs which are due to their energy, foresight and managerial ability?

Of course, we know that high profits are made not only in Taiwan, but, say, in the United States as well. Does this fact refute our thesis of exploitation? In no way. The existence of monopolies in the United States is a fact known to all. However, these monopolies are not permanent. Some of them appear, some disappear, every year."

4.Grajdanzev--159 S-4 (no date) 1942 Formosans
116. 457, 652, 661, 177.43 Japan
636.43

"For our purposes it is irrelevant whether all or only a few of the Japanese firms on the island make high profits; whether there are bankruptcies among them or not. We are concerned here with Japan's position in Taiwan as a whole. The existence of the Japanese firms on the island which make less than 10 percent on the invested capital, of the Japanese entrepreneurs who fail and the Japanese adventurists who return to Japan disappointed and disillusioned does not refute our thesis. It was shown in some detail above that beside investment profits as such there is derived from Taiwan the income of Japanese officials, and income originating in taxation, monopolies, fines, etc., most of this due in the last analysis to one source—Japan's colonial power. All this brings us to the conclusion that the active balance of Taiwan's trade represents mostly an unusually high degree of exploitation of the Chinese on the island by the Japanese government and industrialists.

To those who ask whether the colonies are profitable or not, it may be said that the ruling group of Japan knows that they are. They are able in Taiwan to support 300,000 Japanese on a much higher level than those Japanese would enjoy in Japan and in addition to extract profits of more than 100 million yen a year."

15: U.S. Navy--27 [9] (no date) 1944 Formosans
116, 241, 433, 434, 177.43 Japanese
636.43

"Food is plentiful, but is subject to requisition by the Army. The farming population is able to raise a substantial amount of the food it consumes, but the Japanese frequently order the restriction of plots planted to these crops in order that more space may be devoted to a crop (castor oil beans for instance) required by the military. In 1940 the official daily ration of rice permitted to farmers in Taihoku Province was only 0.60-0.75 pounds, or 2-2 1/2 go per person. This is well below the usual consumption and has been the cause of bitter discontent and resistance."

22: Wiedfeldt--38-39 F-5 (1913) 1914 Formosan Aborigines
116, 439, 177.43 Japanese
636.43

What the Japanese really need is the valuable camphor trees which grow in Atayal territory. This important commodity is not bartered, however, and the Japanese control only the camphor trees inside the Aiyu line, pushing this line ahead as they feel the need. The tribes in the interior naturally do not share in this insignificant trade in trifles which has slowly developed in the border territories. Barter between tribes is just as impossible as barter between members of tribes, for all the Atayals produce the same things, and therefore have nothing to offer each other.[39] The Atayals and the Amis, who bound them on the south, hate each other mutually, and have nothing but hostile dealings with each other. Since the Japanese forbade the importation of guns and salt, a contraband barter in these two articles, which can hardly be dispensed with for purposes of defence and maintenance, is said to have developed in place of the former free gift of these things to the tribes of the interior, but no one knew anything about it, or if they did, they were unwilling to say anything about it.

4:Grajdanzev--48 [2] S-4 (no date) 1942 Formosans
116, 241, 439, 656, 177.45 Japan
636.45

"Rice, as we shall see, is a cash crop; probably not less than two-thirds of the crop finds its way to the market. Sugar cane which constitutes from 12.2 to 19.3 per cent of the total, has special importance because the whole crop is marketed. Sweet potatoes and vegetables are chiefly for home consumption. Next in importance, in the order named, are tea, bananas, groundnuts, pineapples, tobacco, jute, and cassava. This almost complete dependence on rice and sugar cane is the result of government policy, as before 1905 the distribution of cultures was not so specialised. But now Taiwan has become a part of the economy of Japan and its function is to serve that country's needs."

"The trade balance of Taiwan with all countries other than Japan is usually 'passive', but this trade also does not present a special problem. If Taiwan, for example, bought beans from Manchuria for 20 million yen and sold goods to Japan to the [157] value of 80 million yen, we may consider that this means that value of 80 million yen worth of goods were sold from Taiwan to Japan. The freight payments which accrue chiefly to the Japanese need not trouble us because they are included in Taiwan's statistics of imports and excluded from the statistics of exports. Thus we find the commodity balance of trade almost exactly measures the amount of profits and other earnings of the Japanese individuals, companies, and the government-general which they put at the disposal of Japan proper(1). Invisible items of the balance of payment with foreign countries do

1. Actually the profits derived by Japan from Taiwan are even greater, because (a) the gold produced in Taiwan and sent to Japan is not included in the trade statistics and (b) there was very active smuggling by Japanese of goods from Taiwan to Chinese ports, estimated by Japanese authors at several million yen a year.

not complicate the picture. Naturally, there is not an exact correspondence between the amounts transferred to Japan and the balance of payments from year to year and especially from month to month; more goods may be sent this year than there are

profits and savings transferred, but in the following year the situation will be reversed if the normal functioning of the financial mechanism is to continue.

Let us now look at the balance of payments of Taiwan. In the first thirteen years of the Japanese administration (1896-1908) the balance was usually passive and the net aggregate amount of these passive balances was 31,655,000 yen (after deduction of active balances). It is fair to assume that this sum approximately represents net Japanese investments in Taiwan—a sum for which no equivalent was received up to 1908. Since that time the balance has been active. Admittedly, these investments do not include Japanese expenses of military occupation. But these were taken care of by the huge indemnity paid by China to Japan after the war of 1894-1895. This indemnity, as is well known, was in excess of the cost of war to Japan.

Active Trade Balance of Taiwan (1,000 Yen)

	Aggregate	Annual Average		Aggregate	Annual Average
1909-1913	26,384	5,276	1929-1933	354,672	70,934
1914-1918	167,117	33,423	1934-1938	481,642	96,328
1919-1923	212,148	42,430	1939	184,289	184,289
1924-1928	382,971	76,594			
			Grand Total	1,809,223	

[158] Thus from an annual average of 5.3 million yen in 1909-13 the active balance of Taiwan rose to 96,328,000 in 1933-1938 and reached a peak of 184,289,000 in 1939. In

many cases the trade balance cannot serve as a good indicator of what a country pays to others for foreign investments. However, the case of Taiwan is different. The items complicating the balance of payment as apart from the commodity balance are almost absent here. There are few islanders abroad and there are few foreigners (except the Japanese) in Taiwan. There are no other foreign investments (other than the Japanese) on the island worthy of consideration. The islanders do not travel abroad, the foreigners do not travel in the island. Almost all economic relations are with Japan; the economic relations with other countries, insofar as they exist, are taken care of in the balance of payments."

15: U.S. Navy--31 [5] (no date) 1944 Formosans
116, 466, 656, 177.46 Japanese
636.46

"Through direct employment and through indirect control of the large agricultural and industrial companies, the Japanese government is the largest single employer of Formosan labor. Control and supervision has been strict since the Japanese occupation of the island, but the progressive invocation of the National Mobilization laws after the outbreak of the China 'Incident' has made government control of labor complete. Although there is evidence of chronic discontent among laborers on Taiwan since the 'liberal' days of the 1920's, government policy has been careful to prevent the development of any leadership. The usefulness of Taiwan as a base for military operations and as a link in the new imperial system depends upon the smooth functioning of transportation and communication and (to a growing degree) of industrial activity. All this in turn depends upon the strict control and obedient service of Formosan-Chinese labor, both skilled and unskilled. The Japanese fear any labor agitation, and realize that they are extremely vulnerable to slow-down tactics, if these should be initiated."

15: U.S. Navy--31 [8] (no date) 1944 Formosans
116, 167, 464, 177.46 Japanese
636.46

"Labor problems are dealt with by the several offices of the Government-General. There is no 'Labor Bureau' as such.

Before the China 'Incident' there were few restrictions upon the employment of an alien within Taiwan provided the alien had entered the country legally, held a visa from a Japanese consul and was duly registered in Taiwan. All Chinese laborers entering were required to be licensed for labor by the immigration authorities. The government itself has attempted to employ local labor or semi-skilled and skilled labor from Japan. After August, 1937, steps were taken to end the immigration of Chinese, and in 1938 it was announced that all Chinese nationals who thereafter left Taiwan for any point outside of the Empire of Japan would automatically be barred from re-entry."

15: U.S. Navy--32 [3] (no date) 1944 Formosans
116, 466, 467, 656, 177.46 Japanese
636.46

"In 1931 the upsurge of reactionary power at Tokyo made possible the outbreak of the Manchurian Incident and the stage was set for the war program. Labor leadership, labor organizations and union programs came to an end much more quickly in Taiwan than in Japan Proper. By the end of 1931 everything which smacked of opposition had been suppressed. The employers in the strategic industries, transportation and communications are official or semi-official bodies. Hence there can be no dispute over labor questions."

15: U.S. Navy--32 [6] (no date) 1944 Formosans
116, 745, 466, 177.46 Japanese
636.46

"Hours of labor average about ten per day, including Sundays, although most employees get two days off each month. There are no labor laws or workmen's compensation laws, as there are in Japan. Excepting in cases of Government laborers, as in the Monopoly Bureau or the Government Railways, there are no provisions for bonuses or overtime payment, but most Japanese employers follow the Government example and pay for overtime work. The Government provides free housing for certain classes of Government employees, and retires long-time employees on small pensions. Private industry makes no such provisions, except sometimes where the employer is a wealthy family bearing a paternal relationship toward workmen long in service. The Government also has a scheme for compulsory social insurance payments. No such provisions exist in private industry. If a laborer is injured on the job, it is customary for the employer to pay hospital expenses. If he is killed or totally disabled, the employer makes a money contribution, called 'consolation money' to the injured man or to his family. Thirty days' notice is usual in discharging an employee; in lieu of notice, thirty days' wages are generally paid."

15: U.S. Navy--33
116, 466, 177.46
636.46

(no date) 1944

Formosans
Japanese

"Under the National Mobilization laws which have been put into effect the conscription of labor by the Japanese has been complete. Even before this, the forced contribution of labor, directly or indirectly, was managed in various ways. Work on semi-public undertakings was called a patriotic duty. Schools, young people's associations, and local ward organizations were expected to contribute certain hours of labor or, in lieu of them, special donations. If an individual Formosan is absent from any announced 'voluntary' project, complete explanation must be made to the authorities concerned. Types of semi-public undertaking include road-building, flood prevention, irrigation works, construction and care of shrines, land clearance, airfield construction, and tree-planting. The figures which follow indicate labor contributions over a one-year period:

Table 26: Enforced contributions of labor.

	No. of Laborers	Hours of Labor
School groups (primary and middle schools, Native and Japanese)	629,510	3,101,869
Young Men's Organizations	221,574	1,567,248
Adults in various organizations	399,708	2,265,361

Men of the upper class, especially those with advanced education and experience outside of the island, live in constant fear of impressment and transportation to the front for Army labor service."

15: U.S. Navy--33 [4] (no date) 1944 Formosans
116, 563, 463, 465, 177.46 Japanese
636.46

"Formosan-Chinese furnish almost all labor. Japanese are generally employed as foremen or skilled labor, or in particularly vital operations. For instance, they provide the personnel on the moving stock of the Government Railway system. This accounts for the difference in wage scales whereby the Japanese laborer receives from 80 to 150 percent more than Formosan-Chinese who do the same work. A Japanese tailor, for instance, at one time received two yen a day as against 1.20 yen per day for a Formosan-Chinese; a worker in a pineapple cannery 1.50 as against the Formosan-Chinese wage of 70 sen."

4:Grajdanzev S-4 (no date) 1942 Formosans
177.47 Japan
636.47

[For penetration of Japanese corporations and enterprises into the economic life of Formosa See categories 47, 43, and /or 563--Analyst]

4:Grajdanzev--61 S-4 (no date) 1942 Formosans
116, 249, 423, 471, 177.47 Japan
636.47

"The old type of sugar cooperatives dominating the industry before 1895 disappeared with the advent of capitalistic forms of enterprise in Taiwan. Production of sugar is now carried on in modern mills which are the property of the Japanese sugar companies possessing tremendous amounts of capital (several hundred million yen). Step by step these companies acquired a huge area of cultivated land——from 63.2 thousand ko in 1925 this area increased to 93.2 thousand ko in 1935. The latter figure amounts to more than ten per cent of the cultivated area of the island, but in the regions where sugar cane is cultivated the companies own more than twenty per cent of the area under cultivation (1).

1. Actually their influence is greater than these figures suggest because they rent about 20,000 ko of land.

However, it would be a mistake to think that this huge area is used by the manufacturers for sugar cane plantations. They plant only about 18,000 to 25,000 thousand ko with cane, while all other sugar cane is bought by them from the small farmers, i.e. about three-quarters of the total sugar cane production is supplied by 127,000 to 130,000 farmers, each planting on the average only half a ko."

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--96-97 S-4 (no date) 1942 Formosans-1-2
116, 171, 454, 471, 473, 177.47 Japan
636.47

"It is also interesting to compare the size of the companies in Taiwan as regards capital with those in Japan proper and in Korea.

Industrial Companies, their Total and Average Capital in the Japanese Empire, December 31, 1937.

	Companies, number	Total paid-up capital and investments (million yen)	Capital per enterprise (1,000 yen)	Capital per capita of population (yen)
Japan proper	30,518	9,396.9	308	132
Korea	981	246.2	251	11
Taiwan	335	191.5	572	34
Kwantung	358	96.9	271	81
Karafuto	88	33.6	382	103

Source: Dainippon teikoku tokei nenkan, 1939.

It is clear that Taiwan and Korea are poorly supplied with capital per capita of population, but there is an important difference between them: the average capital per company in Taiwan is higher than in any other part of the Japanese Empire, including Japan proper. These are averages and include small as well as large companies, but behind them one may see the silhouettes of big corporations dominating the economic life of Taiwan,

corporations which have few equals even in industrially developed Japan (1).

1. By size of total paid-up capital the corporations and partnerships in industry in Taiwan were distributed as follows: [97]

Size	Number of companies	per cent of total	Total paid-up capital (1,000 yen)	per cent of total
Less than ¥10,000	50	14.9	253	0.1
¥ 10,000- 49,000	111	33.1	1,922	1.0
¥ 50,000- 99,000	34	10.2	1,276	0.7
¥ 100,000- 199,000	48	14.3	3,020	1.6
¥ 200,000- 499,000	40	11.9	4,878	2.5
¥ 500,000- 999,000	20	6.0	4,694	2.5
¥1,000,000- 4,999,000	25	7.5	24,077	12.6
¥ 5,000,000-9,999,000	2	0.6	5,700	3.0
Over ¥ 10,000,000	5	1.5	145,316	76.0
Total	335	100.0	191.1	100.0

Thus, 32 companies—9.6 per cent of the total number—had 91.6 per cent of the total capital of companies."

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-1-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

"Our analysis of industry and mining must not be limited to a survey of present conditions and the plans of the government, etc. Properly speaking it should only begin here. The population of Taiwan is about five per cent Japanese and about ninety-five per cent Chinese and aborigines. In order to evaluate the place of these two groups in industry and mining we should know wage levels and working conditions as well as the all-important question of who are the entrepreneurs and who the wage earners. Unfortunately, some of these questions cannot be answered because of the absence of information.

The latest available report concerning the nationality of capital in Taiwan's companies refers to the years 1929.

Distribution of Corporate Capital in Taiwan by Nationality in 1929
(1,000 yen)

	Japanese	Chinese	Other*	Total
Agriculture	4,434	4,962	4	9,399
Industry	180,497	16,786	1,658	198,941
Commerce	23,128	28,082	2,033	53,242
Communications	3,186	2,571	25	5,781
Fisheries	2,258	1,190	20	3,467

Distribution of Corporate Capital in Taiwan by Nationality in 1929 [Cont.]
(1,000 yen)

	Japanese	Chinese	Other*	Total
Mining	12,243	3,441	1,422	17,107
Total	225,745	57,033	5,161	287,939

* Chiefly Chinese from the mainland, citizens of the Chinese Republic.

The share of the Japanese was therefore 90.7 per cent in industry and 71.6 per cent in mining, while the corresponding shares for the Chinese were 8.5 per cent and 20.1 per cent. It is true that these figures do not include individual enterprises, which are chiefly Chinese, but it is quite evident that their inclusion would not greatly change the picture because the average capital of such enterprises is very small. On the other [111] hand this table does not include government enterprises which should be considered for all practical purposes as Japanese enterprises (the managerial staff is Japanese and the profits may be transferred to Japan at any time), and the capital of these government enterprises is huge. As is seen from the table, the capital of all corporations was about ¥288 million in 1929, yet in the same year the capital of the state railways alone was ¥122 million. Beside railways the government has many enterprises of all kinds. Since 1929 the situation has further changed to the disadvantage of the Chinese group for in the

last few years, as was shown above, huge new companies have been established and the capital of old ones increased. The new companies are Japanese. In 1929, for example, the capital of the Japanese companies occupied in the fisheries was ¥2,258,000; in 1939 two Japanese companies with headquarters in Japan proper, whose capital is ¥65,500,000 were operating in Taiwan. Of course, only a part of this capital is sunk in their Taiwan enterprises, but it is clear that the situation in 1939, in this as well as in many other respects, is less favorable to the Chinese than it was ten years before.

The same thing has occurred in mining, where the total capital is now ¥46.6 million, instead of ¥17.1 million as in 1929. The increase is due to the activities of the Japanese Koyo Kogyo, Taiwan Kogyo, and Keelung Tanko corporations."

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929	Korea 1938
	Per cent	Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

4:Grajdanzev--112 S-4 (no date) 1942 Formosans-2
116. 171, 471, 563, 477, 655, 177.47 Japan
636.47

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital. and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

4:Grajdanzev--113 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 177.47 Japan
636.47

"Our first question is now answered: the Chinese as a group receive very little from Taiwan's industry and mining in the form of interest on capital or entrepreneurs' profits. Any advantages which they may derive from these industries arise then chiefly from their position as workers. Let us see now what they receive in this capacity. In 1936, out of 81,589 workers occupied in industrial enterprises with five or more workers or having a prime-mover, 76,251 (93.5 per cent) were Chinese—almost the same percentage as in the population of Taiwan. The remaining 6.5 per cent were chiefly Japanese."

4:Grajdanzev--140 S-4 (no date) 1942 Formosans
116, 563, 656, 177.47 Japan
636.47

" 'Encouragement of industry', on which the government planned in 1939 to spend 11.5 million yen from the general budget and 6.5 million from local budgets, consists of subsidies to Japanese industrialists and entrepreneurs in general. The budget for 1939, for example, provided for the following grants to Japanese companies: 1,743,000 yen to oil companies, 1,447,000 to shipping lines, 1,640,000 to airlines, 72,000 to private railways, 629,000 to gold producers. It is clear that these expenditures enriching the Japanese entrepreneurs give at best, as was shown above, low-paid work for the Chinese."

"Independent trade and foreign business are at an end (1) and the handful of foreigners

1. Identical amounts of foreign trade may mean different things for a nation; thus if an American firm buys tea in Taiwan, transports it to the United States in an American ship and sells it to retailers, the net result for the United States is very different from the case where a Japanese firm buys tea in Taiwan, brings it to the United States in Japanese bottoms, and sells it to American retailers.

in Taiwan are in a precarious position. In his [147] book 'Taiwan under Imperialism' Tadao Yanaihara explains this in the following way (2): in their competition with foreign

2. Yanaihara, op. cit., pages 48-49.

and Chinese merchants the Japanese traders had great capital; they also entered the sphere of production; they had the advantage of the cooperation of the Taiwan Bank; they were helped by state monopolies; they enjoyed subsidies from the state; they were protected by the tariff wall. But nowhere in his book does Professor Yanaihara give proof that the Japanese merchants had greater amounts of capital when their enterprises were organized. The huge capital funds were not brought from Japan; they were created in Taiwan itself. Neither can any reason be found for combination of trade and production

as a cause of their success. According to his own statement (op. cit., page 48), the foreign traders and shipping were almost completely driven out (hotondo kuchiku serarete) by 1907. But at that time no Japanese took any part in the production of rice, whereas in tea production Mitsui Bussan Co. and Nozawa have participated only since 1907. As late as 1905 about 90% of the sugar was produced in primitive mills and only 4,535 tons in the mills of the newly-established Japanese enterprises, while the total exports of sugar for 1905 were but 42,600 tons. Pineapples and bananas were unimportant as articles of export in these early years: bananas appeared in the custom reports in 1907 (valued at only 44,129 yen), pineapples to the value of only 18,639 yen were exported in the same year. Since camphor became a monopoly, there is no question of competition with respect to it; while alcohol was practically not exported."

4:Grajdanzev--147 S-4 (no date) 1942 Formosans
116, 171, 477, 656, 177.47 Japan
636.47

"The establishment of a Japanese bank does not of itself mean that Japanese merchants would enjoy privileges in it in comparison with other clients. There remain then monopolies, subsidies, tariff walls and--we add--taxation policy, administrative pressure and other similar measures as causes of the Japanese commercial success. The same measures were applied in Korea, later on in Manchuria and are now being used in China."

"The growth of Taiwan's cooperative societies of all kinds is good testimony to the ability of the Chinese population to organize and to manage quite successful enterprises. The growth of the cooperative movement in Taiwan may be seen from the following table:

The Cooperative Movement in Taiwan

	1913	1918	1930	1935
Number of societies of all types	18	171	407	462
Number of members	2,760	70,428	265,248	342,122
Paid-up capital 1,000 yen	484	4,455	13,949	15,250

[172]

In 1936 the urban credit cooperatives had deposits of 20.7 million yen, while the rural cooperatives had 64.3 million yen. In May, 1940 the corresponding sums were 36.4 million yen and 122.7 million yen. All this is the more remarkable because the cooperatives were developed by the Chinese with little help from the Japanese or from the cooperative associations of Japan (1), and because the government put so many obstacles

1. This does not mean, of course, that the Japanese cooperative associations were unfriendly to the Taiwan cooperative movement. Quite the contrary. Throughout the history of the Taiwan cooperative movement the Chinese received every encouragement from the Japanese societies and from the certain Japanese individuals; but this help could not be great because of the conditions existing on the island. It is

important to emphasize that many individual Japanese physicians struggling with epidemics, teachers bringing education to far-away villages, political organizers helping the Chinese to organize their fight for freedom, and many others whose services to the Chinese were great and whose relation to the conquered people was that of sympathy and often of self-sacrifice, deserve the highest praise. However, it is not the individuals who count most, but the system, and however good the intentions of particular individuals might be, they could not and cannot change the governmental system existing on the island.

in the way of the development. The managerial and controlling staffs of the cooperatives in Taiwan must be approved by the government-general, so that 'undesirable' elements can be eliminated from the movement. The active members of the societies were often arrested and imprisoned and obstacles were put in the way of the creation of a powerful central body for the cooperative movement. But in spite of all obstacles the population of the island succeeded in building up a strong and useful organization."

4:Grajdanzev--172-173 S-4 (no date) 1942 Formosans
116, 452, 241, 476, 563, 177.47 Japan
636.47

"Since the start of the present war, however, through increasing supervision and various regulations, the government has turned the cooperatives into a piece of bureaucratic machinery, rather like the paochia. The chief function of the agricultural cooperatives, which form the backbone of the movement, has become the collection of rice and other products and their transfer to the government. According to the declared rations (1), the farmers in Taihoku province, for example, are to have only from two to

1. The ration figures are taken from the Ekonomisuto, Tokyo July 1, 1940.

two and half go of rice per day (0.6-0.75 lb.). But this is considerably below the usual consumption of [173] the farming population, so the farmers will not willingly surrender their 'surplus' and the cooperatives have been turned into organs for the compulsory collection of grain and other agricultural products. The only organization created by the islanders which had some semblance of independent existence is thus becoming a mere cog in the Japanese military machine."

15: U.S. Navy --24 [5] (no date) 1944 Formosans
116, 166, 486, 659, 177.48 Japanese
636.48

"The movement of Formosan-Chinese or Japanese into the aborigine territory is supposed to be strictly regulated. Permits must be had for any forest operations which take laborers into the area for logging or for camphor extraction. Likewise, the movements of aborigines who wish to leave the territory for business or sightseeing (educational) visits to towns and villages is carefully checked by the Japanese police. The police stations are small centers for trade and local administration through which most such traffic must pass. Roads, paths and the pushcar lines converge on these centers.

Movement from the western and northern settled regions to the isolated East Coast is susceptible of complete control. The town of Suo is the last important settlement at the northeast. Koshun is the last important settlement at the extreme south. Through these two towns pass all round-the-island motor traffic. (A road crossing the southern peninsula from Shajo eastward may now cross above Koshun.) All persons entering the territory through these points are expected to be registered for police purposes.

Some foot traffic (confined largely to bearers of supplies and messengers for the interior police stations) passes across the island from the Taichu-Hori district over the Noko mountain ridge to Karenko. It is improbable that Formosan-Chinese, singly or in small groups, should attempt to cross the mountains on foot unless armed or escorted by armed police."

15: U.S. Navy--29 [5] (no date) 1944 Formosans
116, 486, 177.48 Japanese
636.48

"The movement of all persons into or out of a community is carefully registered and reported to the police. Every hotel or place of lodging, such as a temple along a mountain trail, must keep a registry open for inspection at all times. Regular nightly inspections of hotel registers are made by the police--in the towns by a special police detail.

A further special registration is required each person crossing the border of the aborigine territory on the East Coast."

4:Grajdanzev--119 [2] S-4 (no date) 1942 Formosans
116, 171, 497, 511, 563, 177.49 Japan
636.49

"From the table given above [see table on page 118 under category 116--analyst] we see that a Japanese makes almost five times as many trips a year as does a Taiwanese --whereas the movement of the freight appears relatively as large as in Japan. The movement of passengers reflects the conditions of life of the natives while the movement of freight in Taiwan is the movement of Japanese freight to and from ports--coal, sugar, rive, fertilizer, lumber, and sugar cane (1) (in the order of freight carried)--

> 1. Sugar cane is in sixth place because the bulk of its [sic] transported on special railroads.

which, as will be shown later in more detail, serve chiefly the Japanese economic machine. The statistics of revenue show that the average cost per ton of freight in Taiwan is less than in Japan (¥2.26 as compared with ¥2.34). It may be said that this is quite reasonable because in Taiwan average distance over which the freight is moved is less. On the other hand, the average passenger cost per trip in Taiwan is twice as high. In spite of the smaller scale of operation, the railways of Taiwan bring a net return of eight to nine per cent as compared with six per cent in Japan (1937)."

4:Grajdanzev--118 S-4 (no date) 1942 Formosans
116, 494, 496, 177.49 Japan
636.49

"All kinds of communications are in use in Taiwan—from the primitive sedan chair and jinrikisha (rickshaw) to the airplane, but modern means of communications are either in the hands of the Japanese government or of Japanese companies. There are 3,375 km. of improved roads. These play an increasingly important part in inland communications because the railroads do not link up the whole island in a complete network; the eastern part has no railroad connections with the rest of the island. The number of motor cars and buses is small (1). The buses on the roads are used by the government

1. No statistics are published by the government.

railways as feeders for the rail services."

4:Granjdanzev--118-119 S-4 (no date) 1942 Formosans
116, 454, 496, 655, 177.49 Japan
636.49

"In 1926 there were 950 km.(1) of government railroads in Taiwan; in 1938 there were

1. Taiwan, Its System of Communication and Transportation, 1929.

1,040 km. The lengths of private railways at the same dates were 525 km. and 521 km. respec-[119]tively—a slight decrease. In other words, in the last decade the construction of new railroads in Taiwan has almost stopped. At the end of 1938 the capital invested in the government railroads including expenditures on repairs and restorations was ¥172,499,691."

26: Honda--469-470 N-3 (1896) 1897 Formosans
116, 491, 499, 177.49 Japan
636.49

The roads on the whole island are nothing more than narrow paths extending irregularly with corners and curves through fields. Bridges are as good as non-existent. For that reason we had to cover the entire distance to Mount Morrison on foot. [470] When the Japanese started building wide roads, the Chinese farmers were not particularly pleased and expressed the opinion that it was rather wasteful to build wide roads at the cost of useful fields; they felt that narrow paths were perfectly sufficient for pedestrians. Thus it is easy to imagine what difficulties of transportation the Japanese militia encountered when it was sent out to subdue the rebels.

15: U.S. Navy--30-31 (no date) 1944 Formosans
116, 494, 177.49 Japanese
636.49

"Ricksha men operate under license, and must maintain certain standards of dress and of vehicle maintenance set by the police. Indeed, the regulations are so precise that every [31] ricksha man changes from a winter blue costume to a summer white costume on exactly the same day, and vice versa."

4:Grajdanzev--121-122 S-4 (no date) 1942 Formosans
116, 504, 177.50 Japan
636.50

"The development of shipping demands good ports, and Taiwan is poor in natural harbors. But the government did not spare money or effort in the improvement of harbors, the best of which are Keelung and Takao through which most of the island's external trade passes. In 1929 Keelung's wharves were able to accommodate fifteen ships of 3,000 to 10,000 tons each and in addition six ships could be moored within the harbor, which was capable of handling 1,650,000 tons of cargo a year. Since that time considerable improvements have been made, and a plan of reconstruction, which [122] should be finished in 1943, foresees accommodation for forty ships at one time. Up to 1939, ¥36.4 million had been spent on the improvement of the harbor. In 1929 Takao harbor could accommodate seven ships of 5,000 tons each in berths, with seven more in the narrow but long harbor; recent construction permits accommodation of vessels of 10,000 tons, and, when the program is completed, it will be possible to accommodate twenty-nine ships at once. The cost of construction up to 1939 was ¥33.5 million. The other important ports which have undergone improvements are Karenko (east)--cost of construction ¥7.4 million; Bako (the Pescadores)--¥850,000; Soo (northeast)--¥669,000; Shinko (a fishing port in the east)--¥860,000; Shinko (west), where the works are to be finished in 1942 at an estimated cost of ¥15 million."

4:Grajdanzev--122-123 S-4 (no date) 1942 Formosans
116, 509, 177.50 Japan
636.50

"Taiwan is connected by regular airline with Japan proper and there is one air line which encircles the island. The first line connects Fukuoka (between Nagasaki and Moji, the centre of the Japanese lines radiating from Kyushu) with Taihoku (1,610 km.). Flights are made every day and, in 1938, 8,706 passengers were carried and 144,005 ton-km. of freight and mail were flown. The line is however not remunerative, although the flights of the Taiwan and Osaka businessmen and Japanese officials are subsidized by the government-general at the expense of Taiwan's taxpayers to the extent of ¥325,000 (1939).

The length of the island air lines in 1938 was about 600 km. Flights are made daily (only every second day to Pescadores) and stops are made at all important cities of the island. The number of passengers for 1937 was 6,450, but the movement [123] of freight in the same year amounted to only 570 ton-km. A subsidy of ¥360,000 was paid to these lines by the government-general in 1939, which means that each passenger was subsidized to the extent of ¥60 per flight."

15; U.S. Navy--22 [6] (no date) 1944 Formosans
116, 526, 177.52 Japanese
636.52

"There is a traditional form of Chinese boxing which has been discouraged by the Japanese because of its 'un-Japanese' character. It is in fact much like Japanese judo of which it is the ancestor."

40: Kirk--20 [2] S-2 (no date) 1941 Formosans
116, 563, 759, 871, 177.56 Japanese

"Theoretically, Japanese and Formosans may attend the middle and high school as well as the university, but in practice the Formosans find many difficulties in their path. The more important positions in business and the professions, with one exception, seem to be held by Japanese exclusively. Medicine is the one profession open to educated Formosans on equal terms with the Japanese."

15: U.S. Navy--29 [6] (no date) 1944 Formosans
116, 582, 177.58 Japanese
636.58

"There have been changes in such fundamental customs as betrothal and marriage under the impact of large-scale modernization programs and the realignment of social life to conform to Japanese ideas of colonial management."

4:Grajdanzev--163 [21 S-4 (no date) 1942 Formosans
116, 171, 625, 659, 871, 177.62 Japan
636.62

"Many times on the preceding pages it has been shown that Taiwan is more poorly supplied with this or that commodity than is Japan proper. But in one respect Taiwan is better supplied——with policemen. According to Dainippon teikoku nenkan (Statistical Year Book of the Japanese Empire) for 1937, there was one policeman for every 1,052 persons in Japan proper in 1937, while in Taiwan there was one for every 580 persons. According to the same source there were more policemen than teachers in Taiwan——9,972 policemen in 1937 as compared with 9,651 teachers of all kinds in 1936——while in Japan proper the number of teachers was almost six times as large as the number of policemen. The number of policemen in Taiwan is almost three times the number of physicians."

4:Grajdanzev--163-164 S-4 (no date) 1942 Formosans-1-2
116, 563, 625, 177.62 Japan
636.62

"Besides having this regular police force the whole country is organized for police purposes through the revival of the old Chinese system of paochia. As we saw, the Chinese of the island have no voice in the government of the island, but they [164] are widely used for police purposes through the paochia system, which is obligatory for the Chinese, but from which the Japanese are free. Ten Chinese families form a chia and ten chia a pao, so that a pao comprises one hundred families or about 500-600 persons. At the end of 1938 there were 53,876 heads of chia and 5,648 heads of paochia (called paocheng in Chinese or hosei in Japanese). All these persons are elected by the members of the chia or pao, but they must be approved by the governor (or the chief of the district). It should be noted, however, that although they have no right to elect their own representatives for the self-government, the members of the pao and chia have the right to elect their own policemen. This paradox is due to the fact that the duties of the chiachang (the head of the chia) and the paocheng are heavy, unpleasant, sometimes dangerous, and completely unpaid, while any expenditures which may be incurred are covered by a tax on the members. Only relatively prosperous men can afford to do this work and even they do it for the most part unwillingly. They police their community under the guidance of the professional policemen, report the number of residents, new arrivals and departures (very severe punishments follow failure to

report), organize groups to pursue 'bandits', take precautionary measures in case of epidemics, repair the roads and bridges, fight insect pests, collect the taxes, etc., etc. If a crime is committed or the chiachang neglects his duty, he is the first person to be held responsible, but he along with the whole group is also held jointly responsible. This system was established by the Japanese government at a time when in spite of all governmental efforts, the island was not pacified, and some extraordinary measures were necessary to bring peace. But now, after more than forty years have passed since its inception, the system is a sign of weakness on the part of the government; it shows its distrust of a people conquered so many years ago and a belief among the rulers that only through this system can peace and order be maintained on the island."

4:Grajdanzev--3 S-4 (no date) 1942 Formosans
116, 131, 631, 177.63 Japan
636.63

"The area of Taiwan, excluding the islands around it, is 35,760 sq. km. (13,807 sq. miles), a little more than the area of the Netherlands, or one-third as large as Virginia, and almost equal to the area of Kyushu or the Japanese part of Saghalien. The island stretches from north to south, the distance from its northern-most point to its southern promontory being 400 km. (249 miles) and, from east to west at the broadest part, 150 km. (93 miles). As an administrative area the Taiwan government-general includes adjacent islands and the Pescadores. The total number of these islands is 76, but their total area is only 64 sq. km. Recently the Spratley Islands off the coast of Indo-China were made a part of the territory of the government-general, but as yet they have not been adequately surveyed."

4:Grajdanzev--161 [2] S-4 (no date) 1942 Formosans
116, 631, 177.63 Japan
636.63

"Let us now examine the local government administration of Taiwan. It is divided into five provinces, three districts, fifty-one counties and nine cities. Districts are formed in less developed regions—Taito, Karenka (in the East) and Boko (the Pescadores)."

4:Grajdanzev--161-162 S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"The most important person in the province is the governor, and in the district, the chief of the district. Their powers and position are similar to that of the governor-general but on a smaller scale. They can impose upon any person without recourse to the Courts a prison term of two months and/or a fine of ¥70. They may ask military force for the maintenance of order, they supervise all administrative bodies in their respective provinces or districts, etc. These bodies are: the secretariat, the bureau of Internal Affairs, [162] bureau of Police Affairs, Police Headquarters, Taxation bureau, agricultural experimental stations, etc."

4:Grajdanzev--162 [2] S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"Since 1920 there has been an advisory body for each provincial governor or district chief, consisting of 20-40 members, half of whom are appointed by the governor-general and half chosen (by indirect election) by the municipal and county council. The governor of the province is the president of the provincial council. The officials administering the counties and whose duties are chiefly of a police character, the mayors of the cities and of rural communities are not elected, but are appointed by the government."

6: Kirchhoff--30-31 U-4 (no date) 1895 Formosans
116, 161, 177.63 China
636.63

The whole of Formosa, belongs only to the Chinese "sphere of interest," together with the islands off its coast. In reality only the western side is ruled by the Chinese, the north and, recently, a narrow strip of land along the eastern coast. Within this ruled region the Chinese Government is said to have carried out a census of the inhabitants, but [31] to have treated the results as an official secret. The assertion, made for a long time past, that Formosa has 3 million inhabitants, has thus practically no basis whatever. If this estimate were correct, it would enable one to conclude that the density of population attained the not inconsiderable figure of 90.

The slow advancement made in the more careful treatment of Formosa by the Chinese Government is reflected in the divisions into administrative districts that grow smaller in extent. At first some importance was attached to the southwest alone, and it was superficially divided into the three districts (Hsiën) of Tai-uan (now Tai-nan) in the middle, Tschu-lo in the north and Fung-schan in the south. Subordinated were the Fisher Islands and the remote Tam-sui as ting, i. e., "sea district" or, probably more correctly, "district of inferior rank." The warning rebellion of 1722 brought about the splitting of the excessively large northern district into a northern half, administered from Tschang-hua, and a southern half administered from Tschu-lo. This latter administrative center received, as a result of the self-sacrificing defense offered the rebels in 1788, the honorable name of Kia-y, i. e., "praiseworthy love of the fatherland." Until 1875 this organization of the four Hsiën (each under a Tsche-hsiën, a district president) was allowed to go on pretty much unaltered, except that [38] a few Ting were added, these being Komalan, later called Y-lan, and even the region round Tam-sui.

Then the fear of a Japanese invasion induced important reforms. Two centers of administration were now set up, a northern one in the newly created town of Tai-pe-fu, which in accordance with the Chinese custom bears the name of the district it administers*

*Tai-pe-fu is a shortened form of Tai-uan-pe-fu, i. e., the northern prefecture of Tai-uan (or Formosa).

and a southern one in Tai-uan-fu, which now received the corresponding name of Tai-nan-fu (southern prefecture). Each of these prefectures was governed by a higher official with the title of Tsche-fu (chief president). Subject to the president of North Formosa were the following districts, each administered by a Tsche-hsiën:

1) Tam-sui,
2) Sin-tschu (formerly Ting Teuk-tscham),
3) Y-lan (formerly Ting Komalan),
4) Tai-uan (i. e., Tai-nan),
5) Fung-schan,
6) Heng-tschun,
7) Pi-lam.

Similarly the districts of the same level subject to the chief president of South Formosa were:

1) Tschang-hua,
2) Kia-y.

The south of the former district of Fung-schan (from the stream entering the sea at Pang-leao down) had also received its own Hsiën administration, and was provided with the capital of Heng-tschun, founded for this purpose, and the same was done with the

greater part of the east coast, where the former village of Pi-lam became the administrative capital of an extensive district reaching from the north to the border of Komalan. Only the Schiffer Inseln (Pung-hu) remained a Ting.

The highest administrative chief of the island was appointed as the superior of the two chief presidents or prefects of North and South Formosa, with the title of tao-taï, and his official seat was at Tai-uan-fu (now Tai-nan). Every year he had to traverse the island once, and he was the highest court of appeal in all administrative and legal matters, being immediately subject to the Governor of Fo-kiën, who had to undertake a journey of inspection in Formosa every third year. But as a consequence of the Franco-Chinese conflict, the importance of Formosa as the "eye of the Southern Sea" increased in the eyes of the Peking cabinet to such an extent that, in accord with an Imperial Decree of October, 1885, the Provincial Governor of Fo-kiën was compelled henceforth to set up his residence on Formosa itself, so that he should govern the island directly. At his side a brigadier-general commanded the Formosan garrison, which was armed in European fashion and, even in peace, numbered 10,000 or 12,000 men.

The administration of Formosa has become even more specialized and made even more independent in the last years. According to Hosie's report, the island has now been raised to the rank of an independent Chinese province under a governor directly responsible to the central government of the Empire. At the present he resides in Tai-pe-fu. At the same time the division of Formosa into three prefectures was ordered, each of them embracing a number of sub-prefectures (hsiën, ting, tschu). They consist of the following:

I. Northern prefecture (Tai-pe-fu).
   1) Hsiën Tem-sui,
   2) " Sin-tschu (or Hsin-tschu),
   3) " Y-lan (or I-lan),
   4) Ting Ki-lung.

II. Middle prefecture (Tai-uan-fu).
   1) Hsiën Tai-uan, *

* This district must consequently have its center of administration in a town called Tai-uan; we thought we should indicate this to be to the east of Tschang-hua, where Hosie's map shows a town called Tai-nan (obviously an error in lettering).

6: Kirchhoff--38
116, 631, 177.63
636.63

U-4

(no date) 1895

Formosans-2
China

2) Hsiën Tschang-hua,
3) " Jün-lin,
4) " Miao-li,
5) Ting Pu-li.

III: Southern prefecture (Tai-nan-fu).
1) Hsiën An-ping,
2) " Fung-schan (Feng-schan, as the English call it),
3) " Kia-y (or Kia-i),
4) " Heng-tschun,
5) Tschu Tai-tung (formerly the district of Pi-lam).

31: Hofmann--603-604 N-3 (1909) 1912 Formosans
116, 634, 669, 697, 177.63 Japanese
636.63

In the house of the governor, Count Sakuma... I had the opportunity to meet the chief magistrates of the various provinces. Among these there was not one who did not speak either English or German. All of them had been sent to Europe by the government of Formosa to complete their studies there. In every respect, the achievements of the Japanese colonial administration are most impressive, and they become even more so if one takes into consideration the conditions under which the Japanese first took over the administration of the island. In 1895 there was complete anarchy among the Chinese elements of the population. There were organized bands of guerilla soldiers in all the regions that were accessible to foreigners, so that before the administration could proceed to the task of suppressing the Malayans in the mountain regions, [604] it was necessary to break the resistance of the Chinese. I saw some of the leaders of these guerilla bands, who had not been condemmed to capital punishment, in the large reformatory in the capital. There the prisoners were engaged in occupations such as cabinet making, in which they showed a great deal of skill and understanding.

4:Grajdanzev--160 S-4 (no date) 1942 Formosans -1-2
116. 643, 177.64 Japan
636.64

"The administration of Taiwan is entrusted to the Taiwan governor-general, who is appointed by the Emperor of Japan. Before 1919 only generals or admirals could occupy this post (1) and nowadays, if the governor-general is at the same time a general or

1. Recently the opinion was expressed in the Japanese press that, in view of the importance of Taiwan as a base for the advance to the South, this practice should be restored.

admiral, he is also commander-in-chief of Japanese forces on the island. If, on the other hand, he is a civilian, he may demand from the commander of the army the use of troops for the maintenance of order. His powers are extensive. He supervises the work of all administrative machinery, promotes the officials, dismisses them from service, though in respect to certain ranks his action must be approved by Tokyo. He has a right to suspend or cancel any order or any administrative measure of provincial governors under him and he can impose on any person on the island, without recourse to the courts, a fine up to ¥200 and/or a prison term up to one year. Under him are his Secretariat, the Departments of Home Affairs, Education, Finance, Colonial Development, Police, Communications, Monopolies and the Research Institutes (Central, Sugar, Aquatic). His actions are supervised by the Japanese Minister of

4:Grajdanzev--160 S-4 (no date) 1942 Formosans-2
116, 643, 177.64 Japan
636.64

Colonial (Overseas) Affairs, but as regards special branches of his administration he is also responsible to the Ministers of Finance and Communications."

4:Grajdanzev--160-161 S-4 (no date) 1942 Formosans
116, 563, 646, 177.64 Japan
636.64

" 'For the consulting of the people's opinions' there is an advisory body to the governor-general, Hyogikai (1), established in June 1921. Only government-general

1. Usually translated 'council.'

officials, civil and military, and those private persons 'rich in knowledge and [161] experience' whom the governor-general choses to appoint have a right to represent the people's opinions; but all high officials, civil or military, are Japanese, and, as was mentioned, they are appointed as well as dismissed at the representation of the governor-general. This advisory body, consisting of a chairman, vice-chairman, and forty members is thus made up of persons whom the governor-general finds it convenient to appoint. The chairman is the governor-general himself, and the vice-chairman is his secretary-general. Each member is appointed for a two-years period, but with the permission of the governor-general may be released from duty before the expiry of that period. Clearly, this is a purely bureaucratic institution."

4:Grajdanzev--161 S-4 (no date) 1942 Formosans
116, 641, 643, 177.64 Japan
636.64

"The people of Taiwan have no representatives in the Japanese Imperial Diet, they have no representative body which takes part in the legislation or administration of the island.

Under these conditions the position of the governor-general acquires a special importance, and yet if we exclude Kodama, who spent eight years at his post (from February 1898 to April 1906), the average length of tenure is two years and one month, too short a time for a good knowledge of the local conditions. The tenure of the government-general is evidently subject to the vicissitudes of political conditions in Tokyo and has little to do with Taiwan."

4:Grajdanzev--161 S-4 (no date) 1942 Formosans
116, 641, 643, 177.64 Japan
636.64

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4: Grajdanzev--162 S-4 (no date) 1942 Formosans
116, 563, 642, 177.64 Japan
636.64

"The officials of the Japanese Empire are divided into three groups--chokunin, appointed by the Emperor, sonin, highest officials, appointed with the Emperor's approva and hannin, lower officials, for whom the sanction of the Emperor is not necessary. In the government-general there were in 1938 7 chokunin officials, 119 of sonin rank, and 648 of hannin rank, while in the provinces and districts five persons were of chokunin rank, 94 of sonin and 1,523 of hannin.

These numerous high officials are exclusively Japanese and in the counties and municipalities there are hundreds more. Lower positions are occupied not only by Japanese, but also by Chinese, but as it is pointed out in Sekai nenkan, 'from the political point of view all administrative organisations are almost exclusively (hotondo zembunga) staffed with Japanese, while from the economic point of view everything is under the domination of the Japanese economy' (1).

1. P. 179."

4:Grajdanzev--162-163 S-4 (no date) 1942 Formosans
116, 171, 632, 641, 177.64 Japan
636.64

"The municipal or village councils have from 8 to 40 deputies (according to the population), half of whom are appointed by the government and half elected. The electorate is made up of male Empire subjects who have attained the age of twenty-five years, who are not dependent, who have lived continuously for at least six months in that particular locality and pay at least five yen in municipal or village taxes (house tax, land tax, or business tax). [163]

Thus it is clear that the only places in which there is some semblance of elections are the cities or villages. As has already been pointed out, the small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko. But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote. We have no data for Taiwan, but the example of Korea shows that by this device two per cent of the population—the Japanese—form the majority of the electorate."

4:Grajdanzev--163 S-4 (no date) 1942 * Formosans
116, 625, 642, 177.64 Japan
636.64

"Since the mayor and half the members of the Council are appointed by the government, since the mayor and all higher officials have the right to reject the decisions of the councils, since the provincial councils are appointed or elected indirectly and since the advisory council to the governor-general is appointed directly, we may say that after forty-five years of Japanesc rule, Taiwan is a colony in the government of which the islanders have no voice whatsoever and in which the Japanese themselves as citizens have little or no influence. The island is ruled by the governor-general with the help of the army and police."

"Taiwan 'the stone aiming at the south' was acquired by [186] Japan in 1895. The Bank of Taiwan, established in 1897, had among its tasks penetration of Southern China and Nan-Yo (1). In 1900 it established a branch in Amoy; in 1903—in Hongkong. In 1912 one

1. Nan-Yo includes Southeast Asia and the islands between Formosa and Australia. It is not clear whether the term includes Australia and New Zealand. Inclusion of Australia and New Zealand was denied by the former Minister of Foreign Affairs, Mr. Matsuoka, presumably to alleviate the fears of the Australians, but the maps published by the Japanese theorists of the southward advance include Australia and New Zealand.

in Bangkok. During the same period a well-planned net of agencies of the Bank was laid throughout the Malay archipelago. In 1919 with the assistance of the Bank of Taiwan the Chinese Southern (Hwa Nan) Bank was established with a capital of 10 million yen, and head offices in Taihoku, Taiwan. Its purpose was work among the Chinese emigrants in the colonial countries of Southeast Asia. In the same year the Bank of Taiwan established the South Seas (Nan-Yo) Warehouse Company with a capital of 5 million yen. As early as 1908 the government-general of Taiwan decided to earmark from its budget 700,000 to 800,000 yen annually for the purposes of education, health work, protection, cultivation

of friendship, and financial assistance to the Japanese in South China and Nan-Yo. But beside these purposes, about which some information will be given below, there was financial assistance not only to business men as such, but to business men of a special character. Malaya, Netherlands Indies, Australia, the Philippines, French Indo-China and Siam, not to mention South China, were systematically covered by a network of Japanese photographers, druggists, laundrymen and shopkeepers. There were hundreds of photographers who did not have as many as five clients a year; druggists who never sold any drugs to the natives or any one else; fishermen who were busy in surveying the coasts and taking soundings. We do not know how many of them were paid from the general budget of Japan proper; but we know that the sums appropriated annually by the Taiwan government-general were probably sufficient to support 3,000 such people throughout Southeast Asia (Y240 a year being enough for a frugal Japanese in [187] these southern countries.) To this network one should add the branch offices and agencies of the Bank of Taiwan, and the consulates of the Japanese Empire dotting the same area (2).

2. French officials in Indo-China complained that the Japanese knew more about Indo-China than they did. (Noted in Mirovoye Khozyaistvo, . . . , 1941). The same may be said about other countries of Southeast Asia.

The details of expenditures of the Taiwan government-general for this purpose

according to a Japanese source 'are not clear' (3), but it was said that 60% were spent

3. Taiwan Keizai Nempo, 1941, p. 778.

in South China and 40% in Nan-Yo."

4:Grajdanzev--187 S-4 (no date) 1942 Formosans
116, 208, 648, 177.64. Japan
636.64

"Under the auspices of the Taiwan government-general the Zenrin kyokai ('Good Neighbor Association') was established in 1917 and the Hakuai kai ('Philanthropic Association') in 1918. Their capital was supplied by the Government-General and the Bank of Taiwan; they opened schools and hospitals not only in South China, but also in Davao (the Philippines) and North Borneo. After 1918 the Zenrin kyokai started publication of newspapers for Chinese readers in Foochow, Swatow and other places."

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-1-2
116, 648, 177.64 Japan
636.64

"However, only after 1935 was the activity in Southeast Asia greatly intensified, the center, as before, being Taiwan. In 1935 the Government-General [of Japan--analyst] established a research institute for tropical countries. In 1936 a semi-private Taiwan Takushoku Kabushiki Kaisha (Taiwan Colonization Corporation) with a capital 30 million yen was organized, its purpose being not only the development of Taiwan, but also 'economic help' to the Japanese in South China and Nan-Yo and increase of trade with these countries. In 1936 the Japanese Overseas Minister, Mr. Nagata, answering an interpellation in the special session of the Diet, declared that 'the historical mission of Taiwan lies in the South, because of Taiwan's geographic position.' In 1937 the Government-General of Taiwan established a Foreign Affairs Division in charge of affairs of Kwantung, Swatow, Amoy, Hainan Island. The government stated the purpose as [188] being the spread of the knowledge of the Japanese language in South China and Nan-Yo through magazines, photographs, pictures, broadcasts, and in order—according to the statement of the Bureau of Information of the Government-General of Taiwan—to facilitate propaganda for the establishment of the East Asia Co-prosperity Sphere. In 1940 it established the Colonial Personnel Training School and rendered financial help to other institutions with similar purposes. The Bank of Taiwan was urged to give 'special loans' to the Japanese in South China (since 1935), in Nan-Yo (since 1936) and in

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-2
116, 648, 177.64 Japan
636.64

the Philippines (since 1938). On March 30, 1939 Shinnan Archipelago (Spratly Island and others)was annexed and declared a part of the Taiwan Government-General."

22: Wiedfeldt--27 F-5 (1913) 1914 Formosan Aborigines
116, 643, 177.64 Japanese
636.64

The tribe has the same organs as the clan. The designation applied to the chief, maraho, or moruhuk, means venerable old man, also leader of the army. The Japanese Governor-General is called by the Atayals the maraho of the Japanese. The chief is by no means the richest member of the tribe, and he lives in a hut just like the other members of the tribe. His title is hereditary, as it is in the clan, but a tribal chief is never also a clan chief. This office is said to have been held by the family of the present chief of the Schimptonoff [MC: an Atayal tribe] from the beginning of the tribe. At any rate, their position has not been disputed. Partly from lack of knowledge and partly for political reasons, the Japanese have often appointed Atayals who were friendly to them as chiefs, but their appointees have never been able to obtain any influence or to be successful.

22: Wiedfeldt--43 [2] F-5 (1913) 1914 Formosan Aborigines
116, 177.64 Japanese
636.64

The agreements between the tribes and the Japanese officials are in the nature of international law, and have been forced upon the Atayals in the last decade and a half.

25: Plaut--28 [2] U-4 (no date) 1903 Formosans
116, 643, 648, 177.64 Japan
636.64

Finally on the 14th of April 1895, the treaty of Shimonoseki forced China to cede Formosa with all of its islands andthe Pescadores to Japan, and then the Japanese Government began rapidly and energetically to establish order in her new possession. The difficulties were formidable, for the Chinese residents of the island did not look upon the new masters with good grace; then, too, the Japanese were not sure about the best methods of procedure at first, so they were groping and uncertain, and several times they were forced to change their system. That was due to the fact that the local administration was often quite unsuitable for applying the good suggestions of the officials. But finally the administration was organized in an intelligent and permanent fashion, and since 1898 the island has progressed steadily under the energetic and intuitive guidance of the Governor General, Lieutenant General Kodama Gentaro, and the tireless labor of the skilled and discrete Civil Governor Dr. Goto Shimpei.

4:Grajdanzev--18 S-4 (no date) 1942 Formosans
116, 175, 177.65 China
636.65

"In 1884 began the Sino-French war, the purpose of which was to compel the Chinese government to agree to the French version of Tonkin's boundary. Activities spread to Taiwan, which was blockaded by the French navy. The war was not very glorious for French arms, but it brought home to the Chinese government the need for improvements in Taiwan. The island was raised to the rank of a province in 1887, and the energetic Liu Ming-chuan, commander of the Chinese forces during the French blockade, became the first governor. He worked out a plan of substantial improvements and during his short rule the construction of the first railway on the island was begun, a telegraph network was constructed and a cable connecting with Amoy laid; harbors were also improved and fortifications built. But all this was done without any attempt to improve the condition of the masses, to educate them, or to give them some voice in the government. The cost of the reforms Liu Ming-chuan wanted to place upon the local population through the introduction of 'likin' (1) and through a revision of the land tax. This caused disturbances

1. A tax on goods moved across administrative boundaries.

among the population. Liu Ming-chuan was removed from office and the Chinese administration of the island returned to the original state of inaction; but the menace was already at hand."

4:Grajdanzev--20-21 S-4 (no date) 1942 Formosans
116, 175, 563, 177.65 Japan
636.65

"Thus Taiwan became the first Japanese colony. Many problems faced the new masters of the island, one being the aborigines and the territory occupied by them. About half of the island, sparsely populated by aboriginal tribes, was practically outside Chinese authority and the occupation of the western part by Japanese in 1895 did not bring them nearer to [21] the solution of the problem. It took decades of effort and even now is not finally solved. The Chinese part was easier to control, but several years were spent in the suppression of rebellions, and special measures were required to keep order among the population. Even the pacified population presented many problems. They were foreign in speech, in customs, outlook and allegiance, and no policy worked out in advance could be applied at once."

4:Grajdanzev--21 S-4 (no date) 1942 Formosans
116, 175, 177.65 Japan
636.65

"Finally, a not less important problem was how to make the island pay, for the new masters came to the island not so much in order to benefit the islanders as to benefit themselves. Owen Rutter, explaining the existence of good roads, railways, good streets and other amenities of life in Taiwan, says that 'Money has been poured into Formosa by the Japanese; to them it is like a ewe lamb'. (1) In the following pages however it will be

1. Geographical Journal, London, 1928, p. 286, quoted in the discussion of the report of E. H. Bunsen.

shown that Japan spent relatively very little in Taiwan and received very much from it; that most of what has been done in Taiwan has been done on money raised there.

The history of the island after Japanese occupation will be given along with a description of various phases of human activity in Taiwan."

4:Grajdanzev--42 43 S-4 (no date) 1942 Formosans
116, 651, 177.65 Japan
636.65

"The former Chinese government was exceedingly inefficient and taxes were often paid by the farmers on one ko, where [43] actually there were two. After the Japanese survey this became impossible. The 'striking success' of the Japanese government was largely administrative; for the farmers it meant only the trebling of the land tax. As Takekoshi writes: 'To be more exact, before the survey the total area of the fields and fish nurseries was believed to be 890,000 acres which yielded ¥860,706 tax. The result of the measurement . . . shows that the real area is 1,535,163 acres, and the receipts from the land tax have jumped up to ¥2,989,287.' (1) "

1. Op. cit., p. 130.

4:Grajdanzev--64 S-4 (no date) 1942 Formosans -1-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon.

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane Culture in Taiwan

	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4: Grajdanzev--68 [2] S-4 (no date) 1942 Formosans
116, 241, 471, 656, 177.65 Japan
636.65

"These examples--the cotton plan and horse-breeding plan--are extremely significant. The government officials work out plans which can hardly be called realistic and yet the successes of agriculture in Taiwan are very frequently ascribed to the government's efforts and plans."

4:Grajdanzev--131 S-4 (no date) 1942 Formosans
116, 439, 652, 177.65 Japan
636.65

"It might seem more appropriate to examine Taiwan's public finances in a later chapter after a survey of the administrative machinery and its functions. However, one important consideration makes it necessary to consider them here. Our investigation of Taiwan's economy cannot be considered complete without an examination of its external trade, which plays a very important part in the life of the islanders. But the exceptionally heavy movement of goods from the island to Japan cannot be understood simply on the basis of trade or the structure of Taiwan's economy. Certain non-economic factors must be examined before a satisfactory explanation of the movement of commodities can be made. By far the most important among these factors is the government budget, which involves tremendous sums--judging by the standards of the islanders."

4:Grajdanzev--131-132 S-4 (no date) 1942 Formosans
116, 652, 177.65 Japan
636.65

"In 1937, ... the gross value of production of the island was officially estimated at 890 million yen, while the gross revenue of the state for the same year was 203 million yen. If one takes into consideration the fact that the prevailing standards of life in Taiwan are oriental and that most of the families have little, if any, surplus, then a system which succeeds in squeezing out a gross revenue of 203 million yen for the state should be recognized as a remarkable achievement which the administrators of other colonial possessions might well envy. The fiscal system in Taiwan is a powerful instrument with which to extract from the population wealth which cannot be got by ordinary economic means. Of course, if the sums received in this way are applied for the benefit of the subjects themselves, a redistribution of income which fol-[132] lows may in certain cases be recognized as beneficial. If, for example, money which would otherwise be spent by the taxpayers on liquor is spent on the education of the taxpayers' children the results will be recognized as beneficial by most people. Thus we should know not only how much money is collected by the colonial administration, but also how it is spent."

4:Grajdanzev--132 S-4 (no date) 1942 Formosans
116, 127, 652, 177.65 Japan
636.65

"Before giving tables of the revenue and expenditures of the government-general, a few explanatory remarks should be made. (1) We give only net revenue (or expenditures) for the fiscal monopolies (1), railway communications, forests, hospitals, etc., because

1. In Taiwan fiscal monopolies include salt, camphor, opium, tobacco, and alcohol.

gross revenue figures give an exaggerated value to these items; (2) on the expenditure side we have changed the classification according to the purpose of the expenditures and all 'extraordinary' revenues and expenditures we combined with ordinary ones in order to give a more complete picture. The official heading, for example, 'grants to the sufferers from natural calamities' is misleading. One might assume that this represents aid rendered by the state to the local population, but on closer inspection one sees that a greater part of this item in the last year was made up of grants to the railways. Under the heading of 'building and repairs' (eizen hi) we find expenditures on airfields (more than one million yen) out of all proportion to the number of passengers carried (about 40 passengers per day), not including subsidies to airlines.

Unfortunately we cannot disentangle many other large items in view of the absence of information, and consequently, the amounts given represent a minimum for certain expenditures (war, police, 'subsidies' to business men, etc.) and if data were available they might be of much larger proportions."

4:Grajdanzev--132-133 S-4 (no date) 1942 Formosans
116, 631, 652, 177.65 Japan
636.65

"First of all let us compare the gross revenue of the government-general, provinces and municipalities, in order to secure a clear idea of their relative importance. [133]

Public Revenues for 1939 (Budget Estimates) (1)

1. Of course, there are probably cases of double counting in this table, e.g. a grant-in-aid from the government-general to provinces may appear in the budget of the government-general and also in the provincial budgets.

	In 1,000 yen	Percent of total
Government-general	208,602	74.4
Provinces	34,610	12.4
Municipalities	36,961	13.2

Thus three-fourths of all revenues pass through the hands of the government-general; compared to it the local administration is of trifling importance, and we may therefore concentrate our attention chiefly on the budget of the government-general."

4:Grajdanzev--133-134 S-4 (no date) 1942 Formosans-1-2
116, 651, 177.65 Japan
636.65

"The sources of revenue of the government-general for the last five years are as follows:

Revenue of the Government-General in 1,000 Yen (1)

1. Including net income from monopolies, railways, communications, forests, textbooks, weights and measures, hospitals.

	1935	1936	1937	1938	1939	1940
	settled		accounts	budget	budget estimates	approx. budget estimates
Taxes(a)	53,978	64,173	72,567	81,873	78,170	93,000
Net Revenue from railways, commun.	12,395	12,888	13,296	16,904	15,250	—
Loans (b)	—	—	—	—	6,400	6,000
Others	5,834	7,007	6,564	9,397	8,420	—
Surplus from the preceding year	29,441	32,605	41,833	46,392	18,373	25,934
Total	101,648	116,673	134,260	154,566	126,613	—

a) Including net profits of monopolies and receipts of stamp duty.
b) Loans were often floated by the government-general before 1939, but were not

included in the general budget because they were made for special purposes. This item, however, represents a deficit. The debt of the government-general, at the beginning of 1939, probably stood at about Y 94 million.

Insofar as the 'surplus from the preceding year' cannot be considered as an independent source of revenue, it is clear that the greater part of the revenue of the government comes from taxes (including fees and fines). If we add the taxes to be collected by the provinces and municipalities, the total amount [134] of revenue from taxes was 124.3 million yen for 1938 and 122.5 million yen for 1939--large amounts for an oriental island, agricultural in character, and with a population of only six millions(2). Compared with

2. An official investigation of farmer's budgets made in 1936 revealed that direct taxation of farmers in Taiwan is twice as high as in Japan (Nasu, op. cit.).

1935 the amount of taxes to be collected from the population in 1938 increased by 52%, and this increase was resumed in 1940 and 1941."

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-1-5
116, 434, 565, 651, 177.65 Japan
636.65

"Taxes may be of different types--some falling chiefly on the rich, whose ability to pay is, of course, greater than that of the average farmer. We do not have necessary information for a detailed analysis of how the tax burden is distributed between these two groups, but what is available gives clear indications. We have divided the taxes into two groups: (a) taxes on the recipients of large incomes; (b) taxes on the masses.

Taxation and Net Monopoly Receipts in 1,000 Yen

A. Taxes on the recipients of high incomes:

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Income Tax	3,873	5,285	9,538	13,024	12,395
Tax on capital		5	189	352	855
Mining Tax	200	203	291	353	327
Special profit tax	1,016	1,575	2,761	4,979	2,444
Tax on distribution of dividends		335	425	394	850
Inheritance tax			105	279	305
Total	5,089	7,403	13,309	19,381	17,176

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-3
116, 434, 565, 651, 177.65 Japan
636.65

[135]

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Profit on weights and measures d)	179	209	206	331	341
Fines and confiscations e)	1,091	529	224	362	224
Tax on railway fares				205	202
Admission ticket tax				116	124
Tax on construction					152
Amusement tax					188
Other taxes	731 f)	1,213 f)	1,200 f)	164	907
Total	48,889	56,770	59,258	62,492	60,994
The same as percentages of total					
Group A.	9.4	11.5	18.3	23.6	22.0
	90.6	88.5	81.7	76.4	78.0

a) We include business taxes in this group because it is legitimate to suppose that they are shifted by the business men to the population.

b) The fall of receipts from the tax on alcohol in the last two years is due to the introduction of a state alcohol monopoly.

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-2
116, 434, 565, 651, 177.65 Japan
636.65

B. Taxes on the masses of the population:

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Land tax	7,492	7,742	7,938	8,342	8,342
House tax					1,312
Business tax a)			2,931	3,290	2,726
Tax on sugar	3,320	3,461	4,050	6,702	5,215
Tax on alcohol b)	3,698	3,845	2,913	169	100
Taxes on other commodities	2	177	275	393	826
Customs duties and other duties connected with them	2,611	3,326	2,574	1,846	1,817
Stamp duty	5,107	7,271	7,220	7,653	5,926
Monopolies, net receipts	24,555	28,968	29,652	32,845	32,568
Net profits from text-book sales c)	103	29	75	74	24

c) Formally this is not a tax, but a surplus remaining after deduction of expenditures on printing of textbooks from receipts. However, state profits derived from the sale of textbooks to school pupils hardly can be considered otherwise than a tax.

d) As in the preceding item this represents a surplus from a form of fiscal monopoly.

e) Formally fines and confiscations are not taxes. But their regularity (they are foreseen in the budget) and their amounts show they are not 'casual' receipts. They fall, mainly, on the Chinese population.

f) Chiefly receipts from the taxation of surplus issues of Bank of Taiwan notes.

From this table it may be seen that about 80 to 90 percent of the taxes fall on the masses of the population and only 10 to 20 percent on the wealthier groups. The percentage of taxes contributed by the well-to-do rose from 9.4 in 1935 to 22.0 in 1939, but it would be a mistake to suppose that this implies a change of policy: the exigencies of wartime and the already oppressive burden of taxes on the masses make it more and more difficult to increase that burden. Under these conditions, heavier taxation of the rich is a necessity, but the government prefers to borrow from them, not to tax them: the loans amounted to six million yen in 1939 and are expected to amount to 17 million yen in 1941.

The actual tax-burden on the masses as compared with the wealthy is considerably

greater if we include provincial and [136] local taxes. We have no data on the exact distribution of local taxes, but provincial taxes can be measured. Provincial taxes are surtaxes, calculated as a percentage of the corresponding government-general taxes. Their rates are as follows:

Surtax on income tax	18%	of income tax
Surtax on land tax	90-100%	of land tax
Surtax on business tax	70-80%	of business tax
Surtax on house tax	120-150%	of house tax

These rates show that surtax on income tax (which falls chiefly on the recipients of high incomes) is only 18%, while surtaxes on taxes falling on the masses of population range from 70 to 150%."

"The special tax is a combination of property and income tax, but it cannot play an important part in local taxation in Taiwan because as a rule the recipients of large incomes in Taiwan do not live there--their residences being in Japan proper. Consequently this tax falls chiefly on the middle and lower brackets, so that the chief burden of local taxation falls on the masses to an even greater degree than in the case of the taxes of the government-general.

We cannot calculate the general incidence of taxation in Taiwan, but we can get an idea of the burden it represents in the following way: land taxes in the 1939 budget total about 22,350,000 yen (1). In this figure are included taxes on improved land, forest land, fish

1. This figure is arrived at as follows: (a) the land tax of the government-general is 8,342,000 yen; (b) the provincial land tax is 7,805,000 yen; (c) we have no figure for the local land tax, but we assume that the relationship is about the same as in Japan proper, which would give a figure of 6,200,000 yen. Thus the total amount of taxes on land is about 22,350,000 yen.

ponds, and other land to the amount of [137] 3,060,000 yen (2). Thus, 19,280,000 yen are

2. The taxes of the government-general on lands of this kind amount to 1,143,000

yen, but insofar as provincial and local taxes bear a definite relation to the basic tax, the total is estimated to be about 3,060,000 yen.

paid on 856,900 ko of taxable land, i.e. 22.5 yen per ko. Since the agricultural population of the islands represents about 60% of the total population, the average amount of land per person in the agricultural population of Taiwan is about 0.37 ko (about 0.9 acres). A tax of 22.5 yen per ko is equal to one and a half to two months' wages of an agricultural worker (3); and the levy on land is only one among many taxes.

3. Daily wages of an agricultural worker are about 0.80 sen; monthly, 8 yen to 18 yen. Source: Taiwan Jijo.

But as was mentioned above, it is important to know for what purposes the sums collected are applied. The harshness of taxation may be mitigated by beneficial ways of spending the revenue."

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-1-5
116, 465, 652, 177.65 Japan
636.65

"The expenditures of Taiwan government-general may be classified as follows:
Expenditures of the Government-General (1,000 Yen) (1)

1. Source: Okurasho Nempo.

Purpose [a]	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
Government-general	1,758	1,939	2,289	2,232	2,416
Grants to local governments	14.704	14,985	15,733	16,171	16,648
Pensions	4,915	4,898	5,088	5,190	5,414
Public finance [b]	9,210	8,623	9,412	9,920	14,315
Police, court, prison [c]	4,474	4,547	5,437	5,534	5,342
General hygiene, hospitals [d]	716	572	833	978	1,204
Education	4,720	5,096	5,499	4,119	4,840
University [e]	295	322	349	3,236	3,797
Research and Investigations	2,630	2,570	3,055	3,186	3,929

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-2
116, 465, 652, 177.65 Japan
636.65

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
Railroads and roads (new construction)	7,136	8,537	8,475	9,839	9,588
Ports, rivers	9,113	9,625	10,669	9,120	13,327
Communications (new construction)	717	1,623	1,718	1,442	1,798
Help to sufferers in natural calamities	2,894	435	600	1,272	326
Development of State lands	204	193	335	445	497
Rice control	405	1,180	1,218	121	2,217
War	287	2,017	8,727	18,299	21,150
Meteorological stations [138]	73	94	278	507	890
Propaganda	146	155	427	1,228	1,957
of which for 'spiritual mobilization'			37	57	60

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-3
116, 465, 652, 177.65 Japan
636.65

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
'Expenses of establishments (shisetsu) in South China and the South Seas'	583	618	1,080	2,046	4,074
Secret funds	181	176	176	159	190
Encouragement of industry	3,969	5,707	5,873	9,058	11,468
Temples and shrines	709[f]	134	349	377	599
Total	69,839	74,046	87,620	104,479	125,986

a) The classification offered here is in most cases quite different from the official one; see below for explanations.

b) Chiefly debt service and the cost of tax collection.

c) Not including those paid from the budget of local governments.

d) These are net expenditures, receipts from the patients are deducted.

e) As will be shown later, the University serves chiefly the Japanese. It existed before 1938, but the expenditures were not disbursed from the budget of the government-general.

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-4
116, 465, 652, 177.65 Japan
636.65

f) Includes expenditures on the memorial exhibition ('Forty years of Japanese rule').

To this it is useful to add the table of expenditures of provincial and local governments:

Expenditures of Provincial and Local Governments (1,000 Yen)

	1938 budget	1939 budget estimates
Cost of government, including police	8,289	7,630
Debt service	4,389	4,413
Education	13,177	14,144
Hospitals and hygiene	5,447	5,193
Encouragement of industry	5,172	6,488
Guards	757	1,110
Public Works	7,156	7,052
Repairs	6,796	4,361
Shrines	146	103
Other expenditures	19,827[a]	21,159[a]
Total	71,156[a]	71,653[a]

a) This includes several millions in cases of double counting

(grants from the provincial governments to local ones), but we have no means of tracing them."

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-1-2
116, 563, 659, 723; 177.65 Japan
636.65

"The expenditures on the government apparatus, including police, courts, prisons, and pensions are chiefly, in some cases [139] exclusively, expenditures on the Japanese staff and for the benefit of the Japanese. All important government positions are occupied by Japanese and their salaries are much higher than those of the Chinese. Expenditures on roads, railroads, and communications, of course, benefit the local population as well as the Japanese, but as was shown in preceding chapters, these improvements are used chiefly by the Japanese or for commerce with Japan which brings little net gain to the islanders. Expenditures on ports are out of all proportion to the needs of the island. Their function is, as the Japanese openly announce, to serve as a base for the advance to the South, and such expenditures have little to do with the welfare of the islanders. Expenditures on rice control are again expenditures in the interest of Japan proper for this system has in view simply the interest of Japanese. In the war expenditures we have included expenditures on airfields, on Red Cross activities, on air defense and contributions to the war chest of Japan. These expenditures grew from the modest figure of 287,000 yen in 1935 to 21,150,000 yen in 1939; thus Taiwan contributes to the conquest of China by the Japanese. In the war expenditures should be included expenditures on meteorological stations. Their remarkable growth from 73,000 yen in 1935 to 900,000 yen in 1939 is explained not by any interest in meteorological phenomena, but by the

needs of the Japanese military aviation. Taiwan lies in the path of typhoons and information on weather conditions there is of extreme value to the Japanese forces in China."

4:Grajdanzev--140 [3] S-4 (no date) 1942 Formosans
116, 652, 657, 177.65 Japan
636.65

"Expenditures on the health and education of the population occupy a rather modest place in the budget of the government-general, and their part in total expenditures is falling, as the following figures show: (percentages of total expenditures)

	1935	1936	1937	1938	1939
Education[a]	6.8	6.9	6.3	4.5	3.8
Health	1.0	0.8	1.0	1.1	1.0

a) Expenditures on the University are not included here as before 1938 they were not included in the general budget, and we have no data on them.

However, it should be pointed out that the bulk of these expenditures passes through local budgets--14,144,000 yen on education and 5,193,000 on health in 1939."

4:Grajdanzev--140-141 S-4 (no date) 1942 Formosans
116, 648, 652, 659, 723, 177.65 Japan
636.65

"The large expenditures on railways and communications, on research, on investments in the South Seas, etc., show what importance the Japanese attach to the part of Taiwan in the schemes for an advance to the South. The money [141] collected in the Taiwan budget--almost 200 million yen--is thus mainly used, on the one hand, for the construction of the all-important base for Japanese penetration in the South Seas, on the other, for the purchase of Taiwanese products to be sent to Japan (1).

1. In the last few years the Japanese government has started the practice of direct contributions by the Taiwan Treasury to the Japan's Treasury. The sum appropriated in Taiwan's budget for 1941, for example, is 24.5 million yen."

4:Grajdanzev--140 [2] S-4 (no date) 1942 Formosans
116, 346, 563, 659, 177.65 Japan
636.65

"The shrines and temples mentioned above are not Chinese temples, but Japanese shrines, including a shrine to the spirits of the war-dead on which 100,000 yen was expended in 1939. It may be interesting to note that construction of Japanese shrine in Taito (1937-1939) was to cost 1,078,000 yen, while the appropriations for the Chinese temple of Confucius in Taihoku (1935-1936) amounted to only 20,000 yen."

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans -1-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

"Political Movements (1)

1. The information concerning these movements is taken chiefly from Yanaihara, op. cit., and from Sekai nenkan, 1939.

As was shown in the historical section of this book, the island was not actually acquired by the treaty of Shimonoseki, but was conquered by the Japanese. This conquest took seven years and the Japanese recognize that the island was pacified only about 1902. However, in 1907 the Peipu rebellion broke out, the immediate cause being an attempt on the part of the officials to use the paochia in the subjugation of the savages. In 1912 the Linchi rebellion broke out in connection with the felling of the bamboo forest by Mitsui interests, and in 1915 [177] there was a new rebellion at Hsilaian. All these rebellions were suppressed by the government. These and other spontaneous movements, the information concerning which was withheld by the government, are classified by the Japanese as rebellions of the old type, to distinguish them from newer movements guided by persons with modern education and ideas. The first of these movements was led by a Japanese, Taisuke Itagaki, who came to Taiwan in November 1914 and organized Dokakai, the Assimilation Society. The purpose of Itagaki was not a revolutionary one; he wanted to see the Chinese of the island assimilated by the Japanese. He realized however, that this assimilation could not take place unless the Chinese of the island

were given equal treatment and equal opportunities in education. But such ideas appeared too dangerous to the government-general and the movement was suppressed in February 1915. Another stimulus to the awakening of political consciousness in the Chinese was given by Lin Hsien-t'ang, a wealthy Chinese who petitioned the government to permit him to open a private middle school in Taichu for the Chinese. The idea was evidently so strange and radical to the Japanese that they consider this application an important stage in the political development of the island. In 1918 the Chinese from Taiwan who studied in Tokyo organized the Domeikai, an organization the primary purpose of which was to effect the abolition of some especially harsh laws in Taiwan. In 1919 this organization started a monthly publication Taiwan Youth, which a few years later was changed into a weekly. At that time the attempt to transfer its publication to Taiwan failed, but the organ became the spearhead of the educational movement and in the 'liberal' years of 1927-30 this publication succeeded in moving to Taiwan and turned into a daily newspaper, the fate of which has already been described."

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-1-3
116, 553, 563, 723, 177.65 Japan
636.65

"In any case. the Japanese government understands the abnormality of the situation [i.e. the unexpressed and expressed hostility of the people of Taiwan toward the Japanese--analyst] and the dangers connected with [192] it. To this 'domestic' consideration a special consideration of grand strategy is added. The militarists of Japan realize that the successful management of the Eastern Asia Co-prosperity sphere cannot be realized without the goodwill of at least some groups of the local population. They plan to retain the semifeudal organization of the Dutch Indies, Thailand, Malaya, etc., but to supplement it on the one hand with direct control over rajahs, sultans, chiefs and so on, on the other hand with an indirect control through the Chinese. In each country of Southeastern Asia there are millions of Chinese, chiefly of Kwangtung and Fukien origin. Their numbers could be easily increased, because through administrative measures their immigration has been kept down. In some countries only a very small number were admitted annually; in other permits to immigrate were given more or less freely, but on condition of payment of a very high head tax. The Japanese can easily double or treble the number of immigrants, putting as the only condition of migration a guarantee of the 'political reliability' of the emigrant. The Chinese have played an extremely important part in the economic life of the countries of Southeastern Asia. This part would be greatly increased on the one hand through repeal of certain limitations upon the activities of the Chinese, on the other hand through the systematic financial assistance given by the Japanese banks to the Chinese businessman, especially to middlemen. Of

course, the activities of the Chinese would be controlled by the Japanese, and here the Chinese from Taiwan come into the picture. Many of them beside their own native language speak Japanese also. The number of such persons can be easily increased, especially if the youth of Taiwan knows that lucrative positions will be opened for them. Thus, two lines of control can be used: on the political side—local population—rajahs—the Japanese commissioners—Tokyo; on the economic side—local population—Chinese middlemen controlled by the Taiwanese or with the help of the Taiwanese—the Japanese monopolistic concerns. The local population will be then thoroughly con-[193] trolled by the Japanese; on the other hand it will be racially divided and unable to present a united front against its masters. The Chinese will know that their interests and privileges depend upon the favor of the Japanese, their economic interests will oppose the interests of the local population. The Japanese militarists hope in this way to reconcile the native population of the island to alien rule. They declare that the greatest immediate problem in respect to the Chinese population of the island is kominka or turning them into imperial people, or more simply, some kind of assimilation. A campaign for the spread of the Japanese language is being conducted; the Chinese are encouraged to change their names into Japanese; various patriotic and chauvinistic societies have been established in order to influence the mind of the Chinese youth. One should not conclude from these facts that the Japanese want to establish a racial equality in this

'co-prosperity' sphere. The Japanese authorities complain that very few islanders change their names. Actually only a few hundred have used this privilege. However, this change of name is not so simple: each case has to be approved by the governor, and it is clear that approval is given only to those who can prove their complete fidelity to their masters."

4:Grajdanzev--193 S-4 (no date) 1942 Formosans
116. 177.65 Japan
636.65

"Thus, so long as the Japanese are successful in their aggression, their base in Taiwan is more or less secure; the experience which they have acquired in subdividing the Formosan people will help them considerably in Indo-China, the Philippines and other countries of Southeastern Asia. It is quite probable that some groups of the Chinese population of Formosa may be willing to 'cooperate' with their masters in subjugation of other countries. But if the victorious march of the Japanese is stopped or turned back; if the economic difficulties mount, as they certainly would in such an event, then Taiwan, with its restless and discontented population may become a base of doubtful value. But this will happen only when the military prestige of the Japanese has received a powerful blow from outside."

15: U.S. Navy--26 [12] (no date) 1944 Formosans
116, 511, 656, 177.65 Japanese
636.65

"The Japanese have immeasurably improved living conditions in Taiwan by systematically developing communications, public health measures, commodity distribution, agricultural planning and the like. Their efforts have been directed toward the improvement and control of the livelihood of the Formosan in order that he may better contribute to the total economic and strategic value of the island. Brigandage has been eliminated and the roads made safe. The whole organization of Formosan life has gone through much the same development and standardization that Japan has experienced since 1868, save that in Taiwan change has been an official policy executed methodically under police supervision with no regard to local opinion or tradition."

6: Kirchhoff--37 [5] U-4 (no date) 1895 Formosans
116, 177.65 China
636.65

Originally the colonizing zeal of the Hakkas and the people of Fokien had quite independently won the soil of the island step by step. Then the rule of the Imperial Government was proclaimed after the collapse of the Koschinga dynasty on Formosa, but until more recent times the central government paid no attention to the "island of the eastern barbarians." The extension of the area cultivated by the Chinese on Formosa remained the private affair of the settlers; the officials sent to the island felt as if they had been banished and used the years of their exile to enrich themselves.

15: U.S. Navy--29 [4] (no date) 1944 Formosans
116, 364, 651, 656, 177.65 Japanese
636.65

"The Japanese have enforced rigorously a system of household registration. At the door of each dwelling there is displayed a plaque bearing the name of the head of the house. Near it are pertinent receipts or certifications received from the police which testify to registration at the nearest police station, house-inspection and approval, vaccinations or innoculations required of all members of the household, certain tax receipts, and such other data which the police may require from time to time to be displayed in a public and easily checked place. In the cities small insignia or notices indicate the public utilities available in each house."

15: U.S. Navy--31 [9] (no date) 1944 Formosans
116, 466, 651, 177.65 Japanese
636.65

"The hoko system of mutual responsibility within households and local communities is under closest police supervision and control. Through it the government can demand and receive contributions both of hours of labor and of taxes in kind. Close check can be kept also on all labor unrest and agitation."

25: Plaut--28-29 U-4 (no date) 1903 Formosans-1-2
116, 114, 654, 177.65 Japan
636.65

Anyone who knew the conditions [EJ: previous to Japanese occupation] realized that if the new order were to be a permanent one, it would have to be based on the existing circumstances; these circumstances were the culture, customs, laws and habits of the [29] most important and largest element of the population, or the Chinese, and so the first thing to do was to make a thorough study of the old system. A number of capable men were set to this task, and they collected a great deal of material. An imperial decree established a Commission to inquire into the old customs on Formosa, and it was under the direction of Okamatsu Santaro, Professor of Law at Kyoto University. This group was charged to examine the available information and to get some more. That was on the 25th of October 1901. That same year Professor Okamatsu published his first report by order of the Governor General, and in 1902 it appeared in English under the title of: "Provisional Report on Investigations of Laws and Customs in the Island of Formosa compiled by order of the Governor-General of Formosa by Santaro Okamatsu."

The report begins with a brief survey of the history, administration and judicial procedures of the island, then there is a detailed description of the legal status of the lands, their division according to the nature and utilization of the soil, the land tax, inheritance and loss, purchase, sale and lease, as well as of the legal forms relating to these contracts, and there is also a discussion of irrigation and the rights and taxes which it entails. In conclusion he has a brief discussion of the family rights of the Chinese

inhabitant. In an appendix he has added a glossary of the Chinese terms which were used in the work, and then there are 89 "References", or examples of documents in Chinese, as they are used in various legal affairs.

All in all, the report is a valuable contribution not only to our knowledge of Formosa, but to the study of comparative jurisprudence as well.

25: Plaut--32 U-4 (no date) 1903 Formosans
116, 206, 496, 654, 177.65 China
636.65

Liu-Ming-Chuan [EJ: the Chinese Viceroy appointed in 1884] was eager to make Formosa more progressive. So he built a railroad from Kelung to the capital T'ai-pei-fu, and from there on to Hsin-chu; he connected the capital T'ai-pei to T'ai-nan and the Pescadores with a telegraph line, and then he made Formosa a part of the world telegraph system by constructing a cable to Futchou. He also established a well-regulated postal system. Industry, including sugar, also received his support. Although Liu-Ming-Chuang's administration was very beneficial for Formosa, he aroused much dissatisfaction by raising the taxes and levying an inland duty, for the previous revenues were not sufficient to defray the costs of his innovations.

31: Hofmann--603 N-3 (1909) 1912 Formosans
116, 366, 543, 657, 177.65 Japanese
636.65

During my stay of one week in the capital and the neighboring regions, I was greatly impressed by the energy with which the Japanese had stimulated the culture of Taihoku. There were extensive government buildings, broad streets, water pipes, schools, barracks, hospitals, reformatories, railroads, telegraph and telephone connections; everything, in short, that is considered representative of western culture. Everywher there are signs of Japanese patience, energy, and initiative which form a striking contrast to the confusion and negligence of the Chinese regime. There is a museum in Taihoku which is well worth seeing, with an extensive collection of the abundant fauna and flora of this island; it is because of the copious vegetation that Formosa for so mar centuries has been the cynosure of all those nations who sought to expand their boundaries. There is also a botanical garden where a large number of useful and interesting plants has been systematically arranged and it is calculated to impress any visitor to the tropics. There is one hotel in Taihoku which, judged even by European standards, is excellent; it offers all the comforts of a tropical hotel.

40: Kirk--19 [2] S-2 (no date) 1941 Formosans
116, 651, 177.65 Japanese

"Money contributions are made through the chokai (municipal system) and the hoko (the rural system). The government raises considerable sums also by promoting 'one vegetable' meals and soliciting the savings of the frugal peasants. 'One house-one thing' campaigns have brought thousands of yen to the colonial treasury from the sale of goods which patriotic Taiwanese have contributed from their scanty store of personal effects. The overburdened farmers frequently find that the government has made a levy on their crops; and, in addition, they feel obliged to make contributions of animals, fruit, vegetables, and currency to help maintain the Japanese soldiers abroad."

4:Grajdanzev--171 S-4 (no date) 1942 Formosans
116, 208, 641, 625, 177.66 Japan
636.66

"Taiwan was conquered by the Japanese army. The regime which was established there was a military regime, and with few modifications it continues to be a military regime today. The government does not trust the Chinese, spies upon them, and is afraid of any movement which does not emanate from the government-general itself. Suppression of the Chinese culture and forcible japanization of the islanders is considered by the government as the best means of turning the islanders into loyal subjects of the Empire."

4:Grajdanzev--177-178 S-4 (no date) 1942 Formosans
116, 668, 177.66 Japan
636.66

"The World War brought in its wake unrest and political agitation. Lin Hsien-t'ang, together with many other Chinese, petitioned the Imperial Diet in February 1921 for the establishment of a parliament in Taiwan and for some kind of home [178] rule. The diet paid no attention either to this or to the following petitions, but the government-general arrested hundreds of persons in 1923 in order to stop the movement (1).

1. This is the Japanese version. Professor R. Goldschmidt, who visited the island in 1926 and who is in general an admirer of Japanese colonial methods, writes as follows: 'There are rumors that the movement was suppressed with 3,000 death sentences. But the notorious Japanese system of secrecy makes this difficult to verify.' (Translated from the German, Neu Japan, Berlin, 1927. pp. 109-110.)"

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -1-2
116, 467, 656, 668, 177.66 Japan
636.66

"In October, 1921, Lin Hsien-t'ang, Ts'ai Pei-ho (who was arrested in 1923), Chiang Wei-sui and others organized the Taiwan Bunkakyokai (Taiwan Cultural Society), which very soon became the centre of the national movement among the moderate elements. But in 1926 the Marxist groups made their appearance on the island for the first time when twenty Chinese formed the Taiwan Proletarian Youth League (Taiwan Musan Seinenkai). Since that time the political movement has separated into two branches—the Moderates centered around the Bunka Kyokai and were strongly represented in the Taiwan Agricultural Cooperatives, and the revolutionary Marxist organizations closely connected with the workers union (Taiwan Koyuso remmei), which in 1928 was reported to have had as many as 6,367 members and to have organized several successful strikes. However, after 1928 there began a new era of suppressions and arrests and one after another the Chinese organizations fell victims to it. The Marxist groups were the first to go. In 1931 the Taiwan Koyuso remmei was suppressed and finally in August 1937 even the most moderate movement of the right wing organizations, the purpose of which was the reform of local government, was dissolved on the claim that the government had already realized this reform.

This, of course, does not mean that all these movements were eradicated; they went underground, and continued their struggle, but the government suppression made even moderate groups more radical than they were before. In 1931 Taiwanese in Shanghai reorganized their Taiwan Youth Party into the Anti-imperialist League. It had close

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -2
116, 467, 656, 668, 177.66 Japan
636.66

connections with Taiwan, where its members from time to time were rounded [179] up by the police."

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress, The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

15: U.S. Navy --21 [3] (no date) 1944 Formosans
116, 186, 563, 177.66 Japanese
636.66

"The first generation of Japanese in the island came as adventurers who hoped to get rich quickly in the wake and under the protection of an occupying army. A domineering and ruthless attitude toward the native population has persisted, although the second or younger generation is beginning to identify itself with the island. It has been bred away from a strong homeland (Japan Proper) tradition. Although the essence of home and school training is emphasis on 'true Japanese spirit,' in practice the lives of these young Japanese are governed by the colonial situation in which they find themselves. They have a strongly developed 'exploitation' and imperialist outlook which prevents them from learning anything of the language or customs of the people among whom they live. Very few Japanese can speak elementary Formosan-Chinese."

:: U.S. Navy --22 [2] (no date) 1944 Formosans
6, 181, 668, 177.66 Japanese
36.66

"Formosans who have received the advantages of a Japanese education naturally ex-
ect opportunities in return. If such cannot be found in Taiwan, nor in China or Japan,
iscontent may increase. The Formosan temperament is not aggressive, but 'Old For-
osa Hands' remark that this temperament often finds devious ways of achieving de-
ired ends in spite of official control.

The Formosans lack leadership, for the Japanese have destroyed out-spoken opposi-
on or have driven it underground and abroad. Only through pressure of Japanese oc-
upation did there begin to develop a sense of the interests of the Formosan people as a
hole, and the formulation of a political program embracing the welfare of the island
is-a-vis Japanese policy."

15: U.S. Navy --22 [7] (no date) 1944 Formosans
116, 181, 266, 578, 177.66 Japanese
636.66

"Through the past twenty years observers have commented on the passivity, and the subserviency of the Formosan-Chinese to Japanese rule. However sullen or resentful the general populace may be, they have been without effective means of resistance. This is not to be attributed to meekness or lack of spirit, but rather to the extremes of force and cruelty with which the Japanese established initial order and imposed their elaborate system of controls, reaching into every household on the island and placing upon the members collective responsibility for the acts of individuals. Even the most generous allowances cannot conceal the fact that before the Japanese came the Formosan-Chinese population as a whole was capable of extremes of ferocity in mob action among themselves, not stopping short of ritual cannibalism (the eating of the hearts and livers of victims to acquire strength and spirit), nor of the cold-blooded sale of the flesh of captured aborigines on the open market both on the island and across the channel along the coast of Fukien. In the years before 1941, educated Formosans commented frequently (and of course privately) upon the probable extremes of mob action likely to be directed against the Japanese if ever an opportunity should be presented. That the Japanese are aware of this was amply demonstrated on February 18, 1938, when the attack of a single bomber from China caused the authorities to barricade public buildings and to set up machine guns throughout the capital city before they sounded the air raid alarm. The guns were directed at the Formosan-Chinese population."

15: U.S. Navy --22 [9] (no date) 1944 Formosans
116, 186, 668, 563, 177.66 Japanese
636.66

"It is evident from an analysis of election returns that the greatest interest in politics and representative government is shown in the districts where the Hakka people are predominant, notably in Shinchiku Province. It is also notable that many of the leaders of fierce resistance to the initial Japanese invasion of the island were Hakka people or people from areas in which the Hakka predominate. Not only is government -processed opium said to be more easily accessible in Shinchiku Province, but it is in this district that the Japanese have taken greatest pains to destroy local religious cults, and to press the Japanization program."

4:Grajdanzev--105-106 S-4 (no date) 1942 Formosans
116, 376, 457, 177.71 Japan
636.71

"Cheap water power is an important asset to Taiwan in all plans for its industrial development. Prior to 1930 it was estimated that the twenty-three major streams can produce as much as 1,040,000 kw., but, according to Takahashi, recent estimates put the capacity at a much higher figure—about two million kw. Of this about 230,000 to 240,000 kw. was utilized in 1939. Development before 1933 was slow. In 1919 the capacity was 10,000 kw.; in 1933, about 40,000 kw. But in 1930-31 a project was worked out for the utilization of Jitsugetsutan (Lake Candidius), a lake in the mountains in the centre of the island located 726 m. above sea level. The project was elaborated chiefly for the purpose of creating an armament industry (1) but there was no money to finance it, so work on the

1. That the primary motives were military is definitely stated in Taiwan Jijo, 1939, p. 418, and Sekai nenkan, 1939, p. 177.

project stopped. Finally, money was found in the United States, where in July 1931 a loan of US $22,800,000 or ¥45,737,210 was arranged. In October 1931 work was resumed and in 1934 the project was completed. In July [106] 1937, a second project was finished at the same lake."

4:Grajdanzev--4 [2] S-4 (no date) 1942 Formosans
116, 101, 177.72 Japan
636.72

"Taiwan is therefore halfway between Shanghai and Hongkong and halfway between Tokyo and southern Indo-China. This makes it an extremely important point for the Japanese. Geographically it is nearer to China and to the Philippine Islands than to Japan. Since its conquest the Japanese have looked upon Taiwan as a base for their advance to the south, as a stepping-stone toward domination over the adjacent areas."

4:Grajdanzev--139-140 S-4 (no date) 1942 Formosans
116, 648, 659, 177.72 Japan
636.72

"Expenditures for the penetration of Southern countries and [140] 'secret funds' are scarcely likely to benefit the Chinese population of Taiwan."

4:Grajdanzev--170-171 S-4 (no date) 1942 Formosans
116, 175, 114, 204, 177.72 Japan
636.72

"Tadao Yanaihara, writing in 1929 when no Chinese newspaper was published, tried to find the cause of the difference between Taiwan and Korea (in the latter newspapers in Korean language are published). He thinks that the cause lies in the former independence of Korea and a resulting [171] Japanese deference to world public opinion, whereas Taiwan was a former Chinese colony and thus Japan did not have to make the same concessions to world opinion (1). We believe that this explanation is inadequate. The Japan-

1. Page 229. op. cit.

ese government had few scruples concerning world opinion for example in 1919 when it brutally suppressed the national movement of the same Korean people. The explanation is simpler. Korea was sold out peacefully by her rulers to Japan and at the time her people acquiesced in this sale. whereas the people of Taiwan did not recognize the cession of Taiwan to Japan. It is important to note that the act of cession took place not in Taiwan, but on the sea. The representative of the Peking government transferred Taiwan to the Japanese plenipotentiary on the open sea because Taiwan was in a state of turmoil. Abandoned by the government, betrayed by militarists, the islanders continued the unequal struggle for several years."

4:Grajdanzev--188 S-4 (no date) 1942 Formosans
116, 648, 652, 177.72 Japan
636.72

"All this [i.e. Japanese penetration to the South--analyst] required additional grants, and grants were forthcoming. In 1937 the Taiwan Government-General appropriated for the purposes of southern policy Y1,061,000; in 1938 Y1,552,000; in 1939 Y4,073,000; in 1940 Y5,387,000; in 1941 Y8,002,000. These figures may serve as an index of Japan's preparations for war in Southeast Asia. These sums were earmarked for work outside of Taiwan; but at the same time other amounts, enormous by Taiwan standards, were set apart from the Government-General budget for the construction of the base for southern advance in Taiwan. These expenditures from a minimum of 25 million yen in 1937 rose to a minimum of 50 million yen in 1941."

4:Grajdanzev--188-189 S-4 (no date) 1942 Formosans
116, 723, 177.72 Japan
636.72

"As for the future, the Japanese writers are not sure themselves whether Taiwan will not follow the fate of Okinawa Islands which, after the acquisition of Taiwan became a forgotten geographic name. But there is little doubt as to the importance of the island for the southern advance now and in the immediate future. First of all, the geographic position of Taiwan is favorable. Takao, in the southern part of Taiwan, is nearer to Manila than to Yokohama, and is just half way between Yokohama and Saigon, southern Indo-China. Takao is 1,495 miles from Yokohama and 1,800 miles from Singapore. [189] For certain purposes Hainan Island, seized by the Japanese in 1938-39 is an even better base for Japanese action in Southeast Asia, and there is no doubt that many of the transports of troops that are now attacking the Philippines came from Hainan. However, Haikow, the chief port of Hainan, was occupied by the Japanese only on February 10, 1939, and there was not time enough to make it a good modern base, especially because of the continued unrest and guerilla activities in the interior of the island. Taiwan for many years was being systematically prepared as a base for the army and navy operations in the South while the United States undertook an obligation not to fortify its bases in the western Pacific."

In the Atayal concept, the members of the tribe are the only ones who should be protected. They are permitted to hunt only savages of other tribes, Japanese, and Chinese, and quite understandably, Europeans, but the number of these is very small. The first group retaliates by conducting their own skull hunts, or by special punitive and plundering forays. The second group is protected by a strong military and police force, which punish such excesses as severely as possible. The third group is victimized comparatively more often but even in this case the Japanese occasionally take harsh measures against a tribe that has a particularly large amount of skull hunting chalked up against it, and force it to withdraw behind the Aiyu line. Inasmuch as unrestrained head hunting on the part of the members of the tribe has seriously endangered the tribe formerly and now in particular, when this practice endangers its independence and its very existence, head hunting is only permitted in the border tribes and supposedly in most of the tribes of the interior when it is ordered by the tribal chief. In many of the tribes of the interior the clan chief also has this privilege. In many tribes, it takes place only in the fall, after the tribal assembly, so that apparently all legal contests are postponed until that time. Everywhere a young man who wants to acquire the skull which will show that he has come of age must control himself until a skull hunt has been declared open for his clan. This regulation does not make the skull hunt any the less dangerous for strangers who approach the territory of the tribe, for they never know whether or not a skull hunt

has been ordered for precisely that time. At any rate, the time before the millet harvest is the safest, and the time after it is the most dangerous. This unpleasant custom is the only thing that gives the slightest justification to the application of the otherwise unjustified designation of savages to the Atayals. It makes no difference whether a skull is that of a man, woman, or child, provided only that the child is over two years old, for the skulls are not captured in battle, but are taken by tricking and surprising the victim. [31] According to the statistics, which are surely incomplete, about 300 Chinese and 40 Japanese are killed annually in the skull hunts. Some 300 Chinese and 20 Japanese are wounded. There is no clue to the number of savages who are captured, but it must be almost as large as the number of Chinese, in the border districts alone. In spite of all the punitive expeditions and all the efforts on the part of the Japanese border patrol, almost no progress has been made in suppressing this unpleasant custom up to now, because it is closely connected with the legal aspect of the life of the Atayals. The most success seems to have been obtained in cases where the Atayals have been told: "Skulls are skulls. Hunt monkey skulls, or antelope skulls".

15; U.S. Navy --26 [8] (no date) 1944 Formosans
116, 596, 736, 626, 177.73 Japanese
636.73

"There are social welfare departments in the Government which endeavor to care for persons without support or livelihood. The family system absorbs the majority of such cases, for a moral obligation lies upon the entire family to support and to share with all members. Property and the income from it is held in common. An able-bodied person who shirks his duties and tends to become a charge upon the family is open to reproof by the elders and by the family council. In extreme cases a member may be cut off from the clan in disgrace and so have no further claim upon it.

Those who are ill, the aged and the physically handicapped can claim the same support from the family group. Hence few appear as public charges."

15: U.S. Navy --26 [9] (no date) 1944 Formosans
116, 732, 759, 548, 874, 177.73 Japanese
636.73

"Schools for the blind, the deaf, and the dumb are maintained at Government expense at Taihoku and Tainan. In addition to instruction in Braille, pupils are taught various skills, of which the most important are weaving, chiefly of panama hats, and massage. Graduates of the school who have passed the required masseur's examination are licensed to practice, and are assigned districts or routes over which they go every evening from nightfall until midnight, with a whistle or pipe and a tune peculiar to each masseur. They travel, both men and women, in pairs or with a small child or elder person as a guide. Many are not wholly blind, but qualify to practice. Sometimes they work at home or in shops at various tasks during the day, making the evening work as a masseur a supplementary livelihood. Many Chinese hotels or lodging houses have masseurs regularly employed. A certain amount of illegal solicitation for prostitution is carried on by them as well as by the masseurs who travel a regular beat through the city streets."

15: U.S. Navy --26 [10] (no date) 1944 Formosans
116, 732, 743, 735, 177.73 Japanese
636.73

"There is a Government hospital for the insane at Taihoku. The general impression is gained, however, that the mentally deficient and the hopelessly crippled are not usually placed in institutions but are simply cared for in a haphazard fashion by their families. Occasionally such persons are found living or begging along the roads leading to popular temples and shrines."

4:Grajdanzev--173 S-4 (no date) 1942 Formosans -1-2
116, 744, 759, 177.74 Japan
636.74

"In all books and articles published under the auspices of the Japanese government the remarkable successes of the Taiwan government with respect to the health of the population are described, and there is no doubt that improvements took place in Taiwan after 1896—it would be strange if this were not so. More than 300,000 Japanese live there now and their health depends to an important degree upon the health of the surrounding population, especially in case of epidemic diseases. First of all, for the sake of comparison, we give the basic figures for Taiwan and Japan.

Number of Physicians, Dentists, etc. in Japan and in Taiwan, 1936

	Japan	Taiwan	
	1936	1936	1938
Physicians	61,799	1,834	1,983
Dentists	22,072	402	407
Pharmacists (yakusaishi)	28,156	190	213
Nurses	124,402	...	170
Midwives	61,732	1,744	1,796
Per 10,000 of population			
Physicians	8.8	3.4	
Dentists	3.1	0.7	
Pharmacists	4.0	0.3	

4:Grajdanzev--173 S-4 (no date) 1942 Formosans-2
116. 744. 759. 177.74 Japan
636.74

Nurses	17.7	0.3
Midwives	8.8	3.2

Source: Dainippon teikoku nenkan and Taiwan Jijo."

15: U.S. Navy --26 [6] (no date) 1944 Formosans
116, 741, 596, 177.74 Japanese
636.74

"The Japanese officially list 1,676 organizations or facilities for philanthropic and social welfare work in Taiwan. These include semi-official organizations such as 'Improvement of Village' associations, pawnshops, public markets, and others which under government supervison perform the work which would be financed elsewhere either through the government budget directly or through spontaneous private charity. There is less need for such organizations in a social system which is built on family units in which the individuals share and share alike."

15: U.S. Navy --26 [13] (no date) 1944 Formosans
116, 625, 556, 744, 177.74 Japanese
636.74

"The Japanese policeman undertakes to instruct rural peoples in sanitation, house-building, religious observance and many other things elsewhere usually left to private initiative. Large-scale public works projects have raised the whole standard of health and public welfare. Extremes of wealth and poverty are not very apparent in normal times."

15: U.S. Navy--28 [2] (no date) 1944 Formcsans
116, 744, 177.74 Japanese
636.74

"Compulsory house-cleaning as a public health measure is rigorously enforced by the Japanese. Towns and country districts are systematically organized for semi-annual house-cleaning days and cooperation is expected of everyone. The movable contents of every house and most shops must be taken out into the open air and the premises must be cleaned thoroughly. Before replacement a police inspection is obligatory, and a certificate of approval must be issued and posted at the door of each building."

15: U.S. Navy--28 [3] (no date) 1944 Formosans
116, 515, 735, 744, 177.74 Japanese
636.74

"General standards of personal cleanliness are not high, but the universal shabbiness must be attributed to poverty rather than to sheer neglect. The principles of elementary hygiene are not widely understood. The Japanese have been making some progress in establishing habits of public cleanliness and have been trying to introduce new measures of household hygiene (careful disposal of waste, daily bathing). The problem is very great, however, among six million people. Although general standards are lower than the average in America, they are as high as standards maintained in backward districts in the South or in city slums, and are infinitely better than standards existing among Chinese villages on the China coast across the Straits of Taiwan."

40: Kirk--22-23 S-2 (no date) 1941 Formosans
116, 123, 626, 797, 177.79 Japanese

"Religion. Besides changing the language and social customs of the people, the Japanese wish to destroy the Taiwan religion and the local temples, and substitute in their place the Japanese torii, shrine, and the Shinto [23] ritual. This policy is well illustrated by a personal experience. During his stay in Formosa, the writer was closely guarded by the military police. One gendarme, and sometimes two, always accompanied the 'foreign suspect' on his visits to the Chinese and primitive settlements. Even in Taihoku, the principal city, a policeman in plain clothes was invariably on hand when the writer would appear in the morning, and this 'guard-of-honor-' would not take his leave until the day's work was done. The 'foreigner' made a useful discovery very early in his Formosan career. Whenever a new 'guard' appeared, a visit to the nearest Shrine came first on the day's schedule. At once the whole attitude of the policeman toward his non-Japanese companion seemed to change from one suspicion to friendliness and he unconsciously became more or less an interested 'research assistant.' Unfortunately, the Japanese system seemed to call for a change of policemen as soon as one 'guard' showed signs of proving his worth as 'a social investigator.'

The residents of Formosa today, it appears, if they with to gain status in the eyes of public officials, may do well to forsake all other religions and follow the teachings of Shintōism."

4:Grajdanzev--140 [4] S-4 (no date) 1942 Formosans
116, 654, 177.81 Japan
636.81

"Attention should also be paid to the considerable amounts spent by the government on research and investigation. A special institute has been established, which centralizes the research on the island and considerable sums are spent on research into new uses for natural gas, on sugar and sugar cane research, and on war industries."

4:Grajdanzev--165 S-4 (no date)1942 Formosans
116, 208, 563, 658, 871, 177.87 Japan
636.87

"In the sphere of education the island has passed through two periods, one before 1919 and another since that year. Before 1919 the policy of the government with respect to the Chinese of the island was vacillating. It was ready to recognize the existence of the Chinese in the Japanese Empire as a separate entity, and was ready even to help them preserve their Chinese character. A special society was created to investigate Chinese customs and habits and these were to be taken into consideration in court practice. Later, the failure of this policy was recognized and the avowed end became the japanization of the inhabitants of the islands in order to make them loyal subjects of the Empire. The elementary school was to become the chief instrument in this japanization. While before that period the education of the Chinese was completely neglected, since then school expenditures have grown and the number of pupils has increased from year to year. But this does not mean that there is any equality between the Japanese and Chinese as regards education. A literate population is necessary for the japanization of the islanders. Knowledge of the Japanese language is indispensable for workers, policemen, for the paocheng, for clerks, for all who work for their Japanese rulers. It does not mean, that there is any intention of raising the Chinese to an equal position with the Japanese."

4:Grajdanzev--166-167 S-4 (no date) 1942 Formosans-1-2
116, 563, 872, 177.87 Japan
636.87

"The growth in the number of pupils in elementary schools may be seen from the following table:

Primary Schools in Taiwan

	1935	1936	1937	1938	1939
Number of schools	781	783	789	796	812
Number of teachers	6,255	6,659	7,239	7,888	8,718
Number of pupils, 1,000	373.9	407.6	450.0	505.5	557.1
Number of pupils as percentage of children of school age	41.5	43.8	46.7	49.8	...
Graduates, 1,000	42.3	45.7	50.3	59.0	...

Source: Taiwan Jijo.

From this it appears that in five years the number of pupils in primary schools increased from 373.9 thousand to 557.1 thousand. About half the Chinese children of school age (8-14) are now in primary schools. This increase is partially due to the absorption of new pupils by schools, and partially to the fact that the schools have been increasing the length of the courses they offer from four to six years. If one takes into consideration the fact that during these six years the pupils must master thousands of characters as well as a foreign language and that most of the teachers are foreigners

(to them), it is clear that a six-year course is not a long one. These statistics do not include the schools for Japanese children. Theoretically there is complete equality in Taiwan and there are no special schools for the Japanese, but there are schools where instruction is carried on in the Japanese language. With the permission of the governor of the province Chinese may also be admitted to such schools, even if they do not know the Japanese language, but this permission is not given willingly. Many parents among the lower groups of Chinese [167] officials want to send their child to a Japanese school so that he or she will have a thorough knowledge of the language of the rulers and a better chance to get a higher paid job. But in 1936, out of 42,576 pupils in these schools, there were only 2,975 Chinese. There is another important fact with respect to the Japanese pupils; while in 1938 only fifty per cent of the Chinese of school age were in school, 99.4 per cent of the Japanese of this age were attending school in 1936."

4:Grajdanzev--167 [2] S-4 (no date) 1942 Formosans
116, 563, 873, 177.87 Japan
636.87

"A further important test of any system of education is the number of students in secondary schools and in universities. As was mentioned, literacy is a necessity under modern conditions, even in the colonies. But to give a secondary education and especially a university education to the colonial peoples en masse is quite a different proposition. On April 1, 1939, there were 5,125 Japanese and 4,117 Chinese in the Taiwan secondary schools for boys. It will be recalled that the number of Chinese on the island is almost twenty times as great as the number of Japanese, and the proportion between the children of the two groups is even greater. In the girls' secondary schools the situation is even less favorable to the Chinese—5,312 Japanese pupils as compared with only 2,541 Chinese (1939)."

15: U.S. Navy --21 [10] (no date) 1944 Formosans
116, 871, 177.87 Japanese
636.87

"The Japanese educational program calls for a great deal of physical training, marching, drilling, and calisthenics. Swimming, and judo and kendo (traditional Japanese military games) are also taught in all schools but are popular only among the Japanese."

15: U.S. Navy--25 [6] (no date) 1944 Formosans
116, 191, 873, 177.87 Japanese
636.87

"There are 7,306 'National Language Training Schools' (Kokugo-koshusho) which exist for the purpose of teaching Japanese to adults. According to statistics as of March, 1938, the number of schools and students was as follows:

Table 21: Number of Language Schools and Students

	Number	Pupils	Annual Cost
Elementary training schools.....	3,454	34,865	¥1,576,975
Training schools.....	3,852	257,277	---
	7,306	292,142	

According to the Taiwan Government General, Bureau of Education, in 1939 the number of institutes remains the same, although the pupils now number 470,000."

15: U.S. Navy --25-26 (no date) 1944 Formosans
116, 191, 875, 883, 177.87 Japanese
636.87

"Sessions of the koshusho [MC: 'National Language Training Schools' established to teach Japanese to the Formosans.] are held in schoolrooms, public halls, special buildings built for the purpose, or private homes. Teachers are almost invariably Formosan-Chinese, usually members of the local young men's association who have been graduated at least from the primary schools. Quality of instruction necessarily varies greatly. A young Formosan-Chinese states that in some districts, members of the young men's association are particularly active and enthusiastic. In such cases, instruction and results at the training school may be satisfactory. In other districts there is little local interest and the quality of instruction is poor. Often the instructors themselves have an inadequate knowledge of Japanese. It is stated that occasionally a Japanese with earnest conviction to aid in the process of assimilation will volunteer [26] to teach. Such cases are extremely rare, however. Instructors receive no pay."

15: U.S. Navy --26 (no date) 1944 Formosans
116, 873, 177.87 Japanese
636.87

"Texts used in the training schools are published especially for the purpose by the Taiwan Educational Association. The language used is extremely simple and few Chinese characters are introduced. The subject matter includes lessons on Japanese etiquette, polite phrases, Japanese holidays, and shrine worship, as well as consideration of Formosan village and rural daily life."

15. U.S. Navy--32 [5] (no date) 1944 Formosans
116, 467, 668, 871, 177.87 Japanese
636.87

"Formosan peasant and trade unions were not organized along class lines, owing perhaps to the essential democracy of the Chinese guild system. Members of the middle and well-to-do classes actively supported the peasants and workers in their agitation for better working conditions and attempted to work for legislation to that end. The biggest handicap to any such movement has been the lack of education for peasants and workers, especially of education which could be gained outside of the Japanese 'National Schools.'"

40: Kirk--20 S-2 (no date) 1941 Formosans
116, 191, 658, 871, 177.87

"Koshusho, or national language training schools, which have sprung up to facilitate the teaching of Japanese to adults, numbered 7,306 in 1939. The classes meet in schoolrooms, public halls, or private homes under the leadership usually of Japanese-speaking Formosans who contribute their services free. From the year 1934 Formosan children will attend primary school for at least six years under a cumpulsory education law similar to the law in Japan proper."

40: Kirk--25-26 S-2 (no date) 1941 Formosans-1-2
116, 561, 575, 658, 883, 177.88 Japanese

"Youth movements. The Japanese are laying great stress upon the various youth movements which are actively sponsored in Taiwan by the Government General and the local provincial governments. There are young men's associations, young women's associations, and Boy Scouts. These organizations aim to

> train and drill youth spiritually and physically to inculcate loyalty, to improve character as loyal subjects, to instill a spirit of public service, to encourage self-help, self-control and initiative, to increase knowledge and skill necessary for practical life, to encourage diligence and thrift, and to improve general health conditions of the nation.

The specific purpose of the young women's association (Joshi Seinen Dan), especially among Formosan Chinese, is 'to encourage and propagate the use of the national language, to inculcate female virtue, to educate women in housekeeping, to improve home-life, to cultivate sentiments through recreation, to improve health conditions, and thus to train women in sound womanhood.' The young woman's movements, however, are far less active than the men's associations. The local territory covered by each association corresponds to a public school district. Young people under 20 years of age

who are graduates of [26] public schools may join the youth movement. The young Formosan Chinese members are particularly interested in spreading the use of the Japanese language and in raising the Formosan standards of living. The young men are called upon to assist the police in traffic control during celebrations, to serve on watch duty or to run errands, and even to do hard manual labor, on occasion, when additional workers are needed.

The geographical position of Formosa and the ethnic factors in the overwhelming non-Japanese population are largely responsible for the determined drive of the Imperial government to assimilate the Formosans as speedily as possible."

15: U.S. Navy--27 [14] (no date) 1944 Formosans
116, 302, 178

"The Formosan-Chinese women of Fukien or Cantonese origin dress their hair sleekly with oil, pulling it smooth and tight to a small knot at the nape of the neck, and usually with some small flower or ornament pinning it there. The Hakka women wear a more elaborate traditional coiffure, surviving from the Ming period in China, and not at all unlike the traditional Japanese Geisha coif."

15: U.S. Navy--28 [11] (no date) 1944 Formosans
116, 175, 178, 361

"The first Chinese settled in Taiwan along the southwest coast, in and about the Tainan region. Because early settlement among the aborigines was dangerous, the settlers kept their dwellings together in defensible clusters, often selecting a prominent elevation or point overlooking a stream which could serve as a moat about a compact settlement. Further north the later settlements tended to become elongated strings of houses on either side of a road or street, often along a river bank. Often they were an extension of a settlement around a temple or the walled house of a wealthy family. Throughout the north the scattered farmhouse is most common, solitary dwellings depending upon their walls and hedges for defense. Near the borders of the aborigine territory the villages still retain a fortress arrangement of many houses within a highly defensible area."

15: U.S. Navy--29 [7] (no date) 1944 Formosans
116, 181, 178, 584, 562

"The general atmosphere of life on Taiwan has been always somewhat less conservative than on the Chinese mainland. Indeed, there are many evidences of the pioneer spirit at work. A girl still has very little to say concerning the choice of a husband, and the parents or eldest relatives on both sides actually carry out the negotiations leading to marriage. Still there is much less of the prenuptial seclusion of women in Taiwan. Marriages are frequently arranged after a young couple has had an opportunity to see one another in public (but not alone)."

40: Kirk --20 [3] S-2 (no date) 1941 Formosans
116, 178, 185, 553

"Beginning with 1940, the 2,600th anniversary year of the Empire, Formosans have been permitted to take Japanese names. It may be significant that in the eight months just prior to the writer's visit only 367 families had signified their willingness to change their Chinese names.

In striking contrast to this nonconformity in Formosa, the Koreans, who received the same invitation, have adopted Japanese names almost 100 per cent. A distinguished American religious leader explained to the writer that the Koreans are docile and easily led, while the Formosans are more stubborn in their resistance to change."

631 As uprisings and clan wars became more
669 frequent and widespread, often nearby villages united to make a league of defense. When one village was raided, a drum or gong would be beaten and the allied neighboring villagers would come to the rescue. To affirm their consolidation, common temples were constructed and common patron gods were worshipped. In rotation each allied village celebrated the yearly festival in honor of the patron god. In each case the allied villagers participated in the festival and feast. The blood tie was represented by the village ancestral temple, the territorial tie was represented by the local patronal god. Usually the worship of local patron gods was more frequent and enthusiastic. Sociologically speaking, it is safe to say that, in spite of the often emphasized Chinese ancestral worship and family spirit, the principle of locality took precedence over the principle of blood relationship during the Manchu period. As far as the mass of Formosan Chinese is concerned, this is true. However, in the case of a smaller number of the upper ruling class, the blood tie was still the dominant principle.

7. Breakdown of Folk Society.

612 Consciousness of the blood tie and locality
•178 bond was very strong among the Formosans in former times. When two persons found they had
631 the same surname, they would consider each other as brothers or cousins. When a person introduced himself, he usually added his native

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province. Associations of kinsfolk and associations of the persons of the same native town were organized in cities, and they performed a significant function as agencies for mutual protection and mutual aid. On the China Mainland, at least until recently, and among the overseas Chinese, these associations are still fairly active. So it was in Formosa up until the early years of the Japanese rule. Nowadays, many young Formosans do not even know exactly which prefecture is their native place on the Mainland. They pay little attention to ancestral shrines, and the remaining associations of kinsfolk or associations of the persons of the same native province no longer perform their former political and social functions. No doubt a radical change has taken place in the attitude of the people.

Since the Japanese administration proved able to keep peace and order with its vigorous police control, kin-groups and local associations for self-protection and mutual aid lost their significance. Gradually people became less eager to support these associations, and to the young generation, raised in peace and order, these associations became a thing of the past. With the administrative, industrial and economic improvement, self-sustaining and half-independent villages were integrated into an organic administrative system. Thus the folk society was broken down, and the people adapted themselves to modern political-economic system.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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I. INTRODUCTION

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Familial relationships and sentiments form the most important basis of social fabric and human behavior in Formosa. Precepts as well as structure of the family and kinship groups, with which the society has lived for centuries, exist side by side with ideas and influences of Western institutions. The extended family, which was predominant in the past, is now gradually on the wane as the result of changes brought about by industrialization and the introduction of new social institutions.

With the exception of tribal aborigines, Formosa's society in pre-Japanese times was a transplantation of those which existed in Fukien and northern Kwangtung provinces. With the coming of the Japanese, economic, educational, religious, and political ties that had held together members within villages, clans, and extended families began to crumble. In other words, most of the familial functions were gradually taken over by the state -- the Government-General of Formosa -- and, indirectly, Japan. Since the beginning of the twentieth century, the Formosan Chinese have been exposed to conflicting cultures and have been forced to reconcile the old and new.

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178 Today, the typical family grouping in the rural areas is that of the extended family; in urban areas, the typical grouping is that of the nuclear or joint family.

II. THE TRADITIONAL FAMILY

596 Ever since the seventeenth century, kinship groups in Formosa have been changing from clans to extended families, and from extended families to joint and nuclear families. Cohesion and functional ties within a clan are no longer strong, and today only the large and extended family remains an arbiter of social behavior.

The traditional family was extended and patriarchal. The ideal was to have a large family, with many generations living under the same roof. A large family was a strength in itself in a society which depended on farming for its livelihood. A popular Formosan saying, "If there are three sons to a man, there will be one thousand in the family within six generations," well expresses the ideal of a large family.[2] The extended family was a

2. Taiwan Government-General, Taiwan rigen shuran [Collection of Taiwan's Maxims and Proverbs], Taihoku, Taihoku kappansha, 1914, p. 138.

577 Filial piety and other traditional values stem from the concept of the family. It is a mark of shame to be called unfilial, and children do not neglect their parents or elderly relatives. A successful kinsman is obligated to assit his kinsmen financially or politically even if such an act should be against the interests of the state.

III. RECENT CHANGES

596 178 The advent of the Japanese was followed by successive changes in the social and political institutions of the Formosan Chinese. The government took over many of the responsibilities of the clan and the extended family in matters which pertained to the maintenance of public order, the establishment of public schools, and other public institutions. Industrialization, the introduction of corporate enterprise, and urbanization in general, together with the newly-assumed duties of the government were responsible for the loosening of familial ties and the emancipation of women within the family as well as within society.

More people now live in urban areas and farmers have ceased to lead nearly self-sufficient lives; they look to the farmers' organizations for agricultural information and other forms of mutual assistance. Opportunities for jobs in banks, factories, railroads, and

596 178 shipping have resulted in further division of extended families and at the same time have given women more opportunity for employment outside the household. There is a great deal of evidence that extended families are separating to form smaller and less-inclusive [162] units. In 1812, the average household consisted of 8.3 persons;[7] in 1953, the average household had 5.5 persons.[8] In a survey conducted by the Foreign Operations Administration's Mutual Security Mission to China, the composition of urban households was characterized by a relatively large proportion of legal households consisting of a single person, and such households accounted for more than 9 per cent of the total.[9]

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7. Yoshinori Ino, Taiwan bunkashi, Vol. II [The Records of the Culture of Taiwan], Tokyo Toko shoyin, 1928, p. 238.

8. Statistical Abstract of the Republic of China, 1955, Taipei, Directorate-General of Budgets, Accounts, and Statistics, Executive Yuan, 1955, p. 27.

9. A. F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 261.

596 369 Rural households retain many of the features of the traditional family. They are often made up of three or four generations with a goodly sprinkling of kinsmen, adopted children, and others. However, among the one hundred households which were the subjects of a survey conducted by the Joint Commission on Rural Reconstruction, 58 were termed nuclear families and included 48 per cent of the total population surveyed. The other 42 households were three- and four-generation households, and included the remaining 52 per cent.[10]

562 178 The influence of the West has greatly improved the position of women in Formosan society. Women today have equal elective franchise and the right of inheritance. They have not only become clerks and manual workers but also have entered the professions and have taken a role in politics. The Chinese Constitution stipulates that the number of women delegates to the National Assembly, as well as the number of women members of the Legislative and Control Yuan, shall be determined by law. The Electoral Law fixes the percentage at ten, and at present there are 60 women of a total

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10. A. F. Raper, Rural Taiwan - Problem and Promise, Taipei, Joint Commission on Rural Reconstruction, 1953, p. 208.

562 537 members in the Lesiglative Yuan.[11]
178 The percentage of women delegates is also applied to the provincial and local councils. In Taipei alone, there are about one hundred full-fledged women doctors and a great number of qualified mid-wives, five chartered women accountants, thirteen women judges, and six women prosecutors.[12]

IV. FAMILY ORGANIZATION AND DISORGANIZATION

58 Monogamous marriage is the rule in
178 Formosa, although concubines and mistresses have not been eliminated. People of the same surname do not intermarry. Marriage remains a family affair as well as an affair of the parties concerned. When a son reaches adulthood it is a traditional obligation of the parents to see that he is married. Parents in most cases choose spouses for their children. But today the majority of men and women at least have some knowledge of their future spouses before marriage. It is stipulated by law that an

11. Chung-pei Hsu, The Position of Women in Free China, Taipei, China Culture Publishing Foundation, 1953, p. 2.
12. Ibid.

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engagement must be contracted by the parties concerned, and if their consent has not been obtained, the engagement is not binding.[13] Contrary to this legal provision, only about 10 per cent of the marriages in the rural and urban households surveyed were contracted by the parties themselves, and the remainder were arranged by parents, relatives, friends, or go-betweens.[14] In some instances people may seek marriage through advertisements placed in newspapers. Feasts attend the wedding, elaborate or simple, according to the family's socio-economic status. Marriages between sons and adopted daughters, or, to a lesser extent, between daughters and adopted sons, are usually performed within the family circle. The patrilocal nature of matrimony requires, in most instances, that the groom's father provides living quarters for the bride. When possible, the bride's family provides a dowry consisting of clothes, furniture, jewelry, and so forth. Some girls consider a dowry so important that they work before marriage in order to save money so that they may bring to their husbands' families such things as furniture and beautiful clothes. For reasons of economy, collective marriages are performed in city halls from time to time.

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13. Ching-hsiung Wu (ed.), Chung-hua Min-kuo Liu-fa Hui-pien [Compendium of the Six Codes of the Republic of China], Volume II, Civil Code, 1947, Shanghai, pp. 505-11.

14. Raper and others, op. cit., p. 268; and Raper, op. cit., p. 209.

186 The manifesto was circulated among the representatives to the United Nations. In May 1950 a Formosan Democratic Independence Party was organized in Tokyo; its leaders included Wilfred Wong, James H. Chen, Gordon Tan, Y. T. Tsong and Frank Lim.[9] Joshua Liao was elected Chairman of the new party. It was reported by a Hong Kong newspaper[10] that in view of their past association with the Communists, the Liao brothers were confined in Sugamo prison, Tokyo, for seven to eight months after their arrival in Japan, and were bailed out by an American by the name of John Kellen. In the latter part of 1955, apparently in connivance with Japanese authorities, they were active again. In September they organized an association of Taiwan residents in Japan and a "Taiwan Provisional Congress."[11] On November 21, 1955, it was announced that Joshua Liao assumed the post of the "President of the Taiwan Provisional Government" and the chairman of the Provisional Congress, while Wu Chen-nan was named "Vice-President."[12] According to Japan's Immigration Bureau, there were in 1955 about 25,000 Formosans living in Japan. How many of the Formosan residents supported Liao was not disclosed.

186 In Formosa the independence movement is regarded just as traitorous as Communism. Since

9. F. W. Riggs, op. cit., p. 56.

10. Weekly Supplement of Hsing-tao Jih-pao (Hsing-tao Daily), No. 201, Sept. 15, 1955, p. 12.

11. United Press, Tokyo dispatch, Sept. 28, 1955.

12. Pan-Asia News Alliance, dispatch of November 21, 1955.

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public expression of popular sentiment is not encouraged, it is difficult to tell how many Formosan Chinese would prefer complete independence or United Nations trusteeship for Formosa to Nationalist government. Moreover, conditions have been changing rapidly in the island. The opinions of foreign observers who visited Formosa during the early years of Nationalist rule are no longer sustained by recent visits. The truth of the matter is that the tide has turned since 1949. An almost uninterrupted series of reforms, economic, political and military, has taken place recently. Land reform has done away with the inquitous system of exorbitant rental. Tenants who constituted two-thirds of the island's population and who in 1950 still suffered from undernourishment, disease and poverty,[13] now own their own land, are well-fed, and possess their own homes. The damaged industries have been rehabilitated and many new ones have been established. Industrial production has exceeded the peak level under the Japanese. Local elections were held in 1950 and 1953. Among the officials in the Provincial, prefectural and municipal governments 67 per cent are Formosans,[14] and their participation is still increasing. Although we should not take it for granted that, on account of the absence of expressed sentiment, the Formosans are no longer in favor of the autonomy movement, it is fairly safe to assume that in view of the improved conditions as well as the imminent Communist menace, the Formosan people as a whole are not

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13. W.I. Ladejinsky, "Land Reform in Formosa," Foreign Agriculture, Vol.14, No.6, June 1950, pp. 130-135.

14. A. F. Raper, etc., Urban and Industrial Taiwan--Crowded and Resourceful, Taipei, '54 p.283

186 178 too anxious for complete independence; at any rate, not before they can successfully defend the island against aggression.

C. Toward the Government:

186 642 Except an insignificant number of aborigines the Formosans are Chinese or of Chinese descent. Even under Japanese rule, they never forgot their own national origin. Poetry and songs composed during that period were replete with reminiscences of their mother country. That is why in 1945, the Formosan Chinese were overwhelmed with joy at the prospect of the island's being returned to Chinese rule after half a century of Japanese colonial dominance. But their enthusiasm was dampened by the abuses of Chen Yi's administration. The Nationalist government after 1949 made a determined effort to win back popular support. Economic reconstruction has been vigorously pushed forward to enable the island to achieve self-sufficienty and stability. Large government corporations have been converted to private firms and turned over to the local people. The political basis of the provincial government has been altered to permit increasing participation by Formosans.

In spite of the special concessions granted by the Nationalist Government in the past five years some Formosans, according to the sentiment expressed in the Provincial Assembly, complain that they have not been making as much headway politically as they would like. Others are not happy because the popularly elected mayors and magistrates do not have full authority in the settlement

45:Stanford U. S-4, 5 1956 AD1 Formosa
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648 Under the Japanese from 1895 to 1945, the economy of Formosa was geared entirely to that of the colonial power. The island was developed as a major source of foodstuffs to feed the rapidly growing population of Japan. All possible arable land was brought under cultivation. The production of rice [439] more than doubled between 1905 and 1935; the sugar crop tripled between 1910 and 1940.[4] Great strides were made in modernizing communications and transportation throughout the island, including the construction of a network of railways and roads. After 1937, 648 178 439 some effort was directed toward the industrialization of the island. Factories were built, electric power developed, highways and railways improved, and harbors enlarged. A number of large plants were established to use the raw materials of Southeast Asia in the production of semi-finished goods to supply Japanese industry. The chief emphasis was on metals and chemicals. No attempt was made to achieve industrial self-sufficiency on the island. Fertilizer and textiles, two of the most important industrial products in an agrarian economy were totally neglected.

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4. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 24.

[ ] Economic dependency on Japan was accentuated 648 by the employment of only Japanese in both 439 technical and managerial positions. From the beginning of the Japanese control, trade was confined almost exclusively to territories within the Japanese empire and managed for the most part by Japanese personnel. Japan took between 90 and 95 per cent of Formosa's exports and supplied 85 to 90 per cent of the island's imports. Some sugar and coal were shipped to China, and small quantities of tea and camphor were sent to the United States. 648 Banking and currency were linked to the 454 Japanese system, and all capital investment was controlled by the Japanese.[5] "Every year, for at least fifteen years previous to the war, Japan is believed to have gained directly 150 million yen from her investments in Taiwan, and for the fifteen years before that lesser but still significant sums".[6]

648 727 Some of the Japanese industrial projects were never completed. Others wer destroyed

5. By 1939, 90% of all the capital invested in the island was held either by the Japanese government or Japanese nationals; the remaining 10% held by Formosans was mostly invested in small shops. Taiwan, A Geographical Appreciation, Ottawa, Department of Mines and Technical Surveys, Government of Canaca, 1952, p. 16.

6. Ginsburg, op. cit., p. 25.

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727 to 86,000 metric tons in 1945-46. The
433 Formosan farmer was faced with the "worst prospect in living memory," as one observer remarked.[8]

434 In spite of the seriousness of economic
178 conditions on Formosa, the Chinese government was able to make only limited progress in reconstruction following the restoration of the island to Chinese control. For one thing, the Nationalist Government was involved in a costly war with the Communists and faced with a huge rehabilitation program on the Mainland. Furthermore, without a surplus of exportable goods, China could not obtain the foreign exchange necessary to re-equip the damaged plants and restore agricultural production on Formosa. The island's economy continued to deteriorate until 1949, when Mainland China was overrun by the Communists and the National Government was withdrawn to Formosa.

458 The sudden influx of over one million
185 mainlanders and half a million soldiers further strained the resources of the island. Inflation was running wild and food was short. However, the removal of the national government to Formosa was not without benefit to the island.

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8. H. Maclear Bates, Report from Formosa, New York, Dutton, 1952, p. 117.

648 the immediate needs of both the people and Formosan industry. MSMC also supplies urgently required replacement parts and materials for the restoration and development of basic industries and public utilities. The proceeds from sales of American aid commodities are deposited in a special account with the Bank of Taiwan. By agreement, the government of China deposits in Chinese currency an amount equivalent to the cost of the American commodities. These deposits, called the counterpart fund, are used to carry out FOA-approved projects, to meet the expenses of aid agencies, to help the Chinese government reduce its budgetary deficits, and to promote production by extending loans to public and private industries. To administer this fund the Chinese government has established within the cabinet an agency called the Council for United States Aid (CUSA), of which the Chinese premier is the chairman ex-officio.

648 178 The mission to China also provides technical assistance to public and private enterprises on Formosa. Under a MSA- and MSMC-financed contract between J.G.

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10. (continued) American Economic Co-operation, Taipei, Feb. 1955, p. 1.

648 both in yield per acre and in total amount,
433 so there is at present not only a sufficient supply to feed the increased population, but also a substantial amount for export.

648 United States aid appropriations for China
451 from 1951 to 1954 was as follows:

1951	US$ 98,034,000
1952	81,479,000
1953	105,503,000
1954	111,821,000
	US$ 396,837,000

In fiscal year 1955, the allotment totaled US$102,000,000, distributed among the following programs:[13]

Military program	US$ 37,000,000
Commodity aid	34,000,000
Industrial construction	28,000,000
Technical assistance	3,000,000
	US$ 102,000,000

648 From the disorganized and demoralized
198 condition of Formosa in 1949, the joint Chinese
433

13. As reported by Martin Wong, Secretary-general of the Council for U.S. Aid on Aug. 12, 1955.

178 and American efforts have effected tremendous
648 change. However, in spite of steady gains,
433 the economy of Formosa has not achieved complete stability. Industrial and agricultural production is higher than before the war, but because of the tremendous increase in population, per capita production is still below the pre-war level. The Nationalist Government has been able to meet yearly budgetary deficits only by relying on American aid and resorting to the printing press. Forty per cent of the annual imports into Formosa are financed by United States aid. Inflation is steadily mounting. The economic situation would be very grave without United States assiatance.

185 On the avowed basis that "a nation's
433 progress and prosperity cannot be a gift from others, but must be sought through production and reconstruction,"[14] the Nationalist Government formulated a four-year plan for economic reconstruction in 1953. The plan aims at developing the island's economy production to a self-sufficient level. By the time the plan is fully implemented, the government intends that Formosa, without

14. Report of Premier Chen Cheng (now Vice-President) before the National Assembly, March 4, 1954.

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Annex "A," Subparagraph 3b,
Economic Background

INDUSTRY

A GENERAL SURVEY

Formosa's industry during the Japanese occupation was geared to the needs of Japan. Prior to 1936 the chief feature was agricultural expansion accompanied by the improvement of transportation facilities. Formosa was to grow rice and sugar, to make up the 20 per cent deficiency in Japan . The aborigines were pushed further inland by force, and a great deal of new land was brought under cultivation. Japanese services and goods, ranging from fertilizers to patent medicines and textiles, were forced on Formosa. No secondary industries of consequence were permitted on the island. From 1936 to the end of World War II, the major emphasis was on industrialization, and Formosa was transformed into a base of operations for Japan's southward expansion. Many new chemical and metallurgical plants were established either by the government or by Japanese corporations with the assistance of the government. Power-generation [1] was expanded from 501 million

1. Economic Data Book, Vol. II, mimeographed copy by FOA Mutual Security Mission to China, Taipei, Jan. 1954, p. 146.

178 kilowatt-hours in 1936 to 1,195 million kilowatt-hours in 1943. Aluminum factories were built at Kaohsiung and Hualien, the combined production of which was 12,000 metric tons in 1942, one-eighth of the total production of the Japanese empire.[2] An oil refinery was constructed in Kaohsiung in 1942 for the use of the Japanese Navy. The largest single investor was the Government-General. "By 1939, 90 per cent of all the capital invested was held by the government and government-backed Japanese; the remaining 10 per cent, held by Formosans, was mostly invested in small shops."[3] Sugar accounted for 54.5 per cent of all exports[4] from Formosa in 1937. Taiwan Seito was the largest of the four sugar companies, and the Japanese imperial family was its principal shareholder.

178 Most of the machinery of the new industrial 179 plants were either made in Japan or had been used in Japan for a number of years. During the war, industrial production was at the breaking point. Machinery and equipment which had become obsolete were not replaced and

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2. Ibid., p. 123.

3. Taiwan: A Geographical Appreciation, published by the Department of Mines and Technical Surveys, Canadian Government, Ottawa, Canda, 1952, p. 16.

4. E.B. Schumpter, The Industrialization of Japan and Manchukuo 1930-40, New York, Macmillan Co., 1940, p. 295.

727 were rapidly worn out. After 1943, Allied
178 aerial attacks dealt them a further crippling blow.

At the time of Japan's surrender it was found that thirty-four of the forty-two sugar mills in Formosa had been reduced to ruins by American bombing. The oil refinery at Kaohsiung suffered 800 bomb hits. The generating capacity of the Western Power System at Sun-Moon Lake was reduced from 308,000 kilowatts to 32,000 kilowatts. The mills of the Taiwan Pulp and Paper Corporation were damaged -- 50 per ent of the buildings and 30 per cent of the machinery -- by Allied aerial bombings.[5]

471 On August 14, 1945, Japan surrendered to the Allies, and Formosa was restored to China. The Chinese government took over all the industrial enterprises previously owned by Japanese nationals. Some of these, including printing houses, match and food

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5. Industrial Enterprises of National Resources Commission in Taiwan -- General Information, National Resources Commission, Taipei, 1951.

471 1. During the Japanese occupation, all modern industries on Formosa were owned by the Japanese, and, as enemy property, they passed under the control of the Chinese government.

2. Many public enterprises on the Mainland were evacuated to Formosa with the withdrawal of the Nationalist Government to the island.

3. Allied bombings had caused the widespread destruction of industrial plants. Extensive repairs were necessary. Only the government with immense resources was able to undertake such extensive rehabilitation.

4. Formosans had been given only secondary positions in industries by the Japanese. They had neither the experience required to manage large-scale enterprises nor the capital needed to finance operation.

• 178 With the economic and technical assistance provided by the United States, systematic repairing and reconstruction of the damaged industries in Formosa were carried out by the concerted efforts of the Nationalist Government. By 1950 most of the plants have been put back into production. Since 1950 the industrial advance has been

178 rapid. From the state of disintegration of 1945 and 1946, some industries are now operating at levels approximating the peak production reached under the Japanese, and a few such as cement, petroleum refining, and chemical fertilizers, are exceeding it. "It would not be praising their achievement too highly to compare the result of their reconstruction work with the best in devastated Europe."[8]

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8. H. Maclear Bate, Report from Formosa, London, Eyre and Spottiswoode, 1952, p. 113.

472 The increase from 1950 to 1953 was, for
483 the most part, in private industries, manufactur-
178 ing consumer articles, including textiles, soap, rubber goods, paints, matches, drugs, aluminum wares, bicycles, electric fans, and sewing machines. Among these, textiles, soap, and rubber goods have increased production most rapidly. Producing only 12 per cent of the textiles consumed locally in 1935, Formosa is now in a position now only to meet the expanding requirement of a growing population, but also to provide a substantial amount of cotton cloth for export. Except for automobile tires, nearly all the rubber goods needed on the island are manufactured locally. In 1939, the year of record soap production under the Japanese, 214,830 cases (5,115 metric tons) of laundry soap were produced. Today there are one government and ninety-three private producers, and the total production capacity of laundry soap is 125,000 cases (2,500 metric tons) per month.[9]

The rapid growth of private industries is attributed to the following factors:

1. Formosa has many basic raw materials, coal, salt, limestone, sulphur, ceramic clay,

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9. Economic Data Book, Part II, Vol. III, preopared by FOA Mission to China, Taipei, March 1955, p. 99.

[433] timber, and is also rich in oil and a favorable climate.
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2. It has abundant power and good means of communication.

3. A great deal of dismantled equipment has been imported from the Mainland.

4. As a result of the massexodus from the Mainland, Formosa has many trained personnel

5. Labor supply with experience of mechanical operations is plentiful.

472 It should be noted, however, that 90 per
471 cent of the private factories are of very small size, operated by a single owner. More than half have less than 5 hired workers, one-sixth from 6 to 10, and a fifth from 11 to 30 workers. Ninety-five per cent have capital of less than NT $50,000 (US $3,000). Twenty-six per cent depend entirely on manual labor, 67 per cent use a motor under 15 horsepower, and only 7 per cent use motors of 15 horsepower or more.[10] On the other hand, the government

10. Arthur F. Raper and others, Urban and Industrial Taiwan, Crowded and Resourceful, published by FOA/MSM to China and National Taiwan University, Taipei, 1954, pp. 122-23.

471 the transfer transactions are completed, the government will still control 60 per cent of the total value of industrial output.

656 Another adverse factor affecting the development of private enterprise is the multiplicity of government controls. The prices of coal, cement, fertilizer, and many other goods are regulated by the government. "The government also operates a supply bureau, through which small private manufacturers secure much of their imported raw materials. Banks, foreign exchange, and import and export licenses are controlled by the government; the sale of exports is permitted by the government only at prices above fixed floor prices."[15] In the field of taxation, inequities are widely reported. The discrimination in favor of public enterprises and the vexatious government controls seriously hamper the
778 growth of private industry. Formosa is
4 emerging from a colonial economy into a self-sufficient economic unit. The need for the production of goods and services is tremendous. The creation of new employment opportunities is also imperative on account of the enormous increase in population in recent years. In future industrial expansion, private enterprise

15. Raper, op. cit., p. 10.

must contribute a major share. The Chinese government has promulgated regulations to attract capital investment by overseas Chinese and foreign nationals, but the result will not be encouraging until a healthy environment in favor of private investment is first created. To foster the growth of private industries the following conditions appear to be essential: (a) a relatively stable price level and reasonably cheap credit; (b) tax obligations must be clearly defined, and no price controls imposed abruptly and arbitrarily; (c) economic control should be reduced to a minimum; (d) and the virtual government monopoly in foreign trade should be modified to allow private initiative to find an outlet for surplus products. When a more favorable climate is created to insure the success of private capital, private industry will overtake public enterprises and assume an important role in the industrial revolution that is under way in Formosa.

433 241 439 resources would have to be supplemented by the integration of Taiwanese and Koreans into the industrial nexus of Empire.

THE CONTEMPORARY PROSPECTS

178 727 Today the plans of the Japanese for the further development of Taiwan are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

177 198 The political travesty of the Chinese liberation of the Chinese population of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

Taiwan[1].

Before the Japanese occupation there was frequent migration between the China mainland and Taiwan. After the Japanese occupation, the fundamental policy of the colonial government was to cut off the relation between China mainland and Taiwan. Thus the entrance of mainlanders to Taiwan and the departure of Taiwanese to the mainland was strictly controlled. After the restoration of Taiwan to China in 1945, especially since 1949, many people came to Taiwan from the mainland, and the populations factors have changed greatly. During the half century of Japanese occupation the Chinese population in Taiwan was a "closed" population (1: p. 12), its change was almost wholly caused by natural increase, and the influence of migration was insignificant. It seemed that Taiwan was kept as a laboratory for experimentation on Chinese population change, and this is a very valuable condition from a demographic point of view. 161

Besides dependable data of population statistics, there are statistical data of administration, industry, communication and transportation, hygiene, and education, etc., which will enable us to trace the interrelation of population change and social change. Usually, statistical records begin after a society has attained some degree of development, and the data of the initial stages of modernization are not easy to find. Besides, neglect of birth and death registration is unavoidable in early statistics. Thus even when there are statistictical records, dependable data are hard to get. Taiwan is an exception in these points. Since statistical records were taken by the colonial government under strict police control, dependable statistics from the initial stages of modernization are available, which will enable us to make a study of a complete processes of population change and social change. "It is", as pointed out by Notestein, "if not the only case, then certainly one of the very few cases in the world" (1: p. v.). 161 178 127

Social change in western Europe took place from within, developed by inner necessity, and the change was from the base to the top. Social change in Taiwan was different from this, as pointed out by G. W. Barclay. In Taiwan the Change was started and pushed by the colonial ruler. It was passive in character, and was from the top to the bottom. There are many areas in the world which were occupied as colonies in former times, and their social change shows the same trend as that of Taiwan. The study of social change in Taiwan will help us to understand the colonial type of social change. 178

By the time of the Japanese occupation (1895), the islands of Taiwan and Hainan had about same size of population, around two and a half million. Fifty years thence, the population of Hainan remained almost the same, but the Taiwanese population had 161

Note 1: Hitherto the population of Taiwan was treated as a whole in most articles and books. In a paper by the present writer: "Sociological Study of Mortality in Taiwan", published in 1947-48 (main references, No. 6), a different standpoint was adopted, Chinese population in Taiwan was the subject of the analysis. Two books by G. W. Barclay published in 1954 also adopted the same standpoint.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

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as indicated in Table 3. The birth rate also shows the same periodical tendency. It is very significant that there is an intimate interrelation between population change and social change in each period, and we even may infer that population change is the index of social change. This will be analyzed in subsequent sections. The average rates of birth, death, and natural increase (Table 3) and main features and changes of each period will be clear from the following table.

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Table 3: Five Periods of Taiwanese Population Change.

Period	I	II	III	IV	V
Years	1906–09	1910–20	1921–25	1926–40	1941–43
Number of years	4	11	5	15	3
Average Birth Rate (per 1,000)	40.25	41.40	42.08	45.24	41.10
Average Death Rate (per 1,000)	33.35	29.37	24.61	21.20	18.23
Average Rate of Natural Increase (per 1,000)	6.90	12.03	17.47	24.04	22.83

First Period (before 1909): Wide spread epidemics and malaria, frequent revolts of the people against the Japanese characterize this unstable period. The birth rate was high (more than 40 per 1,000), but the death rate also high, more than 30 per 1,000 on an average, and the fluctuation was remarkable and frequent. The rate of natural increase was about 7 per 1,000.

Second Period (1910–1920): Epidemics were wiped out by the end of this period, the prevention of malaria had started. The uprisings of the Taiwanese were suppressed around 1915, the revolts of the aborigines were largely mitigated by 1920, and comparative social stability was more or less attained. Political, cultural and social movement of the modern type began for the first time after World War I, and took the place of armed uprising. The Japanese colonial policy had changed somewhat. Birth rate increased slightly, death rate declined to an average of around 30 per 1,000, and the rate of natural increase rose to 12 per 1,000.

Third Period (1921–25): Vigorous cultural and social movement marked this era. This was a period preparatory to the following period of expansion. Transportation was improved, mobility of people increased. Agricultural products and processed agricultural products increased, the productivity was raised, and the consumption of daily necessities increased slightly. The attitude of the people began to change, they began to adopt new ways of life more readily. Use of mechanical facilities gradually increased, and the number of doctors of western medicine exceeded the number of physicians who practiced Chinese medicine. The spread of primary education was promoted. The birth rate increased again, the death rate was 4.8 per 1,000 lower than the foregoing period, and the rate of natural increase rose 5.5 per 1,000.

Fourth Period (1926–40): During this period there was a tremendous increase in the output of agricultural products, attaining the peak production during the Japanese rule. The hydroelectric plant of Sun Moon Lake was completed in 1934, and industry

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

161 178 was much promoted by it. Prevention of malaria was successful to a large extent, the activities of preventive hygiene being started by the 1930's. There was reduction in the number of cases of diarrhea, enteritis, and tuberculosis. Infant mortality began to decline. The birth rate rose to a peak, the death rate declined again, and the fluctuations became fewer and of lesser extent. The rate of natural increase attained a peak of 24 per 1,000. Age composion changed, the proportion of infants and children increased markedlv.

Fifth Period (1941-1943): The value of industrial products exceeded the value of agricultural products, and the quick tempo of urbanization began. The birth rate began to decline, and death rate continued to drop, to around 18 per 1,000; the rate of natural increase declined slightly. Infant mortality declined further. In comparision with 1906, the average expectation of life of Taiwanese at birth in 1940 was 13 years longer for males and 16.7 years longer for females.

Objectively considered, there were improvements in Taiwan during the half century of Japanese rule; and it is evident at the same time that under the scheme of colonial administration, the improvements were limited in character. The specific character of this social change can be traced in the population data. In order to let her colony carry out its function, in order to make it a good supplier of rice and sugar which Japan urgently needed, various kinds of basic establishments and developments had to be accomplished, such as the wiping out of epidemics, prevention of endemics, basic sanitation, development of transportation, primary education etc. In order to make her colony a good market for manufactured products, the purchasing power and the level of living of the people had to be raised somewhat. But if the "improvement" was pushed too far, it would enable the people to resist and revolt, so it must be kept within certain limits. The Japanese were quite clear on these points, and developed the island within the colonial scheme. The results were successful, even to the extent of Taiwan being called the "ideal colony". Here is the fundamental character of social change in Taiwan. Some data will help us to understand the situation concretely.

161 165 Though the death rate of Taiwanese had declined, its tempo was slow, and still remained very high in comparision with the death rate of Japanese in Taiwan. In the early years of occupation, the death rate of Japanese in Taiwan was tremendously high, but declined quickly and steadily, and with the passage of time the rate was not only lower than in Japan proper, but even attained the level of the most advanced western countries. To take the death rate of 1925 for instance, it was 24.84 per 1,000 for Taiwanese, 20.27 per 1,000 in Japan proper, but was as low as 11.34 per 1,000 for the Japanese in Taiwan. Though it is somewhat higher than Australia (9.2 per 1,000) and Netherlands (9.8 per 1,000), it is still lower than Sweden (11.7 per 1,000), England and Wales (12.2 per 1,000). The age composition of the Japanese in Taiwan was specific, [162] there were more youths and adults in its population, and no doubt this was one of the causes of its low death rate. But even after the difference of age composition was

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertiliser and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertiliser increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyse the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1942. p. 201.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

[121] 669 people were forced to sell their land cheaply to sugar corporations. The influence of the revolution lead by Dr. Sun Yat-sen on the mainland was also felt. After 1916, the uprisings were suppressed by a forceful police system. Since 1921 the revolts of the aborigines have been largely mitigated.[5] After the 1920's peace was generally preserved in Taiwan, and the resistance of the people changed gradually from revolt by force to organized political and social movements.

000 Peoples' attitudes are much influenced by peace and war. Disturbances do not give the people the needed security of life and property. They must keep a cautious and watchful attitude at all times. It is impossible to invest the surplus of their production for the extension of their business. They have to exchange the surplus of production for gold and silver, and bury it under the ground for safety. Direct and immediate self-sustainance was their main daily concern, and the idea of future development was unfamiliar to them. This society is approximataly the same as the "militaristic type of society" defined by Herbert Spencer, and no development can be expected from it. In peace time people need not spend their time and energy defending themselves against thieves and bandits. They can concentrate their strength on their work. They can extend their business and gradually plan for the future. Again, we may use Spencer's definition and classify this state as an "industrial type of society". Once 178 established, its development will be accelerated. In Taiwan, after peace and order were established by the colonial government police system, production was extended, 648 and the population gradually increased.

The various kinds of social change in Taiwan were basically influenced by the colonial policy of Japan. Before World War I the policy was typically colonial. After the war, the spirit of democracy permeated the whole world. In Japan, serious social problems broke out. Democratic and Socialistic movements likewise became widespread. Social movement of the modern type among students and young people broke out in China at about the same time. Under the influence of both China and Japan, political, social, and cultural movements started in Taiwan for the first time around 1920. At first the colonial government tried to suppress them by force, but the current was too strong and the government had to change its policy somewhat. From around 1920, the policy of assimilation was adopted, and there were some improvements in administration. Though the improvement was limited in character, it had a fairly significant effect on Taiwan, and its results were reflected in population data. From [161] 1926 on the system of modern Taiwan was generally molded, and after that date population growth was speeded up.

Japan started her invasion of Manchuria in 1931, intruded in northern China in 1937, and then struck Pearl Harbor in 1941. As the war for expansion was extended, Taiwan was considered a strategic base, and the colonial policy had to change again.

Note 6: Yanaihara, T.: Taiwan under Imperialism. 1929, Tokio, pp. 241-242. Shiomi, T.: "Police System and Economy of Taiwan under Japanese Rule". Quarterly of the Bank of Taiwan. Vol. 5, No. 4, 1953, Taipei, pp. 259-261.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

Hitherto the development of chemical production, heavy industry, and consumer goods industries on Taiwan had declined, but now they were earnestly promoted. This gave another impetus to social change.

8. Elimination of Epidemics

After the occupation of Taiwan, two things troubled the Japanese most: the revolts of the Taiwanese and epidemics. One branch of the Japanese expeditionary army landed on the Pescadores on March 21, 1895. By mid-May, fully 1945 people out of 6,190 were afflicted by cholera, and 1,247 died. Another branch of the expeditionary army landed on Taiwan at about the same time and was also stricken with cholera, malaria, dysentry, typhus, pneumonia, and beri-beri. Only one fifth of the total army was free from illness by the end of September (5: Vol. 2, No. 12). During the early years of the Japanese occupation epidemics spread widely, and thus, elimination of epidemics was the first administrative task for the new rulers of Taiwan.

Plague, cholera, and small-pox were three serious epidemics in Taiwan. Plague broke out in Hongkong in 1894, invaded in Taiwan two years later, and had spread to many places during the next twenty-two years. During this time more than thirty thousand people were inflicted, and twenty-four thousand died. It was wiped out in 1917 (5: Vol. 2, No. 12). The activities of extermination and prevention by police power were conspicuous. They included the isolation of patients, destruction and burning of contaminated houses, extermination of rats, quarantine at sea ports etc. Though the means adopted were harsh and cruel, they were effective. Cholera was not as serious as plague in Taiwan. A greater prevalence of cholera occured in 1902, 1912, 1913, and 1920. After 1921 the preventative arrangements were more or less completed and by the cooperation of the people and the public health system, the occurence of cholera could be closely controlled.

During the early years of Japanese occupation small-pox was a serious problem. With the enforcement of vaccination, it began to decline after 1903. Since then, except for a greater prevalence in 1918–1920, small-pox has not been a menance in Taiwan (5: Vol. 2, No. 12).

Plague was wiped out in 1917. Cholera and small-pox were under control by 1920. Since then there has been no serious problem of epidemics in Taiwan. Incidentally, the cattle pest which ravaged Taiwan from 1896 and killed more than forty thousand head of cattle, was also exterminated in 1920.[7]

Whether or not a society is menaced by epidemic is always a significant social fact. We may say that freedom from epidemics is the first step toward modernization. In Taiwan, the course of this change can be traced in the data of population change. Before 1920 the death rate was high, and it also fluctuated frequently, and the extent of fluctuation was great. This is a sign of the uncertainty of life. In fact, living in a society where epidemics constantly spread, one could not estimate in the morning what would be happen before nightfall. Fatalism, such as shown in the saying "man proposes,

Note 7: Animal Resources of Taiwan, published by the Bank of Taiwan, 1962, p. 172, p. 298.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

15. *Change in the Way of Life*

In response to the various changes which took place during the Japanese era, the way of life of the Taiwanese had gradually changed. There is much data on this point, but we can only describe some of it in this limited space. The increase in the mobility of the people should be pointed out first. How many times each person has

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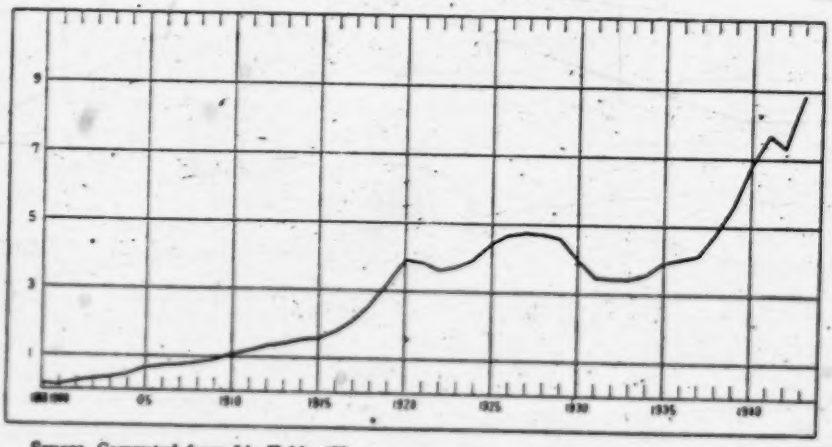
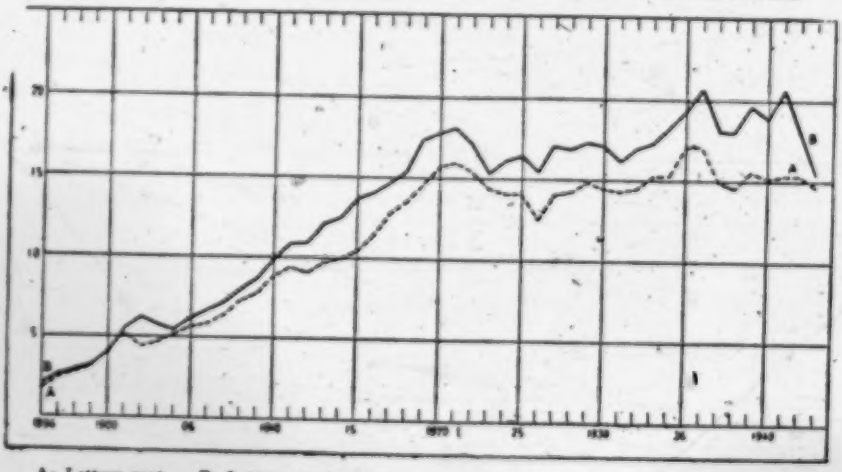
Fig. 7: Number of Times Traveled on Government Owned Railroads Per Capita Per Annum, Taiwan, 1899-1943



Source, Computed from 14: Table 433

Fig. 8: Number of Letters Received and Sent Per Capita Per Annum, Taiwan, 1896-1943



A: Letters sent B: Letters received
Source, Computed from 14: Table 432

48: Chen E-4 (no date) 1955 ADl Formosa ADl

178 484 traveled by train annually, and how many letters he has received and sent annually may be taken as an index of the mobility. The increase in the frequency of travel and the increase in the number letters received and sent are signs of the wider sphere of activity and higher mobility. The increase since 1920 was particularly remarkable (Fig. 7, Fig. 8).

Figure 7 was the number of times of travel per capita per annum on government owned railroads, and does not include travel on privately owned railroads and bus lines. When the latter is included, the figure rises as indicated in Table 7. During the later years of Japanese rule the mobility had increased markedly. In 1938, the number of times traveled per capita per anum was 17.19, but it had risen to 23.64 by 1942.

Table 7: Number of Passengers on Train and Bus Lines in Taiwan in Selected Years

	1938	1942
1. Government-owned Railroads	27,179,194	46,342,569
2. Privately-owned Railroads	2,002,456	1,962,017
3. Government-owned Bus Lines	8,207,474	9,413,577
4. Privately-owned Bus Lines	53,644,809	81,536,398
Total	91,033,933	139,254,561
5. Total Population	5,267,005	5,891,848
Average times travelled Per Capita Per Annum	17.19	23.64

Source: 14, 1: Table 433; 2: Table 446; 3: Table 458; 4: Table 459; 5: Table 64.

262 The consumption of food had also increased. Here we will take sugar and pork as an example (Table 8).

Table 8: Per Capita Per Annum Consumption of Sugar, Taiwan[11]

Year	Per Capita Per Annum Consumption
1903-1909	2.79 kilograms
1910-1920	5.26 kilograms
1921-1925	6.13 kilograms
1926-1938	8.87 kilograms
1939-1943	14.41 kilograms

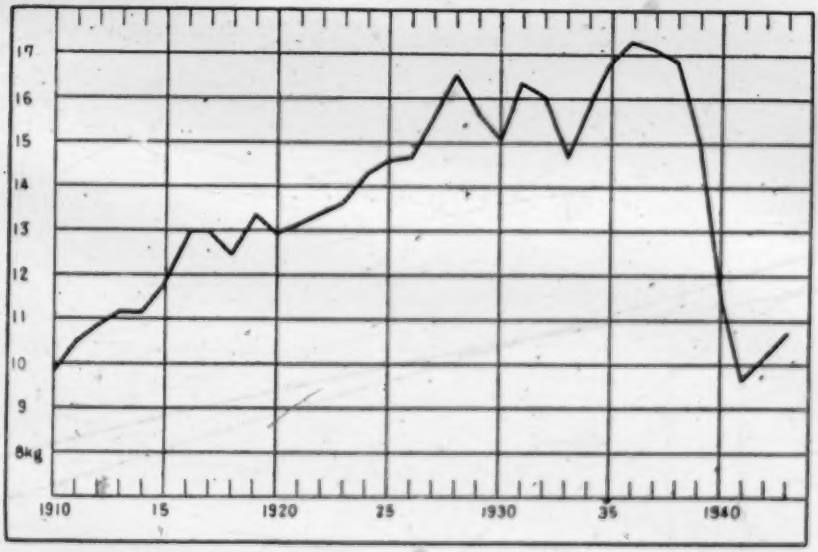
In later years of World War II the transportation between Taiwan and Japan was hampered by the allied forces, and no doubt, the jump in the amount of consumption in the last period (1939-1943) of the table 8 includes some sugar which was actually stocked in warehouses in Taiwan. For comparision, the per capita per annumn consumption of sugar in other parts of the world in 1939 was as follows. Netherlands was the highest consumer: 81 kilograms. Denmark and Australia came to next, more than 50 kilograms. Britain, U.S.A., and Canada were nearly 50 kilograms, Italy and Portugal were about 9.5 kilograms. India was 6.7 kilograms, Java: 4.6 kilogram, China mainland: 1.8 kilograms. The average of 1939-43 in Tawian was 14.4 kilograms[12].

Note 11: Taiwan Sugar Yearbook, 1947, Taipei, Table 55.
Note 12: op. cit., Table 106. cf. 27: Table 144, Table 145.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

The increase in the consumption of pork is given in Figure 9. Beef and mutton are not included in this figure. Increase in the amount of meat consumption is a sign of the improvement of the standard of living. The per capita per annum consumption of meat in France was 20 kilograms in 1840, it increased to 35 kilograms by 1892, and to 40 kilograms by 1939[13]. The consumption of pork in Taiwan was 7.3 kilograms in 1910, it reached a peak of 17.3 kilograms in 1936, and after that decreased as the importation of beans and bean cakes as animal feed became increasingly difficult with the development of the war. For comparision, the per capita per annum consumption of meat in other parts of the world in 1939 was as follows. New Zealand was the highest: 110 kilograms; Australia: 95 kilograms; U. S. A., Canada, and Britain: more than 60 kilograms; Switzerland and France: more than 40 kilograms; Italy: 20 kilograms[14]. The consumption of pork alone in Taiwan was 15 kilograms in 1939.

Fig. 9: Per Capita Per Annum Consumption of Pork, Taiwan, 1910-1943



Unit: Kilogram
Source: Animal Resources of Taiwan, pp. 63-64

16. *Change in the Attitude of the People*

People living under many kinds of changes gradually change their attitudes, or the ways of feeling, thinking and behaving. During the early years of Japanese rule, the large part of the Taiwanese were conservative farmers, who persisted in their traditional way of life. They had to face the merciless coercion of Japanese police on

Note 13: Peyret, H.: La Lutte pour less Dernées Vitaless, 1946, Paris, qu. from Japanese tr. pp. 76-77.

Note 14: op. cit., p. 27. ci. 27: Table 144.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

181 matters of sanitation, and at times on matters of agriculture. With the passage of
178 time, experience lead them to compare their traditional way of life with that imposed by the colonial government. Some of these ways were found to be not too bad, some even adoptable. This kind of change in attitude through hard experience was fairly significant. By this, people realized for the first time that there were another ways of life besides their traditional one, and that some elements were worthy of adoption. Once the people began to adopt the new way of life, change began to speed up. From the following instances we can see that change in the attitude of people became conspicuous after the 1920's. We have discussed the influence of war and peace, the prevalence of epidemics, and the development of transportation on the attitude of the people (§ 7, 8, 12). Here the change of attitude concerning medical treatment and agriculture will be discussed.

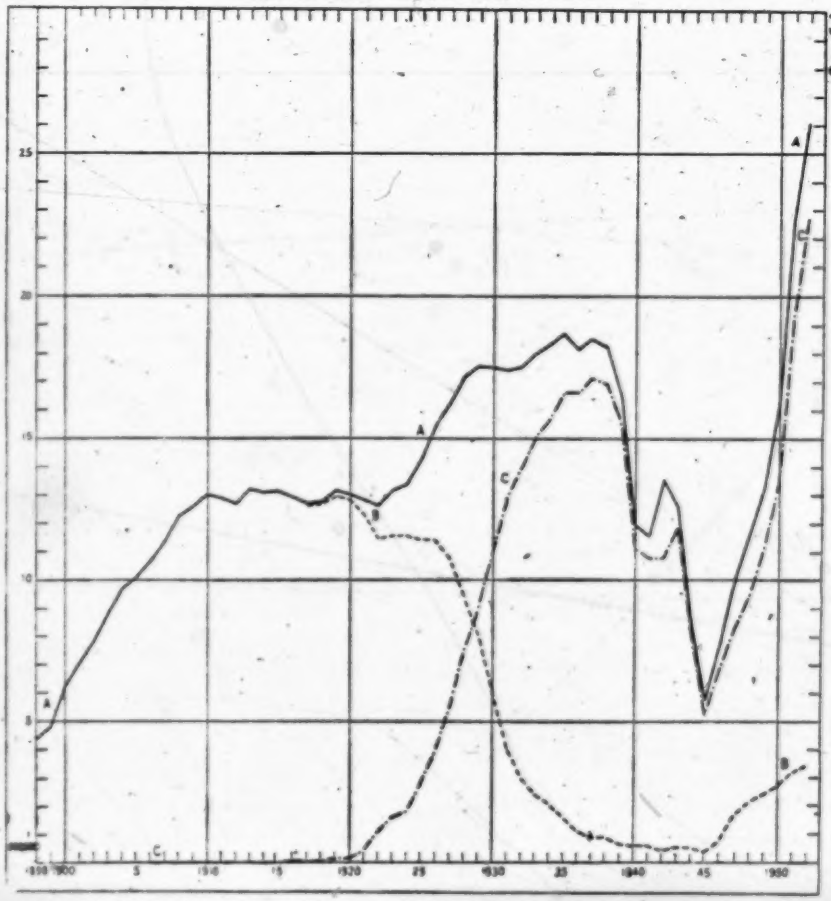
178 Since treatment of illness touches the innermost part of life, it is only natural that
744 conservative people do not dare to allow an unfamiliar doctor with strange ways of
156 treatment to approach them. For Taiwanese, who had been accustomed to the traditional Chinese medicine and folk medicine, doctors of western medicine, particularly with their injections and operations, were dreaded. During the early years of the Japanese rule there was a prevalence of cholera. Colonial officers compelled the people to take the preventive injection. Great consternation arose among the people, and many of them, particularly young girls, escaped and hid, in order not to have the dreaded injection. In the old city of Tainan a young girl of a wealthy family was escaping in a palanquin, but unfortunately she was caught by a Japanese police on the way, and forced to take the injection. Perhaps because the shock was too great, she died in a short time. Another young girl who took the injection killed herself after she went home, because it was a dreadful shame for a young girl of high standing to expose a part of her body to the public gaze. When a person died, his family had to have a medical certificate in order to get permission for burial. In 1906 90% of the medical certificates were issued by doctors of Chinese medicine, and certificates issued by doctors of western medicine constituted only 10% of the total. The proportion of
[759] the latter increased gradually, attained to 45% by 1917 (11:1917, p. 29). By 1920, the number of doctors of western medicine already exceeded those of Chinese medicine, and by 1935, 90% of medical certificates for the dead were issued by doctors of western medicine. Thirty years after 1906, doctors of Chinese medicine and doctors of western medicine had changed positions completely. By 1935, people did not object to injections and operations any more. On the contrary, they even believed blindly in injections, and asked for an injection when they saw a doctor. This was a remarkable change in attitude.

178 Farmers are tenaciously conservative in their work. In Taiwan, farmers originally
241 used only compost and night-soil, and did not use any commercial fertilizer. When a sugar corporation started to promote the cultivation of sugar cane, they bought commercial fertilizer from Japan, and distributed it free of charge to farmers. Once a

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

farmer received some bean cake for fertilizer. However he was afraid that this new and strange material would hurt his crop, so he threw it away in a grove of bamboo. Later he found that the bamboo around the bean cake had shot up tremendously, and he realized for the first time that commercial fertilizer was useful, and began to use it on his crops. It is not an easy task for the conservative farmer to depart even a little from his traditional way of life, and experiment with new methods. But when once the experiment is begun, new experiences will lead him farther. The use of commercial

Fig. 10: Total Number of Hogs and the Number of Native Hogs and Improved Hybrid Hogs, Taiwan, 1898-1952



Unit: 100,000 head A: Total Number B: Native Hogs C: Improved Hybrid Hogs
Source, 1898-1950, from Animal Resources of Taiwan, pp. 58-59
1951-1952, from Taiwan Agricultural Yearbook, 1952

48: Cnen E-4 (no date) 1955 AD1 Formosa AD1

24 178 The use of commercial fertilizer spread quickly, and with textiles, became one of the main items of import [439] from Japan.

For the improvement of hog raising, the colonial government had imported [232] Berkshire hogs from Japan in 1896, and Yorkshire hogs from England in 1900. After a series of experiments, it was found that the first generation of hybrids between the native hog and Berkshire hog was most suitable to Taiwan, and the promotion of the 231 hybrid was started in 1907. As in other agricultural practice, the traditional way of 178 hog raising was a complicated procedure. Many religious and magical elements were involved in it, and it was not easy for the conservative farmer to adopt the profitable new hybrid. It took more than ten years of government promotion before people became willing to adopt the new hybrid. After 1920 more and more people adopted it, and the number of native hogs declined sharply (Fig. 10). This is the best instance of change in the attitude of the people. A new strain of rice (Ponlai rice) has been extensively cultivated since 1924, and the output of rice has sharply increased.

118 The 1920's is the turning point in the social history of Taiwan. Epidemics were wiped out, prevention of malaria had improved, the doctors of western medicine exceeded the doctors of the Chinese medicine, and even the cattle pest was wiped out. Political and social movements began for the first time. Primary education spread wider, the conservative farmer began to adopt new strains and new technics, and increase production. Mobility of the people had increased, more bicycles, automobiles, and trucks were used, and the level of living was raised somewhat. It was amid this social milieu that Taiwan's death rate steadily declined while its already teeming population with equal steadiness rose to new heights.

4:Grajdanzev--43 S-4 (no date) 1942 Formosans
116, 161, 178, 241

"The average increase of area under cultivation by 7,000 ko each year must be compared with the annual increase of the population of 130,000 to 140,000 persons; for each ko increase in cultivated land there is an increase of twenty persons. It is thus quite evident that the increase of cultivated area is lagging behind the increase of population. The same idea may be expressed in another way: since 1904 the population of Taiwan increased 1.92 times. whereas the cultivated area increased only 1.37 times.

Improvement in the situation may be brought about (1) by cultivating areas now uncultivated; (2) by turning areas now producing one crop into double-crop areas chiefly through irrigation; (3) by increasing yields and substituting crops bringing high income per unit of area for crops bringing low income; (4) by shifting the population from agriculture to industry and importing foodstuffs to feed the growing population. Let us now consider these possibilities in turn, with the exception of the fourth, which will be examined later."

4:Grajdanzev--75 S-4 (no date) 1942 Formosans
116, 162, 178, 421, 651

"According to official statistics the number of payers of the agricultural land tax increased from 2,099,000 on January 1, 1938, to 2,112,000 on January 1, 1939—an increase of 13,000. How can this increase be explained when the number of families engaged in agriculture fell by 2,900? We must therefore conclude, either that official statistics are inaccurate, or that a rapid proletarization of the agricultural population is going on. It may be—although this is only a hypothesis—that the official statistics do not include sub-tenants, a very numerous class in Taiwan. But whatever the cause, the statistics give a distorted picture of land relations on the island."

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-1-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

"The division of families occupied in agriculture into owners, part-owners and tenants may be seen from the following table: (1)

1. Here and in the following tables the official figures of families occupied in agriculture are used, though, as was pointed out, they are probably underestimates. The statistics of landowners in Taiwan should be more or less correct because the land is surveyed and change of title involves a complicated procedure. The statistics may be incomplete only as regards tenants and agricultural workers (which they omit completely), and if one takes these into consideration one comes to the conclusion that official statistics probably give a brighter picture than is justified.

Division of Agricultural Families in Taiwan
(thousands)

	1932	1933	1935	1937	1938
Owners	132.2	129.4	132.1	131.1	130.2
Part-owners	119.3	121.7	128.4	134.8	135.6
Tenants (2)	152.4	155.0	159.4	161.5	158.7
Total	403.9	406.1	419.9	427.4	424.5

Footnote (2) on next page.

Division of Agricultural Families in Taiwan [Cont.]
(thousands)

2. Those who have read Japanese Rule in Formosa by Yosaburo Takekoshi may be astonished to discover that there are tenants in Taiwan. Takekoshi wrote in 1905 '. . . The tenants [in Taiwan, after the reform by the Japanese administration] came to enjoy the absolute ownership of the land they or their ancestors have been farming for three centuries. Such a change certainly amounted to a social revolution. Most of the revolutions recorded in history required sacrifices, but the present one was entirely bloodless. This change has given the tenant absolute ownership, thus insuring securing of property. . . .' (p 132). But what Takekoshi described as a social revolution, was actually only a very modest reform: the government abolished the rights of the taiso--owners who had only doubtful title to land. This reform made transfer of real estate more secure and paved the way for Japanese penetration.

As percentages of total

Owners	32.7	31.9	31.4	30.7	30.7
Part-owners	29.6	29.9	30.6	31.5	31.9
Tenants	37.7	38.2	38.0	37.8	37.4
Total	100	100	100	100	100

Source: Takumu Tokei, 1938.

[77] As this table shows, about forty per cent of all farmers in Taiwan own no land at all and must rent it from landlords and farmer-owners; about thirty per cent have plots so small that they are compelled to rent land, and barely thirty per cent of the farmers till only their own land. These figures are striking. Taiwan does not know rich tenants of the British type. Those who rent land are mostly poor farmers, but even those who cultivate their own land, are not all rich. As to the relative changes, there is a noticeable fall in the percentage of owners in six years--from 32.7 per cent in 1932 to 30.7 per cent in 1938. For the same period the percentage of tenants is the almost the same (37.7 and 37.4 per cent respectively), while the percentage of part-owners rose from 29.6 per cent to 31.9 per cent. It would seem that the farmer-owners are gradually losing their position and sinking to the level of tenants, but a six-year period is not a sufficiently long time to ascertain definitely whether such a trend exists.

However, it is not only the number of owners and tenants which is important, but also the area which they respectively till. Statistics of area are divided into only two categories—owned and rented.

Area Owned and Rented in Taiwan in 1932
(1,000 ko)

	Dry fields		Paddy		Total	
	Area	%	Area	%	Area	%
Owned	230.2	60.0	132.2	33.3	362.4	46.5
Rented	153.8	40.0	264.0	66.7	417.8	53.5
Total	384.0	100	396.2	100	780.2	100

Source: Nogyo Nenkan, 1939-40, p. 641.

In 1932 the area cultivated by owners constituted 46.5 per cent, the area rented by tenants 53.5 per cent. But it is important to emphasize that owners cultivated chiefly dry land while the tenants cultivated paddy. Paddy brings much higher yields than dry fields; in 1937 the average yield of rice per ko of paddy was about 14 koku while that per ko of dry land was only 7.8 koku, and, further, many paddy fields [78] produce two crops a year. In other words, one ko of paddy yields, on the average, more than twice as much as one of dry land, so that the tenants produce about sixty-five to seventy per cent of the total crop of Taiwan on rented land, and the owners not more than thirty-five to thirty per cent."

4:Grajdanzev--78-79 S-4 (no date) 1942 Formosans-1-3
116, 178, 427, 565

"As to the distribution of land between landowners by size of holdings, we have figures for 1930 and partial figures for 1932. We shall divide the farmers into four groups: (1) landowners with holdings of less than half a ko (less than 1.2 acre); (2) landowners with holdings of half a ko to one ko; (3) landowners with holdings of one ko to five ko; (4) those with holdings above five ko (above 11.9 acres).

Distribution of Landowners by Size of Holdings, 1930

Size of landholdings (ko)	0-0.49	0.5-0.99	1.0-4.99	5.0 and over	Total
Number (1,000)	172.9	86.7	122.4	23.1	405.1*
Percentage	42.7	21.4	30.2	5.7	100.0
Area (1,000 ko)	41.0	62.5	258.6	359.2	721.3
Percentage	5.7	8.7	35.8	49.8	100.0
Average area per holding (ko)	0.42	0.72	2.1	15.5	1.78

* It is important to note that the number of owners as given here is considerably greater than the number shown in more recent statistics. For 1932 the earlier figure was 340,674, whereas the current statistics (Takumu Tokei, 1938, published in 1940) give the number of owners and part-owners for 1932 as only 251,300; this is another indication of our point that the current official statistics probably understate the number of those occupied in agriculture.

Source: Ibid.

We see from this table that 42.7 per cent of the owners are decidedly small owners: their average holding is only 0.24 ko or less than 0.6 acre. They cannot exist on such a strip of land but must rent some land from rich landowners. In other words, almost half of the landowners are such in name only; they have enough land only for a house, a yard, and a kitchen-garden. Another 21.4 per cent of the owners are in a better position but not much better. Thus 64.1 per cent of the total number of landowners in Taiwan in 1930 had on the average less than 2.4 acres each. At the other end of the social scale, 5.7 per cent of the landowners owned 49.8 per cent of land, [79] or one-half of the total cultivated area. We may go farther and say that 126 persons (or corporations), 0.05 per cent of the total number of landowners possessed 94,072 ko—or 13.1 per cent of the total cultivated area. (1) Only thirty per cent of the owners are in the middle category. As regards

1. These figures are probably now out of date. In Kabushiki Kaisha Nenkan, 1940, five sugar companies and one canning company are listed as owning 81,634 ko of land in Taiwan.

the distribution of land among owners, Taiwan is a country of contrasts. Rich owners, although outnumbered eleven times to one by small owners, had nine times as much land. Thus on the average a rich owner had one hundred times more land than one in the first

two groups. This is extremely important for it shows that the farmers in Taiwan are divided into groups of unequal economic strength with extremes prevailing, so that the situation of the masses of the agricultural population is less satisfactory than the average figures calculated above would suggest. The Japanese government has not solved this question in Japan proper and it has not solved it during forty-five years of its administration in Taiwan."

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

the island and set out to discover the responsibilities and rewards of colonial administration. 648

Japan embarked on this first colonial venture without having at the outset any very clear idea of what use to make of it. The first few years were taken up in consolidating their control over the population and in deciding what to do with the island. As their experiment progressed, the Japanese began to introduce some profound and subtle changes. Their objectives became clarified, and their policies toward Taiwanese more firm. Gradually they evolved a system of managing affairs in Taiwan that developed into one of the most successful colonial programs in the world. As long as they remained, Taiwan repaid them handsomely for their initial investment of care and expense.

Some of the more important aspects of this program will be discussed in subsequent chapters. Here it is appropriate to establish what were broadly the consequences in terms of population trends, and to discover what sorts of information about Taiwan's people can be gained from the records of this administration. The Japanese rationalized certain parts of Taiwan's agriculture, so that the island produced a substantial surplus of farm commodities each year. They established a strong and efficient government, the first that the island ever had. With a shrewd combination of police force and political guile, they imposed strict public order and penetrated every town and village with a structure of organized control. 648 178

They constructed excellent facilities for transportation and communication where there had been none before, founded modern business institutions and commercial centers, promoted some industrial processing of the island's products, rebuilt the major cities, and stamped out the principal epidemic diseases. In short, they transformed Taiwan from a "backward" and neglected land into a thriving region that could regularly export a large share of its agricultural produce. This was a success that would satisfy most of the countries striving for modernization today.

All these material accomplishments of the Japanese in Taiwan are well known. With some justifiable pride, they publicized this side of their rule and compiled an imposing set of statistics to document it. What we propose here is to examine the human side of these developments and to appraise some of its consequences in the 121

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER III

Economic Activities and Social Change

THE activities, interests, and aspirations of the Japanese community in Taiwan were things that existed apart from the indigenous population. These elements were never effectively communicated to the Taiwanese—partly through a design to withhold them, and partly through reluctance among the people of Taiwan to accept them. Consequently the conduct of Japanese residents is not of much help in understanding the accustomed modes of life among the island's people. It is the latter problem that has the more interest for demography, and makes it essential to consider the background of social order in Taiwan and the changes under colonial rule.

The Early Agrarian Order in Taiwan

The importance of agricultural pursuits in imposing a predominantly agrarian character on a society is not a thing that can be precisely measured. Short of perfect exactitude, a great deal can be learned with lesser devices, by describing the cultural setting of agriculture in Taiwan, and pointing out how it influenced the participation by Taiwanese in the island's economy. The basis of this setting lay in the conditions that prevailed before Taiwan became a colony of Japan.

By the mid-19th century, the lowland region of Taiwan was rapidly becoming fully settled. Piracy, which had made Taiwan a scourge to sea traffic along the China coast, gradually subsided into sedentary agriculture. Most of the Chinese population was already supporting itself by farming and the marketing of farm products. Since 1700 immigration had brought in a steady stream of Chinese from the mainland. In spite of sporadic prohibitions, hundreds of thousands of peasant farmers came to seek refuge from rural poverty in South China. Once arrived, they often reverted to this same condition, by reaching unfavorable terms with some of their countrymen already entrenched there as land speculators.

Poverty tended to reproduce itself among those who reached Taiwan, though there was also great wealth open to the few who rose from cultivation to commerce. Each settled family held an advantage over newcomers. This superior position placed new migrants in

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

these new opportunities for employment. It steadily brought more Taiwanese into contact with the modern side of the Japanese economic program.

Yet even though movement to the cities did widen the horizons of a few Taiwanese, it was surrounded by circumstances that tended to minimize this effect. The familial character of the migration made the break between country and city less sharp than it might have been. Removal to a city did not expose migrants very readily to whatever new influences were there. These were all dominated by Japanese, who kept most of their innovations to themselves and erected barriers against free intercourse with the rest of the population.

Urban growth therefore did not promote general social change among the Taiwanese. It removed into cities those who were to feel the strongest effects of contact with these alien elements. Migration thus helped to absorb the modern aspects of economic development so that they did not intrude into the affairs of rural communities.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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Introduction

This book, primarily a study of a Hokkien Chinese agricultural community on the west-central coastal plain of Taiwan, is based on a field study carried on during sixteen months of actual residence in Hsin Hsing village. It is more than simply an ethnographic description, however, since it also provides a picture of the changing life of the Chinese peasant, at least in one area of the island.

Taiwan provides an especially unique opportunity for the study of the nature of Chinese culture change and its dynamics. In a relatively brief span of years it has evolved from a traditional, premodern society to an emerging urban-industrial society. As more and more scholars have come to realize, the essential material for the study of this dynamic process is available there for analysis.

At the same time, until fieldwork can be carried on again on the Chinese mainland, research in Taiwan is perhaps the closest one can come to studying a Chinese cultural group living in a Chinese context. This has unfortunately been the case since Western scholars were virtually halted in their firsthand ethnographic research on the mainland of China when the Communists assumed power in 1949. The several studies published before and since then, ranging in type from J. L. Buck's (1930, 1937) detailed land-utilization and farm family surveys to the anthropological and sociological community study type (see bibliography), are of scattered areas dotting the great Chinese land mass. For the extremely important area of southeastern China, Fukien and Kwangtung, where most of the Taiwanese came from, only three published Western language studies exist—those of Kulp (1925), Lin (1947), and C. K. Yang (1959). Other than some scattered general studies (discussed briefly in Chapter 2) and a number of brief works dealing with highly specific subjects, this book, which combines ethnography with detailed analysis, is the first of its kind to be made available for Taiwan.

Culturally, Taiwan has been and still is a part of China. Before the influx of Chinese between 1945 and 1949, immigration from the south-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

121 eastern part of the mainland to Taiwan had been going on for several
167 hundred years, beginning in the 1600's and virtually ending about
177 1900 when it was almost completely stopped by the Japanese regime.
178 Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 During the Japanese occupation of Taiwan, except for the period
177 just before and during World War II when they attempted to Jap-
178 anize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese popula-
[744] tion has been significant. The combination of relatively efficient gov-
[20] ernment, orderliness of life, and public health measures, together with
[161] an extensive system of communications on a relatively small island has
[369] greatly facilitated rapid population increase on a stable land base and a rapidly increasing growth of urban centers.

Out of these developments, the most significant changes for the rural
369 population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and
[167] with this an increased spread of urban influences or at least their effects into the rural villages. These increasingly significant extensions

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

F 175 648 ists brought a change in regime to Taiwan. This is known as the "Restoration." At the outset the Taiwanese people welcomed the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been F 175 648 killed in the war in Southeast Asia. The other villagers from Hsin Hsing who had surrendered or been taken as prisoners while working 722 in Japanese labor groups were returned to Taiwan in ships. The re- 727 turn of these men to the land was followed by a general population 161 increase, and in the Hsin Hsing area this quickly aggravated the prob- 423 lem of land scarcity; tenancy became a greater problem than ever 464 before. Families could neither buy nor rent enough land to support [178] themselves adequately, and, in addition, the war period had brought [462] about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

Tn 175 423 [648] [241] [434] Tn [161] After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

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LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1
Taiwan AD6

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Changing Land Tenure and Its Effect on Community Organization

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The traditional (Ch'ing) land tenure system in Taiwan has undergone a number of modifications over the years. Each was instituted with the advent of a new regime, and marked the inception of major changes in other aspects of rural life. As we have seen, the colonial administration policies of the Japanese were instrumental in producing the first significant involvement of the Taiwanese peasant in the market economy. Nevertheless, it was not until the restoration of Chinese rule, when the population growth began to exert noticeable pressures and the Nationalist Chinese sponsored the Land Reform Program, that major changes took place in the economy which reached directly into most of the areas of Taiwanese rural life.

The system of land tenure in Taiwan has always been a controlling factor in the lives of the agricultural population, and to understand Taiwanese life fully it is necessary to understand the land tenure system and its history. From the late nineteenth century onwards the rural villagers suffered the results of the concentration of landownership into too few hands. This situation culminated finally in the Land Reform Program of 1949–1953, which, for the first time, secured the Taiwanese tenants' rights to the land they tilled through firm rental contracts, reductions in rent, and the Land-to-the-Tiller Program.

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Putting untilled land under cultivation became a great concern of the government at the time of the Manchu conquest of Taiwan in 1683, according to T'ang (1954:23–27). Under the Manchu (Ch'ing) dynasty, any person applying for rights to occupy uncultivated land was considered the owner as long as he kept his acres under proper cultivation. Not surprisingly, this program led to a situation in which people with enough capital, "a relatively small number of great families" (Ginsburg, 1953:32), obtained rights to large amounts of land

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

eating, while continuing to push more food on him. When old people talk, even though the younger people may consider their words pure nonsense, they merely smile and agree. When the evening is over there is usually some young grandchild waiting to lead the old man back over the dark paths to his house.

Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

ILLNESS, DISEASE, AND MEDICINE

As has already been shown in Chapter 2, the tremendous increase in population on Taiwan is a reflection of the great reduction in the death rate, which results, primarily, from the lower incidence of fatal diseases. The control of disease has been effected by such factors as public health programs which have helped eliminate diseases like cholera and malaria, an increase in the number of Western-style doctors, an increased reliance on Western medicine and medical techniques, and somewhat better sanitation as a result of education of the public and governmental enforcement of health standards.

It was during the Japanese period that Taiwan saw the advent of Western-style doctors and medicines, especially in the 1930's. However, they were few, and their practice was limited mainly to the wealthy. The benefits of their knowledge, therefore, and the everyday use of Western-style medicines did not reach many of the rural people. During this period the rural people continued to rely primarily on Chinese doctors and herbal medicines, as well as magical cures effected by shamans and healing priests. (The magical techniques are discussed more fully in Chapter 8.) However, public health measures introduced by the Japanese government to combat epidemic diseases did benefit

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

the rural people. Some forms of improved sanitation reached the rural areas through the schools and, perhaps more effectively, through the publishing of government edicts enforcing practices of sanitation. Semiannual government inspections forced villagers to clean up their houses and the villages twice a year. The inspections were carried out by the Japanese police and civil officials, and any family which did not pass the inspection was subject to fine and to reinspection, which meant that "the party was punished by having to clean up all over again." The policy of inspections instituted by the Japanese has been continued under the Nationalist Chinese regime.

During the latter part of the war, and especially after the restoration of Chinese rule to Taiwan, there was a marked increase in the incidence of disease, particularly communicable diseases. There was even a recurrence of cholera. This was a direct result of the poor living conditions brought about by the war and, with the coming of the Chinese government, a chaotic administration which was unable or unwilling to deal with health problems. However, the situation gradually began to improve after 1948 and 1949 when Taiwan became the new stronghold of the Nationalist Chinese regime. This improvement is evidenced by the general situation in the Hsin Hsing area. Beginning in the early 1950's the number of Western-style doctors practicing in the area increased. At this date, there are a number of such doctors, and the villagers consider their fees reasonable and within their means. The reason for this great increase lies in the different licensing practices of the Japanese and the Nationalist governments. Under the Japanese a man had to be a graduate of a medical school before he could practice medicine; under the Chinese government, the applicant is required only to pass a practical examination. This means that people who have worked in hospitals as aides or technicians and have had some opportunity to observe others practicing medicine may have accumulated enough knowledge to pass the examination and obtain a license. Therefore, while there are now a large number of licensed doctors practicing in the Hsin Hsing area, only a few who went to school in Japan have had formal medical training.

In addition to the great increase in the number of doctors practicing in the local area, in recent years there has also been a marked expansion in the number of private and public hospitals in the cities. These hospitals, which are sometimes very large, can accommodate many patients, house relatively modern facilities such as operating rooms, X-ray and other equipment, and provide modern drugs for patients. Although most of the patients treated in these hospitals are city people, village people sometimes go to them for treatment. They are usually referred there by a local doctor who is capable of diagnosing an illness as one requiring hospital care or who is honest enough to

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

NOTES

Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, *i.e.*, only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 3.93–5.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 39.37–59.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chroniclers, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1716), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1758), Wang Ying-ts'eng (1764), Hsieh Chia-luan (1807), and Chen Shu-chün (1852) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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15: U.S. Navy --22 [2] (no date) 1944 Formosans
116, 181, 668, 177.66 Japanese
636.66

"Formosans who have received the advantages of a Japanese education naturally expect opportunities in return. If such cannot be found in Taiwan, nor in China or Japan, discontent may increase. The Formosan temperament is not aggressive, but 'Old Formosa Hands' remark that this temperament often finds devious ways of achieving desired ends in spite of official control.

The Formosans lack leadership, for the Japanese have destroyed out-spoken opposition or have driven it underground and abroad. Only through pressure of Japanese occupation did there begin to develop a sense of the interests of the Formosan people as a whole, and the formulation of a political program embracing the welfare of the island vis-a-vis Japanese policy."

15: U.S. Navy --22 [7] (no date) 1944 Formosans
116, 181, 266, 578, 177.66 Japanese
636.66

"Through the past twenty years observers have commented on the passivity, and the subserviency of the Formosan-Chinese to Japanese rule. However sullen or resentful the general populace may be, they have been without effective means of resistance. This is not to be attributed to meekness or lack of spirit, but rather to the extremes of force and cruelty with which the Japanese established initial order and imposed their elaborate system of controls, reaching into every household on the island and placing upon the members collective responsibility for the acts of individuals. Even the most generous allowances cannot conceal the fact that before the Japanese came the Formosan-Chinese population as a whole was capable of extremes of ferocity in mob action among themselves, not stopping short of ritual cannibalism (the eating of the hearts and livers of victims to acquire strength and spirit), nor of the cold-blooded sale of the flesh of captured aborigines on the open market both on the island and across the channel along the coast of Fukien. In the years before 1941, educated Formosans commented frequently (and of course privately) upon the probable extremes of mob action likely to be directed against the Japanese if ever an opportunity should be presented. That the Japanese are aware of this was amply demonstrated on February 18, 1938, when the attack of a single bomber from China caused the authorities to barricade public buildings and to set up machine guns throughout the capital city before they sounded the air raid alarm. The guns were directed at the Formosan-Chinese population."

15: U.S. Navy--22 [8] (no date) 1944 Formosans
116, 181, 175, 362, 563

"The Hakka Chinese people. The ancestors of the Hakka people came to the island from the hinterland of Fukien and Kwangtung provinces. They remain distinct from other Formosans in dialect, dress and some ways of village life. They were an audacious and bellicose people when they arrived, and in the southern part of the island particularly they had to push through earlier Chinese settlements along the coast to the marginal land beyond, between the settled Chinese and the aborigines who were gradually and forcefully being dispossessed. As a consequence, even today the Hakka settlements are among the foothills rather than on the plains. This sequence of immigration has caused the Hakka to intermarry more freely with the aborigines."

15: U.S. Navy--29 [7] (no date) 1944 Formosans
116, 181, 178, 584, 562

"The general atmosphere of life on Taiwan has been always somewhat less conservative than on the Chinese mainland. Indeed, there are many evidences of the pioneer spirit at work. A girl still has very little to say concerning the choice of a husband, and the parents or eldest relatives on both sides actually carry out the negotiations leading to marriage. Still there is much less of the prenuptial seclusion of women in Taiwan. Marriages are frequently arranged after a young couple has had an opportunity to see one another in public (but not alone)."

596 There was strength in remaining a large family. Farming needed the co-operation of all adult members. A family engaged in commerce often feared the loss of prestige and economic strength if the family were divided.

Thus, the family played a decidedly important role in the whole web of human contacts.

596 Group living necessitated a pattern of obligations, sentiments, and expectations.
181 The custom of passing on a business from father to son, the reluctance of rural people to leave their ancestral land for the cities, and the mutual profit shared by family members -- young or old -- who worked together to earn the family's livelihood all reflect the influence of family relationships upon individual lives. Many cultural characteristics of the Formosans -- their great dignity and politeness, their unwillingness to express disagreement, their tendency to keep their own counsel, and the way in which they maintain an attitude of non-interference toward the lives and the problems of others -- had their origin in the close-knit family groups and the conditions in which of necessity they lived. Considerate behavior and the ability to compromise have been necessary to maintain friendly relationships within the family.

C. General Characteristics

181 Formosans are considered to be industrious and resourceful. Perseverance, tenacity, and endurance are characteristics of the majority. The rural people show a strong feeling of solidarity and affection to members of their community and have a strong attachment to the soil as representative of their homeland and their way of life. Family loyalty and filial love are considered the greatest of virtues. Deep love for the family circle is further accentuated by the frontier environment of Formosa. In the cities, people tend to become more independent and self-reliant. Because it is not the custom to pool resources for joint enterprises outside the immediate family, only small businesses can be established. If the head of a small urban household suffers a long illness or extended unemployment, the family falls into dire need. Most families so afflicted must return to rural areas and live with kinsmen until they have acquired enough capital to go back to the city and try again.

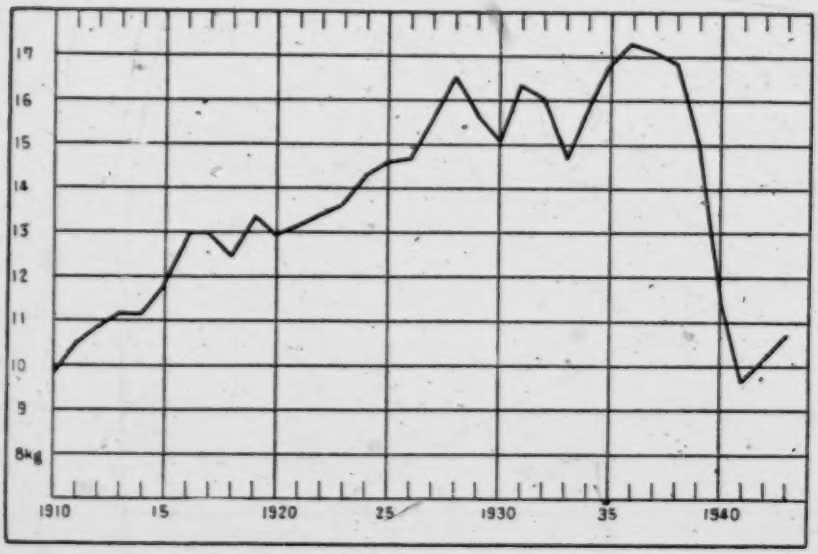
D. Recreations and Sports

241 461 Formosa's subtropical climate makes farming possible in all seasons; most farmers

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

The increase in the consumption of pork is given in Figure 9. Beef and mutton are not included in this figure. Increase in the amount of meat consumption is a sign of the improvement of the standard of living. The per capita per annum consumption of meat in France was 20 kilograms in 1840, it increased to 35 kilograms by 1892, and to 40 kilograms by 1939[13]. The consumption of pork in Taiwan was 7.3 kilograms in 1910, it reached a peak of 17.3 kilograms in 1936, and after that decreased as the importation of beans and bean cakes as animal feed became increasingly difficult with the development of the war. For comparision, the per capita per annum consumption of meat in other parts of the world in 1939 was as follows. New Zealand was the highest: 110 kilograms; Australia: 95 kilograms; U. S. A., Canada, and Britain: more than 60 kilograms; Switzerland and France: more than 40 kilograms; Italy: 20 kilograms[14]. The consumption of pork alone in Taiwan was 15 kilograms in 1939.

Fig. 9: Per Capita Per Annum Consumption of Pork, Taiwan, 1910-1943



Unit: Kilogram
Source: Animal Resources of Taiwan, pp. 63-64

16. *Change in the Attitude of the People*

People living under many kinds of changes gradually change their attitudes, or the ways of feeling, thinking and behaving. During the early years of Japanese rule, the large part of the Taiwanese were conservative farmers, who persisted in their traditional way of life. They had to face the merciless coercion of Japanese police on

Note 13: Peyret, H.: La Lutte pour less Dernées Vitalesa, 1946, Paris, qu. from Japanese tr. pp. 76-77.

Note 14: op. cit., p. 27. cz. 27: Table 144.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

181 matters of sanitation, and at times on matters of agriculture. With the passage of
178 time, experience lead them to compare their traditional way of life with that imposed by the colonial government. Some of these ways were found to be not too bad, some even adoptable. This kind of change in attitude through hard experience was fairly significant. By this, people realized for the first time that there were another ways of life besides their traditional one, and that some elements were worthy of adoption. Once the people began to adopt the new way of life, change began to speed up. From the following instances we can see that change in the attitude of people became conspicuous after the 1920's. We have discussed the influence of war and peace, the prevalence of epidemics, and the development of transportation on the attitude of the people (§ 7, 8, 12). Here the change of attitude concerning medical treatment and agriculture will be discussed.

178 Since treatment of illness touches the innermost part of life, it is only natural that
744 conservative people do not dare to allow an unfamiliar doctor with strange ways of
156 treatment to approach them. For Taiwanese, who had been accustomed to the traditional Chinese medicine and folk medicine, doctors of western medicine, particularly with their injections and operations, were dreaded. During the early years of the Japanese rule there was a prevalence of cholera. Colonial officers compelled the people to take the preventive injection. Great consternation arose among the people, and many of them, particularly young girls, escaped and hid, in order not to have the dreaded injection. In the old city of Tainan a young girl of a wealthy family was escaping in a palanquin, but unfortunately she was caught by a Japanese police on the way, and forced to take the injection. Perhaps because the shock was too great, she died in a short time. Another young girl who took the injection killed herself after she went home, because it was a dreadful shame for a young girl of high standing to expose a part of her body to the public gaze. When a person died, his family had to have a medical certificate in order to get permission for burial. In 1906 90% of the medical certificates were issued by doctors of Chinese medicine, and certificates issued by doctors of western medicine constituted only 10% of the total. The proportion of
[759] the latter increased gradually, attained to 45% by 1917 (11:1917, p. 29). By 1920, the number of doctors of western medicine already exceeded those of Chinese medicine, and by 1935, 90% of medical certificates for the dead were issued by doctors of western medicine. Thirty years after 1906, doctors of Chinese medicine and doctors of western medicine had changed positions completely. By 1935, people did not object to injections and operations any more. On the contrary, they even believed blindly in injections, and asked for an injection when they saw a doctor. This was a remarkable change in attitude.

178 Farmers are tenaciously conservative in their work. In Taiwan, farmers originally
241 used only compost and night-soil, and did not use any commercial fertilizer. When a sugar corporation started to promote the cultivation of sugar cane, they bought commercial fertilizer from Japan, and distributed it free of charge to farmers. Once a

Annex "A," Subparagraph 1a,
Sociological Background

GENERAL CHARACTER OF SOCIETY

1. Three Types of Social Integration.

182 Among Formosans, as among other peoples, there are three developmental ideal types of social integration correspondings to three developmental ideal types of society:

a) Integration by blood relationship -- tribal society
b) Integration by locality -- folk society
c) Integration by social function, or social need within an area -- national society

182 602 Blood relationship is the most direct and immediate principle of social integration. It is natural that primitive societies in their transition from band to horde to tribal society, are integrated on this principle. The aboriginal society in Formosa belongs to this type. We of course refer to integration by blood relationship and tribal society as an ideal type. Even in primitive societies there are relationships by locality and relationships by function, but blood is the main principle of social integration.

182 When a society increases in numbers and its scope is extended, various kinds of work

182 and functions are differentiated. Then the society becomes too complicated to be integrated by blood relationship. Integration by locality has to take its place. Though the dominant place is taken by locality, however, blood relationship still remains a very important principle of social cohesion. The principal of social integration of the Chinese in Formosa up to the early years of Japanese rule belonged to this type.

As a society continues to develop, some part of it will be urbanized, and handicrafts and commerce will develop. In an urban community, some members begin to make their living by means other than agriculture. Handicrafts and commerce, and later on various kinds of services, become the main concern of its members. People are integrated by their trades into guilds, and guilds are again integrated into some higher unit. This is the new principle of social integration, integration by social function or social need in its various aspects. At the same time handicrafts and commerce promote the exchange of goods, and the self-sufficient, closed village economy gradually evolves into a circulatory money economy. Eventually a national economy may develop. On the political level, a national economy requires standardization and unification, and half-independent localities within an area are generally integrated into an organic whole which becomes an administrative division of a modern state. A modern state with a national economy is a national society or civil society. In it, although social cohesion by blood relationship and locality are still important, social function or social need becomes the dominant principle of integration.

182 As long as the urban community still comprises only a small part of society, there will be no remarkable change. But when the scope of the urban community is extended and industry, commerce, and the field of services develop and become more important than agriculture, then the way of life changes greatly, agrarian society is transformed into industrial society, rural society is transformed into urban society. In Formosa the modern political-economic system was enforced by a colonial ruler, and industrialization and urbanization were begun only after the Japanese occupation.

2. Blood Relationship and Locality as Principles of Social Cohesion.

103 618 Among the place names in Formosa there are not a few called after the surname of a clan. Examples are, Tan-tso (Ch'en-tsu), which means the hamlet of the clan of the Ch'ens, or Lim-tso-liao (Lin-tsu-liao), which means the cottages of the clan of the Lins. Though hitherto not adequately noticed, this is an indication of the existence of the so-called clan-village, and it is a significant stage in social development.

103 Again, as in other countries, there are places named after the original native town of the residents. In one case the local name of a mainland town or city was adopted in Formosa, such as Chaochow (Ch'ao-chou) in southern Taiwan. In other cases, a prefix or suffix was attached to the

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

THE FERTILITY OF THE TAIWANESE

161

Regrettably there is very little actual knowledge of the early demographic situation in Taiwan that preceded this development. Poor records are most often characteristic of such conditions, for the same factors that stand in the way of promoting longevity also inhibit modernization in other respects. But ignorance of the details need not prevent us from ascertaining broadly what was the state of affairs that formerly prevailed. It is certain, for example, that the early population of Taiwanese regularly suffered heavy attrition by mortality. As late as 1906, at least 35 deaths were still occurring per thousand in the population. If this was the case after ten years of pacification, conscientious civil administration and preliminary sanitation measures by the Japanese, then the usual level of mortality before must have been even higher.

The Taiwanese on the island before 1895 were already a firmly established population, and no longer relied on immigrants to replenish their numbers. In age composition the population was a settled and not a transient one (see Fig. 3). If the decade or so preceding the first census had not presented unusually high risks of death, the age structure would have been almost the same in 1905 as it was in 1940. Even so, it was marked by large proportions of infants and young children, indicating steady and high fertility in the past. Though we have given migration credit for most of the population growth in Taiwan before 1895, there is every sign that fertility continued there at the same rate that was customary on the mainland.

Chinese culture from the earliest known times has been faced with mortality that was proverbially high. As a normal state of affairs, this imposes certain requirements if a population is to continue in existence. For example, barring large migration, enough births must regularly be produced to offset the risks of dying. Failing this, a population would also fail to survive. Prolonged high mortality thus helps to develop social institutions that encourge high fertility.

161 182.

Sufficient numbers of births, however, are not forthcoming due to this necessity alone. Their supply is ensured in countries of high fertility through elaborate features of social organization. Custom and moral precept in such societies create firm sentiment in favor of the obligations and continuity of family relationships. They furnish powerful incentives to bring forth abundant offspring. There are strong and subtle pressures toward marriage of young men and women. Family life receives great emphasis, and becomes the center of numerous activities that give it additional weight. When a wide

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

161 enough range of social functions is carried on in family units, individuals cannot readily participate in the society except as family
182 members. Their contacts with the rest of the society may come to depend on ties of kinship, lacking provision for being conducted on other terms.

Familial institutions have always been one of the most prominent elements in Chinese society. The culture of China is dominated by a morality that systematically urges and abets the production of progeny. We have already seen the by-products of this situation among the Taiwanese. The organization of livelihood, the inheritance of occupation, the immobility of the rural population and the character of migration to cities all reflected the influence of family relationships in the decisions of individuals.

At the same time, events under Japanese rule undeniably altered many of the conditions of life in Taiwan. In fifty years of selective exposure to modern innovations, Taiwanese were showing the effects of this contact, though none of these effects—except the gains in longevity—could be called spectacular. It now remains to be seen whether these developments had created more than superficial social changes, and had begun to exert any influence on fertility.

The Course of Fertility in Taiwan

163 Due to its peculiar nature in Taiwan, the system of vital registration recorded the numbers of Taiwanese births with a high standard of accuracy. Births were registered by the same system as were deaths, which has been described in some detail in Chapter VI. It functioned as part of a more comprehensive scheme of control; this scheme in turn owed its effectiveness to the ingenious way that it was fitted into local solidarities and backed by police power. Since the system recorded deaths accurately and since the figures it helped to compile in census enumerations were practically complete, the tests illustrated in Chapter VI indicate that few live births went unregistered.

By this token the data for births are nearly as valid as were the figures for deaths. In other respects, however, they are less adequate. It is not enough for the study of fertility to know the numbers of births that occurred. The significant event is in reality parenthood rather than the birth itself—we do not search for the motives of a child in entering the world, but of its parents in bringing about the event. Accordingly, some information is needed about the circumstances of birth, and in particular about the characteristics of parents. Though Taiwan's Research Bureau issued copious data each year

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

eating, while continuing to push more food on him. When old people talk, even though the younger people may consider their words pure nonsense, they merely smile and agree. When the evening is over there is usually some young grandchild waiting to lead the old man back over the dark paths to his house.

Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

ILLNESS, DISEASE, AND MEDICINE

As has already been shown in Chapter 2, the tremendous increase in population on Taiwan is a reflection of the great reduction in the death rate, which results, primarily, from the lower incidence of fatal diseases. The control of disease has been effected by such factors as public health programs which have helped eliminate diseases like cholera and malaria, an increase in the number of Western-style doctors, an increased reliance on Western medicine and medical techniques, and somewhat better sanitation as a result of education of the public and governmental enforcement of health standards.

It was during the Japanese period that Taiwan saw the advent of Western-style doctors and medicines, especially in the 1930's. However, they were few, and their practice was limited mainly to the wealthy. The benefits of their knowledge, therefore, and the everyday use of Western-style medicines did not reach many of the rural people. During this period the rural people continued to rely primarily on Chinese doctors and herbal medicines, as well as magical cures effected by shamans and healing priests. (The magical techniques are discussed more fully in Chapter 8.) However, public health measures introduced by the Japanese government to combat epidemic diseases did benefit

40: Kirk --19 S-2 (no date) 1941 Formosans
116, 185, 208, 461, 656, 177.20 Japanese

"The common people today are called upon to make so many sacrifices that the government is appealing to their sense of loyalty to the Empire and to their intense national patriotism to keep the masses united and in a mood to endure further privations. The present campaign for 'Spiritual Mobilization' includes (1) encouragement of savings, spending nothing for luxuries and very little for necessities ; (2) mobilization of gold; (3) free gifts of labor, money, and materials to help carry on the war; (4) improvement of health and training to increase the stature. Very few persons are exempt from labor services. Road and bridge building, flood prevention, cleaning and caring for shrines and shrine grounds, clearing and cleaning airports, and tree planting are types of labor which any ablebodied person may be called upon to do. When a worker receives notice to report on a certain day and at a certain time and place, he usually thinks twice before he dares to ignore the summons."

40: Kirk --20 [3] S-2 (no date) 1941 Formosans
116, 178, 185, 553

"Beginning with 1940, the 2,600th anniversary year of the Empire, Formosans have been permitted to take Japanese names. It may be significant that in the eight months just prior to the writer's visit only 367 families had signified their willingness to change their Chinese names.

In striking contrast to this nonconformity in Formosa, the Koreans, who received the same invitation, have adopted Japanese names almost 100 per cent. A distinguished American religious leader explained to the writer that the Koreans are docile and easily led, while the Formosans are more stubborn in their resistance to change."

40: Kirk--21-22 S-2 (no date) 1941 Formosans-1-2
116, 185, 656, 177.18 Japanese

"Chinese culture. The government officials of Taiwan are trying to abolish the Chinese culture patterns of the Formosan people. The 'Spiritual Mobilization' program formulated as a result of the 'China Incident' involves radical changes in social customs and religion as well as the substitution of Japanese for the Formosan language. A number of social customs are particularly objectionable to the Taiwan government. (1) Foot-binding is still practiced among the Taiwanese women, especially among those whose forefathers came originally from Fukien, China, although the custom is now prohibited by law. In 1905, according to official statistics, 59.6 per cent of the entire female population had deformed feet, in 1915 the percentage had dropped to 17.4 per cent, and in 1920 only 11.8 per cent of the women were victims of foot-binding. Today the young women are practically free from this affliction, but many of the older women are cruelly misshapen and walk with extreme difficulty. (2) The Japanese are trying to change the burial customs of the Formosans by urging cremation to promote sanitation and to conserve the land. The Chinese are reluctant to give up [22] the time-honored practice of depositing their dead in concrete mounds and vaults, and resent any interference on the part of the government. (3) Firecrackers, so dear to young and old, are no longer permitted. The Chinese find that the noise quickly brings the military police to the scene; so they comply with this law. (4) Another law which the subject people frequently disobey, however, is the prohibition of gold and silver religious papers, which the

Chinese persist in burning at their temple ceremonies. (5) Traditional Chinese costumes no longer meet with the approval of the ruling class. The Taiwanese who discard their native dress are more apt to receive favors from the military police. Guardians of the law have been known to cut cloth buttons from the garments of Formosan Chinese in public. (6) The traditional Chinese theater is no longer free to give performances of classical plays in the old style. Actors must appear in modern or Japanese clothes, and preferably in plays which dwell upon Japanese themes of loyalty and Bushido. The Taiwan puppet plays are illegal except by police permission. (7) 'Due to the present situation,' storytellers are no longer allowed free speech. (8) The Japanese are opposed to betel-nut chewing and are anxious to put a stop to the habit, but they have not yet taken positive action. The natives buy and use betel nuts without police interference. (9) As opium is a government monopoly, the Japanese are in a position to exercise strict control. Opium smoking, it is claimed, is declining rapidly. (10) The Taiwan officials do not approve of native dances and festivals, but permit a few savage tribes to stage their traditional dances under close supervision."

40: Kirk--24 S-2 (no date) 1941 Formosans
116, 185, 208, 177.18 Japanese

"Spiritual mobilization. As an integral part of the Japanization program, the 'Ten Commandments of Taiwan' are given wide publicity.

1. Revere the Emperor. Make your body, as well as soul, that of a Japanese.
2. Revere the Shinto Shrine. Discard superstition.
3. Use the Japanese language. Discard Formosan Chinese.
4. Keep your body clean. Be neat in your dress.
5. Pay attention to hygiene. Stop the habit of eating in public.
6. Build sanitary facilities.
7. Think of the comfort of others; do good to them.
8. Follow the path of an honest man. Let us abolish thieves and liars.
9. Stop gambling. Work hard and earnestly.
10. Be polite and quiet. Stop quarrels and avoid speaking in loud tones."

40: Kirk--24-25 S-2 (no date) 1941 Formosans
116, 157, 185, 177.18 Japanese

"The Japanese are ambitious and aggressive; the Formosan Chinese are good natured and easygoing. The general opinion seems to be that Japan will succeed in its policy of assimilation, although old-timers whisper that the Formosan temperament is outwardly docile, but inwardly rebellious, and often finds ways of getting what it wants [25] in spite of official regulations. This control by force, combined with the passive temperament of the people, makes open resistance extremely unlikely, but as one Formosan told the writer, 'Many reforms are changes in outward appearance only. They do not transform the spirit within...'

It is probable that many specially qualified Formosans who have accepted the 'New Order' in Taiwan will find increasing opportunity to participate in the 'reconstruction' of China under Japanese rule; for the Taiwan plan of administration may by extended to the mainland in pursuit of a 'New Order' for South China."

175 185 During the second period Formosa became the base for Japan's southward expansion. In 1936, Admiral Kobahashi was made the seventeenth Governor-General of Formosa. His appointment marked the return of military government.[45] In his first public speech, the Governor-General laid down a new two-point program for Formosa: cultural assimilation and industrial development.[46] An intensive campaign was launched to assimilate Formosan Chinese, who were encouraged to discard their own customs, religion, and language. The Japanese language was used in the schools. Chinese language newspapers were prohibited, and even banking had to be conducted in Japanese. Simultaneously the industrialization of the island was accelerated; mining and industrial enterprises were encouraged, and commercial crops such as cotton and ramie were raised. Machinery and raw materials were imported from Japan and other parts of the Japanese Empire in order to make the island self-sufficient industrially and to meet the demands of Japanese military efforts.

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45. The first seven governors-general in the period 1895-1919 were either admirals or generals. From 1919 to 1936 the governors-general were chosen from civilian officials. From 1936 on they were admirals.

46. Hideo Naitor, Taiwan- A Unique Colonial Record, 1937-38 Ed., Tokyo, Kokusai Nippon Kyokai, 1938, Ch. VI, pp. 53-54.

45:Stanford U. S-4, 51956 AD1 Formosa
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727 to 86,000 metric tons in 1945-46. The
433 Formosan farmer was faced with the "worst prospect in living memory," as one observer remarked.[8]

434 In spite of the seriousness of economic
178 conditions on Formosa, the Chinese government was able to make only limited progress in reconstruction following the restoration of the island to Chinese control. For one thing, the Nationalist Government was involved in a costly war with the Communists and faced with a huge rehabilitation program on the Mainland. Furthermore, without a surplus of exportable goods, China could not obtain the foreign exchange necessary to re-equip the damaged plants and restore agricultural production on Formosa. The island's economy continued to deteriorate until 1949, when Mainland China was overrun by the Communists and the National Government was withdrawn to Formosa.

458 The sudden influx of over one million
185 mainlanders and half a million soldiers further strained the resources of the island. Inflation was running wild and food was short. However, the removal of the national government to Formosa was not without benefit to the island.

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8. H. Maclear Bates, Report from Formosa, New York, Dutton, 1952, p. 117.

185 458 First of all, the presence of President Chiang Kai-shek strengthened the political stability of the island. Then the arrival of technical and experienced personnel and capital equipment from the Mainland greatly facilitated the island's economic rehabilitation. With the gold evacuated from the Central Bank of China at Shanghai, the Nationalist Government was able to institute currency reform. Steps were immediately taken to increase the production of food-stuff, and a program was initiated to relieve the Formosan farmers' burden of high rents and high taxes. Taxation was simplified by discontinuing numerous special levies. To insure the cultivator a fair share of his crop, a land reform program was undertaken. Land rents were cut from their previously usurious rate of about 60 per cent of the main crop to a maximum of 37.5 per cent. A limit was set on the ownership of tenanted land. Any land holding in excess of the stated limit was bought by the government and resold to the tenant.

648 In 1950 economic improvement quickened. At the outbreak of the Korean conflict, the United States government assigned the Seventh Fleet to patrol duty in the Formosa Strait. Fear of Communist invasion, which had been the underlying cause of the constant flight of capital, was dispelled. Public confidence was further enhanced by the revival of American economic assistance in June of the same

178 and American efforts have effected tremendous
648 change. However, in spite of steady gains,
433 the economy of Formosa has not achieved complete stability. Industrial and agricultural production is higher than before the war, but because of the tremendous increase in population, per capita production is still below the pre-war level. The Nationalist Government has been able to meet yearly budgetary deficits only by relying on American aid and resorting to the printing press. Forty per cent of the annual imports into Formosa are financed by United States aid. Inflation is steadily mounting. The economic situation would be very grave without United States assiatance.

185 On the avowed basis that "a nation's
433 progress and prosperity cannot be a gift from others, but must be sought through production and reconstruction,"[14] the Nationalist Government formulated a four-year plan for economic reconstruction in 1953. The plan aims at developing the island's economy production to a self-sufficient level. By the time the plan is fully implemented, the government intends that Formosa, without

14. Report of Premier Chen Cheng (now Vice-President) before the National Assembly, March 4, 1954.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

185 foreign aid, will be able to provide its people
433 with the goods and services necessary for a satisfactory standard of living and yield sufficient revenue to support needed public services, including defense. The general co-ordination and review of the plan is the responsibility of the Economic Stabilization Board (ESB), established in July 1, 1953 within the Executive Yuan.

The Four-Year Economic Development Plan, is divided into two parts -- agricultural and industrial. The agricultural plan is directed at increasing the production of rice, sugar, pineapple, tea, peanuts, and soybean as a means of increasing exports and reducing imports. Since agriculture in Formosa is comparatively well developed,[15] the aim of the Four-Year Plan is to expand farm production 20 per cent by 1957.

The major emphasis of the Four-Year Plan is on industrial development, and top priority is given to the production of power and fertilizer. The following goals have been announced[16] for expanding the output of major products on completion of the plan in 1956 (production in 1952 equals 100):

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15. Practically all arable land is now in use. The possibility of enlarging the cultivated area depends largely on expanded irrigation.

16. Industrial Development Commission of the Economic Stabilization Board, The Four-year Economic Development Plan, Taiwan, Taipei, 1955, pp. 4, 7.

185
173

Item	1956 Index	Item	1956 Index
Rice	118	Coal	131
Sugar, white	138	Canned pineapple	217
Sugar, brown	181	Flour	2,060
Wheat	126	Cotton yarn	171
Peanuts, unhulled	150	Cotton cloth	122
Soybean	187	Paper	162
Tea	122	Soda ash	1,830
Pineapple	129	Phosphate	159
Fish	139	Cement	141
Timber	124	Shipbuilding	436
Poultry	122	Power	174

45:Stanford U. S-4, 5 1956 AD1 Formosa
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433 According to the report of the Industrial Development Commission of the Economic Stabilization Board, "annual production goals as set out in the Plan have generally been realized. In some instances, such as canned pineapple and textile production, actual production has been greater than planned."[17] A new Four-Year Plan is being drawn up to cover the period 1947-1960. These development plans indicate the determination of the Chinese government to put the economy of Formosa on a more solid basis. At the end of these two four-year plans the government envisions that, despite the heavy strain of military requirements, the national budget will be balanced; inflation will be halted; there will be enough export to balance foreign exchange payments; and the economic development will be great enough to take care of the rapidly growing population.

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17. Ibid., p. 8.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

423 founder of the Republic of China, in his San-min Chu-i.[5] He called it the Land-to-the-Tiller Policy. It had been tried out in the provinces of Szechwan, Kwangsi, and Kweichow after World War II and met with some degree of success; but the reform program was interrupted by the Communist uprising. When Gen. Chen Cheng became the governor of Formosa in December 1948, he undertook with great zeal and determination to carry out the much-needed land reform in the insular provinces.

423 185 With the aid of the Sino-American Joint Commission on Rural Reconstruction (JCRR), a detailed program of land reform was mapped out. The program was to be carried out in three successive stages, namely, reduction of farm rent in 1949, sale of public farm lands in 1951, and redistribution of private lands in 1953.

A. Rent Reduction

423 429 On April 14, 1949, the Taiwan Provincial Government promulgated a set of regulations

5. San-min Chu-i [The Three Principles of the People], Taipei, China Cultural Service, reprinted 1953, p. 187.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

632 621 ments, health program, and construction for public works all depended on generous amounts of labor. Without such cheap incentives to mobilize this labor, these projects could not have been pursued so effectively.

As obvious as these advantages of "indirect rule" may be, it should be as clear that it is a poor vehicle for introducing social change. The more it is used to wield authority, the stronger and more resistant to change it can become; the more it is undermined by altering local relationships that sustain it, the less remains of its usefulness. Hence, from adoption of this scheme initially as an expedient to "pacify" the island, Japanese authorities acquired a positive interest in preserving the same set of agrarian institutions that had existed in Taiwan before their arrival.

Thus they abandoned the idea of reorganizing the rural society—primarily because they tried and failed, but also because as it stood it gave them the best access to regulation of the agricultural population and farming practices. It was in some respects a ready-made instrument for exerting the necessary control with the least disturbance of customary affairs, having in the past enabled the various parties to the export trade to prosper at the expense of farmers. For better coordination of their policies, Japanese gradually did erect a more formal type of government administration, but the basis of the system in rural areas was not greatly affected by this modification.

The Impact of Improvements in Agriculture

185 The Japanese who were charged with remodeling Taiwan's economy gave first priority to long-range investments around the fringes of agriculture. The rural economy was already geared to exchange food and related products for special capital services. Certain of these services were soon altered under Japanese influence. Positions that provided them, or that could usurp them, gradually began to be occupied by Japanese nationals—official, private, and always an indistinct class in between that wielded quasi-official sanctions.

Those innovations that worked their way into agriculture were directed chiefly to raising crop yields per unit of tilled land. Another avenue of increasing the total agricultural product was by extending 311 242

construed as a lament that there were few opportunities for advancement outside the rural villages and towns dominated by petty gentry. Discontent from this source bore few signs of being the awakening of a popular movement for independence among the Taiwanese, as it is sometimes represented. See Hsu Tze-wei (1946), p. 161 ff.

36: Rowe S-4 (no date) 1955 AF1 China AF1
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was that the Taiwanese were accustomed to the peace and order of a country under a foreign tyranny, and could not, at first, understand the "lack of uniformity" and "the complexities" of democratic rule (thanks to the Japanese, on the other hand, they had no illusions about or yearnings after Communism). Finally, the men who governed Taiwan immediately after the retrocession gave every evidence of being more interested in increasing their power and lining their pockets than in providing good management. When, therefore, the Nationalist government moved to Taiwan in 1949, it found that it had taken on numerous grave local problems in addition to those it had brought with it from the mainland.

Political Reform

The Kuomintang, the leading political party, prepared itself to deal with these problems by putting itself through a reorganization. Its younger, more liberal leaders were, to this end, appointed to a Central Reform Committee, the main task of which was to strengthen and tighten party organization and eliminate corrupt elements, opportunists, and bureaucratic politicians. On 1 September 1950, the Nationalist government was ready to announce a new political program. Its objectives were to

encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; to establish a democratic industrial system in which the workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprise; to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; to carry out local self-government and to protect civil rights.

Local self-government and land reform were the fields in which the government brought about the most spectacular changes. It first removed all the social barriers and segregation measures that had been created and maintained by the Japanese. The native Taiwanese were no longer barred from institutions of higher learning, or from the worthwhile positions in commerce and politics. They were encouraged to participate in local self-government, and to think for themselves. By 6 May 1951, 21 mayors and magistrates in 16 counties and 5 municipalities had been elected to their respective offices by popular vote. There are now 6304 village and *li* (comparable to urban wards) assemblies, in which the Taiwanese are learning the art of self-government. Representing them in town and district assemblies are 8024 village and *li* delegates. On the county and municipal levels, there are about 541 popularly elected councilmen. Of an estimated 2,650,000 qualified men and women voters, some 2,416,072 are registered. In keeping with the government's policy of economy, the total number of government employees was reduced in June, 1950 to 81,000. The percentage of indigenous citizens in the government service rose to 65.46 percent.

There has also been a marked change in the importance and responsibility of the posts held by Taiwanese. In the category of first class officials, indigenous personnel have increased from 0.92 percent under Japanese rule to 17.45 percent in the present government. In the category of second class officials, indigenous personnel rose from 1.29 percent to 25 percent.

Land Reform

The other outstanding reform accomplished by the government has been the carrying out of a new land reform program, which has greatly benefited the lot of the farmers, who are no less than 60 percent of the population. For the 70 percent of the farmers who are

36: Rowe S-4 (no date) 1955 AF1 China AF1
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Education

Free primary school education is now available to everyone, and the average number of children attending school is 80 percent. (The Japanese had restricted the education of the Taiwanese, with few exceptions, to a certain level and to certain schools). All Taiwanese are free to attend any school or college.

In 1950, there were 121 middle schools in Taiwan. Of these 34 were provincial schools, 74 established by *hsien* or municipalities, and 13 private schools. In 1950, there were eight normal schools, as compared to three on V-J Day, several vocational schools, and six institutions of higher learning, including a national university with a total enrollment of 6573 students.

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Since most of the institutions of higher learning are run by the government with a view to keeping costs down, a Taiwanese may obtain a high school or college education with only a small outlay of money. However, the demand for education far exceeds the opportunities because educational facilities are still in short supply. Thus the schools are overcrowded and competition for admission to them is keen. Education remains a major unsolved problem.

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Evaluation of Nationalist Achievements

The Taiwanese economy today supports a considerably larger population than in the past. It also supports an army, which though it has itself cultivated land and increased other types of production in an attempt to provide in part for its own consumption, still creates a heavy drain upon the government treasury. By Western standards government employees are poorly paid; an army officer, for example, earns less than a storekeeper or peddler. The cost of living remains high in relation to average income, despite the fact that the currency is more stable than it has been for over a decade. There is some unemployment (though no beggars).

In general, however, the island's postwar record of internal peace, order, and achievement is impressive. The police force and local administration are efficient and reasonably free from corruption. Crime is at a low level. For the first time in many centuries, the government has taken an accurate census. The government gives every evidence of sincerely respecting the wishes and opinions of the people. To be sure, a permit is required for entering and leaving the island, and all residents carry identification cards. Some would attribute such measures to an overzealous secret police, but the alleged reason for them, military security, appears to be the real one. It must be remembered that a government constantly on the defensive against a merciless enemy, must take extensive precautions. The important point is that despite these precautions, and the presence of five hundred thousand exiled troops on the island, the Taiwanese who keeps within the law is not likely to be deprived of life, liberty, or property. This is rather confirmed than disproved by the considerable amount of grumbling in which they indulge. At any Taiwanese newstand one may purchase magazines and papers critical of the existing regime as well as those favorable to it, and there are no restrictions on listening in on the short-wave radio. There is, on the other hand, no mercy shown genuine political offenders. The Communists employ every method in the book in their attempt to recruit Taiwanese, including blackmail and threats of harm to relatives on the mainland. The Communist slogan, familiar to everyone on the mainland, is: "We will use blood to wash Taiwan clean!" The secret police in Taiwan have good reason, therefore, to keep on the alert, and the government good reason to mete out swift justice to the proven spy or traitor. It is the general opinion

36: Rowe S-4 (no date) 1955 AF1 China AF1
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among foreign observers that in Taiwan there are fewer Communists, less unrest, and more security of the person than in any other country in the Far East except possibly Japan.

Taiwan is indisputably a thorn in the side of the Chinese Communist Party. It provides every Chinese malcontent a rallying ground on which he will be welcomed. It channels into a national force what would otherwise be the suppressed discontent of a weak and divided people. As in the Chungking days, the exiles think of themselves as occupying a temporary refuge, which they intend to maintain as a symbol of the hopes of all freedom-loving Chinese. As long as Taiwan remains outside the Bamboo Curtain, they insist, the hopes will not die.

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A SELECTED READING LIST

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15: U.S. Navy --21 [3] (no date) 1944 Formosans
116, 186, 563, 177.66 Japanese
636.66

"The first generation of Japanese in the island came as adventurers who hoped to get rich quickly in the wake and under the protection of an occupying army. A domineering and ruthless attitude toward the native population has persisted, although the second or younger generation is beginning to identify itself with the island. It has been bred away from a strong homeland (Japan Proper) tradition. Although the essence of home and school training is emphasis on 'true Japanese spirit,' in practice the lives of these young Japanese are governed by the colonial situation in which they find themselves. They have a strongly developed 'exploitation' and imperialist outlook which prevents them from learning anything of the language or customs of the people among whom they live. Very few Japanese can speak elementary Formosan-Chinese."

15: U.S. Navy --22 (no date) 1944 Formosans
116, 186, 609

"The Formosan-Chinese as a whole are intelligent but self-centered, displaying little interest in affairs beyond the limits of their own community. They do not have high standards of loyalty or honesty outside their own group. In dealing with strangers they are crafty, but with friends they are open, generous and kind. They despise the Japanese and all their ways, but respect policing power and conform to Japanese orders as the course of least resistance. They are physically tough and capable of great endurance as laborers."

15: U.S. Navy--22 [9] (no date) 1944 Formosans
116, 186, 668, 563, 177.66 Japanese
636.66

"It is evident from an analysis of election returns that the greatest interest in politics and representative government is shown in the districts where the Hakka people are predominant, notably in Shinchiku Province. It is also notable that many of the leaders of fierce resistance to the initial Japanese invasion of the island were Hakka people or people from areas in which the Hakka predominate. Not only is government -processed opium said to be more easily accessible in Shinchiku Province, but it is in this district that the Japanese have taken greatest pains to destroy local religious cults, and to press the Japanization program."

15: U.S. Navy --24-25 (no date) 1944 Formosans
116, 191, 212, 872, 186, 177.19 Japanese
636.19

"Japanese, spoken by the 323,148 Japanese, is the official language of the island, and is spoken by a high percentage of the middle-aged and younger Formosan-Chinese in urban centers, but by few of the older agricultural community. About 42 percent of the Formosan-Chinese children attend elementary public schools to learn the Japanese [25] language and doctrines. They learn very little Japanese and at the same time lose the opportunity, when young, to learn something of written Chinese. Hence these younger Chinese are technically 'literate', and can understand orders issued in simple Japanese. Japanese is supposed to be compulsory for all who know it, and it is true that Japanese has become the lingua franca of the island. It may be said that Japanese, as the official language, will be understood by someone in any large gathering of people or in every village outside of the most remote savage territory, although the Formosan-Chinese avoid using it when they can."

42: Schetelig--388 T-2 (no date) 1868 Formosans
116, 162, 186, 463, 609

The population of Sawo, which is cut off from all communication by land with the rest of the island (except with the Caponlan Plain), is consequently made up of the dregs of the Chinese population. Since agriculture is impossible, they belong to a genus of seaman such as exists only in China, for on occasion they can transform themselves into pirates, shore robbers, camphor wood thieves or mandarin's soldiers, as required. Sawo is a place with an evil reputation even among the Chinese....Shortly after we had arrived camphor agents landed and, although they were extremely polite to us on the surface, they nevertheless looked at us suspiciously for they thought that their secret trade might be unfavorably influenced by us. These persons then stirred up the inhabitants against us and spread the rumor that we were traveling in the interests of a foreign government, the Prussian Government, and they hampered us in all our movements. The web of intrigue that was thrown around us was extremely finely spun, and every day there were new troubles and new affronts; for the Chinese, when he is evil, observes the principle that evil must be profitable to him, or it is not worth the trouble. Finally, after they had tried in vain to starve us out, for we were well supplied, we had to forego water transportation. The boats and junks were hidden from us and we were compelled to travel by land over the ridge of hills to the north to the plain of Caponlan, since we could not leave behind the instruments, etc. Fortunately there were five of us and we were all armed, for among these rogues a single man would have perhaps had a hard time.

668 been really strong on the island. It has never been given a chance to take root among Formosans. Communism was repeatedly persecuted by Japan with vigor when the island was under Japanese rule. After the restoration, a great many Communists perished in the February-March 1947 incident. Another important reason why the Formosans have never cherished any hope of being "liberated" by the Communists is that the islanders are convinced that they are faring better than the Chinese on the Mainland. Refugees fled from the Mainland have many stories to tell of the terror and sufferings they have experienced, and such accounts simply render Communist propaganda ineffective. The fact that 14,209 Chinese prisoners of war in Korea refused repatriation after hostilities ceased and that the inhabitants of Yikiangshan (I-chiang-shan) and nearby islands chose to evacuate to Formosa provide additional evidence of the ineffectualness of Communist propaganda. It is quite certain that the people in Formosa are firmly opposed to Communist and that they will wholeheartedly defend the island against Communist aggression.

B. Toward Independence:

186 668 Some Formosans favor complete independence for the island from Nationalist rule. They advocate the setting up of a United Nations trusteeship as a means of enabling the island to attain autonomy. It is said that the Japanese are secretly encouraging the movement in the hope that an independent Formosa might provide a better chance for Japan's imperialist expansion in the future. The separation

186 668 movement attracted some following soon after the return of the island to Chinese rule, when the Formosans found themselves worse off than they were under the Japanese. They were denied at that time the opportunity of participating in the management of Japanese enterprises taken over by the Chinese Government. Although the new Chinese Constitution was in force on the Mainland in 1947, local self-government for Formosa was not carried out until 1949. Even then all positions of authority, in both government and business, were occupied by Mainland Chinese. As to the local people, if they had any standing during the Japanese regime, all were treated as Japanese collaborationists. Formosan Chinese who were enthusiastic about the restoration of the island to Chinese rule, expected equality from the Nationalist administration. When they were treated as second class citizens, they were naturally disappointed. Their resentment led to the growth of the independence or separation movement.

The leaders of the independence movement are the two Liao brothers, Joshua and Thomas. Their father was a tax collector at Lotung. Both brothers were educated at Columbia University, and taught in high schools after their return to Formosa. They formed a Freedom Party in 1945 and associated with the Communists in the uprising occurring February 28, 1947. Following this incident, they fled to Hong Kong, organized the Formosan League for Reemancipation, and issued a manifesto, "Formosa Speaks," demanding independence and a plebescite.

The manifesto was circulated among the representatives to the United Nations. In May 1950 a Formosan Democratic Independence Party was organized in Tokyo; its leaders included Wilfred Wong, James H. Chen, Gordon Tan, Y. T. Tsong and Frank Lim.[9] Joshua Liao was elected Chairman of the new party. It was reported by a Hong Kong newspaper[10] that in view of their past association with the Communists, the Liao brothers were confined in Sugamo prison, Tokyo, for seven to eight months after their arrival in Japan, and were bailed out by an American by the name of John Kellen. In the latter part of 1955, apparently in connivance with Japanese authorities, they were active again. In September they organized an association of Taiwan residents in Japan and a "Taiwan Provisional Congress."[11] On November 21, 1955, it was announced that Joshua Liao assumed the post of the "President of the Taiwan Provisional Government" and the chairman of the Provisional Congress, while Wu Chen-nan was named "Vice-President."[12] According to Japan's Immigration Bureau, there were in 1955 about 25,000 Formosans living in Japan. How many of the Formosan residents supported Liao was not disclosed.

In Formosa the independence movement is regarded just as traitorous as Communism. Since

9. F. W. Riggs, op. cit., p. 56.

10. Weekly Supplement of Hsing-tao Jih-pao (Hsing-tao Daily), No. 201, Sept. 15, 1955, p. 12.

11. United Press, Tokyo dispatch, Sept. 28, 1955.

12. Pan-Asia News Alliance, dispatch of November 21, 1955.

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public expression of popular sentiment is not encouraged, it is difficult to tell how many Formosan Chinese would prefer complete independence or United Nations trusteeship for Formosa to Nationalist government. Moreover, conditions have been changing rapidly in the island. The opinions of foreign observers who visited Formosa during the early years of Nationalist rule are no longer sustained by recent visits. The truth of the matter is that the tide has turned since 1949. An almost uninterrupted series of reforms, economic, political and military, has taken place recently. Land reform has done away with the inquitous system of exorbitant rental. Tenants who constituted two-thirds of the island's population and who in 1950 still suffered from undernourishment, disease and poverty,[13] now own their own land, are well-fed, and possess their own homes. The damaged industries have been rehabilitated and many new ones have been established. Industrial production has exceeded the peak level under the Japanese. Local elections were held in 1950 and 1953. Among the officials in the Provincial, prefectural and municipal governments 67 per cent are Formosans,[14] and their participation is still increasing. Although we should not take it for granted that, on account of the absence of expressed sentiment, the Formosans are no longer in favor of the autonomy movement, it is fairly safe to assume that in view of the improved conditions as well as the imminent Communist menace, the Formosan people as a whole are not

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13. W.I. Ladejinsky, "Land Reform in Formosa," Foreign Agriculture, Vol.14, No.6, June 1950, pp. 130-135.

14. A. F. Raper, etc., Urban and Industrial Taiwan--Crowded and Resourceful, Taipei, '54 p.283

986 too anxious for complete independence; at any
178 rate, not before they can successfully defend the island against aggression.

C. Toward the Government:

186 Except an insignificant number of aborigines
642 the Formosans are Chinese or of Chinese descent. Even under Japanese rule, they never forgot their own national origin. Poetry and songs composed during that period were replete with reminiscences of their mother country. That is why in 1945, the Formosan Chinese were overwhelmed with joy at the prospect of the island's being returned to Chinese rule after half a century of Japanese colonial dominance. But their enthusiasm was dampened by the abuses of Chen Yi's administration. The Nationalist government after 1949 made a determined effort to win back popular support. Economic reconstruction has been vigorously pushed forward to enable the island to achieve self-sufficienty and stability. Large government corporations have been converted to private firms and turned over to the local people. The political basis of the provincial government has been altered to permit increasing participation by Formosans.

In spite of the special concessions granted by the Nationalist Government in the past five years some Formosans, according to the sentiment expressed in the Provincial Assembly, complain that they have not been making as much headway politically as they would like. Others are not happy because the popularly elected mayors and magistrates do not have full authority in the settlement

186 642 of local affairs, since governments on the local level as provided by the Chinese Constitution exercise only those powers delegated to them by the central government. There is also the complaint, though not necessarily substantiated by fact, that the "elected Formosans often held office in name only and that Kuomintang men appointed under them held the real power."[15] To remedy such complaints and to make the Formosans more enthusiastic about self-government, two measures may be desirable: (a) extension of the powers of the Provincial Assembly, and (b) selection of personnel for top provincial posts, including that of the governor, by popular suffrage.

642 433 To gain more support from Formosans, the Nationalist government must also seek to improve further their economic well-being. Although the general industrial level has risen forty per cent above the Japanese peak year of 1941, neither in agriculture nor in industry have the gains kept pace with the increasing population. The per capita production is still below that of the Japanese period. Moreover, the rising cost of living has made the economic life of the island unstable. With American aid, the Nationalist Government has been trying to step up the industrial production of the island, but the prospect of arresting inflation is not very bright.

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15. Preston Schoyer, "Present Conditions on the Island," The Reporter, Vol. 12, March 10, 1955, p. 18.

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Annex "A," Subparagraph 2b.1,
Political Background

STRUCTURE AND FUNCTIONS OF THE CHINESE NATIONAL GOVERNMENT

642 186 The Chinese Nationalist Government is a democratic republic. The national flag has a red background which denotes the spirit of liberty and sacrifice, a white sun with twelve points, which represent twelve hour-periods of day, symbolizing unceasing progress, and a blue sky which signifies equality and justice for all.

I. THE NATIONAL ASSEMBLY

646 The existing Chinese government derives its powers from the National Assembly which, according to the Constitution, exercises political powers on behalf of the people. (A chart showing the organization of the Chinese national government is appended at the end of the present chapter.)

The delegates to the National Assembly are elected on the basis of regional and vocational representation. There should be at least one delegate from each hsien or municipality. When the population of a hsien or a municipality exceeds 500,000, there should

Annex "A," Subparagraph 1e,
Sociological Background

LANGUAGE IN FORMOSA

Major Languages and Dialects

• 19 In Formosa there are several language groups, each with its own language or dialect. Most important of the languages and dialects are: the Min-nan dialect (or Amoy dialect), the Kuo-yü (commonly referred to as Mandarin), Japanese, the Hakka dialect, and the languages of the aborigines. To a minor extent, the dialects of Shanghai and Canton are used.

Considering the educational and historical background of the population, a very rough approximation of the number of speakers of each language and dialect may be ventured:

Language or Dialect	Approximate Number of Speakers
Min-nan dialect	7,000,000
Mandarin	4,000,000
Japanese	4,000,000
Hakka dialect	1,500,000
Aboriginal languages	200,000

Language varies, first, according to ethnic groups, and second, according to the length of time the ethnic groups have been on the island. The population of Formosa can be divided into two distinct ethnic groups, namely the Chinese

and the aborigines. The latter's language consists of seven different dialects which belong to the Malay-Polynesian family.[1] They are the dialects of Taiyal, Saiset, Bunun, Tsou, Paiwan, Ami, and Yami. These dialects have no written script.

The Chinese fall into three language groups: Mainland Chinese, Formosan Chinese of Fukien descent, and those of Kwangtung ancestry -- Hakkas. The Chinese who come from Mainland China speak Mandarin[2] as a rule, although a variety of dialects representing Shanghai, Canton, Foochow, etc., are spoken by a good number of them. While not proportionate in degree, it may not be an exaggeration to say that all dialects of northern, central, and coastal China are represented in Formosa.

The Formosan Chinese, except some of Kwangtung descent, speak Min-nan (閩南) as typified by Amoy (厦門) and Swatow (汕頭) dialects. Most of the Hakkas -- a minority mainly of Kwangtung descent -- can understand and speak the Min-nan dialect, although they have an entirely different Hakka dialect of their own.

Japanese is spoken by those who inhabited the island prior to the end of World War II. Most of the adult Formosan Chinese and adult

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1. Cf. Tung-ho Tung, Languages of China, Taipei, 1953, China Culture Foundation, p. 14: "Malay-Polynesian Family consists of languages spoken in the Malay Peninsula, in some parts of Indo-China, and in the Pacific Islands."

2. It covers southern and northern Mandarin as spoken in central and northern China.

19 aborigines, as a result of fifty years of Japanese rule, are at least able to understand Japanese. Japanese was taught in schools as the official language, and a knowledge of the Japanese language continues to be general all over the island.

Geographical Distribution

Among the Formosan Chinese and the aborigines, distribution of languages is determined by geographical location of ethnic groups. The accompanying figure shows that the Min-nan dialect is widely spread over the southern plains and northern section of the island while the Hakka dialect is dominant in the eastern trench and hsien [counties] of Taoyuan, Hsinchu, and Miaoli. The lines of geographical demarcation should not be construed to imply that over these lines one dialect is not understood by those who speak the other. The actual situation, with few exceptions, is quite the contrary. Many of the Hakkas, because of occupational similarities, migration, and communication with the Fukinese, speak the Min-nan dialect with native fluency. However, in some remote Hakka villages in the eastern trench, a traveler not equipped with a knowledge of the Hakka dialect may find it necessary to communicate in sign language.

The aboriginal dialects are distributed in the central and eastern mountains. Their dialects are numerous and complex, as is exemplified by the fact that when members of the same tribe are separated geographically several sub-dialects will be spoken. Mountain tribesmen often find themselve

19 total strangers as far as a common speech is concerned.[3] The Taiyal and Paiwan tribes, which cover large areas, are good examples of this phenomenon.

Since the Chinese Mainlanders are dwelling chiefly in urban areas, the distribution of Mandarin follows closely the boundaries of their settlement. However, it must be noted that Formosan Chinese who speak Mandarin are increasing gradually over the entire island.

The Written Languages and Their Problems

212 Mandarin is the official language on the island and is used in administration, jurisdiction, education, and, to a large extent, in commerce. Its written form and that of the Min-nan and Hakka dialects are practically the same because all three belong to the Chinese Language Family. Their characteristic features as well as their problems are similar to those on the China Mainland.

Romanized Min-nan dialect has been used by some missionaries and some Formosan-Chinese Christians. For instance, a Bible has been written in Roman alphabet with diacritical marks indicating the tonal features of the Min-nan dialect. During the Japanese rule an attempt was made by some Formosan intellectuals to popularize the romanization of the dialect. They claimed it would help abolish illiteracy, because those who could not read anything written in Chinese could read its equivalent in Min-nan dialect if they would master the alphabet together with the tonal

3. Sainosuke, Fujisaki, Taiwan no banzoku [Savage Tribes of Taiwan], Tokyo, 1936, Kokushi kankokai, pp. 6-7.

212 marks. The Japanese did not encourage the movement, for they were attempting to assimilate the Formosans. The present status of the romanized Min-nan dialect has not changed, probably because it is looked upon as an obstacle to the spreading of Mandarin.

Knowledge of Foreign Languages

• 19 The Japanese language is not considered a foreign language here, for it has been adopted by nearly half of the population.

The number of people who can speak English is limited to those who have studied or lived in English-speaking countries, to local students who have limited ability to speak or to understand, and to those who come in contact most often with foreigners on the island. About one per cent of the population has ability to communicate in the English language while another four per cent has knowledge of elementary English.

No classic in the Russian language are given in the National Taiwan University -- the highest institution of learning in Formosa. Thus, it may be said that a knowledge of the Russian language is negligible.

Role of the National Language and Future Trend

The fact that Mandarin has been designated as the national language should not obscure the prevalence of the Min-nan dialect, which has

19 served for centuries as the social language of Formosa. Nearly all of the Formosan Chinese consider this dialect as their mother-tongue and speak it in their daily life. Among the people not previously educated in Japanese or Mandarin, the Min-nan dialect is the only means of oral communication. Most adults who received a Japanese education find Japanese more convenient in writing and in conversation. Likewise, the Formosan Chinese youth now attending schools find Mandarin most convenient for reading and writing. It is this last point that suggests the future significance of Mandarin.

The government is making an all-out effort to infuse non-Mandarin-speaking people on the island with knowledge of the national language. Social education, the establishment of supplementary classes throughout the primary school systems, and lessons by radio are some of the means employed. School children are quickly adopting the new language, and it is believed that in the future Mandarin will become the most important language in Formosa.

In the years to come, as the present generation grows older, Mandarin will gradually replace the local dialects as well as Japanese. It seems possible to say that in fifty years, assuming continuation of the present conditions, the native dialects and Japanese will have no linguistic importance in Formosa.

15: U.S. Navy --24 [8] (no date) 1944 Formosans
116, 191, 198

"There are three major language divisions in Taiwan, namely Chinese, Japanese, and dialects spoken by the aborigines."

15: U.S. Navy --24-25 (no date) 1944 Formosans
116, 191, 212, 872, 186, 177.19 Japanese
636.19

"Japanese, spoken by the 323,148 Japanese, is the official language of the island, and is spoken by a high percentage of the middle-aged and younger Formosan-Chinese in urban centers, but by few of the older agricultural community. About 42 percent of the Formosan-Chinese children attend elementary public schools to learn the Japanese [25] language and doctrines. They learn very little Japanese and at the same time lose the opportunity, when young, to learn something of written Chinese. Hence these younger Chinese are technically 'literate', and can understand orders issued in simple Japanese. Japanese is supposed to be compulsory for all who know it, and it is true that Japanese has become the lingua franca of the island. It may be said that Japanese, as the official language, will be understood by someone in any large gathering of people or in every village outside of the most remote savage territory, although the Formosan-Chinese avoid using it when they can."

15: U.S. Navy —25 (no date) 1944 Formosans
116, 191, 177.19 Japanese
636.19

"Japan is engaged in the stupendous task of changing the language of nearly six million people. While the Formosans continue to use their native tongue in social and business intercourse with one another, it is undoubtedly true that the number of those who have some knowledge of Japanese is increasing at a very rapid rate."

15: U.S. Navy --25 [2] (no date) 1944 Formosans
116, 162, 191, 177.19 Japanese
636.19

"The percentage of Japanese-speaking Formosans is said to have increased from .4 percent in 1905 to 8.5 percent in 1930, to 37.8 percent by 1937 and to be over 45 percent at the present time.

Table 20: Numbers of Formosan men and women who speak Japanese.

	Men	Women	Total	Percentage of total Formosan population
1905	10,801	469	11,270	.4
1915	50,143	4,194	54,337	1.6
1920	87,897	11,168	99,065	2.9
1930	394,677	70,750	365,427	8.5
1937	---	---	---	37.8
1938	---	---	---	41.9
1939	---	---	---	45.6 "

15: U.S. Navy —25 [3] (no date) 1944 Formosans
116, 191, 554, 662, 177.19 Japanese
636.19

"No information is available as to the standard used in determining knowledge of Japanese. Consequently the official figure of 45.6 percent may be an exaggeration. It is nevertheless true that the campaign to promote the use of Japanese has greatly intensified since the beginning of the China 'Incident' in 1937.

Various methods are used. Town and village police stations record the names of inhabitants considered conversant with Japanese. Periodical inspection of homes and oral questioning determines eligibility for the book. Whenever a Formosan needs recourse to the local authorities for licenses, business purposes, appeals, or other matters, reference is invariably made to the 'blue book'. If the applicant's name appears in the book, he is usually granted his request; if not, he is refused. Obviously there is room for graft and the shutting of official eyes in judging eligibility for the book. A foreigner with a wide acquaintance among Formosan-Chinese states that he knows of a number of instances where a man of some financial influence in the community is listed in the 'blue book' although his knowledge of Japanese is decidedly open to question. Nevertheless, it is understood that the system, only recently inaugurated, is producing results. Formosans have come to realize that without a listing in the book privileges and opportunities are denied."

15: U.S. Navy--25 [4] (no date) 1944 Formosans
116, 191, 624, 177.19 Japanese
636.19

"The hosei or head of the Ho must have a knowledge of Japanese. One can not now hold office or participate in local meetings or assemblies without being able to speak Japanese, the 'national language.' Newspapers daily publish reports from various localities emphasizing local pride in the spread of Japanese. An example is an item from Rato, a town in Taihoku Province, stating that a forthcoming election would remove from town and village offices every non-Japanese speaker. A census in Heito, Takao Province, revealed that only 32 percent of the Formosan population knew the national language. To remedy the situation, a school was opened for every ten homes and instruction was to be given by members of the young men's association to persons over 10 years of age."

15: U.S. Navy--25 [5] (no date) 1944 Formosans
116, 191, 208, 554, 177.19 Japanese
636.19

"Use of Japanese only is permitted in banks and government offices. Even though a Formosan speaks with a clerk who is also Formosan, the language must be Japanese. If the former is unable to converse, an interpreter is required. To stimulate language learning, insignia bearing the legend 'This household speaks the national language' are placed above the door of Formosan homes. Other signs such as 'Speak only the national language' are seen frequently in buses and public places.

A commandant of the Keelung Base said to the press, 'The basis of Japanization is dissemination of the national language. To do this, I believe we must immediately mobilize the motherhood of Taiwan under the slogan 'Raise our children in Japanese'. Even though one may know the national language, to use Taiwanese at all does not befit a 'soldier of the Imperial Army.'"

15: U.S. Navy--25 [6] (no date) 1944 Formosans
116, 191, 873, 177.87 Japanese
636.87

"There are 7,306 'National Language Training Schools' (Kokugo-koshusho) which exist for the purpose of teaching Japanese to adults. According to statistics as of March, 1938, the number of schools and students was as follows:

Table 21: Number of Language Schools and Students

	Number	Pupils	Annual Cost
Elementary training schools.....	3,454	34,865	¥1,576,975
Training schools.....	3,852	257,277	---
	7,306	292,142	

According to the Taiwan Government General, Bureau of Education, in 1939 the number of institutes remains the same, although the pupils now number 470,000."

15: U.S. Navy --25-26 (no date) 1944 Formosans
116, 191, 875, 883, 177.87 Japanese
636.87

"Sessions of the koshusho [MC: 'National Language Training Schools' established to teach Japanese to the Formosans.] are held in schoolrooms, public halls, special buildings built for the purpose, or private homes. Teachers are almost invariably Formosan-Chinese, usually members of the local young men's association who have been graduated at least from the primary schools. Quality of instruction necessarily varies greatly. A young Formosan-Chinese states that in some districts, members of the young men's association are particularly active and enthusiastic. In such cases, instruction and results at the training school may be satisfactory. In other districts there is little local interest and the quality of instruction is poor. Often the instructors themselves have an inadequate knowledge of Japanese. It is stated that occasionally a Japanese with earnest conviction to aid in the process of assimilation will volunteer [26] to teach. Such cases are extremely rare, however. Instructors receive no pay."

15: U.S. Navy --26 [2] (no date) 1944 Formosans
116, 191, 177.19 Japanese
636.19

"While the people of Taiwan are far from using Japanese in their daily life, knowledge of the language is increasing rapidly. Within a few generations it would doubtlessly supplant Formosan-Chinese among the educated to a large degree."

15: U.S. Navy --26 [5] (no date) 1944 Formosans
116, 177, 191

"An unknown but considerable number of Formosan-Chinese (students, clerks, typists, accountants and general assistants) have studied English successfully, either through interest in a non-Japanese foreign language, as an 'entertainment' language (motion pictures, etc.) or as a business language."

40: Kirk--19-20 S-2 (no date) 1941 Formosans
116, 191, 626, 177.19 Japanese

"The Japanese language. Japan has undertaken the immense task of changing the language of nearly 5,000,000 people. First of all, those who are struggling to acquire a workable knowledge of Japanese are listed in the 'blue book' and are given special privileges and exemp- [20] tions. Those who speak no Japanese have little chance of holding any elective political office. In banks and government offices Japanese alone is spoken. Above the doorways of Formosan homes where Japanese is spoken appears the legend: 'This household speaks the national language.' Signs frequently appear in busses and public places admonishing the people to 'Speak only the National Language.'"

40: Kirk--20 S-2 (no date) 1941 Formosans
116, 191, 658, 871, 177.87

"Koshusho, or national language training schools, which have sprung up to facilitate the teaching of Japanese to adults, numbered 7,306 in 1939. The classes meet in schoolrooms, public halls, or private homes under the leadership usually of Japanese-speaking Formosans who contribute their services free. From the year 1934 Formosan children will attend primary school for at least six years under a cumpulsory education law similar to the law in Japan proper."

"Japanese-speaking Formosans

Year	Men	Women	Total	Per cent of Total Population
1905	10,801	469	11,270	0.4
1915	50,143	4,194	54,337	1.6
1920	87,897	11,168	99,065	2.9
1930	294,677	70,750	365,427	8.5
1937	...	...	...	37.8
1938	...	...	...	41.9
1939	...	...	...	45.6 "

197

Reduce AC to BC

[Facing p. 92]

15: U.S. Navy --24 [9] (no date) 1944 Formosans
116, 197

"The Chinese dialects (mutually unintelligible).

(1) Variants of the Fukien dialect are spoken by approximately 4,200,000 persons, and are in turn subdivided into strong local variations. The dialect of the Chang-chou area has the widest geographical distribution.

(2) The Canton dialect is spoken by approximately 150,000 persons, most of whom live in the southwestern section, near Takao.

(3) The Hakka dialect (closer to Mandarin than the other two) is spoken by scattered communities numbering approximately 1,000,000 persons and is most frequently heard in the Shinchiku province area."

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD1

871 ently. Besides, the key educational per-
177 sonnel was composed mostly of Japa-
197 nese. To fill their vacated posts with competent indigenous educators is a time-consuming process.

872 A review of existing educational regulations indicates a policy to extend equal opportunity for free education to all the people, beginning with primary education and gradually extending to junior high school level. Of children in primary schools, 79.08 per cent were being given free education as of September 1949, in contrast to 71 per cent during
873 the pre-Nationalist period. Under the Japanese, higher education for Taiwanese youths was discouraged by means of admission technicalities. This restriction has since been removed. Government scholarships are available to deserving youths with inadequate financial means. The current problem is to provide additional facilities to relieve congestion in secondary and higher institutions of learning. It has been made more acute by the influx of some 100,000 refugee students from the mainland.[44]

871 The over-all Nationalist objective in education is to implement the political, economic, and social policies of the National Government. To meet the current emergency, a series of regulations have been adopted to "establish a central thought," "to strengthen Nationalist concepts," "to carry out reconstruction and defeat Communism," and to link education with various extension programs.[45]

The "central thought" policy revolves around Dr. Sun Yat-sen's *San-min*

[44] Data in this paragraph drawn from *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 83–146; *Taiwan Today*, cited note 11 *supra*, pp. 147–48; *The Administration of Planned Education**, cited note 43 *supra*, p. 7.

[45] "Educational Program of Taiwan during Emergency Period"* (text appears in *Taiwan Reconstruction**, Vol. 1, pp. 84–88).

[F. 220 (8)]

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the accent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1943, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1954b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan\Hokkien AD5
Taiwan AD6
Formosa AD1

words in Japanese, such as expressions to be used when entering the predominantly Japanese-manned police stations and other official places. Some uneducated men, however, learned a modicum of Japanese when they served in the Japanese army labor corps during the war period.

Under the Japanese the teaching of the Chinese written language as well as the traditional Chinese classical literature in the schools was illegal. However, village men tell about a Chinese school "secretly" conducted in a temple in Lukang even through the late 1930's. There children and teenagers were taught to read and write Chinese and to study the Chinese classics. Only a very limited number of people from Hsin Hsing and the neighboring villages attended such schools, and there were few who attended the Chinese school who did not attend the Japanese primary schools as well.

In the Hsin Hsing area, then, except for the few Taiwanese who managed to attend secondary schools or colleges or who were laborers during the war, the number of persons able to read and speak Japanese (or read Chinese) was small. Grajdanzev, mostly on the basis of Japanese sources, noted that "after 1937 five and one half million Chinese (in Taiwan) could not read a newspaper in their own language, though most of them do not know Japanese" (1942:170). The effectiveness of the Japanese educational system for much of the population of the rural area has perhaps been exaggerated. Although the Japanese school system was greatly expanded between 1937 and 1943, it appears that it did not have time to develop any depth in its effect on the peasant.

Under the Nationalist government's theoretically "compulsory" education, almost all students and former students of the present school system can now speak some Mandarin, which is the only language used in the school after the first or second year. Some of the younger middle-aged men have developed a functional knowledge of simple Mandarin as a result of recent work contacts in Taipei or service in the Chinese army.

The language situation in Hsin Hsing and the surrounding rural area is as follows (for 1958): Very young children speak only Taiwanese (Min-nan) up through the first few years of school. Children in higher grades and young people up to the age of about twenty-six speak Mandarin with varying degrees of fluency in addition to their native Taiwanese. Their fluency depends upon the amount of schooling they have had, how long they have been out of school, and the amount of contact they have had with the language at work or in other special situations after leaving school.

Some men and a few women between twenty-four and forty-five speak some Japanese in addition to Taiwanese. The men learned it

15: U.S. Navy--22 [4] (no date) 1944 Formosans
116, 198, 484, 563, 177.19 Japanese
636.19

"By making use of the Japanese language necessary in business, education and communication, the administrators of the island have created the foundation of a unity unknown in pre-occupation days. The ease of travel throughout the island is tending to blur rapidly the lines of cultural differences among the educated Formosans. All three Chinese groups are represented among the settlements along the east coast, to which many have been encouraged to move by Japanese interests."

15: U.S. Navy --24 [8] (no date) 1944 Formosans
116, 191, 198

"There are three major language divisions in Taiwan, namely Chinese, Japanese, and dialects spoken by the aborigines."

15: U.S. Navy--26 [4] (no date) 1944 Formosans
116, 198, 873, 177.19 Japanese
636.19

"English has been taught in the private mission schools and in the government schools for many years. It has been a compulsory subject in all middle and higher Schools, i.e., affecting the student age-group from 13 years upward. Pidgin English is not generally known; those who speak it will be found among the clerks and compradores who have worked for foreign firms.

The Imperial University at Taihoku, the High School at Taihoku and the Higher Commercial Colleges at Taihoku and Takao have trained small numbers of Japanese and Formosan students in Malay, Dutch, German, Thai, French, and two dialects of Chinese."

433 241 439 resources would have to be supplemented by the integration of Taiwanese and Koreans into the industrial nexus of Empire.

THE CONTEMPORARY PROSPECTS

178 727 Today the plans of the Japanese for the further development of Taiwan are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

177 198 The political travesty of the Chinese liberation of the Chinese population of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

121 eastern part of the mainland to Taiwan had been going on for several
167 hundred years, beginning in the 1600's and virtually ending about
177 1900 when it was almost completely stopped by the Japanese regime.
178 Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 During the Japanese occupation of Taiwan, except for the period
179 just before and during World War II when they attempted to Jap-
178 anize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese popula-
[144] tion has been significant. The combination of relatively efficient gov-
[20] ernment, orderliness of life, and public health measures, together with
[16] an extensive system of communications on a relatively small island has
[369] greatly facilitated rapid population increase on a stable land base and a rapidly increasing growth of urban centers.

Out of these developments, the most significant changes for the rural
369 population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and,
[167] with this an increased spread of urban influences or at least their effects into the rural villages. These increasingly significant extensions

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

4:Grajdanzev--170 [2] S-4 (no date) 1942 Formosans-1-2
116, 204, 563, 656, 177.20 Japan
636.20

"Now let us turn to another important sphere of cultural activities—newspapers. In Taiwan no newspaper can be published without the permission of the government-general, and the government-general has established a 'custom' of permitting only one newspaper to a city, so that up to 1932 there were only four newspapers in Taiwan, all in the Japanese language, though they sometimes carried a column in Chinese (1). Five

1. In 1937 a fifth one was permitted for Takao.

million Chinese in Taiwan had no newspaper of their own. In 1932 permission was granted to a Chinese weekly to appear as a daily, so that for the first time since the Japanese conquest the Chinese could read their own newspaper—Taiwan Shin-minpao. However, this experiment was short-lived. In 1937 it was decided that the people now know the Japanese language so well that no obstacles should exist to the japanization of the islanders. On March 1, 1937, all Japanese newspapers and the Chinese one carried a notice to the effect that after April 1 (for the Chinese newspaper, after June 1,) they were to cease publication of columns in Chinese (2).

2. Information on the newspapers is taken from Nippon shimbun nenkan, 1939, pp. 143-145. It is confirmed also by Sekai nenkan, 1929.

4:Grajdanzev--170 [2] S-4 (no date) 1942 Formosans-2
116. 204. 563, 656, 177.20 Japan
636.20

Thus after 1937 five and one half million Chinese could not read a newspaper in their own language, though most of them do not know Japanese."

4:Grajdanzev--170-171 S-4 (no date) 1942 Formosans
116, 175, 114, 204, 177.72 Japan
636.72

"Tadao Yanaihara, writing in 1929 when no Chinese newspaper was published, tried to find the cause of the difference between Taiwan and Korea (in the latter newspapers in Korean language are published). He thinks that the cause lies in the former independence of Korea and a resulting [171] Japanese deference to world public opinion, whereas Taiwan was a former Chinese colony and thus Japan did not have to make the same concessions to world opinion (1). We believe that this explanation is inadequate. The Japan-

1. Page 229. op. cit.

ese government had few scruples concerning world opinion for example in 1919 when it brutally suppressed the national movement of the same Korean people. The explanation is simpler. Korea was sold out peacefully by her rulers to Japan and at the time her people acquiesced in this sale. whereas the people of Taiwan did not recognize the cession of Taiwan to Japan. It is important to note that the act of cession took place not in Taiwan, but on the sea. The representative of the Peking government transferred Taiwan to the Japanese plenipotentiary on the open sea because Taiwan was in a state of turmoil. Abandoned by the government, betrayed by militarists, the islanders continued the unequal struggle for several years."

45:Stanford U. S-4, 5 1956 AD1 Formosa
AD1

Annex "A," Subparagraph 11,
Sociological Background

PUBLIC INFORMATION

GOVERNMENT INFORMATION OFFICES

208 There are four principal government information offices on Formosa. The Government Information Bureau, under the Executive Yuan, releases official statements and expresses the views of the government on the topics of the day, for the director of the bureau is the official spokesman of the government. The Fourth Section of the Kuomintang holds regular press conferences and issues statements for the party. The information office of the Ministry of National Defense issues a daily bulletin on military development. The information department of the Taiwan Provincial Government reports on the progress of the work of the various departments of the provincial government.

NEWSPAPERS

204 There are twenty-seven registered newspapers on Formosa and one in the Pescadores. For reasons of economy, the number of newspapers as well as the number of pages of each newspaper are restricted by law. Although any existing newspaper may change its

204 ownership or alter its name, no new daily newspaper may be published. In the years when the Taiwan Pulp and Paper Corporation was run by the government, the paper used by the newspapers was apportioned by the government according to the circulation of each newspaper at a fixed price. When circulation grew, more paper was provided by the government, which paid the difference between the current price of paper over and above the fixed price. The Taiwan Pulp and Paper Corporation has now been transferred to private ownership. It announced its intention to discontinue the practice of supplying paper to the newspapers at the special price on March 1, 1956. In protest, the newspapers proposed to publish a daily consolidated issue on imported newsprint.

Of the 28 newspapers (editions of the same paper printed in or for different cities being counted as separate units), Taipei alone has 15; Keelung, 2; Taichung, 3; Chiayi, 2; Tainan, 1; Kaohsiung, 1, Taitung, 1; Hualin, 2 and the Pescadores, 1. Twenty-five are morning editions and three are evening editions. All of the evening newspapers are published in Taipei.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD2

204 The total circulation[1] of Formosan newspapers, as reported by the Provincial Committee on Paper Rationing, averaged 336,706 copies per day in the year 1954. It is estimated that, in addition to the newspapers listed above, newspapers published elsewhere, mostly in Hong Kong, sell about 40,000 copies on the island. In view of the high literacy among the people, this rate of circulation (under 5 per cent of the total population) appears to be surprisingly low. The explanation may be found in the fact that a large number of the Formosan Chinese are unable to read Chinese. In an effort to suppress Chinese culture during Japanese occupation, only the Japanese language was taught in the Formosan schools and all of the newspapers were printed in the Japanese language. From March 1, 1937, even the practice of carrying a single column in Chinese was abandoned.[2] When the Chinese authorities returned, they were equally anxious

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1. Ch'eng She-wo, "Pao Yeh" ["The Newspaper Business"], Chung-hua Nien-pao [China Annuals], Taipei, China News Press, 1954, Vol. II, p. 50.

2. Andrew J. Grajdanzev, Formosa Today, New York, Institute of Pacific Relations, 1942, p. 170.

204 to eradicate the influence of Japan. On October 25, 1946, the Taiwan Provincial Government restricted the newspapers and magazines to the use of the Chinese language.[3] Because the majority of adults are unable to read the Chinese language, the circulation of newspapers and magazines is necessarily limited. It may be pointed out in this connection that for the benefit of those who cannot afford to buy a newspaper (newstand price, 70 NT cents, equivalent to US 4 cents, a copy), newspapers are posted in public places so that crowds may gather to read them.

The most important newspapers in Formosa are five in Chinese - the Central Daily News, New Life Daily, United Daily News, Chung-hua Daily News, Public Opinion, and one in English, the China Post.

1. Chung-yang Jih-pao [The Central Daily News] (daily circulation 67,170 in 1954, is the official organ of the Kuomintang. It expresses the view of the government and the

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3. Chu Hsü-pai, "Tai-wan Hsin-wen Shih-yeh" ["Newspapers in Taiwan"], Hsin-sheng Ti T'ai-wan [Taiwan under a New Life], Taipei, Hsin-sheng pao, 1950, p. 81.

204 party. Originally established in Nanking in 1919, it was moved to Formosa in 1949.

2. Hsin-sheng Pao [New Life Daily] publishes two editions, one in Taipei, circulation 41,153; and another in Kaohsiung, circulation 21,095. It was the only newspaper called Taiwan Shimpo [Taiwan Daily] on Formosa during the last years of the Japanese rule and was handed over to the provincial government after Japan's surrender. It also operates a large printing press.

3. Lien-ho pao [United Daily News] also publishes two editions. The Taipei edition has a circulation of 33,463 and the Chiayi edition has a circulation of 11,930. It is the combined issue of three newspapers, the People's Daily News, the Min-tsu Pao [National Daily], and the Economic Times.

4. Chung-hua Jih-pao [Chung-hua Daily News] is another Kuomintang newspaper, established when Formosa was restored to China. Its southern edition, printed in Tainan, has a wider circulation, 23,836, than its northern edition-Taipei, 9,558.

5. Kung-lun Pao [Public Opinion] is published by the Young China Party and has a circulation of 4,550.

45:Stanford U; S-4; 5 1956 AD1 Formosa
~~AD1~~ AD1

204 6. The China Post, an English-language daily, is independent and privately owned. Its daily circulation was 3,343 in 1954.

PERIODICIALS

There is no restriction on the publication of new periodicals. With a concentration of talented writers from the Mainland, the number of registered periodicals has grown[4] from 60 in August 1950 to 266 in June 1954. These periodicals cover a wide range of subjects, including anthropology, world affairs, meteorology, agriculture, religion, and even comics for children. Many are of value in the study of Formosa's economy and culture.

PRESS LAW AND CENSORSHIP

Article XI of the Constitution of the Republic of China, promulgated on January 1, 1947, guarantees freedom of the press. The

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4. Taiwan Sheng Cheng-fu Hsin-wen Ch'u [The Information Bureau of Taiwan Provincial Government], T'ai-wan Hsin-chih [A New Account of Taiwan], Taipei, 1950, p. 37.

204 Press Law, enacted by the Legislative Yuan in 1954, stipulates that a publisher is liable to punishment should his paper be found to incite treason, disturb the public order, or "commit acts of moral turpitude." There is no censorship of any kind before a newspaper or a magazine is printed, but all printed matter is checked by security officers after publication.[5]

In 1954, on the ground that the provisions of the Press Law had been contravened, the publication of five magazines was suspended for ten months, two other magazines were suspended for six months, and three were suspended for three months. In November 1954, the Chinese Government formulated a set of regulations with a view to tightening the control over the press, but they were hastily withdrawn because of the strong opposition manifested by the press association and the legislature.

NEWS AGENCIES

204 207 1. There are twenty-seven news agencies on Formosa. By far the largest and the oldest is the Central News Agency. It was

5. The China Handbook 1954-55, Taipei China Publishing Co., 1954, p. 188.

204 established by the Kuomintang in 1924 and
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4. The Pan-Asia Newspaper Alliance is an international news agency, serving newspapers in twelve Asian countries.

5. The Cheng Hsin News Agency [Industrial News Agency] specializes in financial and commercial news.

"Although in comparison with Japan the island is rather poorly supplied with postal, telephone, telegraph, and radio services, the system of communications is in general well developed and reaches all important points. There are 194 post offices, 219 telegraph stations (most of them at the post offices), 222 telephone booths, and 120 telephone exchanges on the island. This represents an increase of about twenty to thirty per cent in twelve years, which corresponds roughly to the rate of population growth.

Communication Statistics for Taiwan
(Absolute figures)

	1921	1929	1936	1937	1938
Ordinary mail received (1,000,000)	60.1	66.3	91.7	82.3	81.8
Parcels sent (1,000)	784	695	726	783	855
Telegrams sent (1,000)	1,398	1,513	1,874	2,067	2,102
Telephone subscribers	8,948	12,122	16,371	18,674	20,251
Telephone calls (7,000,000)	38.3	56.2	113.9	129.1	136.3
Radio (sets)	...	9,152*	27,841	40,919	45,399

* Figures for 1931.

Per capita figures

	1921	1929	1936	1937	1938	1937
Ordinary mail	16.2	14.6	16.8	14.7	14.2	65.1
Parcels	0.21	0.15	0.13	0.14	0.15	0.13
Telegrams	0.38	0.33	0.34	0.37	0.37	1.03
Telephone subscribers	0.0024	0.0027	0.0030	0.0033	0.0035	0.1370
Radio listeners	...	0.0019*	0.0051	0.0073	0.0079	0.0577

* Figures for 1931.

Sources: Taiwan Jijo and Dainippon teikoku tokei nenkan."

4:Grajdanzev--123-124 S-4 (no date) 1942 Formosans
116, 171, 205

"In seventeen years there has been no progress in the use of the means of communication by the population: the number of letters sent (per capita) fell from 16.2 in 1921 to 14.2 in 1938, while in Japan in 1937 the average was almost five times as great (65.1). In 1938 the population sent fewer telegrams [124] and parcels per capita than in 1921--only one person out of seven in Taiwan sending one parcel a year as compared with 1.13 parcels per person in Japan, and only one out of three persons in Taiwan sent one telegram a year. The number of telephone and radio users is small; there are in Japan forty times as many telephone users per capita and seven times as many radio listeners as in Taiwan. The difference may in part be explained by the absence of facilities, as may be seen from the following comparison:

Number of Inhabitants per Post Office in Taiwan and Japan

	Taiwan	Japan
1928	25,500	6,900
1937	32,200	6,200

The number of inhabitants per post office in Taiwan in the past ten years has increased from 25,500 to 32,200, while in Japan it fell from 6,900 to 6,200 indicating that the Japanese are five times better supplied with post offices. But the scarcity of facilities alone can not explain everything."

"On several occasions it has been pointed out that in Taiwan there are two groups of the population, Japanese and Chinese, with quite different levels of income. Let us compare these.

Use of Communication Facilities by the Japanese and the Chinese in Taiwan in 1938

	Total sent (1,000)		Per capita	
	By Japanese	By Chinese	Japanese	Chinese
Letters etc.	50,879	30,957	165.0	5.7
Parcels	681.2	174.0	2.20	0.032
Telegrams	1,736.2	366.1	5.560	0.068
Telephones	15,510 (units)	6,741 (units)	0.05010	0.00125

Source: Taiwan Jijo, per capita figures calculated.

It is clear that the average used in the table on page 123 are misleading, for the bulk of the letters, parcels, and telegrams are sent by the small group of Japanese living in the island, just as most of the telephones are used by them. On the average a Japanese sends 29 times as many letters, 69 times as many parcels, 82 times as many telegrams and has 40 times as many telephones as does a Chinese. An important [125] part of the letters, telegrams and telephones naturally serve official functions. It is now clear why the net-

work of post offices and telegraph offices is growing so slowly--65.4 per cent of all the Japanese on the island live in nine cities and 83 per cent in 57, all of which are well supplied with these facilities."

4:Grajdanzev--125 S-4 (no date) 1942 Formosans
116, 167, 171, 205, 563

"It is also noteworthy that the Japanese in Taiwan send on the average many more letters, parcels, telegrams and have better telephone facilities than the Japanese in Japan proper. This is an indirect proof that they are much better off than the average Japanese at home, a fact to be kept in mind when one is considering the causes for the failure of mass Japanese emigration to the island. The Japanese come to the island in order to secure a better living in Taiwan than they had at home, and not to compete with the low-paid Chinese."

6: Kirchhoff--37 [3] U-4 (no date) 1895 Formosans
116, 205, 487

A stretch of "military road" was at once built between Su-aô and the mouth of the Hua-lien, although malaria mowed down large numbers of the workmen. With this the arm of the Chinese Government, which had at once set up a postal service in this stretch, had already extended itself from the north to about the middle of the east coast. All that remained to be done was to establish contact with the east coast in the narrower southern part of the island. In the southern third of the east coast there lay the isolated coastal locality of Pi-lam. A route was laid down crossing the mountains and ending there. It begins 36 km. to the northeast of Ta-kaô on the Tsche-schan (i. e., at the Red Mountain), but it is very narrow and often uses the beds of streams, which naturally are more or less passable only in the dry season. Yet in the critical year of 1874 it proved very useful, when it was necessary to hold in check the native tribes during the Japanese invasion; for the route cuts through a number of the footpaths used by the natives.

6: Kirchhoff--38 [2] U-4 (no date) 1895 Formosans
116, 206, 491, 496

But the most recent and most important advance has to do with communications. At least a beginning is being made with the construction of more substantial roads to connect the interior, the posts are being put on a systematic and unified basis and, under the first Governor, Liu-ming-tschuan, who lent an ear with unusual readiness to the counsels of foreigners, the first railroad to be approved by the Chinese Government has been built. It runs from the harbor of Ki-lung to Sin-tschu, and a continuation running via Tai-uan to Tai-nan is being prepared by means of alinement surveying (Tracenvermessung). In 1887 and 1888 the telegraph line running from Ta-kao to An-ping was carried on to Tam-sui, Tai-pe and Ki-lung, and at Tam-sui Formosa was connected by cable with the mainland, and at An-ping with the Fisher Islands.

7: Joest--55 [13] E-5 (no date) 1882 Formosans
116, 206

Formosa is the first ... region where the Chinese have established telegraphic connections; the line leads from Taiwanfu to Takao ....

25: Plaut--32 U-4 (no date) 1903 Formosans
116, 206, 496, 654, 177.65 China
636.65

Liu-Ming-Chuan [EJ: the Chinese Viceroy appointed in 1884] was eager to make Formosa more progressive. So he built a railroad from Kelung to the capital T'ai-pei-fu, and from there on to Hsin-chu; he connected the capital T'ai-pei to T'ai-nan and the Pescadores with a telegraph line, and then he made Formosa a part of the world telegraph system by constructing a cable to Futchou. He also established a well-regulated postal system. Industry, including sugar, also received his support. Although Liu-Ming-Chuang's administration was very beneficial for Formosa, he aroused much dissatisfaction by raising the taxes and levying an inland duty, for the previous revenues were not sufficient to defray the costs of his innovations.

40: Kirk--24 [2] S-2 (no date) 1941 Formosans
116, 207, 526

"Men, women, and children among the Japanese, wherever the radio is heard, follow the physical exercises which are designed to promote health and increase their stature. Morning, noon, and night the people are supposed to take advantage of setting-up drills. One of the most impressive sights in Taihoku, the capital, is the ten-to-fifteen-minute daily workout which employees of all ranks in the government offices take at twelve o'clock, just before eating their noonday meal."

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

204 Press Law, enacted by the Legislative Yuan in 1954, stipulates that a publisher is liable to punishment should his paper be found to incite treason, disturb the public order, or "commit acts of moral turpitude." There is no censorship of any kind before a newspaper or a magazine is printed, but all printed matter is checked by security officers after publication.[5]

In 1954, on the ground that the provisions of the Press Law had been contravened, the publication of five magazines was suspended for ten months, two other magazines were suspended for six months, and three were suspended for three months. In November 1954, the Chinese Government formulated a set of regulations with a view to tightening the control over the press, but they were hastily withdrawn because of the strong opposition manifested by the press association and the legislature.

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214 on the fundamentals of modern sciences and is preparing to publish a second series. The China News and Publication Service is a privately owned concern. Among its notable publications are the Chung-hua Nien-pao [The China Annuals], the China News, an English daily, and the Ch'ing-pao Yüeh-k'an [Intelligence Monthly].

According to the statistics of the Provincial Government, there are 239 printing concerns in the Printers' Union on Formosa. The largest are the Hsing-t'ai Printing Company and the China Engraving and Printing Works, both located in Taipei.

BROADCASTING

• 207 There are twenty-nine broadcasting stations on Formosa. Eleven are located in Taipei, three each in Taichung and Kaohsiung, two in Chiayi, and the rest scattered in other cities of the island.

The most powerful broadcasting stations are the China Breadcasting Corporation, the Taiwan Broadcasting Station, the Army Broadcasting Station, the Air Force Broadcasting Station, and the Cheng-i Broadcasting Station. Each of these makes daily broadcasts to the Mainland. "The Voice of Free China" broadcasts in eleven languages ten and a half hours a day, to the countries of Southeast

207 Asia and to the United States, and is directed primarily toward the overseas Chinese and the Chinese newspapers.

In 1954, according to a survey conducted by The China News Press,[6] 37 per cent of the radio programs were educational and 50.7 per cent were classified as entertainment.

Among the five new radio stations established in 1954 one is planned for the Formosan farmer, and another presents special programs for the entertainment of the American forces stationed in Formosa.

There is no television on Formosa. All radio receivers, as a war measure, must be registered with the local telegraph office and owners are required to pay a license fee of NT$10 (US 70 cents) every three months.[7] But it is unlikely that the law is strictly enforced. The actual number of radio receivers in use is not known.

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6. Chung-hua "Broadcasting" in Chung-hua Nien-pao [China Annuals], Taipei, China News Press, Vol. II, February 1955, p. 91.

7. Regulations governing the Registration of Radio Receivers, promulgated by the Ministry of Communications, No. 8593, April 5, 1948; and Regulations Pertaining to License of Radio Receivers, promulgated by the Executive Yuan, No. 3282, June 22, 1951.

•207 The China Broadcasting Company, which manufactures inexpensive radio receivers from parts imported from Japan, estimates that the number of radios in Formosa is under 300,000. The reason for the small number of radios is twofold: the poverty of the people and the uneven distribution of electric power in rural areas. In a survey made in 1952 by the Joint Commission on Rural Reconstruction, it was found that the farmers could not afford to purchase radios costing over NT$150 (US$10), while only 25 per cent of the 800,000 farm families have electricity in their homes.[8] However, the value of radio as an educational medium is fully recognized. There have been various proposals to encourage the farm families and the people of moderate means to own radios. In 1954, the Joint Commission on Rural Reconstruction distributed 5,000 receiving sets to farmers.

MOTION PICTURES

546 Motion pictures constitute the greatest diversion for the populace on Formosa. On

8. Chinese-American Economic Co-operation, Taipei, U. S. Mutual Security Agency Mission to China, Vol. 1, No. 7, July 1952, pp. 46-51.

4:Grajdanzev--139 S-4 (no date) 1942 Formosans
116, 171, 208, 658, 177.20 Japan
636.20

"Analogous to the war expenditures are the related expenditures on propaganda. In this group we included expenditures on broadcasting, including construction of new stations, on 'social education,' and on the 'spiritual mobilization of the population'. There may be some who wonder whether the expenditures on radio-broadcasting stations may be properly considered as expenditures on propaganda. But while in Japan the users of radio receivers must pay a certain annual fee, in Taiwan broadcasting is free because the government considers it a powerful instrument for 'spiritual mobilization' and for the Japanization of the population."

4:Grajdanzev--165 S-4 (no date)1942 Formosans
116, 208, 563, 658, 871, 177.87 Japan
636.87

"In the sphere of education the island has passed through two periods, one before 1919 and another since that year. Before 1919 the policy of the government with respect to the Chinese of the island was vacillating. It was ready to recognize the existence of the Chinese in the Japanese Empire as a separate entity, and was ready even to help them preserve their Chinese character. A special society was created to investigate Chinese customs and habits and these were to be taken into consideration in court practice. Later, the failure of this policy was recognized and the avowed end became the japanization of the inhabitants of the islands in order to make them loyal subjects of the Empire. The elementary school was to become the chief instrument in this japanization. While before that period the education of the Chinese was completely neglected, since then school expenditures have grown and the number of pupils has increased from year to year. But this does not mean that there is any equality between the Japanese and Chinese as regards education. A literate population is necessary for the japanization of the islanders. Knowledge of the Japanese language is indispensable for workers, policemen, for the paocheng, for clerks, for all who work for their Japanese rulers. It does not mean, that there is any intention of raising the Chinese to an equal position with the Japanese."

4:Grajdanzev--165-166 S-4 (no date) 1942 Formosans
116, 208, 871, 876

"The school is considered the best instrument for turning the islanders into docile, law-abiding, hardworking servants. As may be seen from the following table the results, before 1930, were hardly impressive:

Number of Chinese on Taiwan who Understand the Japanese Language
(census data)

	1905	1915	1920	1930
Women	469	4,194	11,168	70,750
Men	10,801	50,143	87,897	294,677
Total	11,270	55,337	99,065	365,427

Source: Kokumin nenkan, 1940, p. 665.

[166] If we look at the rate of growth these figures may appear imposing. But actually the results can hardly be considered satisfactory since by 1930, after thirty-five years of Japanese rule over such a small area, only about ten per cent of the population understand the language of the rulers—and the degree of understanding required by the con census-takers was small."

4:Grajdanzev--171 S-4 (no date) 1942 Formosans
116, 208, 641, 625, 177.66 Japan
636.66

"Taiwan was conquered by the Japanese army. The regime which was established there was a military regime, and with few modifications it continues to be a military regime today. The government does not trust the Chinese, spies upon them, and is afraid of any movement which does not emanate from the government-general itself. Suppression of the Chinese culture and forcible japanization of the islanders is considered by the government as the best means of turning the islanders into loyal subjects of the Empire."

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans -1-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

"Political Movements (1)

1. The information concerning these movements is taken chiefly from Yanaihara, op. cit., and from Sekai nenkan, 1939.

As was shown in the historical section of this book, the island was not actually acquired by the treaty of Shimonoseki, but was conquered by the Japanese. This conquest took seven years and the Japanese recognize that the island was pacified only about 1902. However, in 1907 the Peipu rebellion broke out, the immediate cause being an attempt on the part of the officials to use the paochia in the subjugation of the savages. In 1912 the Linchi rebellion broke out in connection with the felling of the bamboo forest by Mitsui interests, and in 1915 [177] there was a new rebellion at Hsilaian. All these rebellions were suppressed by the government. These and other spontaneous movements the information concerning which was withheld by the government, are classified by the Japanese as rebellions of the old type, to distinguish them from newer movements guided by persons with modern education and ideas. The first of these movements was led by a Japanese, Taisuke Itagaki, who came to Taiwan in November 1914 and organized Dokakai, the Assimilation Society. The purpose of Itagaki was not a revolutionary one; he wanted to see the Chinese of the island assimilated by the Japanese. He realized however, that this assimilation could not take place unless the Chinese of the island

were given equal treatment and equal opportunities in education. But such ideas appeared too dangerous to the government-general and the movement was suppressed in February 1915. Another stimulus to the awakening of political consciousness in the Chinese was given by Lin Hsien-t'ang, a wealthy Chinese who petitioned the government to permit him to open a private middle school in Taichu for the Chinese. The idea was evidently so strange and radical to the Japanese that they consider this application an important stage in the political development of the island. In 1918 the Chinese from Taiwan who studied in Tokyo organized the Domeikai, an organization the primary purpose of which was to effect the abolition of some especially harsh laws in Taiwan. In 1919 this organization started a monthly publication Taiwan Youth, which a few years later was changed into a weekly. At that time the attempt to transfer its publication to Taiwan failed, but the organ became the spearhead of the educational movement and in the 'liberal' years of 1927-30 this publication succeeded in moving to Taiwan and turned into a daily newspaper, the fate of which has already been described."

4:Grajdanzev--187 S-4 (no date) 1942 Formosans
116, 208, 648, 177.64 Japan
636.64

"Under the auspices of the Taiwan government-general the Zenrin kyokai ('Good Neighbor Association') was established in 1917 and the Hakuai kai ('Philanthropic Association') in 1918. Their capital was supplied by the Government-General and the Bank of Taiwan; they opened schools and hospitals not only in South China, but also in Davao (the Philippines) and North Borneo. After 1918 the Zenrin kyokai started publication of newspapers for Chinese readers in Foochow, Swatow and other places."

15: U.S. Navy--22 [3] (no date) 1944 Formosans
116, 208, 609, 873, 177.20 Japanese
636.20

"The general population knows little of the outside world. The United Nations have individually and consistently been placed in an unfavorable light by the Japanese press, radio and educational policies. However, the Formosans who have reached the Middle and Higher Schools and those who have studied in Japan Proper, where they have had access to more evidence of American standards of living and national character, uniformly seem to admire the United States and what they understand of its liberal policies. The record of America's administration in the Philippines has made a considerable impression on educated Formosans. A few Formosans have received their higher education in America colleges and universities. For some years now they have been subject to strict surveillance."

15: U.S. Navy--25 [5] (no date) 1944 Formosans
116, 191, 208, 554, 177.19 Japanese
636.19

"Use of Japanese only is permitted in banks and government offices. Even though a Formosan speaks with a clerk who is also Formosan, the language must be Japanese. If the former is unable to converse, an interpreter is required. To stimulate language learning, insignia bearing the legend 'This household speaks the national language' are placed above the door of Formosan homes. Other signs such as 'Speak only the national language' are seen frequently in buses and public places.

A commandant of the Keelung Base said to the press, 'The basis of Japanization is dissemination of the national language. To do this, I believe we must immediately mobilize the motherhood of Taiwan under the slogan 'Raise our children in Japanese'. Even though one may know the national language, to use Taiwanese at all does not befit a 'soldier of the Imperial Army.'"

40: Kirk --18 S-2 (no date) 1941 Formosans
116, 208, 177.20 Japanese

"Japanization of the people of Taiwan. The social significance of these attempts on the part of Japan to assimilate the savages will stand out much more clearly if we look upon this process as part of a much larger movement known as ko-min-ka, which means literally 'change to Imperial people.'

This economic, social, political, and religious movement dates from the beginning of the China incident and is of particular importance because the Japanese are planning to apply this same program with variations to the conquered and occupied territories of Asia.

First of all, certain slogans appear again and again in newspapers, in theaters, in public addresses, and in public places, which are intended to take the place of independent thinking on the part of the masses.

'Spiritual Mobilization,' 'The New Order in East Asia,' '100,000,000 People of 1 Mind,' 'The Great Mission of Taiwan,' 'The Resolve of the People of Taiwan,' 'Annihilate the Unsound Doctrines Which Oppose Understanding of the Present Situation' are popular phrases which every Japanese in Formosa hears or sees several times a day."

40: Kirk --19 S-2 (no date) 1941 Formosans
116, 185, 208, 461, 656, 17. 20 Japanese

"The common people today are called upon to make so many sacrifices that the government is appealing to their sense of loyalty to the Empire and to their intense national patriotism to keep the masses united and in a mood to endure further privations. The present campaign for 'Spiritual Mobilization' includes (1) encouragement of savings, spending nothing for luxuries and very little for necessities ; (2) mobilization of gold; (3) free gifts of labor, money, and materials to help carry on the war; (4) improvement of health and training to increase the stature. Very few persons are exempt from labor services. Road and bridge building, flood prevention, cleaning and caring for shrines and shrine grounds, clearing and cleaning airports, and tree planting are types of labor which any ablebodied person may be called upon to do. When a worker receives notice to report on a certain day and at a certain time and place, he usually thinks twice before he dares to ignore the summons."

40: Kirk--24 S-2 (no date) 1941 Formosans
116, 185, 208, 177.18 Japanese

"Spiritual mobilization. As an integral part of the Japanization program, the 'Ten Commandments of Taiwan' are given wide publicity.

1. Revere the Emperor. Make your body, as well as soul, that of a Japanese.
2. Revere the Shinto Shrine. Discard superstition.
3. Use the Japanese language. Discard Formosan Chinese.
4. Keep your body clean. Be neat in your dress.
5. Pay attention to hygiene. Stop the habit of eating in public.
6. Build sanitary facilities.
7. Think of the comfort of others; do good to them.
8. Follow the path of an honest man. Let us abolish thieves and liars.
9. Stop gambling. Work hard and earnestly.
10. Be polite and quiet. Stop quarrels and avoid speaking in loud tones."

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 11,
Sociological Background

PUBLIC INFORMATION

GOVERNMENT INFORMATION OFFICES

•208 There are four principal government information offices on Formosa. The Government Information Bureau, under the Executive Yuan, releases official statements and expresses the views of the government on the topics of the day, for the director of the bureau is the official spokesman of the government. The Fourth Section of the Kuomintang holds regular press conferences and issues statements for the party. The information office of the Ministry of National Defense issues a daily bulletin on military development. The information department of the Taiwan Provincial Government reports on the progress of the work of the various departments of the provincial government.

NEWSPAPERS

204 There are twenty-seven registered newspapers on Formosa and one in the Pescadores. For reasons of economy, the number of newspapers as well as the number of pages of each newspaper are restricted by law. Although any existing newspaper may change its

546 large Chinese colony. The information office of the Mutual Security Mission to China surveyed in 1952 the number of movie projectors in rural areas.[11] It was found that 212 primary schools, 23 middle (or secondary) schools, and 64 Farmers' Associations owned movie projectors. Most of these are designed to project 16 mm. silent films. It should be noted that, of those reported, 121 projectors are but rarely or never used.

208 546 A majority of the people on Formosa live in rural areas where transportation facilities are poor and accessibility to public information is difficult. In view of the limited circulation of the newspapers and the small number of radio receivers owned by the villagers, greater use could be made of lantern slides and short films as media of public information. The Joint Commission on Rural Reconstruction made a few documentary and educational films in 1953 and 1954. It reports: "These films, which are shown free to the farmers throughout the island, constitute one of the most effective means of rural publicity and one of the most popular information services of the JCRR."[12]

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11. Chinese American Economic Co-operation, Vol. I, No. 7, Taipei, July 1952, pp. 51-52.

12. JCRR General Report IV, Taipei, 1954, p. 196.

208 Another useful medium of publicity is the
54 pictorial poster, which may be distributed by mail or by carriers. It is found that the rural people welcome these posters and use them to decorate the interior of their homes. Hence the posters possess more permanent propaganda value than either the newspapers or radio broadcasts.

241 **The Farmers' Outlook.** Since the Restoration, the land reform program has been carried out and farmers are enjoying a greater sense of freedom and individual initiative. However, the farmers are inclined to compare the current situation with conditions under the Japanese with regard to farm receipts, living conditions, political freedom, etc. In the eyes of the farmers, the Nationalist Government's success in its administration of Formosa has depended upon and will continue to depend upon how favorably its accomplishments will compare with those of the Japanese.

241 435 It is reported that a large disparity exists between the prices received for farm products and the prices paid for supplies used on the farm. To illustrate this point, the per chia farm receipts from all sources amounted to NT $9,700 in 1952,[17] while the per chia expenditures (for production purposes) were NT $5,400. Thus, the net earnings amount to NT $4,300 per chia, which constituted the support of 4.7 persons, the latter being the average farm population per cultivated chia.

241 208 When asked in a JCRR survey in 1952

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17. New Taiwan Dollars. The prevailing rate of exchange during the year was NT $15.65 to US $1.

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whether current conditions were better than those in 1937, 35 per cent of the 1,176 farmers answered in the affirmative, while 43 per cent answered in the negative, with 16 per cent indicating that conditions were about the same.[18] Among the main reasons given for the affirmative answers were land reform, more political freedom, and larger supply of household goods. Negative answers were attributed to an increase in farm population and high prices in general in comparison with the prices of farm products. However, the general outlook was hopeful among the farmers surveyed. Many of them expected to own their houses and land. Nearly 50 per cent of the heads of households stated that conditions would probably be better during the next ten years. This optimistic conviction was apparently based on the assumption that the land reform program would be carried out as planned, that peace would prevail, that prices would become lower, that more factories would be established, and that the surplus population could go back to the Mainland after the latter's liberation from communism.

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18. A. F. Raper, Rural Taiwan -- Problems and Promise, Taipei, JCRR, 1953, p. 282. The remaining 6 per cent made no answer.

45 Stanford U. S-4, 5 1956 AD1 Formosa
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The Industrial Workers' Outlook. The outlook of industrial workers is determined by the low wages, high prices, and pressure of population on the employment situation. From surveys made by the FOA among coal miners (120 households) at Hsu-ti, dock workers (450 households) in Keelung, salt workers at Putai (132 households), and fishermen (105 households) at Kaohsiung, Suao, and Tainan during 1954, it was learned that a high percentage of workers felt that current conditions were worse than in 1937. The following tabular presentation of the survey results may be examined:

45:Stanford U. S-4, 5 1956 ADI Formosa
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CONSENSUS OF OPINION ON CONDITIONS IN 1954 COMPARED TO CONDITIONS IN 1937*
(in per cent)

	Better	Worse	About the same	No Answer	
Coal Miners (120 households)	12	29	32	27	100
Dock workers (450 householders)	8	32	30	30	100
Salt workers (132 households)	11	52	28	5	100
Fishermen (105 households)	34	34	29	3	100

* Compiled from Foreign Operations Administration, Mutual Security Mission to China, unpublished pamphlets.

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Reasons such as higher price levels, low real wages, and unemployment were given by those who thought that the situation had deteriorated. For the "better" answers, more freedom and more United States aid were mentioned as reasons.[25]

When asked whether in their opinion conditions in the next ten years were like to be better or worse, more than three-fourths of the coal miners thought the situation would be about the same, while 14 per cent indicated that it would be worse. To the same question, 26 per cent of the dock workers answered "better" and two per cent, "worse," while 67 per cent gave no answer. Twenty-one per cent of the Putai salt workers said "worse," and 16 per cent "better"; and 62 per cent gave no answer.

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25. It may be noted that the workers interviewed may have said "better" with the expectation of receiving increased United States aid. Likewise, they may have said "worse" with the hope that current conditions may be improved. These answers are by no means conclusive. Many of the workers of 1954 were probably very young in 1937, and it is difficult to say whether they would recollect correctly after a lapse of seventeen years, a long war, and the change of government.

The reason for the "worse" answers were found to be overpopulation, more competition, more unemployment, and low income. More United States aid, possible reconquest of the Mainland, and more employment were given as reasons why conditions might improve.

V. LABOR ORGANIZATIONS

The Limited Role of Trade Unions. Although Article 5 of the Labor Union Law (revised) of January 7, 1949, states: "The functions of a labor union are as follows: (A) to conclude, revise, or abolish any agreement or contract on behalf of the members...," the trade unions in Formosa function principally as a medium of political education and undertake limited welfare activities on behalf of their members.

During the Japanese occupation unionization was banned by the Government-General. At that time most of the workers were not sufficiently educated or aggressive enough to form unions. Despite the National Government's attempts to encourage unionization, in view of the existing emergency conditions, trade unions are not permitted to exercise their bargaining power. The government has undertaken to train union officials. At the same time, government promotional and

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 2g,
Political Background

PROPAGANDA

PROPAGANDA AGENCIES

208
647 The principal propaganda agencies of the Chinese government in Formosa are the Fourth Section of the Kuomintang Central Committee, which is in charge of publicity, operates newspapers in Formosa and abroad, publishes magazines and books, and promotes radio programs; and the political department of the Ministry of National Defense, which makes frequent airborne leaflet raids and broadcasts daily to the China Mainland. In addition, it runs a motion picture studio, stages plays, operates mobile units which urge the people to support the government, publishes periodicals, and distributes reading matter to the armed forces.

PROPAGANDA POLICY AND ACTIVITIES

Propaganda to the Mainland

208
123 Propaganda is directed to the China Mainland by airborne leaflets and radio broadcasts. In 1954 some 375,000 leaflets were dropped every two weeks over Chekiang,

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

Kiangsu, Fukien, and Kwangtung provinces. Leaflets were also dropped on special occasions, such as the New Year Day, Double Ten National Anniversary, the death of Stalin, the liquidation of Beria,[1] and the arrival of prisoners of war in Formosa. Daily radio broadcasts are made by the Voice of Free China, the air force, the army, and the Cheng-i stations. The Voice of Free China, with 750 kilocycles, is able to reach all parts of China, including Manchuria and Sinkiang.[2]

The propaganda distributed in leaflet form covers a wide range of subjects, including the growing strength of anti-Communist forces, Communist treachery, corruption, extortion, oppression, and massacres, the eventual failure of Russian and Chinese Communists, and so forth. The daily broadcasts contain programs such as, "Everyday Comment," "What to Do," "Whistling," "The Comfortable Home," etc. Experts are engaged to write special features, and distinguished scholars and celebrities are invited to broadcast. The new radio station on Quemoy Island (Kinmen)

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1. China Handbook, 1954-55, Taipei, China Publishing Co., 1954, p. 265.
2. Chung-hua Nien-pao [China Annuals], 1954, Taipei, China News Press, Feb. 1955, Vol. II, p. 90.

20 is also making special broadcasts to the
23 Mainland.

The propaganda policy toward the Mainland is to damage the morale of enemy troops and weaken their fighting power as well as to urge the Chinese people not to co-operate with the Communists and to wait for the opportunity to rise against the Communist regime.

Propaganda Directed to the Overseas Chinese

The Kuomintang publishes Chinese newspapers in all parts of the world where there are large communities of Chinese. The Voice of Free China daily broadcasts news items in different local dialects and music programs for the entertainment of the overseas Chinese. Occasionally exhibits depicting Communist atrocities and documentary films showing military maneuvers and industrial progress on Formosa are circulated under the auspices of the Chinese consulates. Special personalities are sent abroad on lecture tours. One such instance was a tour arranged for representatives of the Communist prisoners-of-war who refused to be repatriated to Red China after the Korean armistice.

The purpose of propaganda work among the overseas Chinese is to guard against the growth of pro-Communist sympathies among

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

them by publicizing the decline in living standards on the Mainland under Communist control, and to rally support for the reconstruction work in progress on Formosa.

Propaganda in Formosa

In Formosa, stage plays and motion pictures are used for purposes of propaganda. To reach the rural population in far-off districts, mobile units have been organized to bring the people musical programs followed by the performance of a play or the projection of documentary films, interspersed with anti-Communist speeches. Maximum use is made of posters. It has been found that pictorial posters are most effective among illiterate people. Wherever one goes in Formosa, one encounteres slogans painted in huge characters on the walls, posted on every public building, even printed on the labels of beer bottles: "Wrest Back the Mainland," "Liberate Our Brothers," "Crush Communism," "Resist Russia," and "He who does not denounce traitors is a traitor himself."[3]

To military personnel, lectures on the teachings of Dr. Sun Yat-sen are given

3. The Manchester Guardian Weekly, Vol. 73, No. 13, Sept. 29, 1955, p. 12.

45:Stanford U, S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

regularly. Periodicals and other anti-Communistic pamphlets are distributed free to the armed forces. Among the publications written especially for military personnel are the Soul of the Nation, the Army Reader's Digest, the Light of Victory Pictorial, and Entertainment Monthly, and the Life of National Heroes.

Propaganda activities inside Formosa exhort the people to give full-hearted support to the government in its avowed policy to liberate the Mainland and strengthen the will of the armed forces to fight.

EFFECTIVENESS OF PROPAGANDA WORK

On Mainland China, all radio receiving sets must be registered with the police.[4] There is a strict ban on the reception of programs of foreign origin. As early as 1950 the Communist Liberation Daily urged readers to report those who listened to the Voice of America.[5] Even the children are encouraged

4. There are about one million receiving sets in Red China. See chapters on propaganda in the regional handbooks on China.

5. Chieh-fang Jih-pao [Liberation Daily], Shanghai, Nov. 12, 1950, p. 1.

208 to denounce their parents for illicit listening.
223 In view of the limited number of radio sets and the vigilant ban on reception, it is doubtful that many people on the Mainland would risk imprisonment by listening to the broadcasts from Formosa. At any rate, the radio receivers are owned by people of means, and broadcasts rarely reach the workers or people in rural districts.

For psychological warfare directed to the Mainland, airborne leaflets appear to be effective, and especially so if they are pictorial, in view of the high rate of illiteracy among the masses. In spite of the Communist threat to punish those who do not destroy or surrender leaflets immediately after such material is found, it stands to reason that many of the people will read the leaflets, if only out of curiosity. Leaflets are dropped in both urban and rural areas.

Political work by Free China among the overseas Chinese seems to be highly successful. The general attitude of the overseas Chinese is best reflected in the varying degrees of enthusiasm with which they observe the anniversaries of the founding of the Chinese Republic and that of the Red regime. Even in localities where the authorities have already recognize the Peking Government, and in spite of the efforts of the Communist diplomatic representatives, the Chinese residents display

less zeal each year in celebrating the Communist National Day. From radio programs and news columns the overseas Chinese are well informed of the ruthless manner in which their kinsmen in China are treated by the Communists. Anti-Communist associations have been organized in San Francisco, Chicago, New York, Mexico, Colombia, Chile, Peru, the Philippines, Tahiti, Korea, Singapore, and Thailand. Many groups of overseas Chinese have pledged moral and financial support to the Nationalist Government.

On Formosa, largely due to the intensive efforts of government propaganda, the people are wholeheartedly anti-Commmunist. However, some observers are skeptical about the response of the Formosan Chinese to the cause of the liberation of the Mainland.[6] Since Formosa not only serves as the rallying point for all overseas Chinese, but also keeps alive the hope for eventual emancipation of 600,000,000 Chinese people now under the

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6. "These slogans may have some effect on the youth or on the soldiers from Mainland China, but create very little impression on the adult Formosan, who views them with mild cynicism." The Manchester Guardian Weekly, Sept. 29, 1955, p. 12.

Communist yoke, the Nationalist Government feels that it must keep on publicizing the coming liberation of the Mainland, whether or not it has the means to achieve its avowed mission. Because a gigantic military campaign would draw heavily on the resources of Formosa, it is not improbable that a section of the populace might react unfavorably to government propaganda relating to an impending invasion of China. However, in the present state of emergency an opinion adverse to the declared national policy is not tolerated. Consequently there is very little public expression by means of which one can gauge the extent of response if an invasion of the Mainland were to be launched.

9: Yamasaki--233 [4] N-5 (1896-1897) 1900 Formosans
116, 211, 262

The most important domestic animal is the buffalo (Bos chinensis). It pulls the plow, and its flesh, horns and hide are also esteemed. Ordinary cattle are also found, but horses are rare. Sheep seem to be lacking, but goats exist in fairly large numbers. The most frequent four-footed domestic animal, is however, as in China, the pig, its flesh being eaten gladly by both natives and Chinese. Generally liked and raised both for their eggs and their flesh are ducks, geese, and hens.

15: U.S. Navy --24-25 (no date) 1944 Formosans
116, 191, 212, 872, 186, 177.19 Japanese
636.19

"Japanese, spoken by the 323,148 Japanese, is the official language of the island, and is spoken by a high percentage of the middle-aged and younger Formosan-Chinese in urban centers, but by few of the older agricultural community. About 42 percent of the Formosan-Chinese children attend elementary public schools to learn the Japanese [25] language and doctrines. They learn very little Japanese and at the same time lose the opportunity, when young, to learn something of written Chinese. Hence these younger Chinese are technically 'literate', and can understand orders issued in simple Japanese. Japanese is supposed to be compulsory for all who know it, and it is true that Japanese has become the lingua franca of the island. It may be said that Japanese, as the official language, will be understood by someone in any large gathering of people or in every village outside of the most remote savage territory, although the Formosan-Chinese avoid using it when they can."

E. Marital Status

162 A great proportion of the people 15 years old or more are married. The rate of divorce in Formosa is low, about 0.45 per 1,000 population as compared with 2.48 for the United States.[12]

Table 5. Marital Status of Population 15 Years Old and Over - 1953 */

	Number	Percentage
Single	1,447,803	30
Married	2,966,356	62
Widowed	388,191	8
Divorced	30,508	-
Total	4,832,858	100

*/ China News Press, Chung-hua Nien-pao 1954 [China Annual, 1954], p. 77.

F. Educational Status

• 212 87 Forty-five per cent of the total population know how to read and write. If children under six years are excluded, the percentage of literacy rises to 59 per cent. Over 90 per cent of the children from six to twelve years of age now attend primary schools; primary education is compulsory. Because many illiterate people are over school age, a literacy movement as well as other types of adult education are being promoted. A detailed breakdown of the educational status of the population is shown in Table 6.

12. United Nations, Demographic Yearbook, 1953, pp. 276-77.

19 total strangers as far as a common speech is concerned.[3] The Taiyal and Paiwan tribes, which cover large areas, are good examples of this phenomenon.

Since the Chinese Mainlanders are dwelling chiefly in urban areas, the distribution of Mandarin follows closely the boundaries of their settlement. However, it must be noted that Formosan Chinese who speak Mandarin are increasing gradually over the entire island.

The Written Languages and Their Problems

212 Mandarin is the official language on the island and is used in administration, jurisdiction, education, and, to a large extent, in commerce. Its written form and that of the Min-nan and Hakka dialects are practically the same because all three belong to the Chinese Language Family. Their characteristic features as well as their problems are similar to those on the China Mainland.

Romanized Min-nan dialect has been used by some missionaries and some Formosan-Chinese Christians. For instance, a Bible has been written in Roman alphabet with diacritical marks indicating the tonal features of the Min-nan dialect. During the Japanese rule an attempt was made by some Formosan intellectuals to popularize the romanization of the dialect. They claimed it would help abolish illiteracy, because those who could not read anything written in Chinese could read its equivalent in Min-nan dialect if they would master the alphabet together with the tonal

3. Sainosuke, Fujisaki, Taiwan no banzoku [Savage Tribes of Taiwan], Tokyo, 1936, Kokushi kankokai, pp. 6-7.

212 marks. The Japanese did not encourage the movement, for they were attempting to assimilate the Formosans. The present status of the romanized Min-nan dialect has not changed, probably because it is looked upon as an obstacle to the spreading of Mandarin.

Knowledge of Foreign Languages

19 The Japanese language is not considered a foreign language here, for it has been adopted by nearly half of the population.

The number of people who can speak English is limited to those who have studied or lived in English-speaking countries, to local students who have limited ability to speak or to understand, and to those who come in contact most often with foreigners on the island. About one per cent of the population has ability to communicate in the English language while another four per cent has knowledge of elementary English.

No classic in the Russian language are given in the National Taiwan University -- the highest institution of learning in Formosa. Thus, it may be said that a knowledge of the Russian language is negligible.

Role of the National Language and Future Trend

The fact that Mandarin has been designated as the national language should not obscure the prevalence of the Min-nan dialect, which has

45 :Stanford U. S-4, 5 1956 AD 1 Formosa

Annex "A," Subparagraph 1j,
Sociological Background

EDUCATION IN FORMOSA

I. LITERACY

The literacy of its people is a prerequisite for a country's scientific and technical advancement and for the improvement of public health. It has been reported that about sixty per cent of the population in Formosa over six years of age are able to read and write.[1] Literacy here probably includes literacy in the Japanese language for many of these people completed their education before the end of World War II, at a time when Formosa was governed by the Japanese. Some of these people may not be able to read Chinese. This complicating factor has resulted in the printing of articles and pamphlets in both Chinese and Japanese; Harvest, a partly bilingual farmers' magazine, is an example.

Literacy in Formosa is high as compared with the rates of some other Asiatic countries, although definitions of "literacy" may vary. Forty per cent of Thailand's population are literate, the literacy of Burma stands at 36 per cent, that of Indochina (Laos, Cambodia, Vietnam) is 15 per cent, and that of Indonesia 7 per cent.[2]

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1. China News Press, China Annual, 1954, Taipei, 1954, p. 78.

2. Economic Co-operation Administration, Far East Data Book, Washington, D. C., Nov. 1951.

*212 But Formosa's position appears less favorable when compared with that of industrially advanced countries such as the United States, which has a literacy rate of about 95 per cent.

The potential literacy of Formosa's population holds promise. More than 90 per cent of the children of school age are now attending primary schools, and it is expected that within fifty years the percentage of literacy will have increased to that current in the United States. Meanwhile, adult education in Mandarin Chinese is being vigorously promoted. During the school year of 1954, approximately 610,000 people attended 5,670 classes (mainly for the teaching of Mandarin) given by hsien governments and municipalities.

II. EDUCATIONAL SYSTEM

87 The educational system in Formosa follows closely that of the United States, though use of terms may differ somewhat. In the main, six years of primary and six years of secondary education constitute the basis for advancing to the collegiate level, which generally runs for four years. Post-graduate work leading to a Master's degree requires two years of study. Vocational education begins at junior middle-school level, at senior middle-school level, or at college level. Normal-school education (teacher-training) begins at senior middle-school level, where primary-school teachers are trained. Because educational facilities are limited, competitive entrance

AF1 China
FORMOSA AD 1

655 471 ments or sold to private industrialists by means of competitive bidding.[40]

Taiwan's industrial growth in recent years reflects mostly the development of government enterprises. Such state industries as gasoline, kerosene, and Diesel oil have registered considerable increase over the peak year production figures under the Japanese.[41] Other government-operated industries such as electric power, sugar, alcohol, cement, and camphor, though lower in production volume than in the prewar peak year, have made extensive recoveries in contrast to their chaotic conditions at the conclusion of World War II.[42] Augmented by ECA assistance, the over-all industrial picture may be described as one of steady growth.

Educational Policies

871 177 [212] The Nationalist government inherited from Japan an educational legacy which comprises a mixture of salutary and disadvantageous factors. Of the former is a more than 70 per cent literacy among the people.[43] A framework of primary and secondary schools scatters over the island. A fair foundation of vocational education has been laid. There are also several higher institutions of learning. A tradition of discipline, hard work, and thriftiness prevails among the students.

871 177 197 On the disadvantageous side is the predominant position of the Japanese language, both spoken and written, as a medium of learning. Many island inhabitants can hardly read Chinese or speak their native Fukien tongue flu-

[40] *Taiwan Reconstruction**, Vol. 2, pp. 408–547.

[41] *Ibid.*

[42] *Ibid.*; also *Taiwan Today*, pp. 99–122.

[43] *Taiwan Reconstruction**, Vol. 1, p. 89; also for a general treatment of the subject, see Taiwan Provincial Government, *The Administration of Planned Education**, Taipeh, 1949.

[p. 220 (A)]

10: Schumacher--225 [10] T-1 (ca. 1896) 1898 Formosans
116, 135, 214, 823

In the north of Formosa, sulphur is cut in large blocks. In the center of the island (Kagee) considerable coal seams are found and the same is true of the northern region around Kelung. The Su-ao river carried gold dust together with rubble as it flows down from the mountains, but the Chinese do not attribute special importance to the gold of the stream. Their interest in camphor is much greater.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

PUBLISHING FIRMS

214 A large number of Chinese scholars took refuge in Formosa after the loss of the Mainland, and as a result an abundance of literary and scientific works has made its appearance in the past five years. However, because of the limited number of readers, the new publications generally are not remunerative. They are shunned by commercial publishers, such as the Commercial Press, the Chuang Hua Book Company, and the World Book Company, which restrict their business on Formosa to the publication of textbooks for schools.

The publishing of new books usually is undertaken by publishing houses supported either by the government or by the Kuomintang. The China Cultural Service since its inception in October 1950 has published an average of one new book a day, the bulk of which is anti-Communist literature. On the other hand, the China Culture Publishing Foundation, established in April 1952, is devoted to the publication of scholarly works. Both organizations included among their new publications in 1953 and 1954 a number of informative pamphlets in the English language. The Cheng Chung Book Company is another publisher financed by the Kuomintang. It has compiled the first series of one hundred volumes

214 on the fundamentals of modern sciences and is preparing to publish a second series. The China News and Publication Service is a privately owned concern. Among its notable publications are the Chung-hua Nien-pao [The China Annuals], the China News, an English daily, and the Ch'ing-pao Yüeh-k'an [Intelligence Monthly].

According to the statistics of the Provincial Government, there are 239 printing concerns in the Printers' Union on Formosa. The largest are the Hsing-t'ai Printing Company and the China Engraving and Printing Works, both located in Taipei.

BROADCASTING

207 There are twenty-nine broadcasting stations on Formosa. Eleven are located in Taipei, three each in Taichung and Kaohsiung, two in Chiayi, and the rest scattered in other cities of the island.

The most powerful broadcasting stations are the China Broadcasting Corporation, the Taiwan Broadcasting Station, the Army Broadcasting Station, the Air Force Broadcasting Station, and the Cheng-i Broadcasting Station. Each of these makes daily broadcasts to the Mainland. "The Voice of Free China" broadcasts in eleven languages ten and a half hours a day, to the countries of Southeast

4:Gradanzev--169-170 S-4 (no date) 1942 Formosans
116, 171, 217, 346, 563

"Let us now consider briefly other cultural institutions in Taiwan. Below we give the data on libraries in Japan and in Taiwan.

Libraries in Japan and in Taiwan, 1936

	Japan	Taiwan
Number of Libraries	4,730	86
Books	12,647,973	369,961
Readers	24,124,344	886,084
Readers per year per capita of population	0.34	0.16

Source: Dainippon teikoku nenkan.

The libraries in Japan are not visited very often—on the average only one out of three persons visits a library once a year—but in Taiwan only one out of six persons finds his way to a library once during the year. There is nothing astonishing [170] in this when we recall that there are only eighty-six libraries for a country with a population of six millions; it means that only the cities, where the Japanese are concentrated, are supplied with them."

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD1

873 In 1954, there were 23 provincial and private vocational schools which provided teaching staffs and facilities for some 10,000 people, mostly factory workers and farmers, and gave classes in vocational education for periods ranging from 2 to 12 months. In the same year, there were also 418 vocational classes, most of private organization, of which 213 taught the fundamentals of tailoring, 39 taught English, 30 taught typewriting, and 30 accounting.

Active promotion of social education by the government is worthy of mention. The provincial Department of Education has built four social education halls in Hsinchu, Changhua, Tainan, and Taitung, which are used for counseling and teaching in all fields of social education. These education halls are often used for concerts, movies, and social meetings of various kinds. Audio-visual aids are now widely used in teaching, and local governments are ordered to set aside a certain portion of their budgets for this purpose. A radio network for educational purposes, reaching the entire island, is now in operation. (See chapter on Propaganda and Public Information.)

•217 With the exception of those located in various schools, the following are the most important libraries and museums on the island: The National Central Library with 120,000 volumes, located at the Botanic Garden, Taipei; two provincial libraries, at Taipei and Taichung, and 15 hsien and municipal libraries at Taipei, Tainan, Kaohsiung, Keelung, Hsinchu, Yilan, Taoyuan, Taichung, Changhua, Chiayi, Pingtung, Hualien, Penghu, Miaoli, and Nantou. These seventeen

45:Stanford U. S-4, 5 1956 AD 1 Formosa AD1

217 libraries have a total of 46,187 books in European languages, 241, 574 in Chinese, and 240,603 in Japanese.

874 The provincial Department of Education also maintains two trade schools for the deaf, dumb, and blind at Taipei and Tainan. These schools provide free education in trades such as woodworking, barbering, shoemaking, massaging, etc., and can accommodate 436 students, principally children.

658 Special attention has been given to fine arts education in order to encourage the aesthetic aspirations of the people. The Ministry of Education recently established for this task the Committee for Fine Arts Education and the Committee for Research and Improvement of Chinese Opera. New plays are being written and concerts, art exhibitions, and other cultural events are provided under the committees' promotion.

III. ROLE OF THE GOVERNMENT

A. Content and Character of the Role

87

In Formosa, the government has general control over the supervision, educational policies, and organization of schools at all levels.

The Executive Yuan, in its proposal of an administrative program to the Legislative Yuan in March 1952, set its educational objectives as follows: "that in order to meet the needs of time...

4:Grajdanzev--85 S-4 (no date) 1942 Formosans
116, 221, 226, 433, 471, 177.22 Japan
636.22

"Fishing, which did not demand an elaborate equipment, was an important auxiliary occupation for the Chinese farmers, especially in slack seasons. The sea around Taiwan is rich in fish and the Chinese are expert fishermen. It is natural, then, that fishing has become an important element in the economy of the coastal farmers. But at the time of their conquest of Taiwan the Japanese were not interested in the fisheries because at that time the seas around Japan proper and near Kamchatka had not been sufficiently utilized. Petty regulations, the taxing of fishermen, and other measures brought a decline in this ancient Chinese occupation and only recently, when the Japanese felt a need for more fisheries, and when their huge corporations with their mechanized equipment turned to the South, did the government become interested in fishing. The results were the same as in all other spheres of the economic life of Taiwan: Japanese fishing grew at the expense of Chinese."

15: U.S. Navy--23 [8] (no date) 1944 Formosans
116, 167, 221, 443, 177.16 Japanese
636.16

"The Japanese put an end to unregistered immigration and emigration when they took over the island in 1895.

All Chinese wishing to immigrate were required to register with a Japanese consular agent in China, and to register in Taiwan after arrival. Actually, a considerable clandestine unregistered traffic continued by small boats plying the Straits.

Until 1937 there was a seasonal movement of labor. Workers crossed from the mainland to work through the tea, sugar or pineapple seasons. After they had made enough to live on for some months, they returned to their legal homes on the China coast. A considerable number of merchants and day laborers engaged in urban enterprises were accustomed to pass back and forth between Canton and Taiwan, entering principally through Takao. As of July, 1935, there were on the island 11,327 households of Chinese holding Chinese citizenship, totaling 41,651 persons. Since 1937 (the outbreak of the China War) seasonal migration has been suspended."

15; U.S. Navy --24 [2] (no date) 1944 Formosans
116, 166, 177, 221

"In normal times population movements which entail permanent shifts in residence or occupation have been (a) from farms to urban centers; (b) from older residences to new industrial sites and into war industry; (c) subsidized movements of both farm and industrial labor to the East Coast valley; (d) compulsory movement of aborigines from scattered mountain settlements to villages established by the police; (e) movements of families and individuals returning to Japan; and (f) movements of traders, merchants, and seasonal labor to and from the China coast before 1938."

4:Grajdanzev--85 S-4 (no date) 1942 Formosans
116, 221, 226, 433, 471, 177.22 Japan
636.22

"Fishing, which did not demand an elaborate equipment, was an important auxiliary occupation for the Chinese farmers, especially in slack seasons. The sea around Taiwan is rich in fish and the Chinese are expert fishermen. It is natural, then, that fishing has become an important element in the economy of the coastal farmers. But at the time of their conquest of Taiwan the Japanese were not interested in the fisheries because at that time the seas around Japan proper and near Kamchatka had not been sufficiently utilized. Petty regulations, the taxing of fishermen, and other measures brought a decline in this ancient Chinese occupation and only recently, when the Japanese felt a need for more fisheries, and when their huge corporations with their mechanized equipment turned to the South, did the government become interested in fishing. The results were the same as in all other spheres of the economic life of Taiwan: Japanese fishing grew at the expense of Chinese."

4:Grajdanzev--85 [2] S-4 (no date) 1942 Formosans
116, 226, 228, 433

"The growth of fishing and of other occupations connected with it, such as the gathering of sea weeds, manufacturing of fish cakes etc., may be seen in the following table [see table on page 86--analyst]."

4:Grajdanzev--85-86 S-4 (no date) 1942 Formosans
116, 226, 474

"The growth was therefore slow. The part played by the fisheries in the occupations of the population is not great. The fishermen are either united into associations or are working for Japanese or Chinese entrepreneurs. There are no statistics showing the division of entrepreneurs into Japanese and Chinese, but the names of the firms serve as an unmistakable [86] guide. The various types of fishermen are united into sixty-two associations of 16,516 persons. The total products sold by these associations were valued in 1937 at ¥2,670,201 showing that for the members of these associations fishing is only an auxiliary occupation."

4:Grajdanzev--86 S-4 (no date) 1942 Formosans
116, 226, 228, 471

"Gross Value of Fisheries' Products
(1,000 yen)

	1919	1923	1928	1931	1934	1936	1937	1938
Value of catch	5,058	9,031	12,670	8,483	11,453	14,934	14,513	15,671
Value of manufactured products	1,424	3,304	2,706	1,525	2,291	2,500	2,324	2,359
Value of products of fish ponds	2,422	1,944	3,402	3,047	2,890	4,207	4,545	5,525
Total	8,904	14,279	18,778	13,055	16,634	21,641	21,382	23,555"

10: Schumacher--224 [4] T-1 (ca. 1896) 1898 Formosans
116, 175, 226, 505

The Chinese fishermen of Lokkang are born on their boats and probably have never set foot in a town. They must be the direct descendants of the dangerous and powerful pirates who even hundreds of years ago were forbidden to enter Chinese ports and rivers. Now they are poverty stricken and on the way to becoming extinct because it is not quite so simple to seize ocean liners made of iron and steel as it was to catch barges and galleys. Now they sail along the coasts with their junks and pick up freight which must be unloaded the next day if they are eager to make a business of freight transportation. Carried by the flood they continue these voyages until the storm throws them on the beach or casts them adrift on the open sea where the waves are more regular than near the shallow shores, but still high enough to embrace the junks and to crush them like rotten match-boxes.

467

Railroad workers union	13	22,265
Highway workers union	13	5,121

* The China Annual 1954, Vol. 3, Feb. 1955, p. 89.

Labor unions in Formosa are generally directed by members of the Kuomintang and are subsidized in part by the government. Their main functions are to seek improvements in wages and working hours, to look after the welfare of the workers, and to participate in patriotic activities. The most noteworthy service offered are social security measures which include accident insurance, maternity and life insurance, pensions at retirement, and low-cost housing for workers. Some unions also operate clinics, day nurseries, and co-operative groceries for the benefit of their members.

474
• 226

Formosa has a long seacoast and over seventy islets. Over 232,000 people are engaged in fishing. The fishermen's associations were formerly controlled by fishing-boat owners and owners of the fish ponds, and funds used in welfare work were derived from a surcharge of the price of fish.

474 In 1954 the fishermen's associations were reorganized by the provincial government
226 to give the workers a greater share of control.[9] There are at present seven local units and one provincial fishermen's association, with a total membership of 80,123. They construct and repair fishing boats, operate facilities for cold-storage, and offer emergency aid to the fishermen and their families.

474 Trade associations are formed by people belonging to the same trade. They combine to form either a chamber of commerce or an association of industries. The professional associations are organized by lawyers, accountants, journalists, and physicians. There are eleven such associations, some having a local organization in each hsien and municipalities, others with only a provincial organization. Social organizations, devoted to social welfare and relief work, are sponsored by the government, by religious groups, and by civic clubs. Their activities include the collection and distribution of comforts for the armed forces, aid to women in distress (unwed mothers, mistreated wives

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9. "Under the new set-up, two-thirds of the directors, officers, and inspectors of the association will be workers." Arthur F. Raper and others, Urban and Industrial Taiwan-Crowded and Resourceful, Taipei, Sept. 1954, p. 292.

4:Grajdanzev--85 [2] S-4 (no date) 1942 Formosans
116, 226, 228, 433

"The growth of fishing and of other occupations connected with it, such as the gathering of sea weeds, manufacturing of fish cakes etc., may be seen in the following table [see table on page 86--analyst]."

15: U.S. Navy --24 [4] (no date) 1944 Formosans
116, 221, 591, 438, 602

"Temporary movements. The people who move to these industrial sites [MC: i.e. developing industrial centers like Keelung, Shinchiku etc.] leave their families, or perhaps only some of the children, with the grandparents on the farms. There is a constant traffic (largely on foot) between ancestral homes in the country and the houses of sons and daughters in town. A great deal of produce is carried into the city for private consumption in this fashion, and in turn various small goods are carried out again to the country. The continuing and strong relationship between the main house and all branches of a family is of very great importance in Chinese life."

4:Grajdanzev--86 S-4 (no date) 1942 Formosans
116, 226, 228, 471

"Gross Value of Fisheries' Products
(1,000 yen)

	1919	1923	1928	1931	1934	1936	1937	1938
Value of catch	5,058	9,031	12,670	8,483	11,453	14,934	14,513	15,671
Value of manufactured products	1,424	3,304	2,706	1,525	2,291	2,500	2,324	2,359
Value of products of fish ponds	2,422	1,944	3,402	3,047	2,890	4,207	4,545	5,525
Total	8,904	14,279	18,778	13,055	16,634	21,641	21,382	23,555"

4:Grajdanzev--86 [21 S-4 (no date) 1942 Formosans
116, 228, 471, 473, 563

"As to the other fishing enterprises, their relative strength may be presented in the following manner:

Fishing Enterprises in Taiwan

	Number of firms	Nominal capital (1,000 yen)	Paid-up capital (1,000 yen)	Average paid-up capital per company (1,000 yen)
Japanese corporations with offices in Japan	2	101,500	65,500	32,750
Japanese corporations with offices in Taiwan	28	5,972	3,044	109
Other firms (mostly Chinese)	21	429	399	19

In this field the Chinese can hardly compete with the Japanese because of their lack of capital (1).

1. It is interesting to note that, according to the last census, out of 82,338 Chinese fishermen 16,382 were employers, while among 5,045 Japanese only 101 were employers. Evidently, the Chinese 'employer' had one to three workers, while the Japanese employer was a person or firm of considerable means."

6: Kirchhoff--32 [3] U-4 (no date) 1895 Formosans
116, 228, 262

Many thousands make their living along the western coasts by sea fishing and the apparently even more profitable cultivation of oysters, in part as "rock oysters" on stones and in part as "bamboo oysters" in planted areas of bamboo cane. The yearly return from this oyster cultivation is said to amount to 116,000 marks and nevertheless to be insufficient for the more wealthy Chinese who dote on them, so that large quantities of dried oysters from the mainland are imported also.

9: Yamasaki--233 [6] N-5 (1896-1897) 1900 Formosans
116, 228

Many oysters are carefully raised on the southwest coast, particularly near Anping.

10: Schumacher--225 [9] T-1 (ca. 1896) 1898 Formosans
116, 228

Along the western coast of Formosa, thousands of Chinese make a living by ocean fishing and the cultivation of oysters. The cultivation of oysters is carried on partly on rocks and partly on bamboo poles laid out. It is said that the income is almost a million Mark annually.

313 at approximately 202,258,000 cubic meters.[14]
433 Broadleaved trees account for about 65 per cent of this reserve; the remainder is made up of coniferous trees. Only 4.3 per cent of the reserve is privately owned; about 90 per cent is owned by the government, which maintains complete control of the island's forestry. It is estimated that about 1,000,000 cubic meters of timber may be cut annually without impairing the total reserve. Production of timber in 1953 was estimated at 515,000 cubic meters; in 1954, at 546,000 cubic meters. Government policy has been to cut less than 50 per cent of available timber, and the government's reforestation program assures that an area equivalent to the timberland cut is replanted each year.[15]

VIII. FISHERIES

228 There are four main categories of
433 fisheries on Formosa -- deep sea, inshore,

14. Ibid., No. 3, March 1955, p. 104.
15. Ibid., p. 106.

coastal, and fish culture. Coastal fishing is most important, since it furnishes more than 50 per cent of the fish catch every year and serves as a source of income for over 140,000 fishermen -- approximately 61 per cent of the population who earn their living in the various fishing industries.[16]

Fishing has become an increasingly valuable part of the island's economy (see Table 9). More efficient methods have been introduced, there are a greater number of powered fishing vessels available today, and a large area is under culture. However, annual production still falls short of the minimum per capita consumption requirements, estimated to be approximately 42 grams per day. Only in the year 1954, when production was approximately 152,500 metric tons, was the minimum requirement reached. Further increases are necessary, for the optimum per capita consumption is estimated to be as high as 84 grams per day. Neither coastal fishing nor fish culture can be increased substantially. The Formosan government must find means to encourage deep-sea and inshore fishing.

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16. China Annual 1954, Vol. 3, p. 86.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 9 follows p. 556.)

Table 9. Production of Fish*
(in 1,000 metric tons)

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	Total	Ocean Fish Catch			
		Deep Sea Fisheries		Coastal fisheries	Fish culture
		Government	Private		
1936	93.0	26.0		52.0	15.0
1937	94.0	30.0		48.0	16.0
1938	90.0	34.0		39.0	17.0
1939	98.0	40.0		43.0	15.0
1940	119.0	57.0		52.0	10.0
1941	85.0	28.0		45.0	12.0
1942	68.0	21.0		33.0	14.0
1943	47.0	5.0		32.0	10.0
1944	23.0	1.0		16.0	6.0
1945	17.0	- #		12.0	5.0
1946	51.0	2.6	0.4	38.0	10.0
1947	62.0	3.0	-	44.0	15.0
1948	83.0	2.7	4.3	51.0	25.0
1949	80.0	2.9	2.1	52.0	23.0
1950	84.0	6.1	5.9	47.0	25.0
1951	104.0	10.4	5.6	63.0	25.0
1952	122.0	10.9	6.1	74.0	31.0
1953	130.6	14.6	9.6	67.9	38.6
1954	152.5	14.5	12.5	83.9	41.6

* FOA Mutual Security Mission to China, Taiwan Economic Data Book, Part II, Vol. 3, Taipei, 1955.

\# Not available.

[Table 9 follows p. 556]

36: Rowe S-4 (no date) 1955 AF1 China AF1
Formosa AD1

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use.

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak.

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1952), cement (389,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures.

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 630,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–52, the world market price began to rise, and sugar production is gradually returning to its previous high levels.

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries.

A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government.

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes.

C F 433
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C F 651

4:Grajdanzev--68 S-4 (no date) 1942 Formosans
116, 231, 492, 177.23 Japan
636.23

"Although it has been said that Taiwan is well stocked with domestic animals and fowls, this requires some qualification. The animals bred are for draft purposes and for production of foodstuffs. In Taiwan either the water buffalo or some type of cow is used for draft purposes. Horses, donkeys and mules are almost entirely absent. The immigrant from Fukien had no place for the horse in his economy, but the Japanese government, in its efforts to supply the army with horses, worked out a ten-year plan and a thirty-year plan for Taiwan. According to the first, the number of horses was to be increased to 9,000; according to the second presumably to be applied simultaneously, the number of horses was to be raised to 110,000 head. In a region where rice occupies sixty per cent of the area, horses cannot be used for work and it is hardly conceivable that the poor farmers of Taiwan will begin to raise Arabian and Anglo-Norman horses as the plan foresees (1). The actual number of horses in 1938 was rather more than 300 while forty

1. Taiwan Jijo, p. 479; figures for the plans are taken from Sekai Nenkan, 1939.

years ago there were two hundred to three hundred horses."

4:Grajdanzev--68-69 S-4 (no date) 1942 Formosans -1-2
116, 231, 492, 171

"The draft animals in Taiwan are the water buffalo and, second in importance, the 'yellow cow'. The water buffalo [69] is a strong animal, slow in movement, which likes to wade in water, and is satisfied with coarse fodder. Its meat is not very palatable. The yellow cow is less powerful but more alert, and its meat is much better than that of the buffalo. Milch cows in Taiwan are few in number—in 1938 they were estimated at 1,275. No statistics of the number of cows and buffaloes of working age are available, but the following total figures will suffice to show the trend (in thousands):

	1921	1932	1933	1934	1935	1936	1937	1938
Water buffaloes	307.9	286.3	302.2	306.9	305.8	292.3	282.1	259.7
Cows of all kinds	113.6	80.4	84.0	88.0	84.7	78.6	76.3	65.4
Total	421.5	366.7	386.2	394.3	390.5	370.9	358.4	325.1
Cultivated area (1,000 ko)	773.8*	839.7	845.5	851.3	856.8	872.3	883.3	884.4
Area per head of draft animals (in ko)	1.83	2.29	2.19	2.16	2.19	2.35	2.46	2.72

*1922.

The average number of ko per head of draft animals is therefore increasing and unless the quality of the buffalo is improving remarkably, the situation is becoming less and less

favorable. (1) Though official sources speak about improvement in the quality of pigs and

1. It is important to note also that the number of females among the draft animals is falling sharply: in 1921 there were 158,000; in 1933, 140,000; in 1937, 127,000.

horses, they are silent concerning the buffalo. In this respect Taiwan is worse off than the Philippines or the Netherlands Indies. In the table only cultivated land was taken into consideration; the crop area is in fact larger, and was growing faster than the arable area, so that the situation is actually worse than the figures suggest."

4:Grajdanzev--69-70 S-4 (no date) 1942 Formosans
116, 231, 492, 427, 422

"Official sources say that there is about one animal per farming family. (1) But this

1. Taiwan Jijo, p. 478.

is inadequate. According to the official statistics for 1937, the number of farming families was 427,397. If we take this figure (it was mentioned above that the actual number of families should be larger) for 1938, then only 0.76 animal was available for each family, if only farmers had cows [70] and buffaloes. This figure includes calves, is also an average figure, and it will be shown later that the wealth of the farmers, at least as expressed in land, is not concentrated around the average. The important conclusion which follows is that at least half the farmers in Taiwan have no draft animals, but are compelled either to work without them or to hire them from the richer farmers. Those who are acquainted with rural life know that dependence on one's neighbour for plough animals is likely to create very serious problems."

"The number of other animals in Taiwan may be seen from the following table (in thousands):

	1921	1932	1933	1935	1937	1938
Sheep	...	0.3	0.3	0.4	0.3	...
Goats	...	90.1	87.0	78.3	70.4	...
Pigs	1,281	1,754	1,807	1,873	1,849	1,827
Poultry	4,452	5,267	5,747	6,466	7,703	7,947
Geese	190	306.3	319.6	370.8	401.5	394.2
Ducks	890	1,379	1,496	1,772	1,958	2,225
Turkeys	...	9.2	11.2	18.5	30.8	35.3

As regards pigs and poultry the situation is more favorable: there was a considerable increase in pigs, poultry, geese, and ducks. On the average there are four pigs (including sucklings) and eighteen to nineteen hens per farming family (assuming that only farmers keep pigs and fowl). These are an important source of meat and income. (1) The develop-

1. The official estimate of an average per capita pork consumption of more than 28 kin a year (37 pounds) is probably an exaggeration. In 1938 one million pigs were killed. If consumption per capita averaged 28 kin, each pig must have weighed 160 kin, but the official estimate of the average weight is 130 kin.

ment is a consequence of the growth of the sugar industry—the cane waste can be utilized

on the farm as fodder. In this respect Taiwan is much better off than Korea. But one should not exaggerate the importance of these figures. It was officially estimated that in 1937 the gross value of products of animal breeding in Taiwan was ¥49.2 million or slightly more than twelve per cent of total agricultural production."

4:Grajdanzev--70-71 S-4 (no date) 1942 Formosans
116, 231, 177.23 Japan
636.23

"The government also expends much effort in encouraging sericulture. Its experts point out that conditions in Taiwan [71] are very favorable for this industry: the mulberry tree has leaves the year round, there are no pests as in Japan, and production costs are low. But the farmers do not seem to take willingly to this occupation, for in 1933 the value of raw silk produced in Taiwan was ¥74,000 whereas in 1937 it had fallen to ¥50,000."

10: Schumacher--224[2] T-1 (ca. 1896) 1898 Formosans
116, 231

An interesting element is the assimilation of the domestic animals. Besides the water-buffalo, which looks rather antediluvian, and the Australian cattle which were imported not too long ago, goats, pigs, and last but not least dogs, ought to be mentioned. It is a question whether it is due to the climate and the soil consistency of Formosa or to the purity of breeding that all the goats, pigs, and dogs and also the buffaloes are black. And even in their build the domestic animals of Formosa resemble one another, owing to their square, thickset forms and their short, stout legs.

31: Hofmann--604 [2] N-3 (1909) 1912 Formosans
116, 133, 231, 241, 311, 342

We travelled from Taihoku by train for 1 1/2 hours until we came to the small village of Toyen. Here the land is almost level and has been utilized to the fullest extent. The extensive rice plantations were green and threw into relief the picturesque houses of the Chinese; these are solid brick houses with a curved roof reminiscent of Buddhist temples. In the canals, for which the tributaries of the Tamsui are utilized, there are numerous tame ducks. In the small ponds one may see grey water buffalo, a domestic animal which occurs in large numbers of Formosa. It cannot be compared to European cattle as regards its usefulness in agriculture, and so far attempts to domesticate it have not been successful. Many times I saw the patient Chinese peasants threatened by the buffalo or saw that the animal had broken loose. Next to the rice fields there are extensive tea plantations. This is the region where the famous Oolong tea is produced. There are also banana and pineapple plantations on a smaller scale. The houses are surrounded by slender bamboo trees, and everywhere one may see betel palms, a tree which grows everywhere on Formosa.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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231 The raising of hogs is Formosa's third most profitable endeavor, only surpassed by the annual crops of rice and sugar cane. Pork and fish are the major sources of protein in the diet of the islanders. The annual production of various agricultural produce is presented in Tables 5, 6 7, and 8.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Table 5. Food Production*
(in 1,000 metric tons)

	Rice	Sweet Potatoes	Soybeans	Peanuts	Wheat
1937	1,319	1,770	6	32	1
1938	1,402	1,726	6	28	1
1939	1,307	1,279	4	28	6
1940	1,129	1,512	3	29	4
1941	1,199	1,693	3	22	7
1942	1,171	1,556	3	13	6
1943	1,126	1,406	3	10	2
1944	1,068	1,521	5	12	2
1945	639	1,165	2	12	1
1946	894	1,331	4	37	1
1947	999	1,783	10	47	4
1948	1,068	2,003	12	53	6
1949	1,215	2,166	12	53	10
1950	1,421	2,201	13	57	19
1951	1,485	2,021	13	61	15

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45;Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~
AD1

1952	1,570	2,090	15	60	17
1953	1,642	2,277	17	60	14
1954	1,695	2,324	17	67	15
1955	1,633	2,290	24	70	19

* Data for the years 1937-53, from Foreign Operations Administration Mission to China, Taiwan Economic Data Book, Part II, Volume III, Taipei, 1955; for 1954, from Industrial Development Commission, Industry of Free China, Vol. 3, No. 4, April 1955, Taipei; for 1955 from the Central Daily News, February 3, 1956.

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45:Stanford U. S-4, 5 1956 ADI Formosa
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ADI

Table 6. Commercial Production*

	Sugar Cane	Tea	Citronella	Jute
	(in 1,000 metric tons)			
1937	8,563	13	-#	9
1938	9,061	13	-*	14
1939	12,822	14	-*	15
1940	9,977	12	273	11
1941	8,392	12	174	7
1942	10,250	12	319	11
1943	10,092	8	201	7
1944	8,468	4	35	4
1945	4,159	1	29	2
1946	1,007	3	12	1
1947	796	7	61	3
1948	3,116	8	213	11
1949	6,194	10	380	9
1950	5,861	10	762	7
1951	3,585	10	1,274	11

45:Stanford U. S-4, 5 1956 ADI Formosa
~~ADI~~
ADI
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1952	4,801	12	2,561	20
1953	8,394	12	2,527	5
1954	6,130	13	-	12
1955	-	14	-	19

* Data for 1937-53, Taiwan Economic Data Book, Part II, Volume III; for 1954, Industry of Free China, Vol. III, No. 4, March 1955; for 1955, the Central Daily News, February 3, 1956.

\# February 3, 1956 not available.

45:Stanford U. S-4, 5 1956 ADl Formosa
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Table 7. Production of Fruit*

	Pineapple	Banana	Citrus
	(in 1,000 metric tons)		
1937	108	219	33
1938	116	202	36
1939	146	182	35
1940	129	169	32
1941	130	191	39
1942	116	196	34
1943	94	142	29
1944	43	65	21
1945	18	32	17
1946	17	53	20
1947	40	124	25
1948	39	110	28
1949	43	98	27
1950	46	117	28
1951	52	100	27

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45:Stanford U. S-4, 5 1956 AD1 Formosa
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1952	63	107	28
1953	68	96	29
1954	62	109	31
1955	64	90	33

* Data for 1937-53, from Taiwan Economic Data Book, Part II, Volume III; for 1954, from Industry of Free China, Vol. III, No. 4 April 1955; for 1955 from the Central Daily News, February 3, 1956.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 8 follows p. 550.)

Table 8. Production of Livestock*
(in 1,000)

433
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	Hogs	Cattle	Chickens	Ducks
1937	1,849	358	7,073	1,958
1938	1,827	325	7,095	2,023
1939	1,653	325	6,680	1,931
1940	1,205	300	- #	-
1941	1,158	309	-	-
1942	1,358	312		-
1943	1,257	325	[illegible],543	1,896
1944	862	331	3,837	1,358
1945	578	291	3,998	1,136
1946	768	280	4,555	1,647
1947	1,006	298	5,119	2,247
1948	1,167	310	4,525	1,985
1949	1,362	357	4,989	2,217
1950	1,620	365	5,143	2,547
1951	2,262	375	5,387	2,991
1952	2,611	383	5,593	2,912
1953	2,820	390	6,165	3,103

* Data on hogs and cattles are from Taiwan Economic Data Book, Part II, Vol. III; on chickens and ducks 1937-39, from Taiwan keizai nenpo 1941 [Taiwan Economic Annual 1941]; for 1943-53, from Taiwan Agricultural Yearbooks.

\# Not available.

[table 8 follows p. 550]

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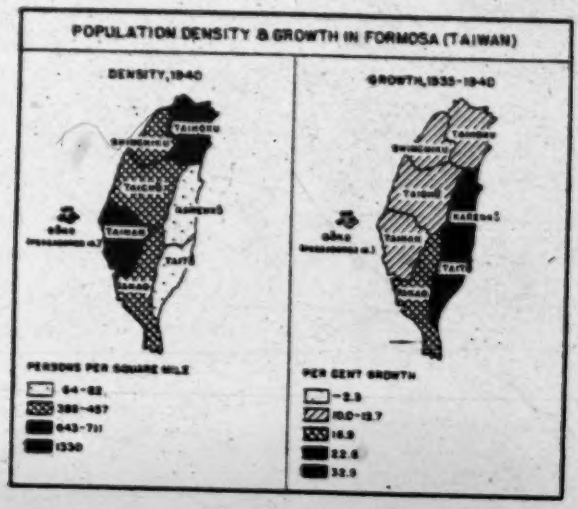

Taiwan, Population Density (1940) and Growth (1935-1940)

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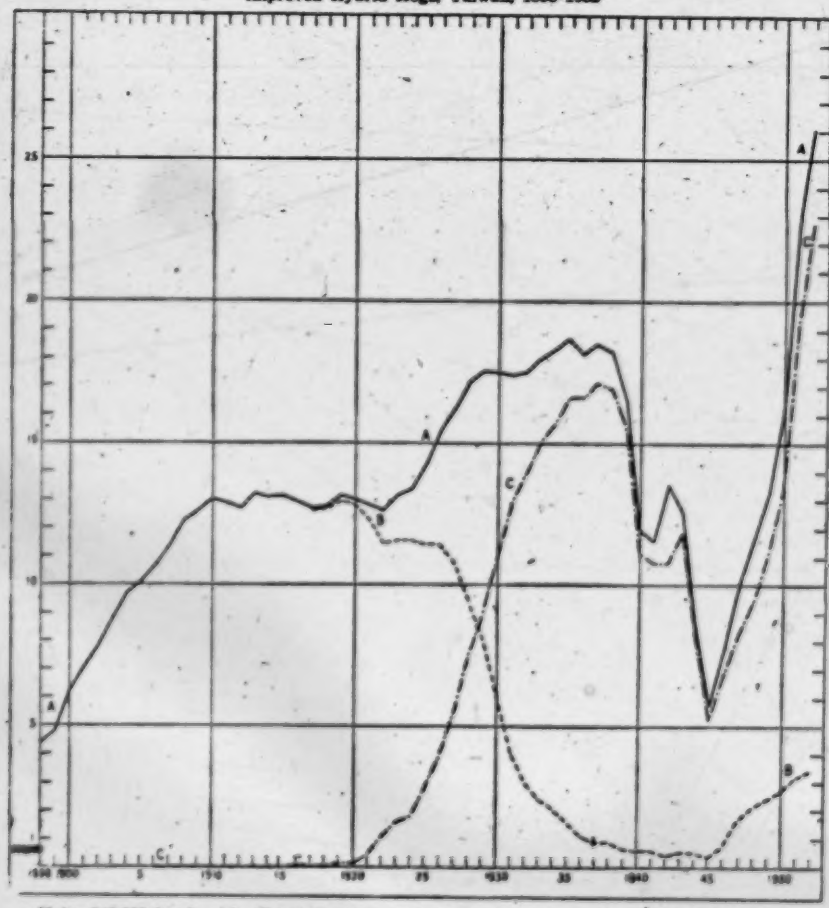
Peasant Scene in Southern Taiwan

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

farmer received some bean cake for fertilizer. However he was afraid that this new and strange material would hurt his crop, so he threw it away in a grove of bamboo. Later he found that the bamboo around the bean cake had shot up tremendously, and he realized for the first time that commercial fertilizer was useful, and began to use it on his crops. It is not an easy task for the conservative farmer to depart even a little from his traditional way of life, and experiment with new methods. But when once the experiment is begun, new experiences will lead him farther. The use of commercial

Fig. 10: Total Number of Hogs and the Number of Native Hogs and Improved Hybrid Hogs, Taiwan, 1898-1952



Unit: 100,000 head A: Total Number B: Native Hogs C: Improved Hybrid Hogs
Source, 1898-1950, from Animal Resources of Taiwan, pp. 58-59
1951-1952, from Taiwan Agricultural Yearbook, 1952

48: Chen E-4 (no date) 1955 ADl Formosa ADl

24 The use of commercial
178 fertilizer spread quickly, and with textiles, became one of the main items of import
[139] from Japan.

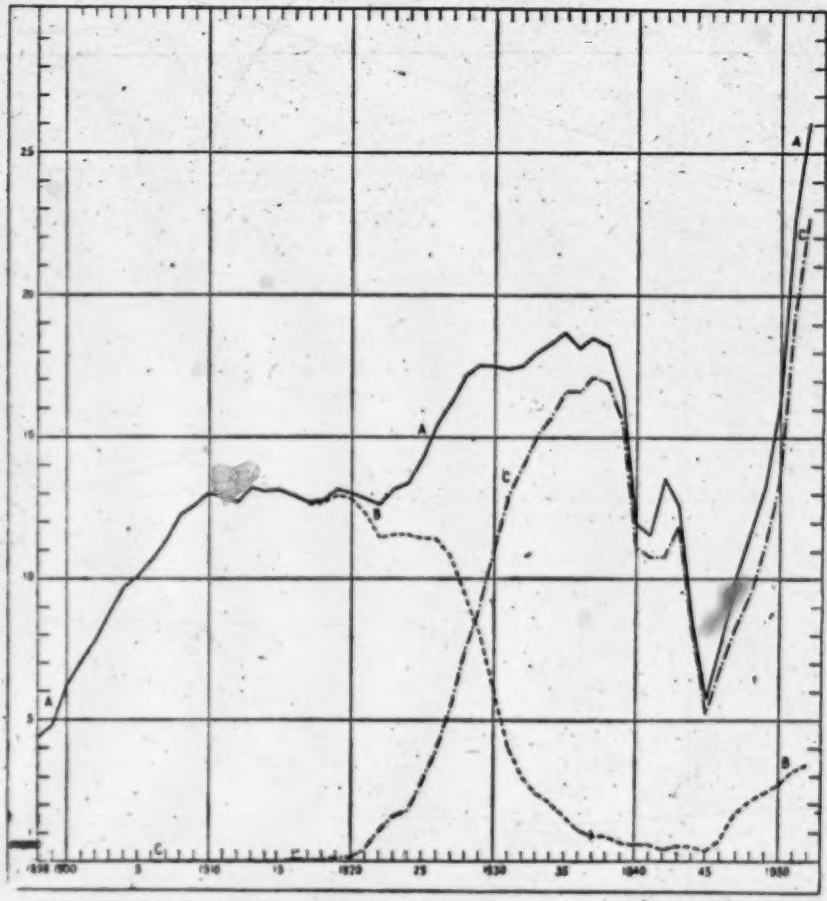
[232] For the improvement of hog raising, the colonial government had imported Berkshire hogs from Japan in 1896, and Yorkshire hogs from England in 1900. After a series of experiments, it was found that the first generation of hybrids between the
231 native hog and Berkshire hog was most suitable to Taiwan, and the promotion of the
178 hybrid was started in 1907. As in other agricultural practice, the traditional way of hog raising was a complicated procedure. Many religious and magical elements were involved in it, and it was not easy for the conservative farmer to adopt the profitable new hybrid. It took more than ten years of government promotion before people became willing to adopt the new hybrid. After 1920 more and more people adopted it, and the number of native hogs declined sharply (Fig. 10). This is the best instance of change in the attitude of the people. A new strain of rice (Ponlai rice) has been extensively cultivated since 1924, and the output of rice has sharply increased.

178 The 1920's is the turning point in the social history of Taiwan. Epidemics were wiped out, prevention of malaria had improved, the doctors of western medicine exceeded the doctors of the Chinese medicine, and even the cattle pest was wiped out. Political and social movements began for the first time. Primary education spread wider, the conservative farmer began to adopt new strains and new technics, and increase production. Mobility of the people had increased, more bicycles, automobiles, and trucks were used, and the level of living was raised somewhat. It was amid this social milieu that Taiwan's death rate steadily declined while its already teeming population with equal steadiness rose to new heights.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

farmer received some bean cake for fertilizer. However he was afraid that this new and strange material would hurt his crop, so he threw it away in a grove of bamboo. Later he found that the bamboo around the bean cake had shot up tremendously, and he realized for the first time that commercial fertilizer was useful, and began to use it on his crops. It is not an easy task for the conservative farmer to depart even a little from his traditional way of life, and experiment with new methods. But when once the experiment is begun, new experiences will lead him farther. The use of commercial

Fig. 10: Total Number of Hogs and the Number of Native Hogs and Improved Hybrid Hogs, Taiwan, 1898-1952



Unit: 100,000 head A: Total Number B: Native Hogs C: Improved Hybrid Hogs
Source, 1898-1950, from Animal Resources of Taiwan, pp. 58-59
1951-1952, from Taiwan Agricultural Yearbook, 1952

48: Cnen E-4 (no date) 1955 AD1 Formosa AD1

24 The use of commercial
178 fertilizer spread quickly, and with textiles, became one of the main items of import
[239] from Japan.

For the improvement of hog raising, the colonial government had imported
[232] Berkshire hogs from Japan in 1896, and Yorkshire hogs from England in 1900. After a series of experiments, it was found that the first generation of hybrids between the
231 native hog and Berkshire hog was most suitable to Taiwan, and the promotion of the
178 hybrid was started in 1907. As in other agricultural practice, the traditional way of hog raising was a complicated procedure. Many religious and magical elements were involved in it, and it was not easy for the conservative farmer to adopt the profitable new hybrid. It took more than ten years of government promotion before people became willing to adopt the new hybrid. After 1920 more and more people adopted it, and the number of native hogs declined sharply (Fig. 10). This is the best instance of change in the attitude of the people. A new strain of rice (Ponlai rice) has been extensively cultivated since 1924, and the output of rice has sharply increased.

178 The 1920's is the turning point in the social history of Taiwan. Epidemics were wiped out, prevention of malaria had improved, the doctors of western medicine exceeded the doctors of the Chinese medicine, and even the cattle pest was wiped out. Political and social movements began for the first time. Primary education spread wider, the conservative farmer began to adopt new strains and new technics, and increase production. Mobility of the people had increased, more bicycles, automobiles, and trucks were used, and the level of living was raised somewhat. It was amid this social milieu that Taiwan's death rate steadily declined while its already teeming population with equal steadiness rose to new heights.

"We begin our investigation of Taiwan's economy with agriculture because the majority of the population are occupied in this field. First, let us examine the area under cultivation. In considering the figures given below, one should bear in mind the following fact: in Taiwan, as in other southern regions, in many cases two and even three crops a year are taken from the same field, and thus a distinction should be made between cultivated area and crop area. If each field produced two crops a year, then the total crop area would be double that of the cultivated area. Double cropping usually takes place on irrigated fields, although, if rainfall is evenly distributed from month to month, even dry fields can yield two crops. The growth of total cultivated area of Taiwan and of its irrigated area is shown in the following table: [42]

Cultivated Area Of Taiwan
(1,000 ko) (1)

1. Ko (in mandarin Chinese chia) is a local measure of area equal to 2.377 acres or 0.961 hectare.

Cultivated Area Of Taiwan [Cont.]

	Paddy fields producing one crop	Paddy fields producing two crops	Total paddy fields	Dry fields	Total
1900	...	...	200.7	157.5	358.2
1904	...	...	312.6	332.1	644.7
1909	...	...	337.8	344.7	682.5
1911	...	...	346.4	364.9	711.3
1916	...	...	358.8	379.7	738.4
1923	261.5	115.3	376.8	398.6	775.4
1933	313.1	147.4	450.5	395.0	845.5
1934	320.0	142.9	462.9	388.4	851.3
1935	322.2	141.3	463.5	363.2	856.8
1936	327.4	206.4	533.8	338.4	872.3
1937	332.3	212.1	544.4	338.8	883.3
1938	331.8	211.4	543.2	341.2	884.4

Source: for 1900. Nogyo nenkan, 1937; for 1938, Taiwan Jijo, p. 456.

The population of Taiwan is growing rapidly, and its agricultural population is very large. Under these conditions an increase of area under cultivation should be recognized as significant, and if the figures given above are correct, the cultivated area increased

2.47 times in thirty-eight years—a remarkable advance. But if we examine the figures, we find that between 1900 and 1909 the cultivated area increased from 358,200 ko to 682,500 ko, or by 36,033 ko every year, while between 1909 and 1938 the increase was from 682,500 ko to 884,000 ko, or only 6,940 ko every year. The greatest expansion therefore took place when the government did not even have complete control of the island, and only in 1908 did the administration work out a comprehensive scheme of irrigation. The explanation of this striking initial increase would appear to be that between 1900 and 1909 the Japanese government made a complete survey of Taiwan, and many lands were recorded which formerly did not appear in the official figures."

4:Grajdanzev--43 S-4 (no date) 1942 Formosans
116, 161, 178, 241

"The average increase of area under cultivation by 7,000 ko each year must be compared with the annual increase of the population of 130,000 to 140,000 persons; for each ko increase in cultivated land there is an increase of twenty persons. It is thus quite evident that the increase of cultivated area is lagging behind the increase of population. The same idea may be expressed in another way: since 1904 the population of Taiwan increased 1.92 times. whereas the cultivated area increased only 1.37 times.

Improvement in the situation may be brought about (1) by cultivating areas now uncultivated; (2) by turning areas now producing one crop into double-crop areas chiefly through irrigation; (3) by increasing yields and substituting crops bringing high income per unit of area for crops bringing low income; (4) by shifting the population from agriculture to industry and importing foodstuffs to feed the growing population. Let us now consider these possibilities in turn, with the exception of the fourth, which will be examined later."

"(2) Irrigation combined with double cropping is another [45] way of increasing agricultural production. In 1937 one ko of dry field produced on the average eight koku of rice, while one ko of paddy yielded 14.9 koku in one crop or, where two crops were possible, 28.1 koku. (1) Irrigation almost doubles the crop while irrigation and double cropping

1. Figures are taken from Nogyo nenkan, 1939-40, pp. 647-648.

combined increase the yield three and a half times.

Data on the increase of irrigated area and of double-crop area were given in the preceding table. [See p. 42, category 116--analyst] Here we may point out that while in 1909 only 49.5 per cent of the total cultivated land was in paddy fields, in 1937 paddy fields accounted for 61.6 per cent of the total and, according to the same table, 37.6 per cent of the total cultivated area was yielding two crops. If this is true, then the crop area should equal 137.6 per cent of the cultivated area but in the official sources for 1937 the total area of all crops amounts to only 1,120,400 ko or 127 per cent of the cultivated area. A possible explanation of this divergence is that ten per cent of the area was fallow or growing green manure, but this is hardly probable."

4:Grajdanzev--45-46 S-4 (no date) 1942 Formosans
116, 241, 651, 661, 177.24 Japan
636.24

"Beneficial as these irrigation works are, in many cases they curtail the farmer's freedom to select his crops. The government often compels the farmers to raise crops which they do not want to raise (as, for example, sugar cane). Takahashi tries hard to prove that this compulsion, which in Taiwan is [46] called simply exploitation (sakushu), is to their benefit, (1) but his arguments are not convincing.

1. Takahashi, op. cit., p. 280."

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-1-3
116, 171, 241, 454, 433, 177.24 Japan
636.24

"(3) Increased agricultural production may also be achieved by raising yields per unit of area. Below we give a comparison of yields in Taiwan and in Japan, and in the case of sugar cane, the area of which in Japan is too small, a comparison with Hawaii and the Netherlands Indies, where conditions are similar to those in Taiwan, while groundnut production in Taiwan is compared to that of Kwantung.

Crop Yields In Quintals Per Hectare in Taiwan and Other Countries.

		1928-32 average	1933-37 average	1937
Wheat	Taiwan	8.7	9.7	10.7
	Japan	17.7	19.1	19.1
Barley	Taiwan	6.4	8.0	7.4
	Japan	19.9	20.6	20.9
Maize	Taiwan	11.3	10.8	11.6
	Japan	14.1	14.7	16.7
Rice	Taiwan	22.2	25.1	26.1
	Japan	35.0	36.8	38.6
Sugar cane	Taiwan	684.4	654.4* Four-year average 1933-36.	...
	N. E. I.	1,308.0	1,374* Four-year average 1933-36.	...
	Hawaii	1,349.4	1,515* Four-year average 1933-36.	...

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-2
116, 171, 241, 454, 433, 177.24 Japan
636.24

		1928-32 average	1933-37 average	1937
Soya beans	Taiwan	5.6	5.7	6.2
	Japan	10.0	10.0	11.2
Groundnuts	Taiwan	16.2	17.1	18.4
	Kwantung	19.0	20.7	...
Sesamum	Taiwan	3.5	3.9	4.2
	Japan	7.3	7.5	7.5

The yields per hectare of the most important plants in Taiwan's economy are therefore thirty to fifty per cent less than in Japan, or, in the case of sugar, in Hawaii or the Netherlands East Indies, and yet all available sources mention the fertility of the soil in Taiwan, while climatic conditions are at least as good as in Japan or the Netherlands Indies.

The explanation lies in the primitive methods of Taiwan [47] agriculture, including the slight use of fertilizers. Judging by the cultivated area and the number of farmers, the island should have at least 300,000 to 400,000 ploughs, but in 1929 (1) almost all (except

1. The last data available, Nogyo nenkan, p. 642.

18,315 'improved' ploughs for deeper ploughing and 614 of the European type) were of the

primitive Chinese pattern. While in Japan proper an average of ¥170 to ¥180 per hectare is spent each year on commercial and home-prepared fertilizers, in Taiwan less than half that sum is spent for this purpose. These two examples—ploughs and fertilizers—for which quantitative data are available show clearly that Taiwan farming is under-capitalized, especially when we consider that the farmer is obliged to pay ¥2,000 per ko for good land.

This does not of course mean that there is no improvement in the agriculture of Taiwan. The government devotes much effort to increasing the productivity of the farms and the farmers are eager to respond. Yields are now higher than they were twenty years ago, as one may see from the tables given later in this chapter. But progress is slow. It is doubtful whether yields in Japan in 1895—the time of the annexation of the island—were higher than in Taiwan, whereas now they are considerably greater and relatively Taiwan is lagging further and further behind."

4: Grajdanzev--48 S-4 (no date) 1942 Formosans
116, 241, 433

"Before we examine the progress that has been made in the production of the most important crops, let us try to evaluate their relative importance in the agriculture of Taiwan. The following table [See following slips, page 49 for table--analyst] gives their gross value for several years (1). It would, of course, be much better to have net

1. Only those products are given, the gross value of which is now over one million yen.

values, i.e. the gross value minus cost of materials, used in production, but these are not available.

This table reveals that Taiwan is an island of two main crops--rice, which accounts for more than half the gross value, and sugar cane."

4:Grajdanzev--48 [2] S-4 (no date) 1942 Formosans
116, 241, 439, 656, 177.45 Japan
636.45

"Rice, as we shall see, is a cash crop; probably not less than two-thirds of the crop finds its way to the market. Sugar cane which constitutes from 12.2 to 19.3 per cent of the total, has special importance because the whole crop is marketed. Sweet potatoes and vegetables are chiefly for home consumption. Next in importance, in the order named, are tea, bananas, groundnuts, pineapples, tobacco, jute, and cassava. This almost complete dependence on rice and sugar cane is the result of government policy, as before 1905 the distribution of cultures was not so specialised. But now Taiwan has become a part of the economy of Japan and its function is to serve that country's needs."

4:Grajdanzev--48 [3] S-4 (no date) 1942 Formosans
116. 241, 311

"Let us now see what part the same crops occupy in the sown area of Taiwan and compare this data with gross value of production."

4:Grajdanzev--49-51 S-4 (no date) 1942 Formosans-1-5
116, 241, 433

"Gross Value of Agricultural Production in Taiwan
(Million yen)

	1921	1933	1935	1936	1937	1938
Rice	88.7	124.9	197.2	214.0	208.8	237.9
Sugar cane	38.9	29.0	55.2	54.4	64.3	78.2
Sweet potatoes	15.9	20.5	25.4	38.3	27.9	29.5
Bananas	5.9	5.7	6.6	6.8	8.1	10.0
Pineapples	.4	2.0	2.6	3.1	3.1	4.0
Groundnuts	1.9	2.3	3.5	3.9	4.1	3.9
Jute	.5	.8	1.8	1.4	1.5	2.5
Tea	4.0	3.9	6.4	7.4	10.3	9.2
Tobacco	1.0	.9	1.2	1.6	2.1	2.6
Cassava	...	...	...	...	1.4	1.2
Other cereals, beans, vegetables, fruits	12.5	15.7	20.1	11.4	27.2	26.3
Animal products	31.6	32.2	41.0	46.0	49.2	54.9
Total	201.3	237.9	361.0	388.3	413.7	460.2
As percentages of total						
Rice	44.1	52.5	54.6	55.1	50.5	51.7
Sugar cane	19.3	12.2	15.3	14.0	15.5	17.0
Sweet potatoes	7.9	8.6	7.0	9.9	6.7	6.4

4:Grajdanzev--49-51 S-4 (no date) 1942 Formosans-2
116, 241, 433

As percentages of total	1921	1933	1935	1936	1937	1938
Bananas	2.9	2.4	1.8	1.8	2.0	2.2
Pineapples	.2	.8	.7	.8	0.8	0.9
Groundnuts	.9	1.0	1.0	1.0	1.0	0.8
Jute	.3	.3	.5	.3	0.4	0.5
Tea	2.0	1.6	1.8	1.9	2.5	2.0
Tobacco	.5	.4	.3	.4	0.5	0.6
Cassava	...	...	...	...	0.3	0.3
Other cereals, etc.	6.2	6.6	5.6	2.9	7.9	5.7
Animal products	15.7	13.6	11.4	11.9	11.9	11.9
Total	100	100	100	100	100	100

[50]

Crop Area In Taiwan
(1,000 ko)

	1921	1933	1935	1936	1937	1938
Rice	510.8	694.4	699.7	702.7	678.1	644.8
Sugar cane	119.9	84.3	121.6	128.3	124.6	134.2
Sweet potatoes	124.5	138.1	142.5	144.5	143.3	138.7
Bananas	6.1	19.2	22.8	24.2	24.1	23.9
Pineapples	1.3	6.6	7.0	8.0	8.9	8.9
Groundnuts	24.4	30.7	31.5	31.7	32.4	32.1

Crop Area In Taiwan [Cont.]
(1,000 ko)

	1921	1933	1935	1936	1937	1938
Jute	2.1	3.0	7.2	5.5	5.2	8.6
Tea	39.1	45.8	42.6	43.0	43.5	43.4
Tobacco	1.4	.8	1.1	1.3	1.5	1.7
All others	190.4	134.1	102.7	109.4	154.2	179.7
Total*	1,020 †	1,159 †	1,176	1,200	1,216	1,216

* Since the figures of total crop area are not available, the total was calculated in the following way: to the total cultivated area is added the double-crop area of paddy fields for each year. The line 'others' was secured by subtraction from the total.

Source: Nogyo nenkan, 1939-40, pp. 640, 647-652; for 1938, Takumu tokei.

† Approximate figures.

As percentages of total

	1921	1933	1935	1936	1937	1938
Rice	50.2	60.0	59.4	58.5	55.8	53.0
Sugar cane	11.7	7.3	10.3	10.7	10.2	11.0
Sweet potatoes	12.2	11.9	12.1	12.0	11.8	11.4
Bananas	.6	1.7	1.9	2.0	2.0	2.0
Pineapples	.1	.6	.6	.7	.7	.7
Groundnuts	2.4	2.6	2.7	2.6	2.7	2.7
Jute	.2	.3	.6	.5	.4	.7
Tea	3.8	4.0	3.6	3.7	3.6	3.6
Tobacco	.1	.1	.1	.1	.1	.1
All others	18.7	11.5	8.7	9.1	12.7	14.8
Total	100	100	100	100	100	100

[51] Rice occupies a predominant position in this table also—from fifty to sixty per cent of the crop area is under rice—but here second place is occupied by sweet potatoes, while sugar cane is third. Then, in order of importance, come tea, groundnuts, bananas, pineapples, jute, and tobacco. It would be a mistake to conclude by comparing percentages of value and of area in the last two tables that rice, for example, is less profitable to cultivate in Taiwan than sugar cane, because in 1937 rice occupied 55.8 per cent of the

area and brought only 51.8 per cent in value, while for sugar cane the corresponding percentages were 10.2 and 16.0. Even if one ignores the cost of labor, one must take into consideration the following circumstances: the growth-cycle of sugar cane is eighteen months in Taiwan, while on more than half the area under rice two crops are taken yearly; sugar cane demands a greater amount of fertilizer, which must be purchased. These considerations suggest that the unwillingness on the part of the farmers to plant more sugar cane for sugar companies is probably due not only to the conservatism of the farmer, but is based on sound judgement. Again, the fact that the area under sweet potatoes is 11.8 per cent while the value is 6.9 per cent cannot be taken as proof that sweet potato culture is less profitable to the farmer than sugar cane. They are now consumed largely on the farm, and if the farmers were to reduce the existing acreage of sweet potatoes, their price would be quite different from what it is now."

4:Grajdanzev--56-57 S-4 (no date) 1942 Formosans
116, 241, 439, 441, 655, 177.43 Japan
636.43

"The price ruling on the Tokyo market is, however, not the price which the farmer in Taiwan receives. Between him and the Tokyo or Osaka market are landlords, usurers, a chain of local dealers in rice, big Japanese importers and exporters, and Japanese shipping companies. Each one of them makes profits, [57] and good profits, so that little remains for the farmer, and especially the tenant-farmer.

However, the advice of Takahashi and others fell on fertile ground and, beginning with November 1, 1939, the export of rice from Taiwan to Japan became a government monopoly. The government-general decides how much rice should be produced, works out a plan of exports for each month, buys rice from the special local organizations, and sells it to a Japanese company, Nippon Beikoku Kabushiki Kaisha (Japan Rice Corporation). The other suggestion of the Japanese economists concerning the lowering of the price of rice in Taiwan may also be attempted, though it will be difficult to realize in a time of war inflation and rice shortage in Japan."

4:Grajdanzev--61-62 S-4 (no date) 1942 Formosans-1-2
116, 241, 435, 452, 477, 655, 177.47 Japan
636.47

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--62 S-4 (no date) 1942 Formosans
116, 241, 477, 427

"More than 110,000 ko of land are under control of the companies which for the most part they lease to the tenants. As will be shown later there is strong competition between tenants in Taiwan, and if the company does not supply the tenant with land, he may be ruined. He must therefore get land from the company and raise sugar cane on the conditions dictated by it."

4:Grajdanzev--62-63 S-4 (no date) 1942 Formosans
116, 241, 312, 471, 177.24 Japan
636.24

"By putting irrigation works at the service of the farmers (at a price) the government, the local bodies, and the companies [63] impose a condition that a certain part of the newly-irrigated area should be devoted to sugar cane. This stipulation may be to the advantage of the farmer or to his disadvantage, but it is clear that he is not free to decide."

4:Grajdanzev--63-64 S-4 (no date) 1942 Formosans-1-2
116, 241, 249, 435

"Although we have no reliable data concerning the profitability of sugar cane in Taiwan as compared with other crops, we can make certain calculations which will help us to see what the farmer gained from its cultivation. The average holdings of farmers did not increase after 1913 and therefore a larger income in these circumstances could be secured in only two ways—through an increase in yield or a rise in the price of sugar cane or both. The improved yields came as a result of the use of better seedlings, earlier ploughing, more careful attention, greater use of fertilizers, better irrigation. Some of these items demand more labor on the part of the farmer; almost all demand a greater expenditure in money. Let us now compare the receipts of the farmer per ko.

Receipts of Sugar Cane Cultivators in Taiwan

	1921	1927	1935	1936	1937
Yield per ko (1,000 kin)	63.2	89.5	102.8	114.6	112.5
Price per 1,000 kin (yen)*	9.6	7.6	3.4	4.1	4.5
Value per ko (yen)	696.7	537.0	349.5	469.9	506.3
Value per ko at 1913 prices, yen (approximately)	330.0	310.0	220.0	290.0	270.0

* For 1921-27 for the price 'the cost of raw material for manufacturers of sugar in Taiwan' is taken (Takahashi, op. cit., p. 216); for the later years. the price as it is given in the value of total production of sugar cane in Nogyo nenkan; the actual price is probably smaller.

Great accuracy cannot be claimed for these figures but they may give an idea of the trend. The yield since 1921 was doubled, but the receipts in deflated money do not show any improvement. This may be partially due to the fact that the general index of prices should not be used to deflate values in this case; a special index of prices paid by the farmer might show somewhat better results. But the expenditures which the farmer now incurs in order to secure these increased yields—fertilizers, irrigation, etc.—were not deducted, and if they are taken into consideration, one is forced to the conclu-[64] sion that some one other than the farmer got the benefits of the better yields."

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon,

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane Culture in Taiwan

	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4: Grajdanzev--68 [2] S-4 (no date) 1942 Formosans
116, 241, 471, 656, 177.65 Japan
636.65

"These examples--the cotton plan and horse-breeding plan--are extremely significant. The government officials work out plans which can hardly be called realistic and yet the successes of agriculture in Taiwan are very frequently ascribed to the government's efforts and plans."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages may be considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

"The situation in the latter [80] country as regards land distribution is worse now than it was several decades ago and the large holdings are growing.

Distribution of Farmers and Land Tilled and by Size of Farms, 1930

Size of farms cultivated (ko)	Less than 0.5	0.5-0.99	1.0-1.99	2.0-4.99	5 and over	Total
Number of farmers(1,000)	128.0	96.9	100.4	78.9	19.0	423.2*
Per cent	30.3	22.9	23.7	18.6	4.5	100.0
Area of land tilled (1,000ko)	33.7	69.7	143.2	236.1	208.6	601.3
Per cent	4.9	10.1	20.7	34.2	30.1	100.0
Average for groups (ko per farmer)	0.26	0.72	1.43	2.99	11.0	1.63
Average in acres per farmer	0.62	1.71	3.39	7.11	26.15	3.87

*In Nogyo nenkan, 1940, from which we quote, the total is 433,300 but this appears to be a misprint. Even so, it is less than the total should be because, as was shown in the preceding table, there were in the same year 405,181 owners and the number

of tenants was not less than 150,000. In other words this investigation evidently covered only a part of the cultivators. This is proved by the figures of the area of land cultivated.

Source: Ibid."

"The figures given above refer to landownership. But the owners of small plots may increase their holdings by renting land. Some economists see the chief advantage of tenancy in the fact that it permits a capable farmer to get as much land as he is able to utilize. We give above the statistics of the size of the farms as actually operated in 1930 [See p. 79, category 116--analyst].

The picture is about the same as that of ownership. More than 30 per cent of the farmers till on the average less than 0.5 ko each (0.62 acres); 53 per cent till on the average less than one ko (less than 1.71 acre) and 77 per cent of the farmers till less than 2 ko (less than 3.39 acres). But 4.5 per cent tilled 30 per cent of the total area, while 579 farmers (or corporations) tilled 66,410 ko. There are therefore a considerable number of very large plantations in Taiwan, chiefly of sugar cane, bananas, pineapples, and tea. These are figures for 1930 and it is quite possible that even then the investigation did not cover all farmers. (1)

1. An indirect proof of this is that a similar investigation made in 1932 covered 340,000 farming families as compared with 405,000 in 1930.

Since 1930 the plantation area has increased sharply, so that the picture should be by now even less favorable. We have no statistics of land ownership by nationalities, but it is well known that all, or almost all, plantations belong to big Japanese companies.

However, it is clear that among Chinese farmers too, there is a sharp division in respect to landownership—there are wealthy Chinese owners, who though few in number, are very important by virtue of the power they wield."

4:Grajdanzev--83 [2] S-4 (no date) 1942 Formosans
116, 241, 361, 427

"Let us now consider the economy of the tenant. We saw that the tenants and semi-tenants make up about sixty-nine per cent of all the agricultural families. From the table on page 79 it appears that seventy-seven per cent of the farmers (the first three groups) cultivate on the average 0.75 ko each. These two groups should coincide approximately."

4:Grajdanzev--83-84 S-4 (no date) 1942 Formosans
116, 241, 427, 511, 556

"We have no recent figures of tenancy conditions but, according to an investigation made in 1927, the position of the average farmer-tenant appeared as follows (on land of average quality in paddy with two crops a year):

	yen
Value of crop from 0.75 ko	325
Rent	160
Balance	165

Thus his reward for his and his family's labor for the whole year was ¥165, minus the expenses of production apart from labor. From this sum house taxes, indirect taxes, etc. must be paid. This income of ¥165 may be compared with the income of a landowner who had 15.5 ko (the average for the upper group of landowners) and leased all this land to tenants. His yearly income would be ¥2,480.

These conditions may not exist now, since the above figures refer to 1927. Official sources do not give new figures, but a few calculations show that the situation has not greatly changed. As has been shown, the proportion of tenants to the total number of farmers has increased since that time, so [84] that competition among them must be stiffer, and there is no reason to expect that rents are lower. The value of two crops of rice from 0.75 ko of paddy in 1937 averaged ¥515 but prices general in 1937 were at least thirty per cent higher than in 1927. All this suggests conditions of poverty among the tenants and the position of even the majority of so-called owners may be not much better."

4:Grajdanzev--93 S-4 (no date) 1942 Formosans
116, 241, 255, 257, 433

"Thus the predominant position in Taiwan's industry—from seventy-one to seventy-four per cent of the total—is occupied by the food industry. The latter consists chiefly of the production of sugar from sugar cane, and, to a lesser degree, of the canning of pineapples. In other words, Taiwan industry is closely connected with its agriculture and is largely the transformation of agricultural products into forms suitable for consumption or for storage and transportation. All other industries show little signs of growth. Ceramics and 'other industries' were at the same level in 1937 as they were in 1929, the lumber, textile, metal and machine industries show an increase, but in absolute amounts this increase is small, and only the chemical industry is of any importance, producing about nine per cent of the gross value."

4:Grajdanzev--172-173 S-4 (no date) 1942 Formosans
116. 452. 241, 476, 563, 177.47 Japan
636.47

"Since the start of the present war, however, through increasing supervision and various regulations, the government has turned the cooperatives into a piece of bureaucratic machinery, rather like the paochia. The chief function of the agricultural cooperatives, which form the backbone of the movement, has become the collection of rice and other products and their transfer to the government. According to the declared rations (1), the farmers in Taihoku province, for example, are to have only from two to

1. The ration figures are taken from the Ekonomisuto, Tokyo July 1, 1940.

two and half go of rice per day (0.6-0.75 lb.). But this is considerably below the usual consumption of [173] the farming population, so the farmers will not willingly surrender their 'surplus' and the cooperatives have been turned into organs for the compulsory collection of grain and other agricultural products. The only organization created by the islanders which had some semblance of independent existence is thus becoming a mere cog in the Japanese military machine."

6: Kirchhoff--31-32 U-4 (no date) 1895 Formosans
116, 241, 262

Up to the present only a modest portion of Formosa is cultivated, for the most part this being the coastal regions of the northeast and the western plain; from there only small cultivated strips [32] stretch out towards the east. The chief cereal is rice, which provides two and in some places three harvests a year. The careful cultivation of rice, like the use of the water buffalo, was naturally introduced by the Chinese. The rice fields are laid out on artificial terraces made in the lowest slopes above the valleys, and they are kept under water by means of skillfully constructed canals so that these areas, after the young plants from the seed beds have been laboriously planted, resemble great pools of mud traversed only by narrow paths. But just before the harvest they look like juicy green carpets. The first rice harvest, for which the seedlings are grown in March and transplanted to the fields in April, becomes ripe at the end of June or the beginning of July, the second (on the same fields) at the conclusion of October. The next most important crop in the people's diet is the sweet potato; two harvests are obtained from this also, at about the same time as the rice harvests. Wheat and barley are seldom planted, and always as a winter crop only.

After rice and sweet potatoes, sugar-cane and the tea plant are most frequently planted. The growing of sugar-cane extends over the whole western side of the island; it is found in enormous quantities in the surroundings of Ta-kaô and Tai-nan, but also upstream from Tam-sui, particularly on the flooded ground on either side of the Sintiam River, where the stalks attain the height of two men.

6: Kirchhoff--32 [2] U-4 (no date) 1895 Formosans
116, 137, 241

As well as indigo, there are grown ginger and plants providing oil, both sesame and peanuts (Arachis hypogaea), and also melons, pineapple, bananas and the South Asiatic tree fruits such as mango and the giant lemons or grapefruit (Citrus decumanus). The Chinese nettle (Su-mo in Chinese) need not be planted any more than the Fatsia papyrifera, since it grows wild in abundance, the latter especially on the mountains round Tam-sui.

"LAND UTILIZATION IN FORMOSA*

* Owing to limitations of space, the text of this article has been considerably condensed from the author's original manuscript, and several tables have been omitted. Also, the difficulties of time and distance have prevented the author from seeing galley proof. --Edit. Note.

Cheng-Siang Chen

Land utilization in Formosa is severely handicapped by the topography. Forest-covered mountains rising to impressive heights form a central range, which extends like a backbone the entire length of the island. Only 36 per cent of the land is utilized, and only 24 per cent of this is cultivated.

According to the comparatively reliable statistics of 1947, the total area of utilized land is 1,290,132 hectares, of which 66 per cent is cultivated (paddy fields, 41 per cent; dry fields, 25 per cent). Considerable changes have occurred during the last 20 years or so Table 1 (1). The percentage of paddy fields has increased, and that of dry fields

1. All tables are based on data contained in the Taiwan

Agricultural Yearbook, Dept. of Agriculture and Forestry, Taipei.

has decreased, as a result of the development of irrigation and drainage. The progress of economic forestation is reflected in an increase of the forested land; the growing popularity of cremation has reduced the burial ground. Land in railroads and highways has also increased, because of the expansion and development of communications."

8: Chen--441
116, 162, 241

TABLE IV-- FARM FAMILIES AND SIZE OF FARMS
(*In cha*[a])

DATE	TOTAL	0.5	0.5–1	1–2	2–3	3–5	5–7	7–10	10–20	20+
Oct. 1920	423,278	127,998	96,933	100,403	45,563	33,342	10,362	5,101	2,997	579
"	100	30.23	22.87	23.72	10.76	7.84	2.43	1.24	0.78	0.13
Apr. 1939	436,593	111,805	90,007	113,117	57,521	41,749	13,129	5,938	2,796	531
"	100	25.61	20.62	25.91	13.17	9.56	3.01	1.36	0.64	0.12

[a] 1 cha = 0.96992 hectare.

8: Chen--441 [2] N-3 (no date) 1951 Formosans
116, 162, 241, 311, 511

"SIZE OF FARMS

The agricultural population of Formosa is constantly increasing, though the percentage has fallen a little. But the area of cultivated land cannot be extended; consequently, the farms are generally very small, as in the provinces of China proper; moreover, the inheritance system breaks up the farms and further reduces the average size. From 1936 to 1945 the total area of cultivated land in Formosa averaged 846,552 hectares, the number of farm families 448,474; thus each farm family had only 1.89 hectares of cultivated land. Although this seems larger than the average farm on the mainland of China, Formosan farm families average 6.7 persons, as compared with 5.4 persons on the mainland.

In 1939 more than 85 per cent of the farm families had less than the three hectares estimated necessary to maintain a comparatively reasonable standard of living (Table IV); and at present, because of the usurpations and annexations of the landlords, about 46 per cent operate farms of less than one hectare, of which 26 per cent are less than 0.5 hectare. The poverty in rural districts and the hard life of farm families are plain. Those who operate farms of more than 10 hectares are less than 1 per cent of the total number of farm families."

"MULTIPLE CROPPING AND KINDS OF CROPS

The climate of Formosa is warm and hot the year round; rainfall is abundant, the growing season long. Therefore most of the cultivated lands have two harvests a year. In other words, the crop area is much greater than the cultivated area. From 1938 to 1942 the area of cultivated land averaged 858,355 hectares, the crop area 1,364,561 hectares; the multiple-crop index was 159 per cent. Among the hsiens, Taichung has the highest multiple-crop index (176 per cent), Hwalien the lowest (142 per cent).

Of all kinds of cultivated land, the double-cropped paddy fields have the highest multiple-crop index. These fields, which produce at least two harvests a year, occupy about 38 per cent of the total cultivated area. In addition, other crops are planted between the seasons or between the rows of paddy, so that there may be five harvests in two years or three harvests in one year. The multiple-crop index of double-cropped paddy fields approximates the average crop index of the lower Yangtze Valley. In view of the total area of cultivated land, Formosa has the highest multiple-crop index of the provinces of China. It is a compensation for the small size of the farms.

Temperatures permit the growing of many kinds of crops in all seasons, but it is mainly the uneven distribution and amount of the rains that set the agricultural season.

In the southern part of the island rainfall is concentrated in the summer; the winter is extremely dry. In places without irrigation, only one crop of paddy rice can grow, and the time for seeding and planting is fixed. In the northern part, though there is no dry season, the low temperatures and frequent rain in winter are not suitable for paddy rice, and there is a longer time for intermediate crops and fallow. The typhoon season and the length of day are also factors controlling the farming rhythm.

According to the Taiwan Agricultural Yearbook, more than 70 kinds of crops are grown in Formosa. However, three -- paddy rice, sugar cane, and sweet potato-- make up 70 per cent of the total value of agricultural products and occupy 72 per cent of the total crop area (Table V).

The crops may be divided into three kinds: food, cash, and horticultural. Among the food crops, paddy rice is first, sweet potato second. The chief cash crops are sugar cane and tea; tobacco and groundnuts come next. The horticultural crops include fruits and vegetables: banana is the most abundant fruit, with pineapple and citrus fruits next; among the vegetables, radish and mustard leaf are grown the most.

There is no obvious regional distribution of the food crops. For example, the area percentages of rice and sweet potatoes do not vary much among [443] the hsiens. (In Penghu, on account of the frequent gales, rice cannot be grown, and consequently the percentages of sweet potato and groundnuts are unusually high.) The distribution of cash

and horticultural crops is comparatively centralized. For example, in Taipei and Hsinchu the crop area of tea gardens exceeds 10 per cent of the total crop area of each hsien (average, 1937-1939); in the other hsiens tea gardens are insignificant or lacking. The total crop area of banana plantations in Taichung and Kaohsiung is 85 per cent, and that of pineapple plantations 83 per cent, of the provincial total. The sugar-cane fields of Tainan and Taichung together occupy about 69 per cent of the crop area of sugar cane of the whole province; the citrus orchards of Taipei and Hsinchu occupy 68 per cent of the crop area of orchards of the whole province. As vegetables are mostly consumed locally, their distribution is similar to that of food crops. Largely because of the widespread cultivation of paddy rice, green manure is grown in all the hsiens except Penghu, but in Taipei the interval between the two paddy crops is too short to permit cultivation of green manure, and its crop-area percentage is therefore unusually low."

8: Chen--442-443 N-3 (no date) 1951 Formosans-4
116, 241, 311

TABLE V—VALUE OF AGRICULTURAL PRODUCTS AND AREA OF THE CHIEF CROPS, 1936–1945*

CROP	VALUE (*in yen*)	% OF TOTAL VALUE	AREA (*in hectares*)	% OF TOTAL AREA
Paddy rice	272,153,000	47.09	620,560	46.31
Sugar cane	92,704,000	16.05	143,430	12.65
Sweet potato	40,260,000	6.90	142,768	12.59
Banana	12,932,000	2.23	18,003	1.59
Tea	11,581,000	2.00	42,004	3.70
Tobacco	7,082,000	1.22	3,330	0.29
Groundnuts	5,288,000	0.91	25,906	2.28
Pineapple	5,013,000	0.86	8,128	0.72
Radish	4,798,000	0.83	7,709	0.68
Citrus	4,583,000	0.79	4,881	0.43
Jute	2,606,000	0.45	11,167	0.98
Leaf mustard	2,044,000	0.35	3,178	0.28

* The total value of agricultural products includes the value of animal products, and the total crop hectare area includes green manure.

"ROTATION

Formosa enjoys the peculiar advantage of tropical and subtropical agriculture -- year-round rotation. The cycle of rotations for paddy fields ranges from one to four years, but one-year and two-year cycles are comparatively prevalent. The rotation cycle for dry fields is mostly limited to one or two years, except on sugar-cane plantations, where it runs into more than two years. [444]

The popular rotations and their cycles are as follows:

PADDY FIELDS

a) Paddy rice (Mar., Apr.-July)→Paddy rice (July, Aug.-Nov.)→Green manure (Dec.-Mar.)

b) Paddy rice (Mar., Apr.-July)→Sweet potatoes (Aug., Sept.-Jan. and Feb.)

c) Paddy rice (Mar., Apr.-July)→Paddy rice (July, Aug.-Nov.)→Vegetables (Dec.-Jan., Feb.)

d) Paddy rice (Mar., Apr.-July)→Paddy rice (July, Aug.-Nov.)→Overlapping sugar cane (1) (Oct.-Jan., Feb.)→Green manure (May-Nov.)→Sugar cane (Dec.-

1. 'Overlapping sugar cane' is so called because the young

sugar cane is planted between rows of the second crop of paddy rice when it is nearly ripe.

Mar., 3rd year)

DRY FIELDS

a) Groundnuts (May-Sept.) → Sweet potatoes (Oct.-Mar.)
b) Upland rice (Apr.-Aug.) → Sweet potatoes (Sept.-Mar.)
c) Green manure (May-Nov.) → Sugar cane (Dec.-Mar., 3rd year)

Paddy rice is generally the first crop. The growing season is usually four months; that for the second paddy crop, about three months and a half. Between the two growing seasons there is a so-called 'summer intermediate crop' season of one to two months; between the second season of one year and the first season of the following year there is a so-called 'winter intermediate crop' season of three to four months. The distribution of these seasons through the year varies according to the region. The first paddy crop is planted and harvested much earlier in the south than in the north. The second paddy crop is also planted and harvested much earlier in the south, but the difference in time is not so great. Thus the summer intermediate crop season begins earlier in the south

and lasts longer, but the winter intermediate crop season, though it begins earlier, does not last as long as in the north, because the following first paddy crop is planted much earlier.

The summer intermediate crop season, because of its short length and overabundant rainfall, is suitable only for green manure and two or three kinds of vegetables. On the other hand, the longer duration and better weather of the winter intermediate crop season make possible the cultivation of many kinds of crops. The duration of the winter intermediate crop season and the intensity of land utilization increase progressively northward; however, north of Hsinchu city the winter intermediate crops are usually delayed by the rainy and chilly weather. As a matter of fact, the middle part of the island, in spite of its rather dry winter, is the best area for winter intermediate crops, because of the development of irrigation; that is why Taichung has the highest multiple-crop index.[445]

Sugar cane is the second crop of Formosa. Since autumn planting became popular, the space left by the young sugar-cane crop has been utilized for sweet potatoes, groundnuts, cotton, wheat, and vegetables. In the paddy fields of the middle part sugar cane and paddy rice are alternately grown. Thus all the cultivated area of the island is utilized to the utmost."

"INTENSITY OF LAND UTILIZATION

If compared with the agriculture of the Philippines and Siam, Formosan agriculture can be called 'intensive'; but in comparison with the agriculture of Japan, it is somewhat extensive. Moreover, rice is the staple crop of Formosa, and its chief production factors are manpower, fertilizer, animal labor, and implements.

To maintain the productivity of the land and increase crop yields, great quantities of fertilizer are needed. After the middle 1920's the use of fertilizer gradually increased—to 133 per cent of the 1924 amount in 1930, to 173 per cent in 1935, to 202 per cent in 1940, and to the peak of 410 per cent in 1943. From 1936 to 1945 the consumption of commercial fertilizer averaged 4,293,000 quintals a year, of which rice and sugar cane consumed the largest amounts (about 50 and 35 per cent respectively). But after the outbreak of the Second World War importation and use of fertilizer decreased, and consequently, fertilizer consumption and crop yield being closely related, the yield of rice and sugar cane also decreased.

Among the rice crops, the Ponlai rice, though its fertilizer and labor needs are greater than those of the native rice, is more commercial, and the method of cultivation is comparatively more progressive. But the intensity of Ponlai-rice cultivation is far

behind that of Japan, and only on the same level with that of Korea. For example, Formosa uses (1935) 34.6 per cent of the amount of natural fertilizer used in Japan, though it uses 119.3 per cent of commercial fertilizer; with respect to the cost per hectare, Formosa spends only 83 per cent as much as Japan. The number of manpower days per hectare is only 49.1 per cent of that in Japan, the amount of wages only 47.4 per cent. The number of animal-labor days per hectare is as much as 97.3 per cent of that in Japan, but the expenses for animal labor are only 57.1 per cent. The expenses for farm implements per hectare are only 28.7 per cent of Japan's. In short, the intensity of land utilization in Formosa is about 57.3 per cent of that in Japan and 95.4 per cent of that in Korea.

From 1931 to 1934 the cost of fertilizer used per hectare in Formosa averaged 51 yen a year; in Japan, 81 yen. However, Formosa's multiple-crop index is about 20 per cent higher than Japan's; consequently, the per [446-453 contain maps] [454] hectare cost of fertilizer must be reduced 20 per cent, to 40 yen—about half the cost in Japan. (Table VI).

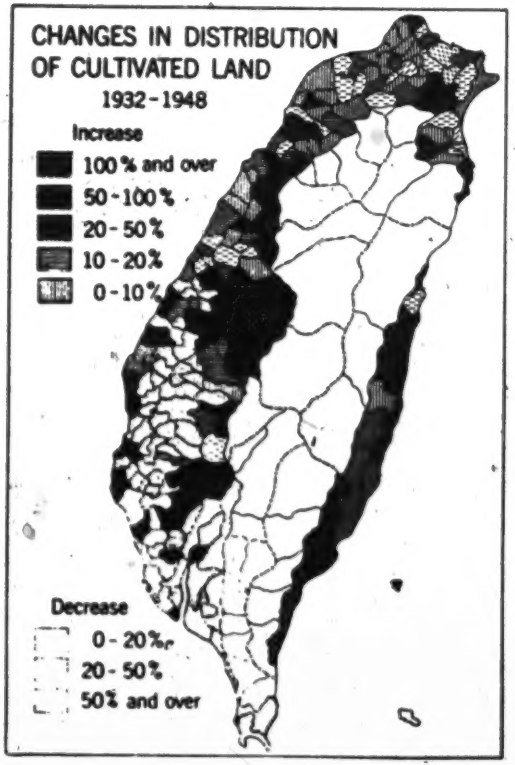
The intensity of land utilization of a region is reflected in the unit-area production of the farmland. The intensity of land utilization in Formosa being lower than that in Japan, the average per hectare production of many crops is only 50 per cent of the Japanese production and approximates the average of the provinces of South China (Table VII)."

8: Chen--447[2]
116, 241, 311

N-3

(no date) 1951

Formosans



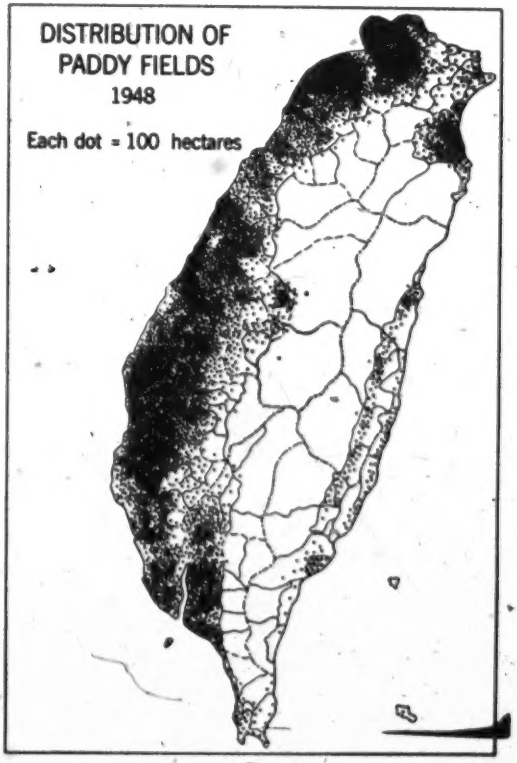


FIG. 8

8: Chen--448
116, 241, 311

N-3

(no date) 1951

Formosans

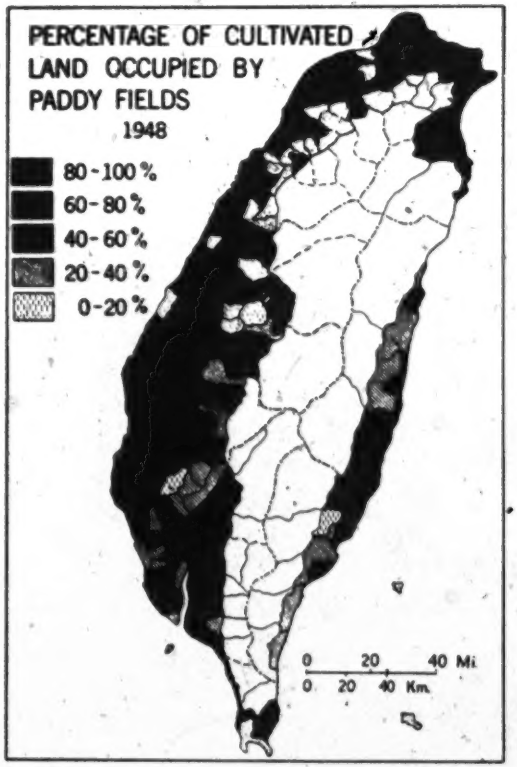


FIG. 10

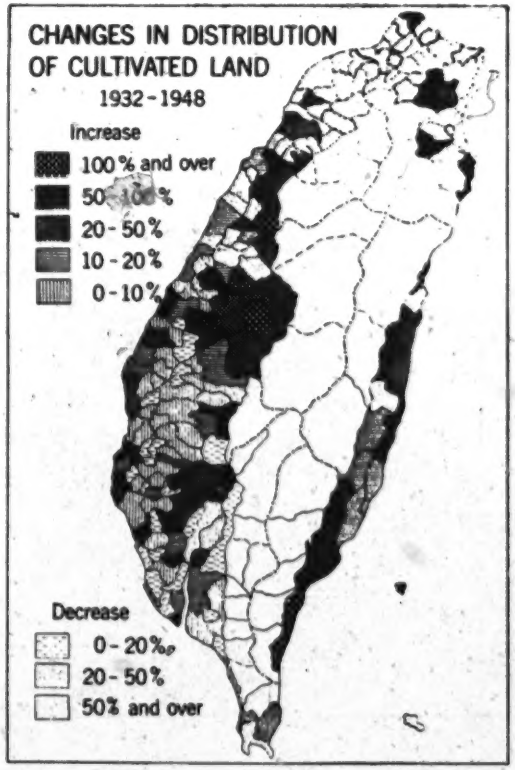


FIG. 11

8: Chen--448 [2]
116, 241, 311

N-3 (no date) 1951

Formosans

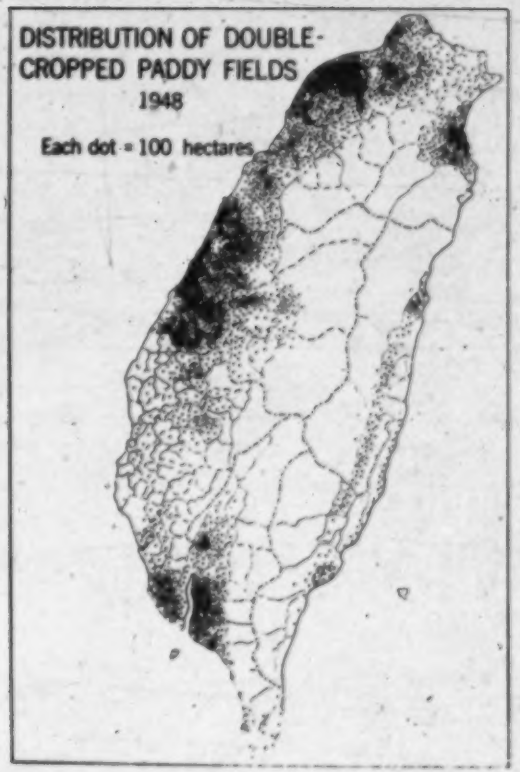


FIG. 12

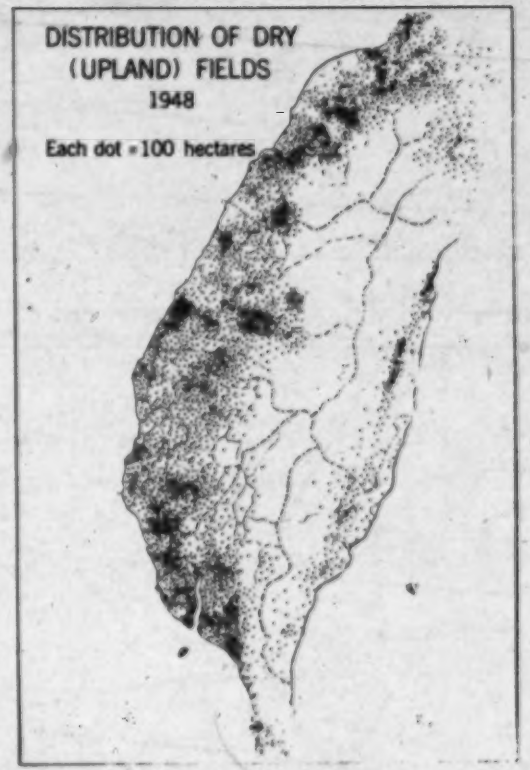


FIG. 11

8: Chen--449 N-3 (no date) 1951 Formosans
116, 241, 311

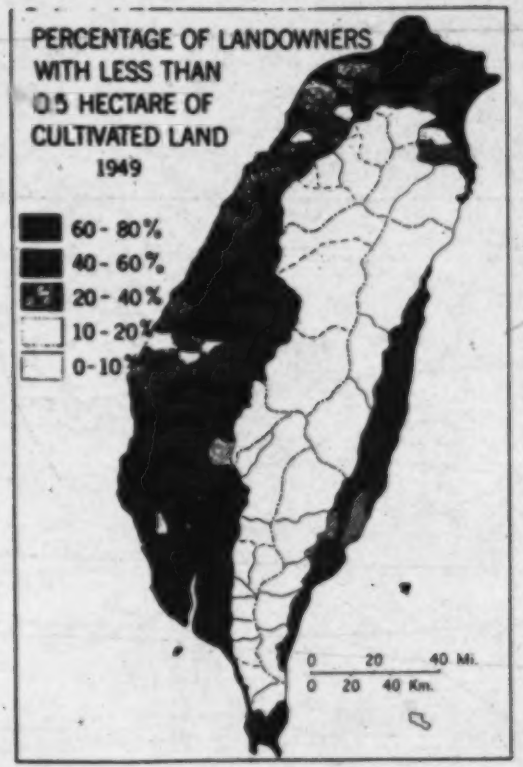


FIG. 14

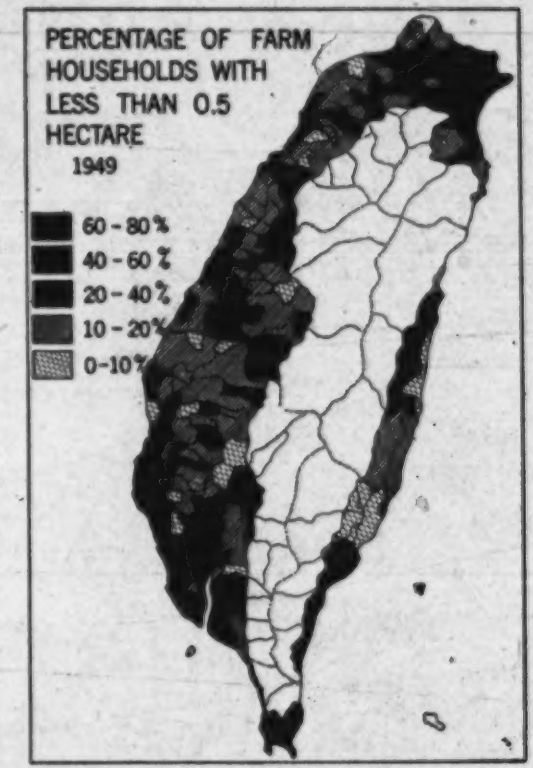


FIG. 15

8: Chen--453 [2] N-3 (no date) 1951 Formosans
116, 241, 311

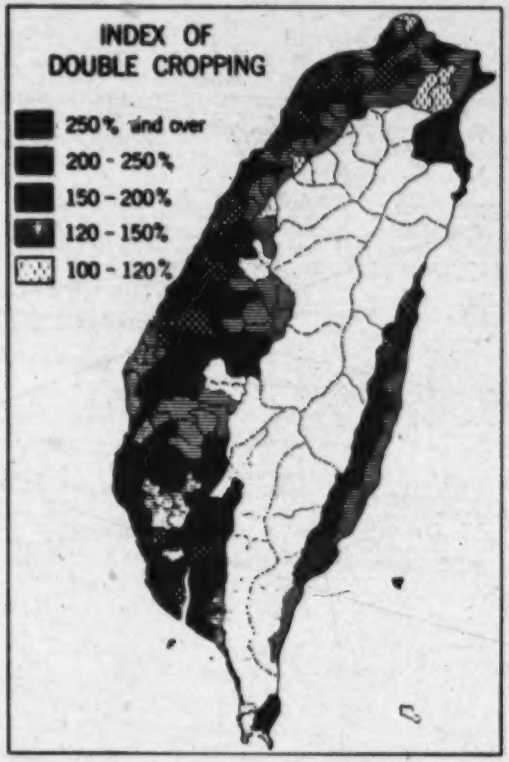


FIG. 32

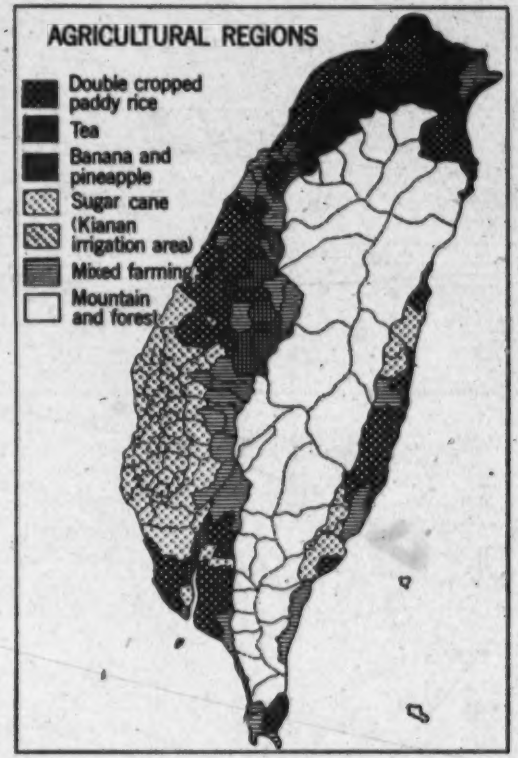


FIG. 33

8: Chen--454
116, 241

TABLE VI—PER HECTARE COST OF FERTILIZER IN FORMOSA AND JAPAN
(*In yen*)

	1931	1932	1933	1934	AVERAGE
Formosa					
Commercial	21	25	33	41	30
Natural	20	21	21	23	21
Total	41	46	54	64	51
Japan					
Commercial	31	33	37	38	35
Natural	42	43	49	50	46
Total	73	76	86	88	81

TABLE VII—YIELD PER HECTARE, FORMOSA AND JAPAN, 1938–1940
(*In quintals*)

CROP	FORMOSA	JAPAN	FORM./JAP.	CROP	FORMOSA	JAPAN	FORM./JAP.
			%				%
Sugar cane[a]	692.22	558.96	123.84	Wheat	11.04	20.99	52.60
Sweet potato	114.55	129.64	88.36	Radish	95.22	231.00	41.22
Sweet corn	12.94	16.05	80.62	Upland rice	10.45	26.03	40.15
Paddy rice	19.91	29.17	68.26	Jute	12.43	31.44	39.54
Soybean	6.36	10.64	59.77	Barley[b]	5.61	22.64	24.78

[a] Because of the incompleteness of the Japanese statistics of 1940, the yield of sugar cane is the average of the three years 1937–1939.

[b] In 1939 and 1940 the average per hectare yield of barley in Japan was extremely high, that in Formosa extremely low. From 1936 to 1938 the average yield in Formosa was 7.92 quintals, 37.77 per cent of the Japanese yield of 20.97 quintals.

8: Chen--454[2] N-3 (no date) 1951 Formosans
116, 132, 241, 312

"IRRIGATION

The general increase in per hectare production in Formosa in recent years is largely due to the progress of irrigation and additional fertilization, as well as to improvement of cultivation and seeding. Because of the great variation in rainfall and the location of the main agricultural region on the western coastal plan, where the winter is extremely dry and the dry season is long, irrigation is necessary. On the other hand, in summer, especially when typhoons pass over the island, the precipitous topography results in floods. The northeast corner, facing the northeast winter monsoon, has plenty of rain the year round; in fact, in many places the winter rainfall is greater than that of summer, and floods are not infrequent. Consequently, drainage and flood control are as important as irrigation."

8: Chen--455
116, 241 312

TABLE VIII—AREA UNDER IRRIGATION AND DRAINAGE IN FORMOSA
(*In hectares*)

YEAR	CULTIVATED AREA	IRRIGATION AND DRAINAGE	%
1903	534,157	150,456	28.2
1910	674,100	226,706	33.6
1920	749,419	305,270	40.7
1930	812,116	441,477	54.4
1940	860,439	530,113	61.6
1948	863,156	505,933	58.6

TABLE IX—CULTIVATED LAND UNDER IRRIGATION AND DRAINAGE, BY HSIENS
(*In hectares*)

HSIEN	1940 AREA	1940 %	1948 AREA	1948 %
Taipei	43,801	46.77	47,728	52.80
Hsinchu	89,077	60.02	56,269	37.37
Taichung	120,323	69.93	102,654	58.49
Tainan	178,612	66.70	222,160	85.10
Kaohsiung	77,194	60.62	61,500	46.60
Taitung	7,508	43.21	5,907	28.53
Hwalien	13,598	50.73	9,715	37.98

8: Chen--455-456 N-3 (no date) 1951 Formosans--1-2
116, 241, 312, 177.31 Japan
636.31

"To a certain extent, irrigation in Formosa was well developed long before the Japanese occupation. As recorded in the twenty-seventh volume of the 'General History of Taiwan' in the later years of the Tsing dynasty, the total number of irrigation reservoirs and ditches was 234. After the occupation the Japanese paid considerable attention to irrigation and drainage. In 1901 'Regulations Governing Public Irrigation Systems' were promulgated, and since then the area under irrigation and drainage has increased annually (Table VIII). In 1903 the total area under irrigation and drainage was 150,456 hectares, 28 per cent of the total cultivated area; in 1942 it had increased to 545,094 hectares, about 64 per cent of the total cultivated area. In area under irrigation and drainage Tainan is first among the hsiens (1948); Taichung comes next; then follow Hsinchu, Kaohsiung, Taipei, Hwalien, and Taitung; Penghu has no irrigation (Table IX). In percentage of cultivated land under irrigation and drainage Tainan is again highest, Taitung lowest.

Among irrigation works in Formosa, the Kianan system, in western Tainan, is the most famous. Construction was begun in 1920 and was finished in 1930, at a total cost of 54,013,000 yen. Today 140,000 hectares of cultivated land are irrigated from the Chenven and Chuhsiu Rivers. Since completion of the Kianan system, land price and land rent within its irrigating area have greatly increased. In 1920 the average land price was

313 yen per hectare, in 1935 it was 1144 yen; land rent rose from an average of [456] 36 yen per hectare to 128 yen; and the value of the yield per hectare increased from an average of 90 yen to 361 yen.

Before the Kianan irrigation system was completed, the average per hectare yield of the rice grown in the western part of Tainan was only 19 quintals. After its completion, because there were still limitations on water supply, paddy rice was grown with sugar cane and sweet potato in a three-year rotation; the yield increased to 27 quintals per hectare. The annual profit on paddy rice, when grown alone, had been 194 yen, totaling 582 yen in three years, but the profit on the rotation was 524 yen for the first year, 272 yen for the second year, and 454 yen for the third, totaling 1250 yen — more than twice the original three years' profit."

15: U.S. Navy--33 [2] (no date) 1944 Formosans
116, 651, 241, 177.24 Japanese
636.24

"Compulsory service takes an indirect, though no less effective form in the forced contribution of produce. For instance, a village headman notifies the farmers that their district is expected to provide a certain quota of hay for army horses, which must be forthcoming by a certain date. Castor beans are another example. By requiring this crop (which has no value in the economy of the individual farmer) the production has increased from 126,893 pounds in 1936 to 4,148,364 in 1938, which represents an impressive labor contribution. Through this method a goal of 23,000,000 pounds has been set for 1949. Each year more time and more labor and more space must be given to producing castor oil for the air service. Each household tends a few plants from which the children carry the beans to school for collection. In many instances no compensation is given for the produce, and in the instances where compensation is given, it is wholly inadequate to reimburse the costs of production."

10: Schumacher--222-223 T-1 (ca. 1896) 1898 Formosans-1-2
116, 241, 311, 727

In the north of Formosa are cultivated a variety of products. The region from Kelung to Tamsui is the section that has most definitely been under the influence of Europeans because it is close to the port of Tamsui and the main settlement of the Europeans in Tuatutia. Here in the north all available land is utilized. The industrious people have even turned slopes into productive agricultural land. Yet only rice is cultivated on a large scale although there are indications that at one time in the past other less common products must have been grown. During war time [MC: 1895?] the sugar-cane fields were furrowed and ruined and the tea plantations were neglected. The land as far as Gosche is mainly used for fields of indigo and sweet potatoes; batatas and rice are rare. The region as far as Tschanghua, on the other hand, [223] is claimed almost exclusively by rice culture. It has escaped the destructive instinct of the Japanese because the Japanese troops wear straw sandals on their marches and would have dirtied their feet with mud and walked them sore on the irrigated rice fields; this would have been a definite impediment although it would not actually have been a danger. Economically the most valuable and the most beautiful part of Formosa extends from Tschang-hua to about 20 kilometers beyond Kia-y. The palm groves are rather clear in some sections and here one finds many remnants of protective shelters against the tropical sun where formerly the most precious products were cultivated. Here and there palm groves are lacking. It seems that for the last ten years the Chinese in these districts have confined themselves to a cultivation of rice or sugar-cane, because they required less capital and less

10: Schumacher--222-223 T-1 (ca. 1896) 1898 Formosans-2
116, 241, 311, 727

labor. In view of the political uncertainty and the greed of the mandarins it did not seem advisable to invest large sums for the cultivation of plants of the optimum state.

10: Schumacher--224 T-1 (ca. 1896) 1898 Formosans
116, 241, 312

It has been mentioned that the agricultural population of Formosa is almost exclusively concerned with the cultivation of rice. It is indeed, the extensive cultivation of this product that has changed the character of the climate of Formosa. All the land utilized by rice fields is repeatedly flooded and very ingenious systems have been devised to assure an even distribution of the regularly flowing water of irrigation. The water trickles along in the most intricately arranged channels and often hydraulic engines are used in order to direct the water from one field to another. This continues until the heat of the sun has done away with all of it and the humidity of the air has been increased considerably. The Chinese bring all their manure and refuse to the area surrounding their settlements and therefore the air is most unhealthy and dangerous right there.

15: U.S. Navy--27 [9] (no date) 1944 Formosans
116, 241, 433, 434, 177.43 Japanese
636.43

"Food is plentiful, but is subject to requisition by the Army. The farming population is able to raise a substantial amount of the food it consumes, but the Japanese frequently order the restriction of plots planted to these crops in order that more space may be devoted to a crop (castor oil beans for instance) required by the military. In 1940 the official daily ration of rice permitted to farmers in Taihoku Province was only 0.60-0.75 pounds, or 2-2 1/2 go per person. This is well below the usual consumption and has been the cause of bitter discontent and resistance."

15: U.S. Navy--30 [8] (no date) 1944 Formosans
116, 241, 516

"There are many folkways and habits among the Formosan-Chinese which are of no importance administratively but which attract the attention of strangers on the island. These include the practice which farmers have of kneeling in the muck of the paddy fields and advancing through the rice rows on their knees, planting or weeding, instead of standing and bending or stooping to plant."

15: U.S. Navy--31 [7] (no date) 1944 Formosans
116, 162, 241, 177

"Approximately 53 percent (2,880,410) of the population of Taiwan was engaged in agriculture at the end of 1937. The remaining 47 percent was engaged chiefly in trade and commerce.

In 1937 the number of persons employed in industry had grown to 87,244, an increase which reflects the rapid expansion of industrial enterprise. The distribution of labor was then as follows:

Table 24: Distribution of Labor in Industry

Industry	No. of Persons Employed	Percentage
Food (including sugar and pineapple processing workers)	48,615	55.6
Chemicals	4,988	5.7
Textiles (including hemp processing)	4,000	4.5
Mining	4,214	4.7
'Others'	25,427	29.5
	87,244	100.0"

22: Wiedfeldt--17 [4] F-5 (1913) 1914 Formosan Aborigines
116, 423, 311, 241 Atayal

As long as the family is making use of its plot of ground, their possession of it is protected. As soon as they leave it, which happens after two, or sometimes three crops, because the soil will not produce anything any more, any other family of the clan can take possession of it. This does not generally happen, however, before seven years have passed, and the field has become covered with a luxuriant growth of bushes and trees.

31: Hofmann--604 [2] N-3 (1909) 1912 Formosans
116, 133, 231, 241, 311, 342

We travelled from Taihoku by train for 1 1/2 hours until we came to the small village of Toyen. Here the land is almost level and has been utilized to the fullest extent. The extensive rice plantations were green and threw into relief the picturesque houses of the Chinese; these are solid brick houses with a curved roof reminiscent of Buddhist temples. In the canals, for which the tributaries of the Tamsui are utilized, there are numerous tame ducks. In the small ponds one may see grey water buffalo, a domestic animal which occurs in large numbers of Formosa. It cannot be compared to European cattle as regards its usefulness in agriculture, and so far attempts to domesticate it have not been successful. Many times I saw the patient Chinese peasants threatened by the buffalo or saw that the animal had broken loose. Next to the rice fields there are extensive tea plantations. This is the region where the famous Oolong tea is produced. There are also banana and pineapple plantations on a smaller scale. The houses are surrounded by slender bamboo trees, and everywhere one may see betel palms, a tree which grows everywhere on Formosa.

31: Hofmann--605-606 N-3 (1909) 1912 Formosans
116, 161, 241

The agricultural population [606] contrasts favorably with the migrant workers in the cities. Their agricultural methods are well organized, although it is true that they are based on experience rather than theory. A further testimony to the industry and diligence of the Chinese is the fact that in this field the Japanese cannot compete with them.... There are no Japanese farms on Formosa, although there is still enough land for this purpose. The island is thickly populated; there is an average of 86 inhabitants per square kilometer.

37: Steere--316 [2] S-3 (1873-74?) 1875 Formosans
116, 132, 311, 241

"The southern part of the island is in the tropics. There is much rain in the north part of the island, especially at Kelung. At Takao and Taiwanfu, it is dry from October to April, but it rains much sooner in the mountains to the east, the rains already beginning there in February." Rice is the principal crop cultivated upon the low level lands to the west, and there is much exported to China. The best lands produce three crops annually. Lands that are harder to irrigate are planted to sugar cane, and large quantities of sugar are exported in foreign vessels to Japan and Australia. Upon the first of March ten or twelve vessels were lying at the ports of Takao and Taiwanfu, all loading with sugar."

36: Rowe S-4 (no date) 1955 AF1 China AF1
Formosa AD1

C F 423 427

tenants there has been a rent reform program, which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

C F 241 654

By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

C F 652

Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

C F [377] [249] 433

Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

C. General Characteristics

181 Formosans are considered to be industrious and resourceful. Perseverance, tenacity, and endurance are characteristics of the majority. The rural people show a strong feeling of solidarity and affection to members of their community and have a strong attachment to the soil as representative of their homeland and their way of life. Family loyalty and filial love are considered the greatest of virtues. Deep love for the family circle is further accentuated by the frontier environment of Formosa. In the cities, people tend to become more independent and self-reliant. Because it is not the custom to pool resources for joint enterprises outside the immediate family, only small businesses can be established. If the head of a small urban household suffers a long illness or extended unemployment, the family falls into dire need. Most families so afflicted must return to rural areas and live with kinsmen until they have acquired enough capital to go back to the city and try again.

D. Recreations and Sports

• 241 461 Formosa's subtropical climate makes farming possible in all seasons; most farmers

241 on the island work every day of the year. The
461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

177 A majority of city dwellers have running water and electric lights. Most families in the cities own sewing machines and bicycles. As the islanders acquire Western conveniences and possessions, their patterns of living take on the configurations common to the occidental world.

526 Sports -- soccer, basketball, and baseball -- are popular among the younger generation. A Formosan basketball team toured the United States and countries in Southeast Asia in 1955. A soccer team from Formosa is to participate in the Olympics in Australia.

524 Mah-jongg and chess, traditional games
517 of the leisured class, have retained their popularity among the older generation. The young favor motion pictures and dancing.
517 Government officials and wealthy persons of
529 other classes take their families to one of the numerous scenic resorts or hot springs in

464 natural rate of increase and emigration remain the same.[7] Since agricultural employment, which was about 1.2 million in 1950, is assumed to remain constant because of limited arable land, the number of jobs for male non-agricultural workers will have to be tripled by 1980, just to provide enough employment, to say nothing of an improved standard of living.[8]

II. FARM LABOR

• 241 Size of Farm Households and Labor Force. In 1952, the total rural population of Formosa amounted to 4.3 million, or about 680,000 farm households. The average size of a farm household at that time was 6.3 persons.[9] An accurage estimate of the size of farm labor is extremely difficult because women as well as children also take part in farming. Women also work in the field and dry harvested rice. Children may deliver food to the field where adult family members work. Farming in Formosa is a household responsibility, and a clear-cut

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7. A Report on Taiwan's Population, Princeton, Princeton University Press, 1954, pp. 53-55.

8. The constant number of farmers at 1.2 million for the period 1950-80 is only an assumption. In 1954, the total number of farmers was reported to be 1.8 million.

9. Taiwan Provincial Government, Taiwan Agricultural Yearbook, 1953, Taipei, 1953, pp. 36-37.

241 demarcation of duties or types of work is rather difficult. According to a survey made by the Joint Commission on Rural Reconstruction (JCRR), on the basis of 4,000 sample families, in 1952 there were 8.14 persons to each farm household, and the actual working force of each household was 3.21 man-equivalents.[10] If this relation was applied to the whole farm population pro rata,[11] the actual working force on

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10. Y.C. Tsui and S. C. Hsieh, Economic Digest Series No. 4: Farm Income of Taiwan in 1952, Taipei, JCRR, 1954, pp. 12-13. One man-equivalent equals a full-time farm laborer between the ages of 16 and 60.

11. Rigid application of this ratio to the total farm population may be open to criticism in regard to the age composition of all farmers and their families and their sex distribution. M reover, the survey represents only one year (1952) and certainly cannot be interpreted as representing the general trends. However, in the absence of a complete survey or more satisfactory sampling, the rough approximation obtained by the following means would work for our purpose here:

Average man-equivalent per family (3.21): Average persons per family (8.14) = X (Total man-equivalent): Average number of persons per family for the whole island, and X multiplied by total number of all farm families.

241 Formosan farms in 1952 would reach 1.7 million man-equivalents.[12]

241 464 Size and Mobility of Surplus Farm Labor. In Formosa there are two, three, and, in some cases, as many as four harvests per year. Therefore the frequency of planting and harvesting is high. The supply of family labor is usually constant. It is true that where there are extra young workers in the family, they often are attracted to the cities in quest of employment or to road construction, water conservation work, etc.; however, strong family ties usually cause them to return if city employment fails to materialize or when temporary construction jobs terminate. The high frequency of planting and harvesting accounts for the absence of prolonged periods of seasonal slack in farm work in spite of the constant supply of family labor.

Formosan farm labor in general is not mobile. Under the current laws regulating the lease of farms, the tenants, by virtue of their contracts with the land owners, have

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12. This figure comes close to the total agricultural workers of 1.8 million in September 1954 as reported in Taiwan: Land of Opportunity, Economic Stabilization Board, Republic of China. However, the latter estimate did not disclose how the figure was reached.

•241 464 the right to cultivate the land for six years.[13] This arrangement gives the farmers a feeling of security and tends naturally to tie them down to the land. As a result of the land reform, 76 per cent of the farmers are now owner-cultivators.[14] whose land ownership results in low mobility. However, it should be noted that all surplus farm labor can be made available for other employment, permanent or temporary.

As seen in the following table, the per chia farm population increased from 3.0 persons in 1929, to 4.3 persons in 1949, and 4.7 persons in 1952.[15] As of 1952, the size of surplus labor on the farms may be estimated at 68,000 man-equivalents.[16] This labor force is a surplus in the sense that the available manpower exceeds the actual need.

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13. Article V, Regulations Governing the 37.5 per cent Land Rental, promulgated on June 7, 1951.

14. United Nations, Department of Economic and Social Affairs, Economic Survey of Asia and the Far East 1954, Bangkok, 1955, p. 88.

15. The increase is principally through natural increase of the farm population.

16. The estimate is based on the JCRR survey Farm Income of Taiwan in 1952. The provincial average of 270 days requiring 3.21 man-equivalents applies to the production of all crops. Supposing that each farmer can work (continued next page)

45:Stanford U. S-4, 5 1956 AD1 Formosa
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16. (continued) 310 days per year (less Sundays and holidays), each 3.21 man-equivalents will have done 40 days of work in addition to the 270 days required for farming. When this extra working manpower is multiplied by the existing farm labor force -- 1.7 million -- it will result in a farm surplus labor force of 68,000 man-equivalents. This is a conservative estimate because some farm families put in more than 400 working days a year in several regions and because farmers seldom take holidays other than national ones.

45:Stanford U, S-4, 5 1956 ADI Formosa
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AREA OF CULTIVATED LAND AND FARM POPULATION*

Year	Farm Population (Thousands)	Cultivated Area (chia)	Population (per chia)
1929	2,489	830,010	3.0
1939	2,925	886,225	3.3
1949	3,880	891,675	4.3
1950	3,998	897,522	4.3
1951	4,161	900,961	4.6
1952	4,257	903,369	4.7

* Figures for 1929 and 1939 from Taiwan keizai nenpo 1941 [Taiwan Economic Annual], Kokusai nippon kyokai [International Association of Japan]. The rest from Taiwan Agricultural Yearbook, 1953. Persons per chia calculated.

241 The Farmers' Outlook. Since the Restoration, the land reform program has been carried out and farmers are enjoying a greater sense of freedom and individual initiative. However, the farmers are inclined to compare the current situation with conditions under the Japanese with regard to farm receipts, living conditions, political freedom, etc. In the eyes of the farmers, the Nationalist Government's success in its administration of Formosa has depended upon and will continue to depend upon how favorably its accomplishments will compare with those of the Japanese.

241 435 It is reported that a large disparity exists between the prices received for farm products and the prices paid for supplies used on the farm. To illustrate this point, the per chia farm receipts from all sources amounted to NT $9,700 in 1952,[17] while the per chia expenditures (for production purposes) were NT $5,400. Thus, the net earnings amount to NT $4,300 per chia, which constituted the support of 4.7 persons, the latter being the average farm population per cultivated chia.

241 208 When asked in a JCRR survey in 1952

17. New Taiwan Dollars. The prevailing rate of exchange during the year was NT $15.65 to US $1.

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whether current conditions were better than those in 1937, 35 per cent of the 1,176 farmers answered in the affirmative, while 43 per cent answered in the negative, with 16 per cent indicating that conditions were about the same.[18] Among the main reasons given for the affirmative answers were land reform, more political freedom, and larger supply of household goods. Negative answers were attributed to an increase in farm population and high prices in general in comparison with the prices of farm products. However, the general outlook was hopeful among the farmers surveyed. Many of them expected to own their houses and land. Nearly 50 per cent of the heads of households stated that conditions would probably be better during the next ten years. This optimistic conviction was apparently based on the assumption that the land reform program would be carried out as planned, that peace would prevail, that prices would become lower, that more factories would be established, and that the surplus population could go back to the Mainland after the latter's liberation from communism.

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18. A. F. Raper, Rural Taiwan -- Problems and Promise, Taipei, JCRR, 1953, p. 282. The remaining 6 per cent made no answer.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3a',
Economic Background

GENERAL STRUCTURE OF ECONOMY

Two-thirds of Formosa is mountainous and one-third is lowland. The mountains are rugged and covered with dense forests, but most of the lowland is well suited to the production of commercial crops. Though the Tropic of Cancer passes through the island, its climate is mild, with moderate temperatures and abundant rainfall. Two major crops a year are usual and a third crop of vegetables often increases the total yield. The soils are generally fertile, but frequent inundation and heavy year-round cropping cause excessive leaching. To maintain fertility, large quantities of fertilizer become a necessity.[1]

135 Mineral resources do not appear to be abundant. However, since much of the mountainous regions has not been thoroughly

1. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop. Chiao-min Hsieh and Alice Taylor, "Formosa" Focus, N. Y., April 1955, p. 5.

135 explored geologically, the situation with respect to mineral resources could be changed considerably in the future. Bitumous coal is abudant in the northern part of the island, and some high-grade coking coal has been recently discovered at Nanchuang near Miaoli. Large reserves of copper and sulphur and some gold veins are located in the northeast part of the Taipei area. Pyrites in limited quantities are mined in the north, primarily for use in the fertilizer industry. Limestone and glass sand are also available for building purposes. But such ores indispensible to industrial development as iron, bauxite, lead, zinc, tin, and magnestie[2] are scarce or non-existent on the island and must be imported. As much of the rock formation on the island is petroliferous, large oil and natural gas fields may be discovered in the future, but as yet petroleum finds and development have been insufficient to offset reliance on foreign sources of supply.

241 The economy of Formosa is essentially agrarian; although only one-fourth of the total land area is arable, most of the population is engaged in farming. Ever since the Dutch

2. Mercury and manganese ores are found in the mountains near Yilan.

241 occupation in the first half of the seventeenth century, rice and sugar have been the staple products of the island.

241 Under Chinese rule in the eighteenth
245 and nineteenth centuries, a constant influx of immigrants from the mainland reclaimed the extensive western plains of Formosa for the cultivation of rice and sugar. The foothills surrounding the plains were terraced for the growing of tea. Further in the mountains,
278 camphor was gathered from the dense forests. In the more isolated mountain region, aboriginal tribes practiced hunting and slash-and-burn agriculture. Coal mines were operated for a time by the government but were later abandoned.

489 Except for a 60-mile stretch of railway between Keelung and Hsinchu, communications was primitive until the present century. Rafts, boats, and junks were used along the coast and on lakes and rivers. Overland, the inhabitants were obliged to travel either in man-borne palanquins[3] or ox-drawn carts.
439 Western merchants handled a small international trade, consisting of tea, camphor, and sugar.

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3. A closed litter commonly used as a conveyance in China.

423 was entirely wiped out by subsequent devaluation
427 of the currency. The Formosan landlord should be especially contented, when he ponders the lot of his brothers on the Mainland. In sharp contrast with the moderate measures in Formosa, the Communists liquidate the landlords, confiscate their land, and make collective serfs of the peasants. The effect of the land reform in Formosa is expected to be more far-reaching than the economic betterment of the peasant class; it is an important asset of the Nationalist Government in anticipation of the liberation of the China Mainland.

423 In connection with the successful
241 redistribution of land in Formosa, it should be added, however, that we must not assume the economic problems of the Formosan farmers who comprise 52 per cent of the total population have been completely solved. First of all, the average size of the farm is too small for economic sufficiency, for 47 per cent of farmer families own less than 0.5 chia (1.2 acres) of farm land, 70 per cent own less than one chia (2.4 acres) and 93 per cent less than three chia (7.2 acres).[26] The average

26. From Statistics on Landownership Classification in Taiwan China, 1952, compiled by Provincial Land Bureau, Taipei, June 1952.

423 and owned by each farming family in Formosa
241 is 1.28 chia or 2.8 acres as compared with 215.3 acres owned by each farming family in the United States.[27] The small size of the farms limits the living standard and the purchasing power of Formosan farmers. Even the small parcel of land owned by the average farmer is threatened with further partition on account of the enormous rate of natural increase in population. The average size of farms on Formosa has decreased from nearly 2 chia (.5 acres) in 1937 to the present 1.3 chia. Unless industrialization of the island can divert members of the growing farming families to industrial enterprises, the size of farmland per family will be further reduced through inheritance and will become too small to maintain even a marginal subsistence. It will be indeed a serious situation. Furthermore, for lack of capital, and relying principally on human labor, the efficiency of Formosan farming is low, and the cost of production is
387 high. The soil of the western coastal plain is
241 alluvial, lacking sufficient humus to be fertile. Fertilizer is needed to increase its productivity.[28]

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27. Report of United States Bureau of the Census for 1950.

28. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop, whereas in Japan, the figure is 66 to 98 pounds.

387 The Chinese Nationalist Government with
241 American aid has made special effort to expand the production of fertilizer in the past five years[29] and make it available to the farmer through the Land Bank of Taiwan and the farmers' associations. The Kaohsiung Ammonium Sulfate Corporation reduced the selling price of fertilizer, from NT$3,100 to NT$2,800 per metric ton in June 1954 and then to NT$2,200 in August 1954. But the present production still falls short of the estimated annual requirement of 740,000 metric tons.[30]

241 At present, farm mechanization is in
407 its infancy. Little power is employed in agricultural production. Farm implements are crude and clumsy; they do not plow deeply and evenly, and so the distribution and the depth of the seeds sown are not uniform. The Sino-American Joint Commission on Rural Reconstruction is sponsoring many projects to

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29. Production was increased from 45,840 metric tons in 1949 to 168,491 metric tons in 1954.

30. The amount of fertilizer actually used in 1952 was 535,801 metric tons-- (732,600 short tons), JCRR General Report IV, Taipei, 1953, p. 55.

241 409 improve the designs of local farm implements -- the plow, the hoe, the sickle and the rice thresher; it is also introducing the use of hand-operated semi-automatic sprayers and rotary dusters. A demonstration of mechanized farming was made on an abandoned pineapple farm in Laopei. It was found that, with deep sub-soiling and deep plowing by a tractor, the cost of production can be reduced from 35 to 40 per cent. This clearly proves that land reform is but one step toward the amelioration of the economy of the farming population in Formosa. In order to raise the standard of living of the farmer, when the arable area is limited and the average holding is small, the per unit and per capita yield must be increased. To enhance a program of productive efficiency, which would include the application of greater amounts of fertilizer, the mechanization of the farms, and other improvements of agricultural techniques, the farmer himself must learn these modern methods in order to increase the value of the land he holds.

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Annex "A," Subparagraph 3a,
Economic Background

AGRICULTURE

I. INTRODUCTION

241 162 431 Formosa's economy is predominantly agricultural. Household registration in 1950 indicates that of a gainfully employed male population of 2.1 million, roughly 57 per cent were farmers.[1] The Taiwan Agricultural Yearbook reports that about 52 per cent of the total population in 1953 were directly dependent on agriculture for a living.[2] Approximately 49 per cent of the total national income in 1951 was derived from agriculture.[3]

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1. George W. Barclay, A Report on Taiwan's Population, Princeton, Princeton University Press, 1954, p. 59.

2. Provincial Government of Taiwan, Taiwan Agricultural Yearbook, 1954, Taipei, 1954, p. 1.

3. Industrial Development Commission, Economic Stabilization Board, Industry of Free China, November 1954, Vol. 2, No. 5, Taipei, p. 7. Agriculture is defined to mean all productive activities involved in farming, livestock-raising, forestry, and fisheries.

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241 The importance of agriculture to the national
434 economy is made more obvious by the fact that a large percentage of Formosan industries involve the processing and transporting of agricultural commodities. Agriculture products also provide an important source of foreign exchange for the island. In 1953, total
[139] exports amounted to approximately US$130,000,000, of which over 90 per cent was derived from the export of agricultural products.

241 The climate in Formosa is eminently suitable for agricultural production. The tropical and sub-tropical atmosphere and abundant rainfall in most parts of the island encourage the cultivation of rice, sweet potatoes, sugar cane, tea, bananas, and vegetables. Rice cultivation is carried on in all parts of the island; sugar cane, sweet potatoes, and peanut are grown in the central and southern sections; tea is cultivated in the northern districts.

648 During the Japanese occupation of
241 Formosa, the policy of economic development was geared to the economic needs of the Japanese Empire. When a shortage of rice was felt in Japan, rice was produced in

648 241 greater abundance in Formosa. Japan's inability to purchase sugar in the international market was balanced by the great quantity of sugar produced in Formosa. Japan's greatest economic efforts on the island were concentrated upon agricultural production in order to exploit to the full Formosa's agricultural potential.

311 total arable land has remained more or less constant, in spite of the fact that some land along the eastern coast of the island as well as some 300,000 hectares of grass land in the mountains might be developed either for crops or as grazing land if the expense of such projects did not seem to indicate that the cost would be prohibitive.[4] When the [53] Shihmen dam and reservoir project is completed, waste land on the banks of Tanshui River can be converted into paddy fields. It is believed that the completion of the dam will make possible the reclamation of at least 54,000 hectares.[5]

241 Paddy fields constitute about 60 per cent of the total cultivated land in Formosa. They are classified in two categories -- double-cropping fields and single-cropping fields. The former yields two crops of rice each year. Between rice crops, one crop of vegetables is planted and harvested. In single-cropping fields, besides one crop of

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4. Table 196, "Summary of Statistics of Taiwan for the Past Fifty-one Years," Taiwan Agricultural Yearbook, 1954, p. 20.

5. Chung-yang Jih-pao [The Central Daily News], Taipei, July 1, 1955.

241 rice, one or two crops of sweet potatoes, peanuts, wheat, or flax are planted, the number depending upon the time necessary for the harvest. The fertility of the soil is heavily taxed by the practice of multiple-cropping, and the intensive use of fertilizer is necessary. Ch'en Cheng-hsiang places the index of multiple-cropping at about 160 per cent -- the ratio of crop area to cultivated area.[6]

III. FARM PRODUCTIVITY

241 483 The productivity of Formosan farmland seems to depend upon the intensity of cultivation. It has been reported that the average yield per chia of both first and second

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6. Ch'en Cheng-hsiang, T'ai-wan T'u-ti Li-yung [Land Utilization in Taiwan], Taipei, National Taiwan University and Joint Commission on Rural Reconstruction, 1950, pp. 95-96. The per cent quoted is an average for the period 1938-42. The index may be slightly higher in recent years as the land is utilized to greater advantage and the practice of multiple-cropping is used to increase production.

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(Table 3 faces p. 536.)

Table 3. Selected Crops - Yield Per Hectare*
(in kilograms)

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	Prewar Peak Year	1945	1949	1950	1951	1952	1953	1954
Rice	2,242 (1938)	1,273	1,624	1,845	1,882	1,998	2,109	2,183
Sweet Potatoes	12,734 (1937)	8,650	9,172	9,443	8,737	8,953	9,576	10,459
Sugar Cane	78,860 (1939)	38,628	50,606	48,064	45,237	49,003	74,136	-
Wheat	628 (1941)	296	720	1,042	1,058	1,139	1,058	1,403
Crude Tea	375 (1917)	61	283	279	294	305	305	291
Soybean	520 (1922)	264	594	618	577	602	617	683
Jute	667 (1939)	326	797	766	894	1,242	787	

* Taiwan Agricultural Yearbook 1954, Taipei, 1954, pp. 1-81. Yields for the prewar peak years are calculated by the author from the same source. The 1954 figure are from China News Press, China Annual 1954, Taipei, 1954, Vol. 3, pp. 6-7.

(facing p. 536)

241 rice crops tends to decrease as the size of
483 the farm increases.[7] The smaller the farm, the more intensive the cultivation, the higher the yield. Productivity also varies according to the fertility of the land and the efficiency of the cultivation.

241 As a rule, farmers on the island do not regard farming as a source of profit but as a means of insuring the subsistence of their families.[8] Those who make their livelihood by growing rice will continue to grow rice even when other crops seem to offer a greater margin of profit. To them, rice is their sole security, and they use rice to pay their taxes, to barter for other commodities, and to feed their families. Rice becomes "money in the bank."

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7. The chia is a local measure of land area = 2.4 acres.

8. Bank of Taiwan, Economic Research Department, T'ai-wan Yin-hang Chi-k'an [Bank of Taiwan Quarterly], Vol. 5, No. 4, March 1953, Taipei, pp. 1-27.

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The yield per unit area of various crops has been increasing steadily since 1945. However, the highest yields in the postwar years are lower than the highest yields in the prewar period. Any number of reasons has been advanced to explain this failure to regain prewar productivity. Less chemical fertilizer is available at present. Lack of funds has postponed extensive development of arable land. The percentage of spoilage each year is high because storage facilities are inadequate. Serious losses have been caused by insects and blight. When these problems are solved, according to the Joint Commission on Rural Reconstruction, the yield per hectare can be increased, as follows:

	Feasible Goals (kg. /hectare)
Rice	2,500
Sweet Potatoes	13,000
Peanuts	1,000
Sugar	10,000
Crude Tea	500
Bananas	12,000
Pineapples	14,000

These goals represents increases in per hectare yield of amount varying between 10 and 50 per cent of highest yields achieved in

241 the postwar years. These goals can be
483 attained without the expansion of present planted acreage and are more optimistic than the goals contemplated for 1956 in the Formosan Four-Year Plan.[9]

If the per unit yield can be increased and additional land is made productive, there is no reason why Formosa cannot substantially expand its yearly production. Rice is now planted on approximately 780,000 hectares of land; upon the completion of Shihmen dam and reservoir, it will be possible to grow rice on 835,000 hectares. If the yield per hectare is 2,500 kilograms, the total yield will be 2,100,000 metric tons, enough to feed 14 million people.[10]

IV. FARM MECHANIZATION

241 As in most undeveloped countries,
407 agriculture in Formosa is conducted on a primitive basis. The average farmer has only

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9. The Four-Year Plan, begun in 1952, is designed to bring about the economic independence of Formosa by increased production in agriculture and industry.

10. The Central Daily News, July 1, 1955.
(continued next page)

241 407 his strong back and a few simple implements. If he is fortunate, he owns a water buffalo. The Taiwan Sugar Corporation owns 500 tractors, but this is the only large-scale use of farm machinery on the island. Mechanization would help to increase farm yields, but many difficulties are presented by the small size of the fields and the many natural obstacles to any plan which calls for the co-operative use of farm machinery. Moreover, private ownership of tractors or other modern farm implements is prohibitively expensive, and the farmer has no experience in repair and maintenance of such machines. On the other hand, water buffaloes are of value to the farmer as a source of fertilizer, meat, and hides.[11] Additional study is necessary to determine whether extensive mechanization of agriculture would be economical for Formosa.

V. DOMESTIC CONSUMPTION

241 438 Formosa, as a rule, has produced sufficient agricultural products to meet the

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10. (continued) The Shihmen dam and reservoir will increase the irrigated land in Formosa by approximately 55,000 hectares.

11. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 38.

241 433 demands of domestic consumption. Surplus rice is exported each year, and the supply of vegetables is considered adequate. Meat is expensive, and the ability to buy meat [262] determines socio-economic position in Formosan society. Data on dietary habits, 1146 433 caloric requirements, and so forth are not available, probably because extensive surveys have never been conducted on the island. There is no way of ascertaining basic food requirements to maintain a desirable nutritional level.

433 The Provincial Food Bureau has estimated the per capita rice requirement for civilians to be 143.4 kilograms, and for the military, 308 kilograms. (These figures do not provide for surplus storage, waste, spoilage, or seeds.) Rice requirements for the next ten years may be estimated as indicated in Table 4. Note that the size of the military force on Formosa is assumed to remain constant (600,000).

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433 Since Formosa produces as much as 1,700,000 metric tons of rice each year, there is no reason why the island cannot maintain its present surplus until 1958, provided that nothing affects productivity. After 1958, there will be a shortage of rice, unless productivity is increased. If per hectare yield should be increased to 2,500 kilograms per year, and planted acreage expanded to 835,000 hectares, as has been projected in the Four-Year Plan, Formosa's annual rice supply will be sufficient for domestic consumption until 1965.

VI. MAJOR CROPS

241 433 The most important food crops produced on Formosa are rice and sweet potatoes. These two crops in 1953 accounted for approximately 60 per cent of total production (rice, 52.8 per cent; sweet potatoes, 7.2 per cent). Of special crops, sugar cane accounted for 13 per cent, vegetables, 3.2 per cent, peanuts, 1.8 per cent, crude tea, 1.5 per cent, tobacco, 1.2 per cent; and bananas, 0.8 per cent.[12]

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12. Taiwan Agricultural Yearbook 1954, Taipei, 1954, pp. 30-31.

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231 The raising of hogs is Formosa's third most profitable endeavor, only surpassed by the annual crops of rice and sugar cane. Pork and fish are the major sources of protein in the diet of the islanders. The annual production of various agricultural produce is presented in Tables 5, 6 7, and 8.

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Table 5. Food Production*
(in 1,000 metric tons)

	Rice	Sweet Potatoes	Soybeans	Peanuts	Wheat
1937	1,319	1,770	6	32	1
1938	1,402	1,726	6	28	1
1939	1,307	1,279	4	28	6
1940	1,129	1,512	3	29	4
1941	1,199	1,693	3	22	7
1942	1,171	1,556	3	13	6
1943	1,126	1,406	3	10	2
1944	1,068	1,521	5	12	2
1945	639	1,165	2	12	1
1946	894	1,331	4	37	1
1947	999	1,783	10	47	4
1948	1,068	2,003	12	53	6
1949	1,215	2,166	12	53	10
1950	1,421	2,201	13	57	19
1951	1,485	2,021	13	61	15

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1952	1,570	2,090	15	60	17
1953	1,642	2,277	17	60	14
1954	1,695	2,324	17	67	15
1955	1,633	2,290	24	70	19

* Data for the years 1937-53, from Foreign Operations Administration Mission to China, Taiwan Economic Data Book, Part II, Volume III, Taipei, 1955; for 1954, from Industrial Development Commission, Industry of Free China, Vol. 3, No. 4, April 1955, Taipei; for 1955 from the Central Daily News, February 3, 1956.

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Table 6. Commercial Production*

	Sugar Cane	Tea	Citronella	Jute
	(in 1,000 metric tons)			
1937	8,563	13	-#	9
1938	9,061	13	-*	14
1939	12,822	14	-*	15
1940	9,977	12	273	11
1941	8,392	12	174	7
1942	10,250	12	319	11
1943	10,092	8	201	7
1944	8,468	4	35	4
1945	4,159	1	29	2
1946	1,007	3	12	1
1947	796	7	61	3
1948	3,116	8	213	11
1949	6,194	10	380	9
1950	5,861	10	762	7
1951	3,585	10	1,274	11

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1952	4,801	12	2,561	20
1953	8,394	12	2,527	5
1954	6,130	13	-	12
1955	-	14	-	19

* Data for 1937-53, Taiwan Economic Data Book, Part II, Volume III; for 1954, Industry of Free China, Vol. III, No. 4, March 1955; for 1955, the Central Daily News, February 3, 1956.

\# February 3, 1956 not available.

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Table 7. Production of Fruit*

	Pineapple	Banana	Citrus
	(in 1,000 metric tons)		
1937	108	219	33
1938	116	202	36
1939	146	182	35
1940	129	169	32
1941	130	191	39
1942	116	196	34
1943	94	142	29
1944	43	65	21
1945	18	32	17
1946	17	53	20
1947	40	124	25
1948	39	110	28
1949	43	98	27
1950	46	117	28
1951	52	100	27

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1952	63	107	28
1953	68	96	29
1954	62	109	31
1955	64	90	33

* Data for 1937-53, from Taiwan Economic Data Book, Part II, Volume III; for 1954, from Industry of Free China, Vol. III, No. 4 April 1955; for 1955 from the Central Daily News, February 3, 1956.

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(Table 8 follows p. 550.)

Table 8. Production of Livestock*
(in 1,000)

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	Hogs	Cattle	Chickens	Ducks
1937	1,849	358	7,073	1,958
1938	1,827	325	7,095	2,023
1939	1,653	325	6,680	1,931
1940	1,205	300	-#	-
1941	1,158	309	-	-
1942	1,358	312	-	-
1943	1,257	325	4,543	1,896
1944	862	331	3,837	1,358
1945	578	291	3,998	1,136
1946	768	280	4,555	1,647
1947	1,006	298	5,119	2,247
1948	1,167	310	4,525	1,985
1949	1,362	357	4,989	2,217
1950	1,620	365	5,143	2,547
1951	2,262	375	5,387	2,991
1952	2,611	383	5,593	2,912
1953	2,820	390	6,165	3,103

* Data on hogs and cattles are from Taiwan Economic Data Book, Part II, Vol. III; on chickens and ducks 1937-39, from Taiwan keizai nenpo 1941 [Taiwan Economic Annual 1941]; for 1943-53, from Taiwan Agricultural Yearbooks.

\# Not available.

[table 8 follows p. 550]

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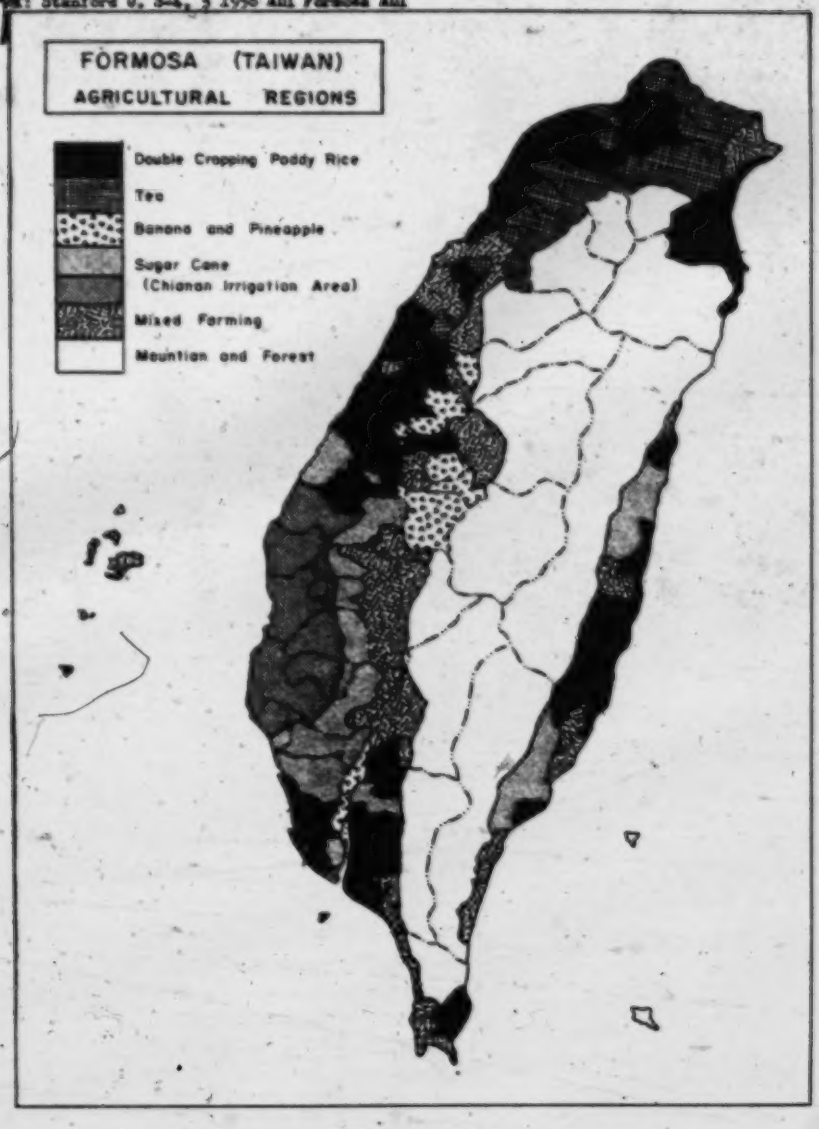

[Facing p 566]

ly to furnish their labor and then to give from their limited incomes to 177
y for the increasingly heavy fertilizer input that insured heavy yields 433
ree times a year from the same land. Taiwan was thus transformed into a
rden island where only the most venturesome of weeds could grow. Increas-
g quantities of rice, sugar and tropical products were transported north-
rd to meet the growing food deficits of Japan's increasing population.

BLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in pub- 744
c health. Administration and enforcement were supported by police power.
the prewar years there were about 2,000 qualified doctors. Many others 759
re trained in Taiwan and given local licenses. At the end of the war 743
ere were some 5,000 to 6,000 local doctors, or almost one per thousand
pulation. Since public posts and private practice were limited, many of 177
ese doctors were unemployed. In 1948 about 3,600 physicians were regis-
red as engaged in private practice or public service. There were about
0 nurses and numerous midwives. In both these groups the majority were
bstandard in grade. The number of hospital beds included approximately
000 in the capital and perhaps 6,000 on the Island, most of them in small
ities. In 1948 effective hospital capacity was less than half this prewar
vel.

Under Japanese control plague was eliminated and cholera and smallpox 177
came rare, although the last two recurred in 1946 to 1947. Tropical di- 164
ases are common, malaria in particular. The Japanese had a special malar- 744
service, based on extensive blood examinations, which administered quinine
positive cases. By these means 30 to 40 per cent of the people were ex-
ined annually and malaria mortality was reduced by treatment. This sup-
ession improved the health record temporarily, but it did not contribute
permanent amelioration. The program has since been largely discontinued.

E INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 161
0 million people on the Island; in 1940, there were 5.9 million. Popula- 241
on thus increased 93 per cent in this 35-year period and virtually all 177

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 378 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

matrix could easily have reduced death rates to 12 or 15 per 1,000 total population and, if birth rates had remained at 45, shot the rate of natural increase from 2.5 per cent per year to 3.0 per cent or more. 165 563

THE BIRTH RATE

Neither the extension of cultivation, the increase of yields nor the health and medical activities in Taiwan produced any major changes in the familial patterns of the peasants. The recorded birth rate of the Chinese remained above 40. There were some slight evidences of a lower birth rate in the more prosperous and urbanized provinces, but the social and occupational groups that might have adopted the modern individual and familial values, rather than the traditional Eastern values, were few in numbers. 163

The growth implicit in the maintenance of fertility at the level that existed in Taiwan during the last decade of Empire was indeed rapid. The gross reproduction rate for the entire population was over 3.2 and the net rate over 2.0.

It is obvious that no population dependent on agriculture and inhabiting a limited and already densely settled area could reproduce indefinitely at the rate implicit in these figures. Potential growth was more rapid than the actual growth of the thirties, though, for any social and economic changes that would improve levels of living and contribute ultimately toward a reduction in fertility would produce immediate and more rapid declines in the death rate.

THE PROSPECTS: PREWAR JAPANESE VIEW

The balance between the people and the land in prewar Taiwan may have appeared precarious to the Western student but the Japanese foresaw many decades of further expansion before the Malthusian pressures of the people on the food supply would limit either population growth or exportable surpluses. Rice production had increased from 2.1 million koku in 1900 to 4.9 million in 1923 and 9.7 million in 1940. In the latter year the export surplus amounted to five million koku. By 1950 rice production would amount to 12.8 million koku and the quantity available for export to Japan Proper would increase by almost a million koku. 433 241 439

The Japanese also realized that Asian hegemony implied a destiny beyond the agrarian for the once subject peoples and that Japan's own demographic

433 resources would have to be supplemented by the integration of Taiwanese and
●241 Koreans into the industrial nexus of Empire.
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THE CONTEMPORARY PROSPECTS

178 Today the plans of the Japanese for the further development of Taiwan
727 are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

177 The political travesty of the Chinese liberation of the Chinese popu-
198 lation of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

181 matters of sanitation, and at times on matters of agriculture. With the passage of
178 time, experience lead them to compare their traditional way of life with that imposed by the colonial government. Some of these ways were found to be not too bad, some even adoptable. This kind of change in attitude through hard experience was fairly significant. By this, people realized for the first time that there were another ways of life besides their traditional one, and that some elements were worthy of adoption. Once the people began to adopt the new way of life, change began to speed up. From the following instances we can see that change in the attitude of people became conspicuous after the 1920's. We have discussed the influence of war and peace, the prevalence of epidemics, and the development of transportation on the attitude of the people (§ 7, 8, 12). Here the change of attitude concerning medical treatment and agriculture will be discussed.

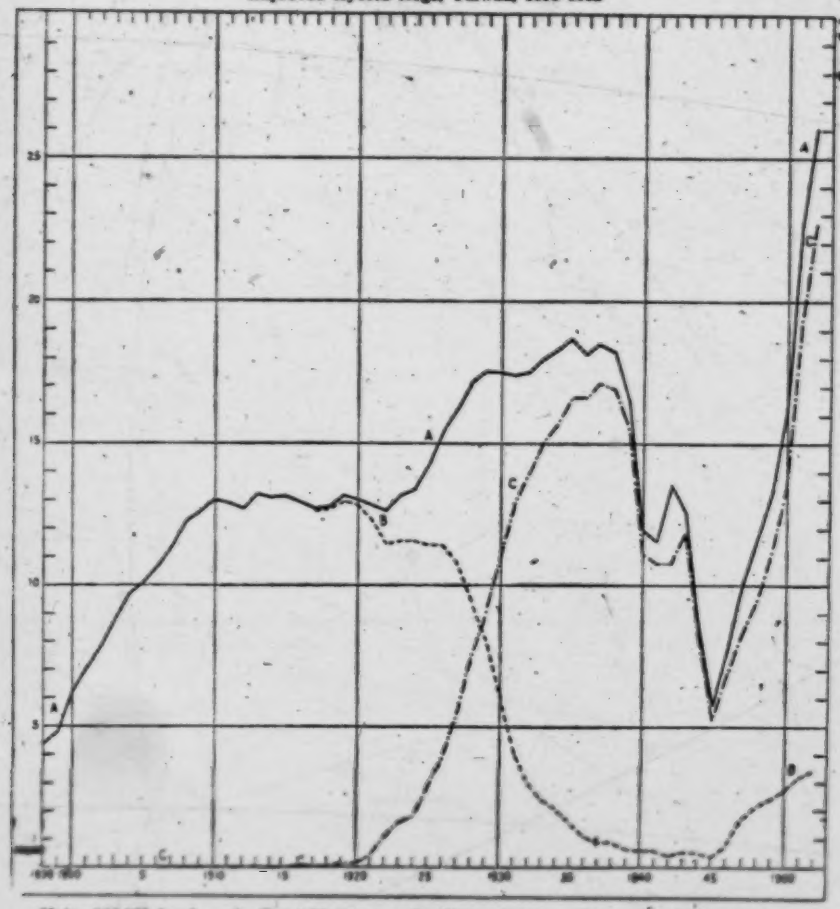
178 Since treatment of illness touches the innermost part of life, it is only natural that
744 conservative people do not dare to allow an unfamiliar doctor with strange ways of
156 treatment to approach them. For Taiwanese, who had been accustomed to the traditional Chinese medicine and folk medicine, doctors of western medicine, particularly with their injections and operations, were dreaded. During the early years of the Japanese rule there was a prevalence of cholera. Colonial officers compelled the people to take the preventive injection. Great consternation arose among the people, and many of them, particularly young girls, escaped and hid, in order not to have the dreaded injection. In the old city of Tainan a young girl of a wealthy family was escaping in a palanquin, but unfortunately she was caught by a Japanese police on the way, and forced to take the injection. Perhaps because the shock was too great, she died in a short time. Another young girl who took the injection killed herself after she went home, because it was a dreadful shame for a young girl of high standing to expose a part of her body to the public gaze. When a person died, his family had to have a medical certificate in order to get permission for burial. In 1906 90% of the medical certificates were issued by doctors of Chinese medicine, and certificates issued by doctors of western medicine constituted only 10% of the total. The proportion of
[759] the latter increased gradually, attained to 45% by 1917 (11:1917, p. 29). By 1920, the number of doctors of western medicine already exceeded those of Chinese medicine, and by 1935, 90% of medical certificates for the dead were issued by doctors of western medicine. Thirty years after 1906, doctors of Chinese medicine and doctors of western medicine had changed positions completely. By 1935, people did not object to injections and operations any more. On the contrary, they even believed blindly in injections, and asked for an injection when they saw a doctor. This was a remarkable change in attitude.

178 Farmers are tenaciously conservative in their work. In Taiwan, farmers originally
241 used only compost and night-soil, and did not use any commercial fertilizer. When a sugar corporation started to promote the cultivation of sugar cane, they bought commercial fertilizer from Japan, and distributed it free of charge to farmers. Once a

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

farmer received some bean cake for fertilizer. However he was afraid that this new and strange material would hurt his crop, so he threw it away in a grove of bamboo. Later he found that the bamboo around the bean cake had shot up tremendously, and he realized for the first time that commercial fertilizer was useful, and began to use it on his crops. It is not an easy task for the conservative farmer to depart even a little from his traditional way of life, and experiment with new methods. But when once the experiment is begun, new experiences will lead him farther. The use of commercial

Fig. 10: Total Number of Hogs and the Number of Native Hogs and Improved Hybrid Hogs, Taiwan, 1898-1952



Unit: 100,000 head A: Total Number B: Native Hogs C: Improved Hybrid Hogs
Source, 1898-1950, from Animal Resources of Taiwan, pp. 58-59
1951-1952, from Taiwan Agricultural Yearbook, 1952

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

241 The use of commercial
178 fertilizer spread quickly, and with textiles, became one of the main items of import
[439] from Japan.

For the improvement of hog raising, the colonial government had imported
[232] Berkshire hogs from Japan in 1896, and Yorkshire hogs from England in 1900. After a series of experiments, it was found that the first generation of hybrids between the
231 native hog and Berkshire hog was most suitable to Taiwan, and the promotion of the
178 hybrid was started in 1907. As in other agricultural practice, the traditional way of hog raising was a complicated procedure. Many religious and magical elements were involved in it, and it was not easy for the conservative farmer to adopt the profitable new hybrid. It took more than ten years of government promotion before people became willing to adopt the new hybrid. After 1920 more and more people adopted it, and the number of native hogs declined sharply (Fig. 10). This is the best instance of change in the attitude of the people. A new strain of rice (Ponlai rice) has been extensively cultivated since 1924, and the output of rice has sharply increased.

178 The 1920's is the turning point in the social history of Taiwan. Epidemics were wiped out, prevention of malaria had improved, the doctors of western medicine exceeded the doctors of the Chinese medicine, and even the cattle pest was wiped out. Political and social movements began for the first time. Primary education spread wider, the conservative farmer began to adopt new strains and new technics, and increase production. Mobility of the people had increased, more bicycles, automobiles, and trucks were used, and the level of living was raised somewhat. It was amid this social milieu that Taiwan's death rate steadily declined while its already teeming population with equal steadiness rose to new heights.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER II

"Economic Development" in Taiwan

648 RULING TAIWAN was a task that the Japanese approached with high
433 hopes. Because their goals were ambitious, the problems were more formidable than they might have been with a more modest and conventional colonial program. Their officials in Taiwan were the first overseas administrators in the Empire, and felt a responsibility to make the colony appear worth while at home.[1] Whatever their wider aims, their strongest aspirations for the island expressed themselves in energetic economic policies—policies pursued with such determination that they profoundly altered many aspects of Taiwan's economic life. In the course of their administration, Japanese nationals came to look upon enhanced production with a two-fold purpose: to secure profits for certain individuals and groups, and to promote the self-sufficiency and military strength of the Empire.

Here we shall examine the techniques of their economic program, survey its operation, and endeavor to make some appraisal of the accomplishments. A closer view of its significance for the everyday affairs of the population is reserved for the next chapters.

241 The situation that the Japanese first encountered in Taiwan was
433 one of long-established tradition, in which a small amount of innovation could go a long way. Agriculture was the main source of livelihood for practically all Taiwanese. The particular manner in which farming is organized in Taiwan tends, as it does in most of the Far East, to shield it from the intrusions of the modern world. Under the Manchu regime the Chinese inhabitants of Taiwan had developed farming along the familiar lines of their forebears on the China coast. Farms existed on a local village scale and were operated
[651] for local subsistence. Most of any exportable surplus of production was removed from the villages in the form of taxes or rent. What was
[427] left became absorbed in the costs of civil disturbance, misgovernment, and expansion of settlement, rather than going toward broadening commercial or other opportunities of the cultivators themselves.
433 Whatever may bring about such a situation, it is one that tends to

[1] Most of the later Japanese publications about Taiwan's future also stressed the island's potentialities as a base for southward expansion of the Empire. The grandeur of these proposals suggests that some of them may have been invented in search of favor for their authors more than in serious expectancy of being carried out.

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The most efficient view of total changes in the island's economy is by reference to its statistics of trade. As indicated above (Table 4), 1 Japan succeeded in securing practically all of Taiwan's external trade to itself, if exports to Korea are counted. During the 1930's even traffic with China, just across the Straits, was almost eliminated.

Compared with a wide range of other Far Eastern countries, Taiwan under the Japanese came to hold a surprisingly high rank in the value of trade per person. At its peak shortly before 1940, the total per capita value of its trade was well above even that of Japan (see Table 5). Since this rank was attained under peculiar conditions,

TABLE 5
ESTIMATED PER CAPITA VALUE OF FOREIGN TRADE OF FAR EASTERN COUNTRIES CIRCA 1939*
(Expressed in U.S. Dollar Equivalents)

Country	*Year*	*Imports*	*Exports*	*Total*
New Zealand	1939	109	127	236
British Malaya	1939	61	72	133
Australia	1938–39	67	64	131
TAIWAN	1937	16	23	39
Korea	1939	15	11	26
Japan Proper	1939	10	13	23
Philippine Islands	1939	8	10	18
Burma	1938–39	5	12	17
Netherlands East Indies	1939	4	6	10
Thailand	1938–39	4	5	9
French Indo-China	1937	3	4	7
China	1939	0.85	0.25	1

* As reproduced in OPNAV, Civil Affairs Handbook. *Taiwan—Economic Supplement* (1944), p. 73.

Source: Far Eastern Unit, Bureau of Foreign and Domestic Commerce, U.S. Department of Commerce.

however, it does not mark Taiwan as an especially "advanced" area (in the sense of supporting bountiful levels of living) except by reference to the Japanese residents in the island.

Taiwan's position in trade with the outside world was created by 241 heavy and increasing exports of a few products, mainly crops sent 433 abroad in only slightly processed state. Compared with what took place in Taiwan's business and financial communities, there was remarkably little shift in the composition of its agricultural output

1 [p. 21- Analyst]

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241 433 (see Fig. 4). Together sugar and rice never lost their dominant position in the value of all crops produced. Despite some greater emphasis on finished sugar as a source of alcohol, the cane harvests gained very little in value over rice, even when the expansion of manufactures after 1935 would seem to have made this likely. In these terms sweet potatoes, which were always prominent in the Taiwanese diet, kept nearly a constant share of the total.

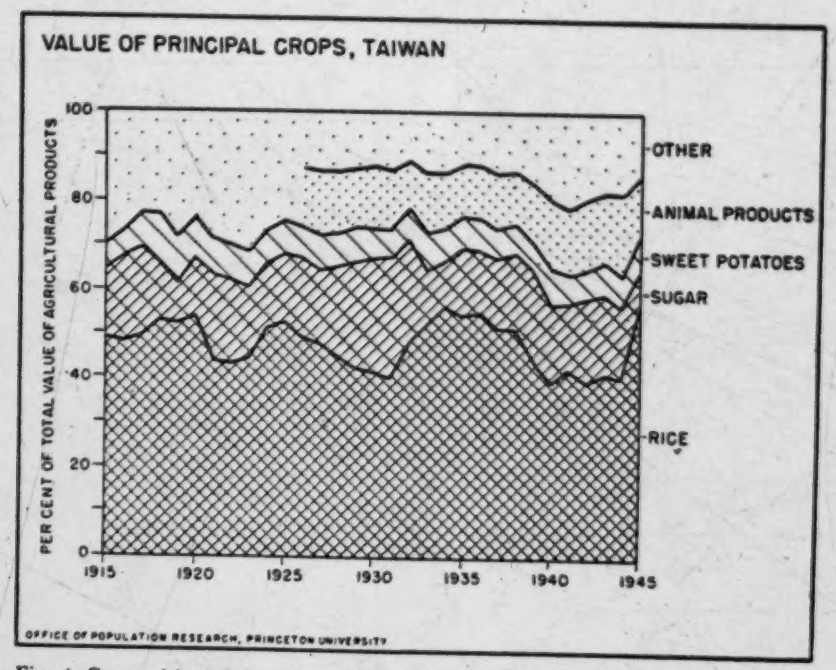

Fig. 4. Composition of the Gross Value of Total Agricultural Production, Principal Crops of Taiwan, 1915-1945.

Japanese promoted certain specialty crops, such as bananas and pineapples. These never occupied a large share in the total output of agriculture, but they more than kept pace with trends in the major crops (accounting for some of the change in the proportion of "other" products in Fig. 4). Together with tea, these crops made use of land not suitable for rice or sugar, and became important supplements to the total agricultural output. The Japanese encouraged such products by providing assured markets and technical supervision in their cultivation, and built canneries to process pineapples for export.

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"ECONOMIC DEVELOPMENT" IN TAIWAN

The various staple and other crops that made up the bulk of Taiwan's agriculture eventually became distributed in a stable spatial pattern over the island. Sugar predominated over a large area in the Southwest, where it displaced rice in most of the land within the major public irrigation system. Tea in the North, and other specialty crops in the center, occupied some of the inland and foothill sections.[30] But it is important to note that rice culture, particularly in small paddy fields, overlapped with all other crops that were raised on the broad plain of Taiwan, and the labor-intensive and traditional farming practices associated with it have continued to be spread throughout Taiwanese agriculture down to the present.[31]

The exports of staple crops would not have risen as they did unless the yields of crops did the same. Gains in rice yields from the land did not come at once. They followed almost 20 years of painstaking experiment, starting in 1906, to find a strain of seed that could thrive under conditions in Taiwan. Almost no improvement was made until the so-called *horai* variety was successfully adapted from Japan. Following its introduction the average yields per hectare for all varieties gradually rose as much as one-fourth, primarily by growth of the area devoted to *horai* rice and the special techniques used in its cultivation. Neither the *horai* nor the native strains were greatly improved in yield thereafter; in fact, it appears that *horai* declined slightly from its high performance at the start as it spread to land less favorable than the experimental farms where it was first grown (see Table 6).

Systematic irrigation was one of the measures that raised the yields of land. Between 1930 and 1936 a few projects were carried out, by the government and by private companies, to introduce controlled amounts of water into lands that previously had been cultivated as dry fields. To illustrate approximately the trend of these events, Fig. 5 shows the changes in the area of land in paddy cultivation and that in dry fields. (Paddy land does not correspond exactly with the land that is irrigated on a large scale, for there were many paddy fields not included in these projects.) Since the total area cultivated was increased over these years, it is possible that the irrigation projects brought some land into cultivation that was formerly idle. More, however, was merely converted from dry to wet cultivation (see Fig. 5).

[30] See Ch'en Cheng-hsiang, *Atlas* (1950), Fig. 161.
[31] *Ibid.*, Fig. 70.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

TABLE 6

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IMPROVEMENT IN THE YIELDS OF RICE IN TAIWAN, 1916 TO 1945

Average Yields of Different Strains in Each Year, First and Second Crops Combined (Hectoliters of Rice per Hectare)*

Years	*All Rice*	*Horai Rice*	*Other Strains*	*Per Cent of Rice Land Devoted to Horai*
1916-20	17.8	—	20.1	—
1921-25	19.3	28.5	19.3	4.6
1926-30	20.9	22.7	20.4	19.9
1931-35	23.0	27.2	21.3	33.7
1936-40	25.5	28.2	23.2	47.3
1941-45	21.6	22.7	19.7	59.8

* Crop statistics in Taiwan were not kept in metric units. Figures in the *Statistical Summary of Taiwan* were all converted before publication.
Source: *Statistical Summary*, Table 203.

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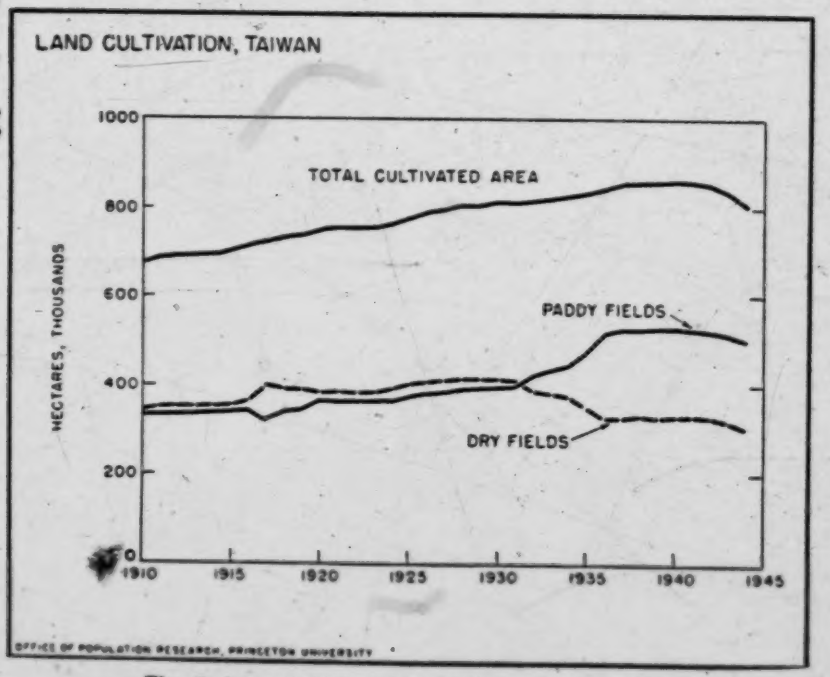

Fig. 5. Area of Cultivated Land, Taiwan, 1910-1944.

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Land that was improved in this manner not only yielded more at each harvest: over a third of the paddy land yielded more than one harvest each year. Under schemes for rotation and inter-cropping devised by the Japanese, it was not unusual to take three separate harvests from many of these fields in a year. 241 433

The labor of preparing the land, of weeding, and of harvesting was not saved by these changes. They may have involved some net additions—irrigation became a more complicated process in some cases, and the aqueducts for transporting the water required special maintenance. Japanese were aware that the soil could not be farmed more intensively without losing some of its fertility, and encouraged the use of commercial fertilizers, much of which they required to be prepared on the island. The remainder comprised the largest single category of Taiwan's capital imports, greater in value than the iron and steel and machinery which are sometimes identified with the needs of agrarian countries. Importing fertilizers for sale in Taiwan proved to be a profitable line of business; it was reported to be firmly in the hands of a few large Japanese concerns, a fact which should occasion no surprise. It was shortage of fertilizers that brought on declines in average yields of crops after 1940 (see Table 6, above). [427] [47]

The shift in official plans for Taiwan after 1930 leads one to look for some indication of results in the composition of Taiwan's products. The search is not very rewarding. In terms of gross value of product, agriculture did not lose its place as the foremost line of production until 1940 and later. Then it exchanged ranks with "Industry"—because farm produce fell off momentarily rather than because of any sharp rise in manufacturing (see Table 7).[32] The steady but slow decline in the share of agricultural production in earlier years had indicated a tendency to submit more of the agricultural produce to processing before it left the island, and not a shift from farming to manufacturing. 433

It is when the category of "industrial" production is examined in detail that some of the more recent trends emerge. In Table 8, evidently industry in Taiwan had always been centered around food products. Until the mid-'thirties these had amounted to three-quarters of the value of all manufactures. Only from then on did the effects of new economic goals begin to appear. The largest advances were made in some of the fields that had been smallest, espe-

[32] The sharp rise in the numbers of Table 7 was largely a matter of currency inflation.

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TABLE 7

GROSS RECORDED VALUE OF ALL PRINCIPAL TYPES OF PRODUCTION, 1915-1942

(Yearly Average for Each Period)

Years	*Total*	*Agriculture*	*Mining*	*Fishing and Forestry*	*Industry*
A. Millions of Yen:					
1915-19	262.7	144.5	7.2	9.1	101.9
1920-24	411.5	207.0	12.0	23.0	169.5
1925-29	559.0	293.6	16.8	31.8	216.8
1930-34	525.5	255.8	15.5	26.5	227.7
1935-39	901.0	432.9	39.6	41.5	387.0
1940-42	1388.4	576.4	62.8	91.8	657.4
B. Percentages of Total:					
1915-19	100.0	55.0	2.8	3.4	38.8
1920-24	100.0	50.3	2.9	5.6	41.2
1925-29	100.0	52.5	3.0	5.7	38.8
1930-34	100.0	48.7	3.0	5.0	43.3
1935-39	100.0	48.0	4.4	4.6	43.0
1940-42	100.0	41.5	4.5	6.6	47.4

Source: *Statistical Summary*, Tables 225-229.

TABLE 8

GROSS VALUE OF PRODUCTION RECORDED FOR "INDUSTRY" IN TAIWAN, BY LINE OF PRODUCT, 1921-1942

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(Yearly Average for Each Period)

Years	*Total*	*Textiles*	*Metal Products*	*Machinery & Equip.*	*Misc.**	*Chemical Products*	*Food Products*
A. Millions of Yen:							
1921-24	165	3	3	4	20	13	122
1925-29	217	3	4	5	32	20	153
1930-34	228	3	6	5	29	18	167
1935-39	387	6	17	12	45	38	269
1940-42	664	11	46	30	91	80	406
B. Percentages of Total:							
1921-24	100.0	1.7	1.9	2.1	11.9	7.9	74.6
1925-29	100.0	1.5	2.0	2.2	14.7	9.3	70.3
1930-34	100.0	1.1	2.5	2.3	12.9	7.8	73.3
1935-39	100.0	1.5	4.5	3.1	11.6	9.9	69.4
1940-42	100.0	1.7	7.0	4.5	13.7	12.1	61.0

* Includes Printing, Wood Products, Ceramics, and Other.
Source: *Statistical Summary*, Table 269 and Table 270.

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CHAPTER III

Economic Activities and Social Change

THE activities, interests, and aspirations of the Japanese community in Taiwan were things that existed apart from the indigenous population. These elements were never effectively communicated to the Taiwanese—partly through a design to withhold them, and partly through reluctance among the people of Taiwan to accept them. Consequently the conduct of Japanese residents is not of much help in understanding the accustomed modes of life among the island's people. It is the latter problem that has the more interest for demography, and makes it essential to consider the background of social order in Taiwan and the changes under colonial rule.

The Early Agrarian Order in Taiwan

The importance of agricultural pursuits in imposing a predominantly agrarian character on a society is not a thing that can be precisely measured. Short of perfect exactitude, a great deal can be learned with lesser devices, by describing the cultural setting of agriculture in Taiwan, and pointing out how it influenced the participation by Taiwanese in the island's economy. The basis of this setting lay in the conditions that prevailed before Taiwan became a colony of Japan.

By the mid-19th century, the lowland region of Taiwan was rapidly becoming fully settled. Piracy, which had made Taiwan a scourge to sea traffic along the China coast, gradually subsided into sedentary agriculture. Most of the Chinese population was already supporting itself by farming and the marketing of farm products. Since 1700 immigration had brought in a steady stream of Chinese from the mainland. In spite of sporadic prohibitions, hundreds of thousands of peasant farmers came to seek refuge from rural poverty in South China. Once arrived, they often reverted to this same condition, by reaching unfavorable terms with some of their countrymen already entrenched there as land speculators.

Poverty tended to reproduce itself among those who reached Taiwan, though there was also great wealth open to the few who rose from cultivation to commerce. Each settled family held an advantage over newcomers. This superior position placed new migrants in

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

the land area that yielded crops. From 34.2 per cent of all "level" land (under 500 meters elevation) in 1910, this area cultivated was raised to 43.7 per cent by 1940. The *effective* crop area was extended still further by irrigation, terracing and careful crop rotation. Irrigation converted many dry fields into paddy fields, as we found in the previous chapter. Improvement in irrigation made more of the paddy fields yield two or more crops each year (see Table 9). Evidently

TABLE 9

SPREAD OF DOUBLE-CROPPING IN IRRIGATED FIELDS, 1917 TO 1945

Area of Paddy Fields That Was Double-Cropped in Taiwan

(Thousands of Hectares)

Yearly Average in Each Period

Years	Total Cultivated Area	Area in Paddy Fields	Area of Double-Cropped Paddy Fields	Per Cent Double-Cropped: of Total Cultivated Area	Per Cent Double-Cropped: of Total Paddy Area
1917-1919	730	336	217	29.7	64.5
1920-1924	753	366	252	33.4	68.7
1925-1929	795	386	274	34.4	71.0
1930-1934	816	422	300	36.8	71.2
1935-1939	850	516	320	37.6	61.9
1940-1944	844	520	314	37.2	60.4

Sources: *Statistical Summary*, Table 196.
Ch'en Cheng-hsiang, *Land Utilization in Taiwan*, Appendix, Table 2.

much of the advance in crop production took the form of increasing the number of harvests from land already cultivated, which in Taiwan was already the "highest in the [Japanese] Empire."[14]

Land was not the only element of agriculture that was put to harder use. With a few exceptions,[15] cultivation continued to be carried on with little difference in ways of applying human labor to the land. Agricultural implements were improved, but remained similar in design; irrigation facilities opened new land, but their construction was itself labor-intensive; transplanting of rice became generally practised to save land, but it is inherently a very laborious process. One of the major problems of farmers in the Far East has long been that their work is distributed unevenly throughout the

[14] Nasu, Shiroshi (1941), p. 96.

[15] A few large-scale plantations experimented with the use of tractors in raising sugar cane.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

241 year.[16] Double cropping fields not only uses land more intensively, but does the same for labor by spreading the intervals of greatest effort over a longer part of the year[17] (see Table 10).

TABLE 10

LABOR REQUIREMENTS FOR RICE CULTIVATION IN TAIWAN

Average Man-Hours Worked for One *Chia* of Rice*

Type of Work	First Crop Man	First Crop Man with Animal	Second Crop Man	Second Crop Man with Animal
Seed Bed	6.3	0.8	1.9	1.4
Preparing Land	22.6	18.1	15.1	11.9
Transplanting	11.1	0.1	10.1	0.1
Fertilizing	7.1	0.9	4.0	0.1
Weeding	29.6	0.4	23.9	0.2
Irrigating	9.6	0.0	6.8	0.0
Pest & Disease Control	1.0	0.0	1.6	0.0
Making Windbreaks	0.1	0.0	1.8	0.0
Harvesting & Threshing	25.9	0.2	27.5	0.5
Total	113.2	20.5	92.7	13.1†

* Women's time was counted as 60-70 per cent of that of men, children's as 30 per cent. Figures represent averages from 36 farms, having a mean size of 1.6 *chia*. (1 *chia* = .96992 hectare) Table has no date.

† Published total does not check with sum of column.

Source: Mendiola, N. B. (1949), p. 72.

433 The data drawn upon thus far give no indication as to whether
241 harder work and better techniques meant higher yields to farmers as well as to land. Fig. 9 helps in a rough way to settle the question. The number of farmers increased relatively more than the land area devoted to farms. It follows that the average gains in crop yields per person fell short of the gains in the yield of land. Fig. 9 also shows crudely the trends in the productivity of farmers, taking into account the major crops of Taiwan. They were unmistakably upward until

[16] If small-scale household farms are subject to two or three peak periods of work each year, shortages of labor tend to appear seasonally. When the seasons coincide for all or many farms, the shortages become general and cannot be met by hiring workers, since other available manpower is also in great demand. To maintain a household large enough to cope satisfactorily with this problem, the goal cherished by most peasant families is usually to bear the burden of supporting members who may not be fully occupied for the rest of the year.

[17] The net effect of double-cropping may even be to *increase* the amount of labor that goes into a given amount of output. However, some of the steps required to produce two crops where only one had been grown before are labor saving, i.e., involve the use of capital. The question of precise trends is too complicated to deal with here in these terms.

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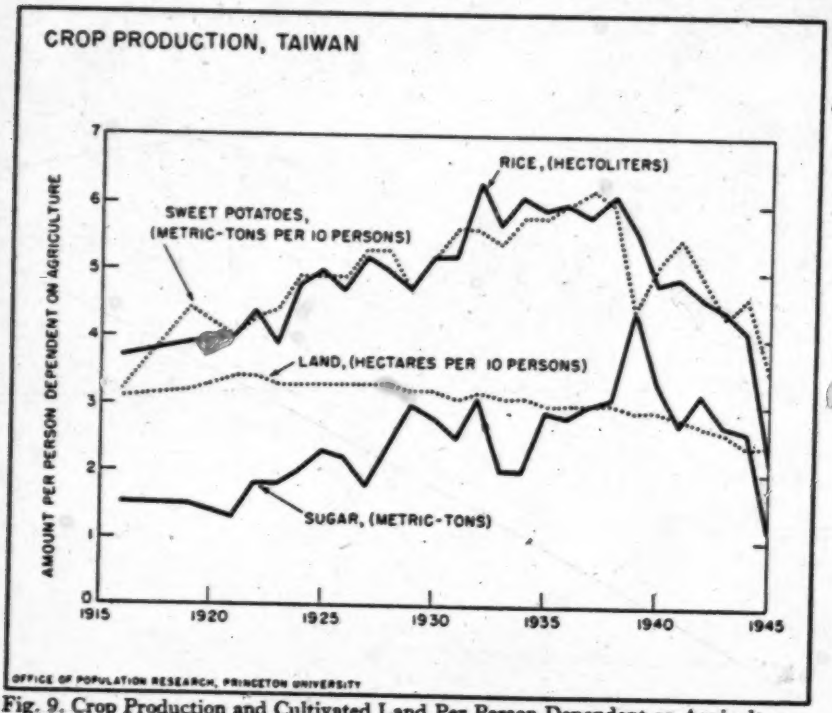

Fig. 9. Crop Production and Cultivated Land Per Person Dependent on Agriculture, Taiwan, 1916-1945.

the time of the war. But, considering the steady rise in the population dependent on agriculture, it is clear that the increased effectiveness of land use (discussed in Chapter II) did not owe so much to their colonial program as the Japanese themselves liked to believe. In part, it was merely a matter of more people working on the land.

Fig. 9 is based only on rice, sugar and sweet potatoes, and makes no allowance for the spread of some other crops during the late 1930's. In actual volume of crops produced, the product per person in agriculture therefore must have risen slightly more than the data imply. Diversification of this sort was of small benefit to most Taiwanese. Specialty crops like bananas and pineapples held a significance for the economy as a whole (they were export crops) greater than for individual farmers. Pineapples, for example, were grown entirely in plantations, and not by peasants as supplemental crops.

Trends in rice and sugar output were the trends for the rural economy as a whole; sweet potatoes are worthy of note because they

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

433 have always supplied a large part of the Taiwanese diet. How well
241 these three basic crops represent the whole of Taiwanese agriculture may be seen from their share in the total recorded value of farm produce (see Fig. 4).[18]

241 The spatial arrangement of crops discussed in the previous chap-
621 ter has an important bearing on the question of persistence in organization of agriculture. Rice fields were found throughout the flat lowland area, overlapping in every civil division with the other types of farming. In its import for the nature of the rural society, this fact overshadows most effects of diversification and rationalization of farming. The types of social system that can give rise to paddy cultivation of rice seem to be uncommonly well equipped to resist change. They are centered around settled family relationships that provide for uninterrupted use of suitable fields over many generations. This is the case throughout most of the paddy-rice areas of Asia, where these conditions resemble what is to be found in Taiwan.[19] Hence, from this stability within farming itself, one should not expect to find that its social setting was greatly different as a result of Japanese occupation.

Changes in Pattern of Employment

463 Farming is so important to Taiwan that it has first been treated separately, with very little reference to its place among other activities. By viewing it in relation to the pursuits of the entire working population, we can take into account the nature of alternative opportunities outside of agriculture.

There would not be much point in looking for possibilities of non-agricultural employment if the economy could not have supported a larger proportion of people in other activities. This is where many agrarian countries have felt the effect of poverty to stand in the way of their industrial progress. From the start of its modern era, Taiwan's peculiar status as a food exporter suggests that food supply was no barrier. Since that time, special diligence in the matter made land and human effort more effective in producing crops. Advancing both of these aspects of productivity implied that at least some movement of people to pursuits outside of agriculture was economically feasible.

[18] These trends, of course, indicate nothing about "well-being" of farmers, since large capital charges (for irrigation, fertilizer, and government administration) were being made against farm incomes.

[19] See Taeuber, Irene B. (1947), pp. 21-43.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

464 369 403 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[6] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b: 18–42).[8]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

T 175 177 464 241 F 175 648 177 433 [161]

greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

F [439] T [458]

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

F 175 648 732 [466]

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

F [241]

F 175 648

The defeat of the Japanese and the coming of the Chinese National-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1
Taiwan AD6

[4

Changing Land Tenure and Its Effect on Community Organization

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The traditional (Ch'ing) land tenure system in Taiwan has undergone a number of modifications over the years. Each was instituted with the advent of a new regime, and marked the inception of major changes in other aspects of rural life. As we have seen, the colonial administration policies of the Japanese were instrumental in producing the first significant involvement of the Taiwanese peasant in the market economy. Nevertheless, it was not until the restoration of Chinese rule, when the population growth began to exert noticeable pressures and the Nationalist Chinese sponsored the Land Reform Program, that major changes took place in the economy which reached directly into most of the areas of Taiwanese rural life.

The system of land tenure in Taiwan has always been a controlling factor in the lives of the agricultural population, and to understand Taiwanese life fully it is necessary to understand the land tenure system and its history. From the late nineteenth century onwards the rural villagers suffered the results of the concentration of landownership into too few hands. This situation culminated finally in the Land Reform Program of 1949–1953, which, for the first time, secured the Taiwanese tenants' rights to the land they tilled through firm rental contracts, reductions in rent, and the Land-to-the-Tiller Program.

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423

Putting untilled land under cultivation became a great concern of the government at the time of the Manchu conquest of Taiwan in 1683, according to T'ang (1954:23–27). Under the Manchu (Ch'ing) dynasty, any person applying for rights to occupy uncultivated land was considered the owner as long as he kept his acres under proper cultivation. Not surprisingly, this program led to a situation in which people with enough capital, "a relatively small number of great families" (Ginsburg, 1953:32), obtained rights to large amounts of land

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1
Taiwan AD6

and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:55; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

F 175 241 423
F 175 161 423 427 554
F 175 177 648 423 427
F 175 648 427
Tu 175 427 161
Tu 423 427
F [423] [427]

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

632 621 ments, health program, and construction for public works all depended on generous amounts of labor. Without such cheap incentives to mobilize this labor, these projects could not have been pursued so effectively.

As obvious as these advantages of "indirect rule" may be, it should be as clear that it is a poor vehicle for introducing social change. The more it is used to wield authority, the stronger and more resistant to change it can become; the more it is undermined by altering local relationships that sustain it, the less remains of its usefulness. Hence, from adoption of this scheme initially as an expedient to "pacify" the island, Japanese authorities acquired a positive interest in preserving the same set of agrarian institutions that had existed in Taiwan before their arrival.

Thus they abandoned the idea of reorganizing the rural society—primarily because they tried and failed, but also because as it stood it gave them the best access to regulation of the agricultural population and farming practices. It was in some respects a ready-made instrument for exerting the necessary control with the least disturbance of customary affairs, having in the past enabled the various parties to the export trade to prosper at the expense of farmers. For better coordination of their policies, Japanese gradually did erect a more formal type of government administration, but the basis of the system in rural areas was not greatly affected by this modification.

The Impact of Improvements in Agriculture

185 The Japanese who were charged with remodeling Taiwan's economy gave first priority to long-range investments around the fringes of agriculture. The rural economy was already geared to exchange food and related products for special capital services. Certain of these services were soon altered under Japanese influence. Positions that provided them, or that could usurp them, gradually began to be occupied by Japanese nationals—official, private, and always an indistinct class in between that wielded quasi-official sanctions.

Those innovations that worked their way into agriculture were 311 directed chiefly to raising crop yields per unit of tilled land. Another avenue of increasing the total agricultural product was by extending 242

construed as a lament that there were few opportunities for advancement outside the rural villages and towns dominated by petty gentry. Discontent from this source bore few signs of being the awakening of a popular movement for independence among the Taiwanese, as it is sometimes represented. See Hsü Tze-wei (1946), p. 161 ff.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

the land area that yielded crops. From 34.2 per cent of all "level" land (under 500 meters elevation) in 1910, this area cultivated was raised to 43.7 per cent by 1940. The *effective* crop area was extended still further by irrigation, terracing and careful crop rotation. Irrigation converted many dry fields into paddy fields, as we found in the previous chapter. Improvement in irrigation made more of the paddy fields yield two or more crops each year (see Table 9). Evidently

TABLE 9

SPREAD OF DOUBLE-CROPPING IN IRRIGATED FIELDS, 1917 TO 1945
Area of Paddy Fields That Was Double-Cropped in Taiwan
(Thousands of Hectares)
Yearly Average in Each Period

Years	Total Cultivated Area	Area in Paddy Fields	Area of Double-Cropped Paddy Fields	Per Cent Double-Cropped: of Total Cultivated Area	Per Cent Double-Cropped: of Total Paddy Area
1917-1919	730	336	217	29.7	64.5
1920-1924	753	366	252	33.4	68.7
1925-1929	795	386	274	34.4	71.0
1930-1934	816	422	300	36.8	71.2
1935-1939	850	516	320	37.6	61.9
1940-1944	844	520	314	37.2	60.4

Sources: *Statistical Summary*, Table 198.
Ch'en Cheng-hsiang, *Land Utilization in Taiwan*, Appendix, Table 2.

much of the advance in crop production took the form of increasing the number of harvests from land already cultivated, which in Taiwan was already the "highest in the [Japanese] Empire."[14]

Land was not the only element of agriculture that was put to harder use. With a few exceptions,[15] cultivation continued to be carried on with little difference in ways of applying human labor to the land. Agricultural implements were improved, but remained similar in design; irrigation facilities opened new land, but their construction was itself labor-intensive; transplanting of rice became generally practised to save land, but it is inherently a very laborious process. One of the major problems of farmers in the Far East has long been that their work is distributed unevenly throughout the

[14] Nasu, Shiroshi (1941), p. 96.
[15] A few large-scale plantations experimented with the use of tractors in raising sugar cane.

4: Grajdanzev--51 S-4 (no date) 1942 Formosans
116, 243, 439, 177.43 Japan
636.43

"The unique position of rice in the economy of Taiwan justifies a more detailed discussion. Rice culture was important before the Japanese came to the island and rice exports to China were quite considerable. However, since the Japanese took control the production of rice has doubled in about a quarter of a century and more than half of the total production now goes to Japan. The credit for this achievement is usually given to the Japanese administration and the expansion has been taken as proof of the beneficent results of Japanese rule."

4:Grajdanzev--52 S-4 (no date) 1942 Formosans
116. 243, 311

"Below we give the data on rice production since 1905. Area under rice

(1,000 ko)	1905	1915	1920	1925	1930	1935	1936	1937	1938	1939
Paddy	417	462	471	526	592	657	662	640	617	...
Dry field	44	44	45	42	41	42	41	38	28	..
Total	461	506	516	568	633	700	703	678	645	646
Yield per ko (koku)										
Paddy	9.7	9.8	9.7	11.7	11.8	13.3	13.9	14.0	15.5	
										14.2*
Dry field	7.7	6.4	6.1	6.9	8.8	8.7	8.4	7.7	7.8	
Crop (1,000 koku)										
Paddy	4,016	4,503	4,567	6,154	7,010	8,759	9,213	8,937	9,599	...
Dry field	338	281	276	289	361	364	345	295	218	...
Total	4,354	4,784	4,843	6,443	7,371	9,123	9,558	9,232	9,817	9,152
Price (yen per koku)	6.6	7.8	22.5	25.2	14.6	21.6	22.4	22.6	24.2†	25.6†

* Average for both paddy and dry field.
† Approximate figures."

4:Grajdanzev--52-53 S-4 (no date) 1942 Formosans
116, 243, 311, 656, 177.24 Japan
636.24

"Thus from 1905 to 1920 the area under rice expanded slowly and the yield per ko showed no increase, while from 1920 to 1935 the area under rice increased by thirty-seven per cent and the yield per ko of paddy increased also by thirty-seven per cent. The explanation of this difference does not lie in Taiwan, but in Japan proper. After 1920 the leaders of the Japanese government became worried over the rice supply of the Empire. The rapid growth of population and the insufficiency of domestic production brought a sharp increase of rice imports from abroad. From the annual average of ¥16.6 million in 1913-17 Japan's imports of rice rose to an annual average of ¥72.0 million in the period 1918-22.

Besides the difficulty of balancing payments abroad, the government did not like this dependence on foreign supplies in time of war. A program for the increase of rice production in Japan proper, Korea and Taiwan was worked out and the necessary measures applied, such as the construction of dams and canals for irrigation purposes, the enlargement of the net-[53] work of agricultural experimental stations, the distribution of small subsidies to new producers of rice as well as to those who would produce new varieties of rice selected by the stations. The fact that these measures were quite effective shows not only the efficiency of the administration but also the ability of the Chinese farmers to act in response to economic factors."

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464, 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

4:Grajdanzev--54-55 S-4 (no date) 1942 Formosans -1-2
116 243, 435, 655, 177.24 Japan
636.24

"Space does not permit us to analyse the rice situation in detail. The table below shows the rapid process of displacement of other kinds of rice in Taiwan by horai.

Crop Area Under Various Kinds of Rice in Taiwan
(In thousand ko)

	1905	1915	1920	1925	1930	1935
Common Taiwan rice	393	423	417	370	370	263
Clutinous, round	24	39	53	81	68	73
Glutinous, long	...	...	...	...	19	18
Horai	0	0	0	72	135	305
Total	417	462	472	523	592	659

Yields of Various Sorts of Rice in Taiwan were as Follows
(1930-35 average)

	(koku per ko)
Common Taiwanese	12.1
Round glutinous	10.2
Long glutinous	11.7
Horai	14.6

As may be seen, the difference is quite pronounced—from 2.5 to 4.4 additional koku per ko, or an increase in yield of twenty to forty per cent as compared with other

varieties.

But on the other side, the production costs of one ko of common rice in 1925 were ¥223.8, while for horai the amount was ¥342.0, and—what is also very important—whereas thirty-four per cent of the production costs of common rice consisted of the farmer's own labor, home-prepared fertilizers (which the farmer does not buy) etc., these costs in the production of horai amounted to only twenty-two per cent. In other words a much greater part of the expenses on horai consisted of sums paid for commercial fertilizers, etc. and as a result, the farmer does not receive so much profit from horai, but is compelled to plant it because he cannot sell his own [55] kind of rice in the Japanese market. The expansion of area under horai is therefore not so much a sign of prosperity, as it would at first sight appear, as a sign of the growing need of the farmer for money to pay taxes, to pay for irrigation, and to pay for the tobacco which he formerly produced himself (and is now a state monopoly)."

"Of course, the inclusion of Taiwan—a region of low prices—in Japan's customs area of high prices should result in an increase of prices in Taiwan, but this does not mean that Taiwan's farmers were necessarily the gainers. All prices were raised and it is by no means certain that this rise benefited farmers and workers. We may find an indirect answer to this question by calculating the average per capita consumption of cereals in Taiwan. Rice is the principal food for the islanders, and all other cereals produced there amount to less than 0.5 per cent of the production of rice and, consequently, may be neglected. Import and export data are available and Japan may serve as the standard of comparison. To simplify matters we assume that the crop of a given year and the imports of that year are consumed in the same year.

Rice Consumption in Taiwan*

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1905	4,354	57	620	...	3,039.8	1.25
1910	4,187	43	648	3,582	3,250.0	1.10
1915	4,785	64	767	4,082	3,479.9	1.17
1920	4,842	160	619	4,383	3,655.3	1.20
1925	6,443	718	2,057	5,104	3,993.4	1.28

*Footnote on next page.

Rice Consumption in Taiwan* [Cont.]

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1930	7,480	97	2,220	5,357	4,592.5	1.17
1935	9,122	7	4,493	4,636	5,212.4	.87
1936	9,559	7	4,788	4,778	5,452.0	.88
1937	9,233	7	4,842	4,398	5,609.0	.78
1938	9,619	15	4,878	4,756	5,747.0	.83
1939	9,152	8	4,106	5,054	5,880.0	.86

* In calculations made for the compilation of imports and exports before 1930 one koku of rice is taken as equal to 2.7 piculs.
Sources: for 1930-39: Keizai nenkan; for 1905-25: for production, Takahashi, op. cit.; for trade, Nippon boeki seiran. The last column is calculated."

4:Grajdanzev--82-83 S-4 (no date) 1942 Formosans
116, 243, 427

"Nothing appears in the formulated [government--analyst] policy concerning the decrease of rent. According to an investigation by the government-general in 1927, rent amounts to about 27 to 29 per cent of the crop from dry fields, 43 to 45 per cent from paddy when one crop is taken each year, and 49.3 per cent in case of two crops. The low figure for dry fields is more than suspicious, for if the figures of the investigation are correct, the tenant cultivating the dry land is in a better position than the tenant of paddy with two crops.

Comparison of the Position of Tenants on the Best Lands in Taiwan, 1927.

Average figures	Dry field (yen)	Paddy with two crops (yen)
Value of crop (per ko)	366.4	517.7
Rent	100.5	255.7
Balance	265.9	262.0

It is well known that the amount of labor required to till one [83] ko of paddy with two crops is several times greater than the amount of labor necessary to cultivate one ko of dry field, and it is strange that the tenant of the dry land is at the end of the year in a better position than the tenant of the paddy."

8: Chen--449 [2]
116, 243, 311

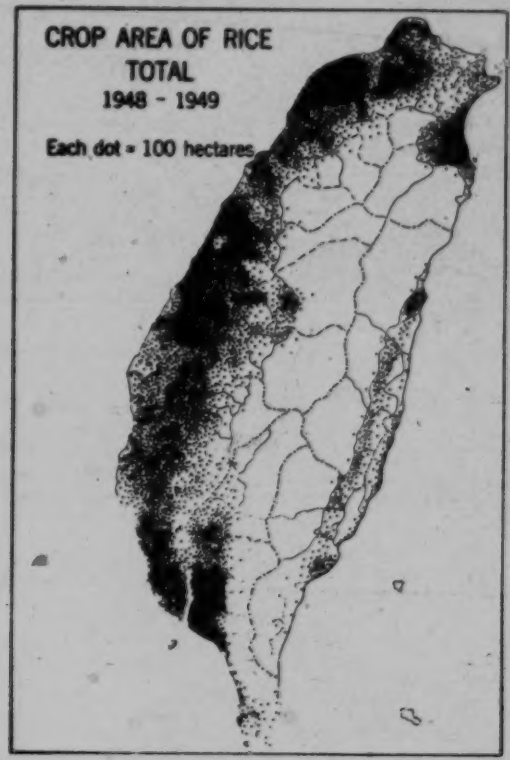


FIG. 16

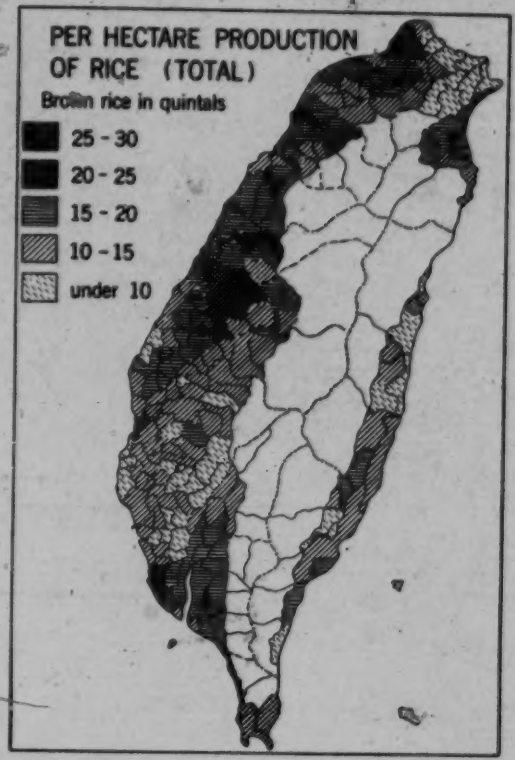


FIG. 17

8: Chen--450
116, 243, 311

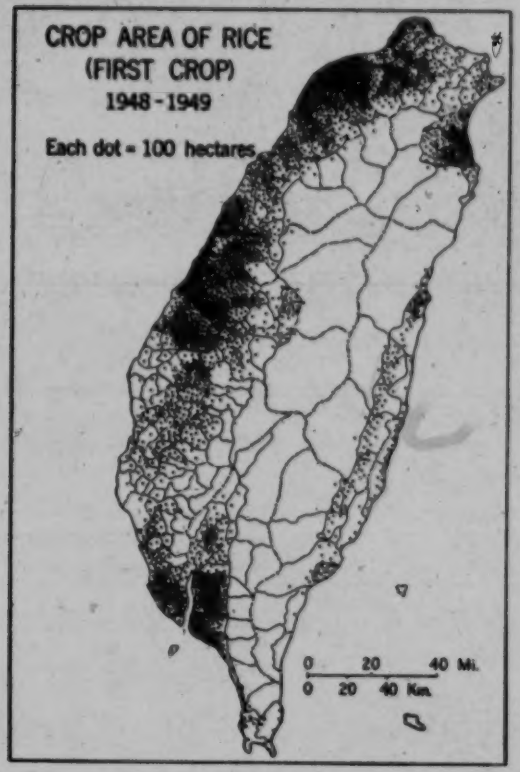


Fig. 18

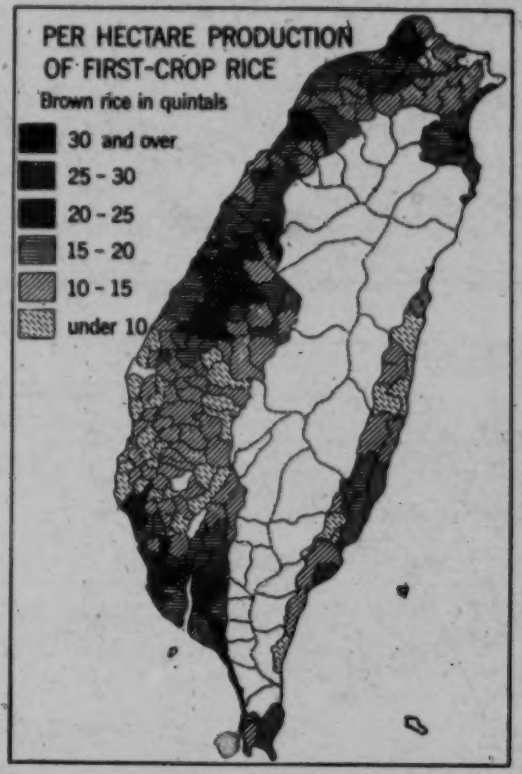


Fig. 19

8: Chen--450 [2] N-3 (no date) 1951 Formosans
116, 243, 311

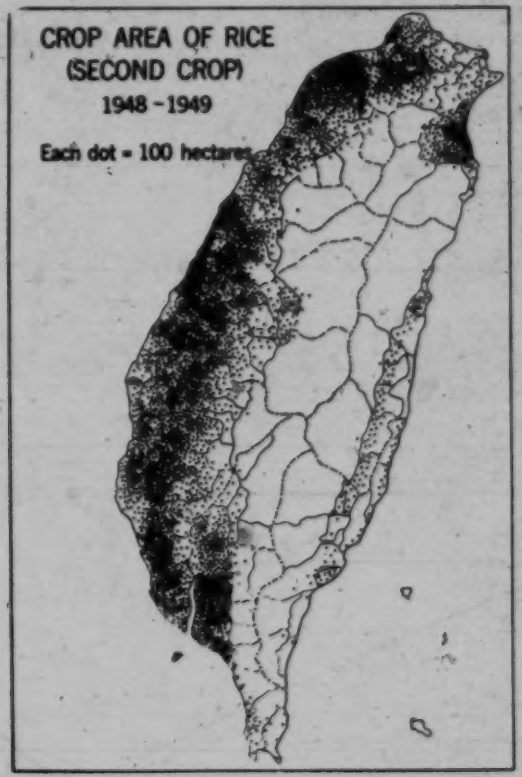


FIG. 20

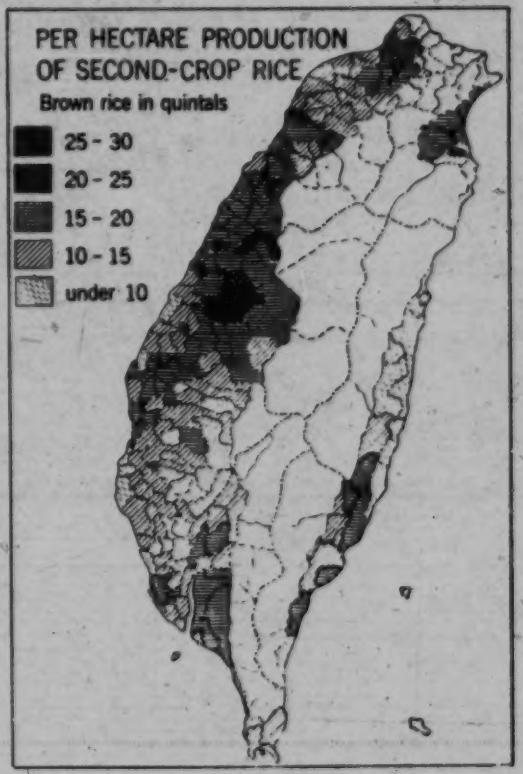


FIG. 21

9: Yamasaki--231-232 N-5 (1896-1897) 1900 Formosans
116, 243, 311

The most important species of cereal on the island is rice (Orysa sativa L.). In the plains as on [232] the gentle slopes of the hilly regions, the rice fields occupy a great area. The basins of the two Tamsui Rivers, the Kapsiulan Plain near Giran, and the Taichū Plain are its chief centers. In East Taiwan we also find small rice plantations, as far as Chinese colonists have penetrated. There are usually two harvests a year: in South Taiwan even three harvests are obtained from the same fields.

9: Yamasaki--232 [5] N-5 (1896-1897) 1900 Formosans
116, 243

In addition to the rice already mentioned, the species of cereals found are wheat, barley, millet and buckwheat (*Fagopyrum esculentum* M.).

A. Production of Rice

433 The production of rice has increased steadily in the postwar years; production in 1950 exceeded the 1938 production level peak achieved by the Japanese. However, because relatively less fertilizer is available for use, the per hectare yield of Formosan fields has not reached the record yield of 2.242 kilograms achieved under Japanese rule. Rice exports have been sacrificed to meet the domestic requirements of the swelling population of the island. In 1938, nearly 50 per cent of the 1.4 million metric tons of rice produced was exported; in 1954, only 36,000 metric tons of rice were available for export in spite of the fact that nearly 1.7 million metric tons were produced in that year. Such a drastic decrease in rice export has affected the dollar reserves of the Formosan people and made it difficult for the country to import the industrial goods necessary for continued economic development.[13]

243 Rice and sugar cane, the two most
244 valuable crops, compete for use of land

13. Industrial Development Commission, Industry of Free China, Vol. 3, No. 6, June 1955, p. 80.

243 resources. Since rice cultivation and
249 harvesting takes about four months and sugar cane takes anywhere from fifteen to seventeen months before it can be harvested, rice has gradually taken the lead. Competition for land is especially keen in the area near Taichung, where paddy fields can be used either for the cultivation of rice or of sugar cane.

243 There are four main types of rice grown on Formosa -- Ponlai rice, native rice, upland rice, and glutenous rice -- and many varieties. Ponlai rice was introduced in Formosa during the Japanese occupation because it suited the tastes of the Japanese. It remains the most popular type of rice cultivated on the island because it has a high yield and good milling quality. Ponlai rice accounts for approximately 55 per cent of current rice production.

B. Production of Sweet Potatoes

244 Sweet potatoes are the second most important food stuff produced on Formosa. They are a staple of diet and are also used as raw material for alcohol and yeast as well as for hog feed. The major part of the annual
251 crop of sweet potatoes is sun-dried to produce chips which can be stored with minimum waste.

C. Production of Sugar Cane

249 648 433 Sugar cane is the raw material for Formosa's sugar industry. Postwar increase in production is all the more remarkable since in the years before the war the Japanese did all they could to exploit the potentialities of sugar cane production to meet the sugar requirements of Japan proper.

Sugar cane is usually planted in the summer June to September. About a year and a half are required before the cane is ready for harvest. Under the International Sugar Agreement concluded in London in 1953, Formosa is permitted to export 600,000 metric tons of sugar annually. Government policy has been adapted to meet this quota and allow for domestic consumption. Land once used for sugar cane is now being used to produce other products.

D. Production of Wheat

243 433 Wheat produced on Formosa accounts for less than one per cent of the total value of the island's farm production. For this reason it has been generally believed that Formosa lacks the conditions suitable for

243 optimum wheat production. Postwar research
433 has proved that wheat can be grown between rice crops in the regions centering on Taichung, Changhua, and Tainan, and the amount of land given to wheat production has been increasing gradually.

E. Production of Tea

245 About 90 per cent of the tea produced
433 on Formosa is exported to American and European markets. The production of tea and its planted acreage has been more or less constant since 1880. Commercial growing of tea began about 1865, and there are three major groups -- Paochung, Oolong, and black -- which are most successfully grown on the island.

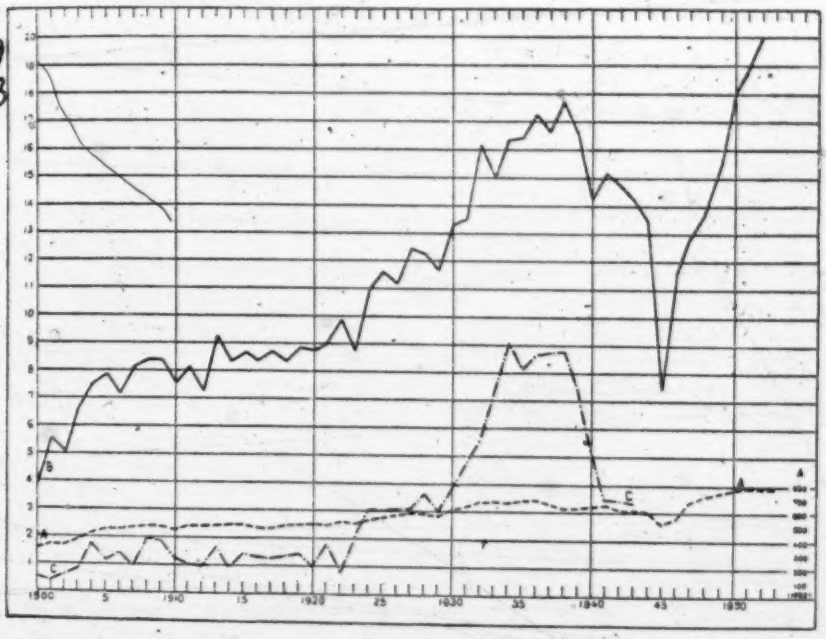
VII. FORESTRY

313 Forests cover about 64 per cent of
433 the total area of Formosa because abundant rainfall is favorable to the growth of trees. The island's forests furnish all domestic lumber and prevent erosion in mountainous areas. Forestry products accounted for approximately three per cent of the total value of all goods produced in 1953. The total timber reserve, as of 1954, was estimated

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Productivity was raised by improvements in various aspects. The rapid increase in the output of rice from the 1920's was the result of the adoption of a new strain (Ponlai rice). By the 1930's, the production of rice in Taiwan was so large as to be twice its local demand, and the surplus rice was exported to Japan. Though the price of Taiwan rice was controlled by the Japanese government and the profit of trade in rice was mainly monopolized by big Japanese traders, the increase of production did have some benefits for Taiwanese, and no doubt, this contributed to the lowering of the death rate after 1920.

Fig. 6 Acreage of Cultivation, Amount of Production and Exportation of Rice, Taiwan, 1900-1953



A: Acreage of Cultivation (unit: 1,000 ha) B: Amount of Production (unit: 1,000,000 hectoliter)
C: Amount of Net Export (unit: 1,000,000 hectoliter)
Source, 1900-1948, from the Rice of Taiwan, 1949, Taipei.
1949-1952, from Taiwan Agricultural Yearbook, 1952, Taipei.

The condition of sugar was a little different from that of rice. The profit in sugar manufacturing was exclusively monopolized by the Japanese enterprisers. But it is undeniable that, in respect to the improvement of agricultural techniques and the raising of productivity, substantial effects were obtained.

As pointed out by W. S. Thompson, "underfeeding weakens the individual and renders him less resistant to disease, whether it be of the degenerative or of the germ

6: Kirchhoff--33 [2] U-4 (no date) 1895 Formosans
116, 244

The fine thin oil of the peanut is used for household purposes only where it is obtained; but what is left after extraction of the oil is sold in large quantities in Amoy and Futschau as food for cattle, in the form of cakes, or as a fertilizer.

9: Yamasaki--232 [4] N-5 (1896-1897) 1900 Formosans
116, 244, 311

Sweet potatoes (Ipomea batatas Lam.) are one of the inhabitants' most important articles of diet for both the Chinese and the natives, and they are to be found growing on the island, wherever it is inhabited. In the mountain regions, as in Musha on the Dakusui-kei, which is inhabited by the wild aborigines, I have also seen fields of sweet potatoes on the rather steep slopes. There is also a double harvest in the western plain.

243 resources. Since rice cultivation and
249 harvesting takes about four months and sugar cane takes anywhere from fifteen to seventeen months before it can be harvested, rice has gradually taken the lead. Competition for land is especially keen in the area near Taichung, where paddy fields can be used either for the cultivation of rice or of sugar cane.

243 There are four main types of rice grown on Formosa -- Ponlai rice, native rice, upland rice, and glutenous rice -- and many varieties. Ponlai rice was introduced in Formosa during the Japanese occupation because it suited the tastes of the Japanese. It remains the most popular type of rice cultivated on the island because it has a high yield and good milling quality. Ponlai rice accounts for approximately 55 per cent of current rice production.

B. Production of Sweet Potatoes

244 Sweet potatoes are the second most important food stuff produced on Formosa. They are a staple of diet and are also used as raw material for alcohol and yeast as well as for hog feed. The major part of the annual
251 crop of sweet potatoes is sun-dried to produce chips which can be stored with minimum waste.

each year to meet emergencies and maintain a stable market price.

Vegetables: Taipei, with a population of nearly 700,000 as of late 1955 consumes more vegetables (as well as other commodities) than other cities on the island. Vegetables for the city are produced in its suburban areas and in the regions of Taichung and Changhua during spring and winter. Yilan also supplies a sizable quantity of vegetables to Taipei (about 3,000 metric tons a year). Producers in the vicinity of Taipei sell vegetables directly to consumers or to local vegetable traders who sell to city dealers. In areas at a greater distance from the consumer, local vegetable traders sell to sales-agents, who sell to retailers at 6 per cent commission. The retailers clean and grade the vegetables before offering them to the public.

Salt: The Taiwan Salt Works, the sole producer of salt in Formosa, supplies salt directly to industrial consumers. The supply to general consumers is controlled by the Provincial Food Bureau, which has offices near railroad stations in the vicinity of the salt fields. The allotment of salt to licensed wholesalers is governed by directives from the Provincial Food Bureau.

8: Chen--452 [2]
116, 244, 311

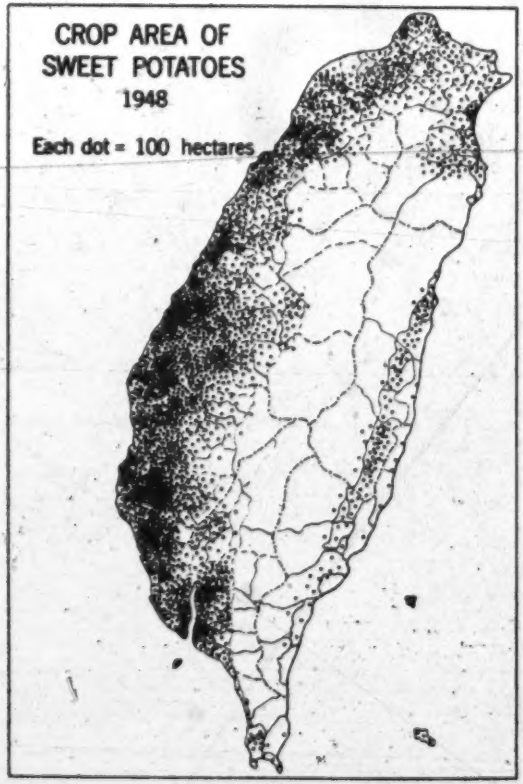


FIG. 28

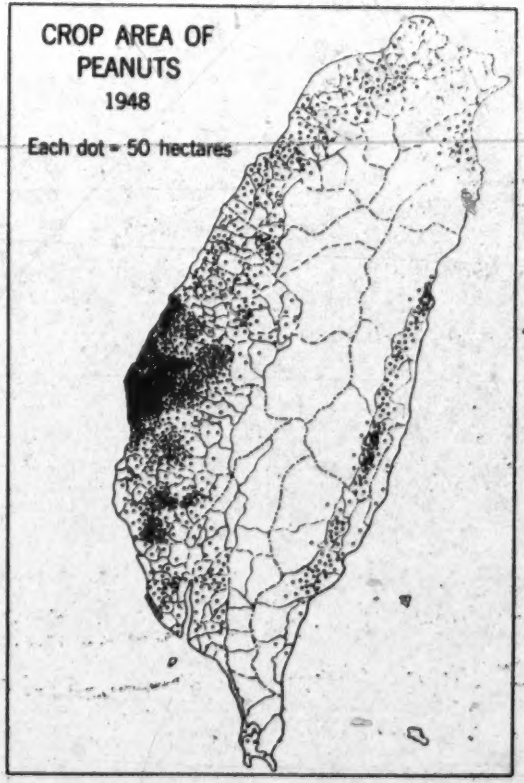


FIG. 29

9: Yamasaki--232 [6] N-5 (1896-1897) 1900 Formosans
116, 244, 264, 372

Also planted are various species of legumes and the peanut (Arachis hypogaea L.). Peanuts in part are eaten roasted, and in part are worked into cakes and made into oil, which is much used by the Chinese for cooking and illumination.

4:Grajdanzev--65 S-4 (no date) 1942 Formosans
116, 245, 177.24 Japan
636.24

"Tea is an old Taiwan crop brought by the Chinese emigrants from Fukien. It was flourishing before the coming of the Japanese and in 1893 about twenty-one million pounds of tea (about sixteen million kin) were exported. It is largely a plantation culture and is now almost completely in Japanese hands, but exports under Japanese rule have not shown improved results. The total area under tea is 45,000 to 46,000 ko. In 1927 the Mitsui Gomei Kaisha alone held 17,000 ko of tea plantations and the Taiwan Takushoku Seicha Company 1,000 ko (1). Japanese plantation holdings are now probably much larger.

1. Yanaihara, op. cit., p. 34.

Tea plantations, which are chiefly in Taihoku and Shinchaku prefectures, occupy hill slopes and generally do not compete with other agricultural plants for area."

4:Grajdanzev--65-66 S-4 (no date) 1942 Formosans -1-2
116, 245, 439, 511

"Tea produced in Taiwan is chiefly of three sorts—black tea, oolong tea (famous for its aroma) and pouchong tea 'wrapped'—paochungch'a. Production is as follows:

Production and Exports of Tea in Taiwan

Quantity (1,000 kin = 600 kg.)

	1914	1934	1935	1936	1937	1938
Oolong tea	...	5,292	5,280	5,049	3,487	4,519
Pouchong tea	...	5,666	5,685	5,923	4,905	5,929
Black tea	...	6,021	5,490	6,508	10,562	9,835
Total production, incl. others	22,000*	16,997	16,468	17,486	18,955	20,285
Exports		16,641	15,768	16,741	18,604	19,057

Values in thousand yen

	1934	1935	1936	1937	1938
Oolong tea	3,562	3,538	3,571	2,871	3,715
Pouchong tea	3,075	3,086	3,394	3,163	3,677
Black tea	4,250	3,964	4,518	7,418	6,844
Total Incl. others	10,894	10,594	11,486	13,452	14,237
Exports	11,047	9,325	10,200	12,851	12,742

* Approximately

Sources: Keizai nenkan; Nogyo nenkan; Taiwan Jijo.

116, 245, 439, 511

[66] Average production for the last five years was 18,038,000 kin, average exports 17,362,000 kin."

4:Grajdanzev--66 [2] S-4 (no date) 1942 Formosans
116, 245, 439

"Another important product is the banana. The tree is indigenous to Taiwan, but only under the Japanese have bananas become an important export item. The growth of production may be seen from the following table:

	1909	1921	1935	1936	1937	1938
Area (thousand ko)	0.6	6.1	20.6	22.5	21.9	21.5
Production (million kin)	10.5	86.2	322.5	339.5	364.3	336.8
Exports (million kin)	...	...	231.9	228.7	261.3	222.5
Value of exports (million yen)	...	...	10.2	11.2	12.3	17.6

As the figures show, a considerable portion of the crop is consumed in Taiwan—18.5 kin (11.1 kg.) per person per year, a fact which may be partially explained by the perishability of the fruit. The total value of bananas produced in Taiwan in 1937 was estimated by authorities at ¥8,133,000, but exports comprising only about two-thirds of the crop for the same year, were valued at ¥12.3 million, which means traders and carriers were getting more than half the value of exports.

This export is very likely to develop farther. Production is concentrated in Taichu, Tainan, and Takao prefectures. In Taichu the fruit is produced all the year round, but in Takao it ripens only from April to July."

4:Grajdanzev--66-67 S-4 (no date) 1942 Formosans
116, 245, 255, 464, 471, 177.24 Japan
636.24

"Pineapples were cultivated in Taiwan before the occupation of the island by the Japanese, but only after the introduction of canning did the industry begin to expand rapidly. The fruit is raised on the hill slopes and thus does not compete with [67] cereals or sugar cane. The authorities estimate that more than 20,000 ko can be used for pineapple plantations, but the area under cultivation is now only 9,000 ko. Data on production are given below.

Pineapple Production in Taiwan

	1921	1935	1936	1937	1938
Area under pineapples (1,000 ko)	1.3	7.0	8.0	8.9	9.9
Crop (1,000,000 kin)	8.9	87.1	110.2	107.8	116.0
Value (1,000 yen)	367	2,626	3,129	3,115	...
Value of exports of (¥1,000) canned pineapples	865	7,306	5,857	7,600	10,620*

* Exports of canned and fresh pineapples.

Sources: Nogyo Nenkan; for 1938, Taiwan Jijo.

Production, chiefly of the plantation type using hired labor, is chiefly in Japanese hands."

6: Kirchhoff-32 U-4 (no date) 1895 Formosans
116, 245

The tea plant appears to be cultivated only in North Formosa, to the 24th parallel. But there, in the course of the last decades, it has extended over enormous areas of hilly land, as on the heights round Tua-tu-tia and to the east of Bang-ka. When a fresh piece of forest land has been won from the original inhabitants, it is at once cleared; the tree stumps are taken out, the fallen trees are burnt and bushes cleared away in great bonfires, and then indigo is sown for a short while. Finally a tea plantation is laid out, either by sowing seed or by the use of shoots. May not the heavy rainfall, divided into the two rainy seasons that may be presumed to extend beyond Ki-lung, be the chief reason for the marked success enjoyed in the cultivation of tea in northeastern Formosa? The tea is very strong and aromatic. Without any manuring of the soil, the tea leaves are picked three times a year (in some districts as many as seven times). In addition to the heavy rains, especially in the winter, the early fogs that are the regular thing at this time in the mountainous regions favor the exceptional development of the leaves. On the other hand, attempts to grow tea in the southwest (around Tai-nan)have failed.

8: Chen--451 [2]
116, 245, 311

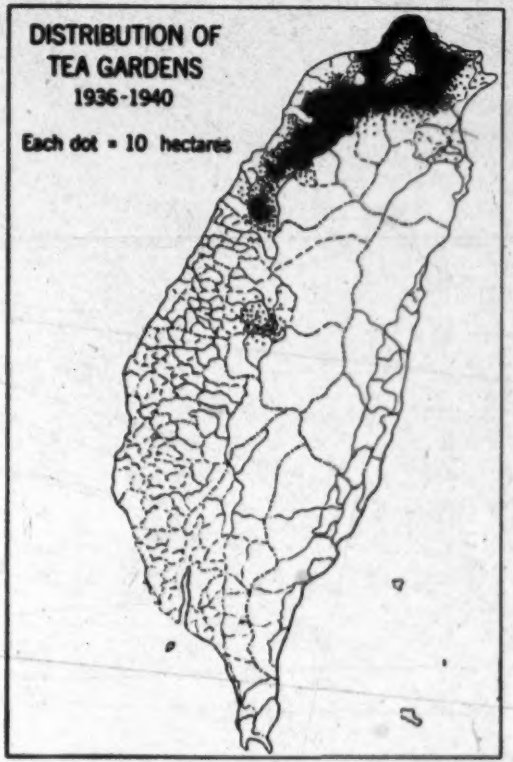


FIG. 24

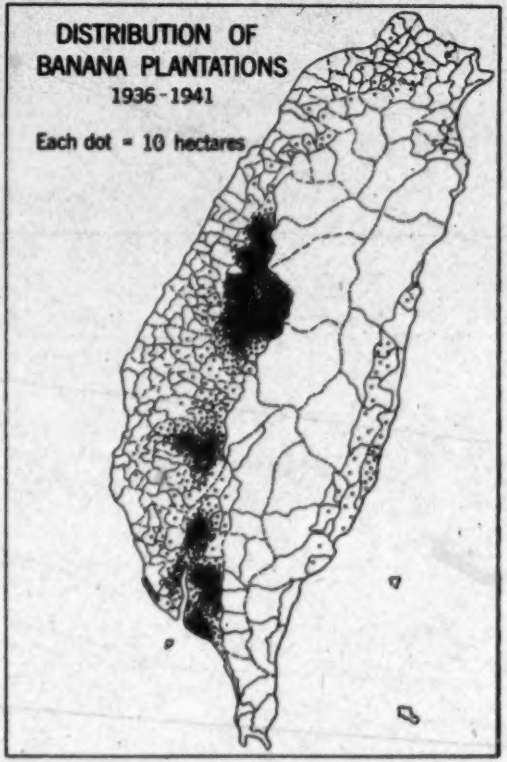


FIG. 25

8: Chen--452
116, 245, 311

N-3

(no date) 1951

Formosans

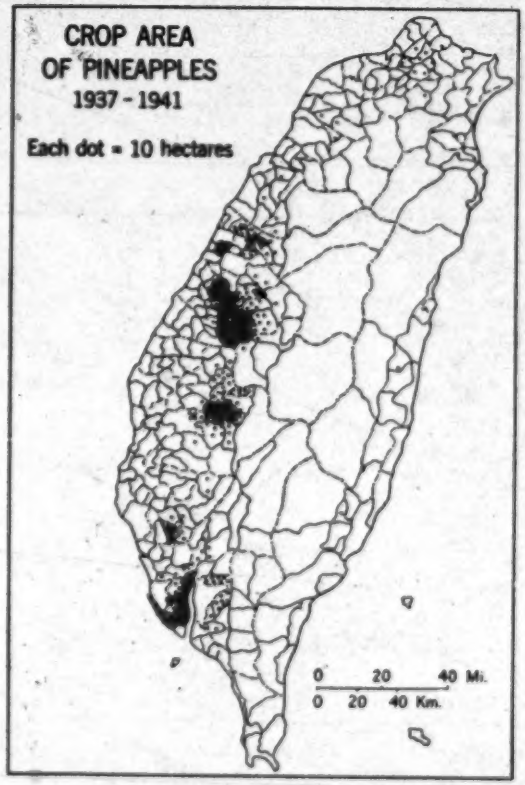


FIG. 36

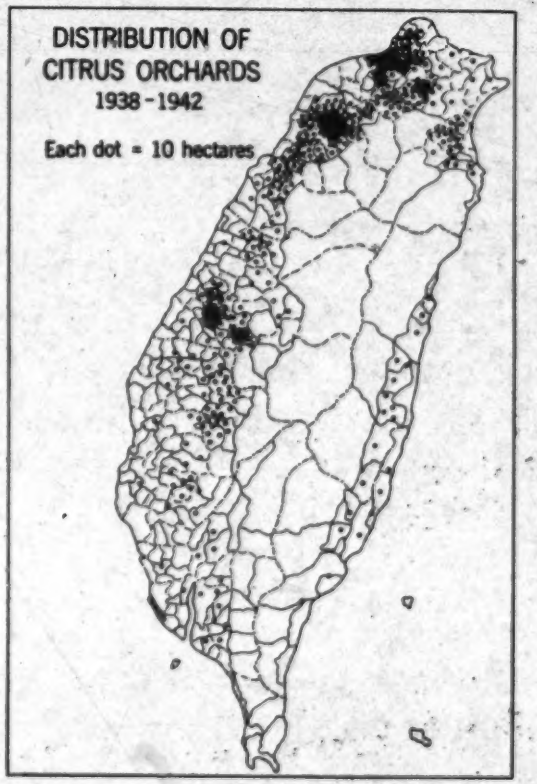


FIG. 37

9: Yamasaki--232 [2] N-5 (1896-1897) 1900 Formosans
116, 245, 311

While we have seen sugar in South Taiwan, we find many fields with tea plants in the northern part of the island. The surroundings of the Taihoku Basin yield most of this third most important island product. Tōshien Tableland and the two slopes of the Kilung Valley are covered in the main with these beautiful tea plantations. There are two kinds of Taiwan tea on the market, Oolong tea and Pauchong tea. They come from the same plants, the difference depending on the method of preparation. Oolong tea, which is usually made from the better leaves, is rather weaker in taste and odor than ordinary black tea, while the other is made aromatic by mixing it with flowers, such as jasmine (Matsuri). The leaves of the tea plant are harvested seven or eight times a year; but the best quality is obtained only from the second Spring harvest.

9: Yamasaki--232 [3] N-5 (1896-1897) 1900 Formosans
116, 245, 439

Taitōtei is the only town manufacturing and dealing in tea. The tea is exported via Tamsui to Amoy, and from there the Oolong tea goes in the main to America, in part to England also, and the Pauchong tea goes to the Straits Settlements for the Chinese who live there.

31: Hofmann--608-609 N-3 (1909) 1912 Formosans
116, 245, 655

The newly conquered land [EJ: i.e., the Atayal] is now being cultivated with great industry and energy. We saw a settlement of the Mitsui Company where the forested areas had been cleared and were made ready for cultivation. Camphor trees are being planted along the steep inclines and the old camphor trees are felled and prepared for export. Since 1889 camphor has been a government monopoly and constitutes one of the most important sources of revenue on Formosa. "The problem of the aborigines is actually the problem of [609] camphor," according to Davidson, (1) and the truth of this

1. Davidson, J. W. The island of Formosa, Past and Present.

statement cannot be questioned.

31: Hofmann--613-614 N-3 (1909) 1912 Formosans
116, 137, 245, 283

From Kagi we went to Chikutoki; on that stretch the land is level and the railway has already been completed. This region was also still dry, and the natives had not yet tended the fields. A feature characteristic of tropical vegetation is the abundance of palm groves (betel palms); the trees have an average height of seven to eight meters. The Chinese and Malayans chew betel nuts as a stimulant. The vegetation in the river-beds, most of which are dry at this time of the year, is more copious. The plant most frequently found, which is also cultivated artificially, is the large Nephelium longana (called Ryugan by the Chinese and Japanese) the fruits of which are very tasty. There are also large, old Ficus trees, including several varieties of palm trees (Phoenix humilis), Passiflora (Carica Papaya), Anona squamosa, etc; all these are representative of tropical flora. On the barren slopes there are Pandanus tectorius with leaves like pineapple trees; this furnishes a fiber which is used for hats resembling panama hats. The flora on the whole is rich in textile, especially fibrous plants. There are, first of all, the rattan palms with prickly leaves. The tough fiber of this palm is an excellent substitute for hemp and is used for all sorts of household utensils everywhere on Formosa. I did not see artificial plantations of this palm anywhere, however, [614] the Chamaerops excelsa is planted everywhere by the Chinese as a textile plant. The Liquidambar formosana is also planted artificially in this region; the leaves are used as feed for silkworms and the Japanese government expects to develop a successful industry of this plant.

37: Steere--316-317 S-3 (1873-74?) 1875 Formosans
116, 245, 311, 314

"The culture of tea has but just commenced, but has already reached considerable importance at Tamsni. The kind mostly cultivated is Oolong, which goes most of it to the United States. The cultivation can be carried to any [317] extent in the north of the island, as there are great plains of high rolling lands lying from Changwha to Tamsni, of the rich red clay which is so favorable for tea. These high plains are the home of the camphor tree, many trunks and stumps of which still lie over the ground, and of the wild tea-tree, of which I saw one specimen, with the trunk a foot in diameter and thirty feet high. The inhabitants gather the wild tea, but it is of bad quality, either by nature or from being badly cured. These high plains are now lying desert, as they cannot be irrigated, while tea is one of the few plants that needs no irrigation. These lands lie near the sea where transportation is easy, while much, or most, of the Chinese tea country is almost inaccessible, the tea having to be carried many days on men's backs and then transported by boats down rapid and dangerous streams, before it can reach a market. Camphor is exported from the island, and most of the mountain land seems to have camphor upon it, but the drug is only procured by the destruction of the tree, and there is no replanting done. There is also quite a trade with China in camphor planks."

241 occupation in the first half of the seventeenth century, rice and sugar have been the staple products of the island.

241 Under Chinese rule in the eighteenth
245 and nineteenth centuries, a constant influx of immigrants from the mainland reclaimed the extensive western plains of Formosa for the cultivation of rice and sugar. The foothills surrounding the plains were terraced for the growing of tea. Further in the mountains,
278 camphor was gathered from the dense forests. In the more isolated mountain region, aboriginal tribes practiced hunting and slash-and-burn agriculture. Coal mines were operated for a time by the government but were later abandoned.

489 Except for a 60-mile stretch of railway between Keelung and Hsinchu, communications was primitive until the present century. Rafts, boats, and junks were used along the coast and on lakes and rivers. Overland, the inhabitants were obliged to travel either in man-borne palanquins[3] or ox-drawn carts.
439 Western merchants handled a small international trade, consisting of tea, camphor, and sugar.

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3. A closed litter commonly used as a conveyance in China.

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433 has proved that wheat can be grown between rice crops in the regions centering on Taichung, Changhua, and Tainan, and the amount of land given to wheat production has been increasing gradually.

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4:Grajdanzev--67-68 S-4 (no date) 1942 Formosans
116, 248, 433, 656, 177.24 Japan
636.24

"As will be seen, cotton does not occupy an important place in Taiwan's economy. But it does play an important part in Japanese imperial policy. As was mentioned, the Japanese authorities did not spare efforts to encourage the production of sugar cane and rice in Taiwan, not because it was in the interests of the island, but because it benefited Japan proper. Since 1927 the sugar industry has suffered from overproduction and in 1935-36 another spectre appeared on the Japanese horizon--the overproduction of rice. A discussion began as to how the production of rice in Taiwan might be limited. A rice monopoly was suggested and was later applied, but for a somewhat different purpose. Instead of rice, the authorities proposed to encourage the production of textile fibers and oilseeds in Taiwan and, partly owing to the shortage of foreign exchange in time of war, more attention was given to cotton than to anything else. A plan was worked out for the production of 100 million kin of cotton at the end of the ten-year period beginning with 1937, on an area of 100,000 ko, i.e. more than ten per cent of the cultivated area of the island. The first year's crop (according to the Japan Year Book, 1939-40 [68] is estimated at about 6 million kin, or, already six per cent of the goal. We do not know on what the data of the Japan Year Book are based, but in Taiwan Jijo, published in December 1939, the plan provided for an area of only 50,000 ko in 1946 and the production of only 35 million kin. According to the same source, there were 4,800 ko under cotton in 1938 and the crop was 1,816,983 kin--as one may see, very far from 6 million kin. The average yield was 2.26 quintals per hectare--a low figure for a region of intensive agriculture."

6: Kirchhoff--32 [5] U-4 (no date) 1895 Formosans
116, 248, 286

This latter fiber [MC: nettle fiber] promises to become even more valuable when it proves possible to free it of the gummy substance that clings to it, makes it more difficult to use and prevents it from taking color evenly when, for example, it is woven together with silk. But even so the Boehmeria ("la ramie" of the French) provides a highly esteemed woven material that gleams like silk, so that it is grown in huge quantities in Ho-nan, Schan-tung, Hu-pe and round Nan-king. In Formosa the stalks reach a height of 3 to 4 m., and can be cut three times a year. In part the stalks are treated as follows: after they have been softened by soaking in water, the bark has been removed and they have been smoothed and dried, they are sent as raw material to China, where they are used to manufacture Schia-pu (summer material, the "grass cloth" of the English); in part the Chinese women and the wives of the Pepo-huan, in Formosa, spin the beautiful fibers to form a shining yarn, and from this they weave broad strips of material up to 30 m. long and 45 cm. wide, two women sitting at a primitive loom out in the open. Boehmeria fiber is already exported from Shanghai, in large amounts, for the world trade, and in London as much as 2,000 marks is paid for the ton.

9: Yamasaki--232 [8] N-5 (1896-1897) 1900 Formosans
116, 137, 248, 286

The pineapple (Hōri or Unrai) is an important plant for Taiwan, not only for its fruit, but also because the leaves have fine fibers from which thin summer clothing is woven. The fine cloth used for this is called Unrai-pu or "pineapple cloth." The most important textile plant of the island is, however, the China-grass (Boehmeria nivea Hook.), Tschumā in Chinese and Karamushi in Japanese, its fibers being exported in large quantities. It is also one of the chief articles of barter for the aborigines in the mountains. In Holisha I saw a large quantity of China-grass fibers, which had been taken there by the natives living on the upper course of the Dakusui-kei.

288 suspended operations, and the remaining 166
433 mills reduced their work-day to eight hours.

248 The textile industry in Formosa was
433 established on the assumption that a sufficient amount of raw cotton could be imported to furnish the material for the production of cotton yarn and cotton cloth. Now efforts are being made to satisfy this demand through domestic production of cotton, and the initial experiment -- transplanting Texas cotton to Formosa -- has been pronounced a success. It is doubtful, however, that in the near future Formosa can supply her total raw cotton requirements. In 1954, raw materials imported for the textile industry cost the island approximately US$20,000,000, and it is believed that this import rate will continue if Formosa's enormous textile industry continues operation at its present level.[21] The following table gives the textile production of Formosa since 1951.

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21. T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 12, No. 1, July 1954, p. 71.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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248
433

TEXTILE PRODUCTION */

	Cotton Yarn (Bale)	Cotton Cloth (1,000 yards)	Woolen cloth (1,000 yards)	Gunny sacks (per 1,000)
1951	39,567	61,836	442	5,240
1952	74,831	89,293	556	6,593
1953	107,464	152,435	1,228	8,407
1954	127,012	180,098	1,491	9,087

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

4:Grajdanzev--57 S-4 (no date) 1942 Formosans
116, 249, 474, 177.24 Japan
636.24

"The culture of sugar cane and the development of the sugar industry is considered one of the most spectacular achievements of the Japanese administration in Taiwan. Here we shall discuss only the culture of sugar cane; the sugar industry as such will be examined later in the section on industry. Sugar cane is an indigenous culture and was not introduced into Taiwan by the Japanese. The Dutch found it there in the 17th century and encouraged it. Before the advent of the Japanese it was produced by Chinese producers' cooperatives, which well deserve a special investigation because of their original character. They not only raised sugar cane, but also extracted the sugar in their old-fashioned mills. The industry had so developed that in 1893, ninety-eight million pounds of sugar were exported and probably not less than that amount was consumed in Taiwan, so that total production may be estimated at about 200 million pounds. This amount was not reached again until twenty years later. (1) With the coming of the Japanese the guerilla

1. Japanese sources say that at the time of Japan's occupation of Taiwan the annual output was only about 80,000,000 kin (104 million pounds). This can hardly be true if in 1893 exports alone equalled 98,000,000 pounds. In 1880 exports equalled 141.5 million pounds.

war continued for several years and ruined the industry."

4:Grajdanzev--57-59 S-4 (no date) 1942 Formosans-1-2
116. 249. 439. 654, 177.24 Japan
636.24

"At the time of annexation the Japanese [58] government was anxious to improve their 'unfavorable' balance of trade with foreign countries, and the cultivation of sugar cane in Taiwan appeared to be an excellent means of doing this. Japan's imports of sugar at that time were in excess of twenty million yen—about ten per cent of her total imports, and at times equal to the 'unfavorable' balance of trade. Sugar cane is grown in Japan, but climatic conditions and limited area make it impossible to increase the total production significantly. At the most it can supply only a small percentage of the domestic demand for sugar. But Taiwan with its tropical climate could be successfully used for this purpose.

As early as 1896 seeds of improved types of sugar cane were imported from the Hawaiian Islands. In 1898, Kodama, the Governor-General of Taiwan, and his energetic Governor Goto began conferences with Japanese financiers on the question of investment in the sugar industry of Taiwan. A special investigation of the outlook for sugar cane culture in Taiwan was entrusted to Dr. Inazo Nitobe, who presented his report in 1901. In this report Dr. Nitobe recommended that the irrigated area and the area under cultivation be increased through various measures of encouragement, assistance, and direct government action, the establishment of sugar research stations, and the introduction of improved varieties of sugar cane, while other recommendations were made concerning sugar manufacture. The government followed these recommendations, established experimental

stations, imported new varieties of sugar cane from Hawaii and Java, and paid special subsidies and grants to the manufacturers and farmers to induce them to follow its policy. Up to March 31, 1932, it had paid about thirteen million yen in subsidies. Moreover, in 1903 a relatively moderate protective tariff on sugar imported into the Japanese Empire was introduced, the rate being 0.8 sen per kin (0.6 kg.) on No. 20 standard and higher. This rate was increased to 4.65 sen per kin in 1911 on No. 21 standard and higher, to 5.3 sen in 1927 on No. 22 standard and higher, and to 7.15 sen in 1932. As a result—this is the official version—wealth came to the sugar [59] industry and to the island 'and this has resulted in the present industrial prosperity'."

4:Grajdanzev--59-60 S-4 (no date) 1942 Formosans-1-3
116, 249, 311

"The area under sugar cane, the cane crop, and yield per ko were increasing in Taiwan as follows:

	Area (ko)	Cane crop (in million kin or 600 metric tons)	Yield per ko (in 1,000 kin or 600 kg)
1905-06	35,158	1,690.2	48.1
1908-09	39,035	2,219.5	56.9
1914-15	85,150	3,933.8	46.2
1917-18	150,450	6,817.5	45.3
1919-20	108,376	4,382.5	40.4
1920-21	142,032	6,752.8	47.5
1921-22	123,233	7,793.7	63.2
1926-27	101,531	7,412.0	73.0
1927-28	108,318	9,697.6	89.5
1928-29	120,046	12,291.9	102.4
1929-30	109,397	11,618.4	106.2
1930-31	99,094	10,944.7	110.4
1931-32	109,496	13,415.2	122.5
1932-33	83,690	8,782.0	104.8
1933-34	91,163	8,883.8	97.4

	Area (ko)	Cane crop (in million kin or 600 metric tons)	Yield per ko (in 1,000 kin or 600 kg)
1934-35	121,628	13,477.3	110.8
1935-36	128,329	13,190.4	102.8
1936-37	124,555	14,271.9	114.6
1937-38	134,208	15,101.1	112.5
1938-39	149,834*	19,602.1*	130.8

* There are reasons for questioning the data for 1938-39. If they are accurate, the acute shortage of sugar in Japan in 1939-40 is hard to explain. Japanese official figures for the rice crop in 1939 were also extraordinarily optimistic in spite of drought, but it is hard to understand why it was necessary to import rice hurriedly from foreign countries, wasting scarce foreign exchange if there was such an abundance of rice at home. The story is the same with sugar. Why was it necessary to introduce sugar ration cards cutting the average per capita consumption in half, if there was a tremendous increase in production? The estimates for 1940 reveal a sharp fall.

In 33 years the area under sugar cane increased almost four times, total production twelve times, and the yield per ko 2.7 times.

4:Grajdanzev--59-60 S-4 (no date) 1942 Formosans-3
116, 249, 311

In 1939 the Japanese Empire occupied seventh place (1) among [60] producers of sugar

1. Others in order of importance were Cuba, India, U.S.S.R., Germany, U.S.A., Java.

and fourth place among producers of cane sugar. The Japanese sugar industry became a factor of world importance. It is true that Japan exports very little sugar, but her absence from the world market as a purchaser is of considerable importance."

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-1-2
116, 249, 433, 458, 654, 177.24 Japan
636.24

"There can be no doubt as to the importance of sugar cane cultivation and of the sugar industry in Taiwan and the degree of success achieved by the Japanese government and Chinese cultivators.

However, a close examination of the table [See page 59, category 116--analyst] reveals some interesting features. It was pointed out how much effort was expended by the officials on the improvement of sugar cane culture. But in spite of all the efforts of the government and of the experimental stations the yield per ko did not show any signs of improvement during the first fifteen years. If the development was as steady as is officially described, why then was the increase of production up to 1921 taking place exclusively as a result of the increase in the planted area?

Further, the increase in sugar production may also come through the increase of sugar content in the juice of the sugar cane. It is interesting to note that in this respect too, little, if any, improvement is noticed up to 1922, but that after that year the sugar content rose from 9.5 per cent in 1922 to 13.2 per cent in 1935 and in this year was considerably higher than in Java or Cuba (12.3 and 11.6 per cent respectively). Finally, the table shows that after the peak of production (and area) was reached in 1917-18, production fell, then rose slowly up to 1928-29, fell sharply by almost thirty per cent and then began to rise again.

The explanation of these fluctuations is that the Taiwan sugar industry (and, as a consequence, also the cultivation of sugar cane) passed through several crises of the most severe character. 'Overproduction' is a word familiar to this industry, and to the planters also. Of course, it must be emphasized that this 'overproduction' is of a special character, because the consumption of sugar in Japan is relatively low and, though physically the demand of the population for sugar [61] is not satisfied, there is insufficient purchasing power available to buy it.

All this is very important for the problem in hand. The government's efforts were probably as great from 1900 to 1922 as afterward, subsidies were given more lavishly than later on, but the results in the first twenty years were rather meagre. In other words, the development was due not so much to the government's and the manufacturers' efforts as to some other factors inherent in the development of the economy of Taiwan and Japan."

4:Grajdanzev--61 S-4 (no date) 1942 Formosans
116, 249, 423, 471, 177.47 Japan
636.47

"The old type of sugar cooperatives dominating the industry before 1895 disappeared with the advent of capitalistic forms of enterprise in Taiwan. Production of sugar is now carried on in modern mills which are the property of the Japanese sugar companies possessing tremendous amounts of capital (several hundred million yen). Step by step these companies acquired a huge area of cultivated land——from 63.2 thousand ko in 1925 this area increased to 93.2 thousand ko in 1935. The latter figure amounts to more than ten per cent of the cultivated area of the island, but in the regions where sugar cane is cultivated the companies own more than twenty per cent of the area under cultivation (1).

1. Actually their influence is greater than these figures suggest because they rent about 20,000 ko of land.

However, it would be a mistake to think that this huge area is used by the manufacturers for sugar cane plantations. They plant only about 18,000 to 25,000 thousand ko with cane, while all other sugar cane is bought by them from the small farmers, i.e. about three-quarters of the total sugar cane production is supplied by 127,000 to 130,000 farmers, each planting on the average only half a ko."

4:Grajdanzev--63-64 S-4 (no date) 1942 Formosans-1-2
116, 241, 249, 435

"Although we have no reliable data concerning the profitability of sugar cane in Taiwan as compared with other crops, we can make certain calculations which will help us to see what the farmer gained from its cultivation. The average holdings of farmers did not increase after 1913 and therefore a larger income in these circumstances could be secured in only two ways—through an increase in yield or a rise in the price of sugar cane or both. The improved yields came as a result of the use of better seedlings, earlier ploughing, more careful attention, greater use of fertilizers, better irrigation. Some of these items demand more labor on the part of the farmer; almost all demand a greater expenditure in money. Let us now compare the receipts of the farmer per ko.

Receipts of Sugar Cane Cultivators in Taiwan

	1921	1927	1935	1936	1937
Yield per ko (1,000 kin)	63.2	89.5	102.8	114.6	112.5
Price per 1,000 kin (yen)*	9.6	7.6	3.4	4.1	4.5
Value per ko (yen)	696.7	537.0	349.5	469.9	506.3
Value per ko at 1913 prices, yen (approximately)	330.0	310.0	220.0	290.0	270.0

* For 1921-27 for the price 'the cost of raw material for manufacturers of sugar in Taiwan' is taken (Takahashi, op. cit., p. 216); for the later years. the price as it is given in the value of total production of sugar cane in Nogyo nenkan; the actual price is probably smaller.

Great accuracy cannot be claimed for these figures but they may give an idea of the trend. The yield since 1921 was doubled, but the receipts in deflated money do not show any improvement. This may be partially due to the fact that the general index of prices should not be used to deflate values in this case; a special index of prices paid by the farmer might show somewhat better results. But the expenditures which the farmer now incurs in order to secure these increased yields—fertilizers, irrigation, etc.—were not deducted, and if they are taken into consideration, one is forced to the conclu-[64] sion that some one other than the farmer got the benefits of the better yields."

"The number of other animals in Taiwan may be seen from the following table (in thousands):

	1921	1932	1933	1935	1937	1938
Sheep	...	0.3	0.3	0.4	0.3	...
Goats	...	90.1	87.0	78.3	70.4	...
Pigs	1,281	1,754	1,807	1,873	1,849	1,827
Poultry	4,452	5,267	5,747	6,466	7,703	7,947
Geese	190	306.3	319.6	370.8	401.5	394.2
Ducks	890	1,379	1,496	1,772	1,958	2,225
Turkeys	...	9.2	11.2	18.5	30.8	35.3

As regards pigs and poultry the situation is more favorable: there was a considerable increase in pigs, poultry, geese, and ducks. On the average there are four pigs (including sucklings) and eighteen to nineteen hens per farming family (assuming that only farmers keep pigs and fowl). These are an important source of meat and income. (1) The development is a consequence of the growth of the sugar industry—the cane waste can be utilized

1. The official estimate of an average per capita pork consumption of more than 28 kin a year (37 pounds) is probably an exaggeration. In 1938 one million pigs were killed. If consumption per capita averaged 28 kin, each pig must have weighed 160 kin, but the official estimate of the average weight is 130 kin.

on the farm as fodder. In this respect Taiwan is much better off than Korea. But one should not exaggerate the importance of these figures. It was officially estimated that in 1937 the gross value of products of animal breeding in Taiwan was ¥49.2 million or slightly more than twelve per cent of total agricultural production."

C

6: Kirchhoff--28 U-4 (no date) 1895 Formosans
249

Indigenous are also the important fiber plant Boehmeria nivea, the so-called China nettle, a near relative of our stinging nettle, and the beautiful Araliacee Fatsia papyrifera, whose stem turns into wood and grows to the height of a man within one year, and which bears a chain of long-stalked leaves on its crest divided like hands, and whose unusually plentiful pith provides the valuable material for the manufacture of Chinese pith paper (incorrectly called rice paper).

6: Kirchhoff--33 U-4 (no date) 1895 Formosans
116, 249

The manufacture of sugar and the preparation of tea are altogether in Chinese hands. The first in particular represents considerable values, although the wares are of poor quality only, about half the raw juice remaining unused in the waste owing to the insufficient pressure (it is done between two stone cylinders turned by buffalo or oxen).

6: Kirchhoff--33 [3] U-4 (no date) 1895 Formosans
116, 249

The indigo, which is grown for the most part in North Formosa, yields a dye by dissolving, and is exported in this state, but it is also used in Formosa as the source of a very fast dye for materials.

8: Chen--451
116, 249, 311

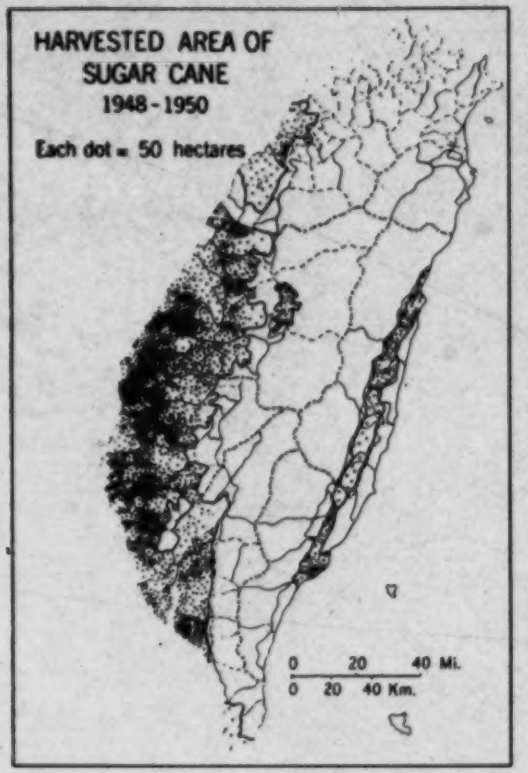

FIG. 22

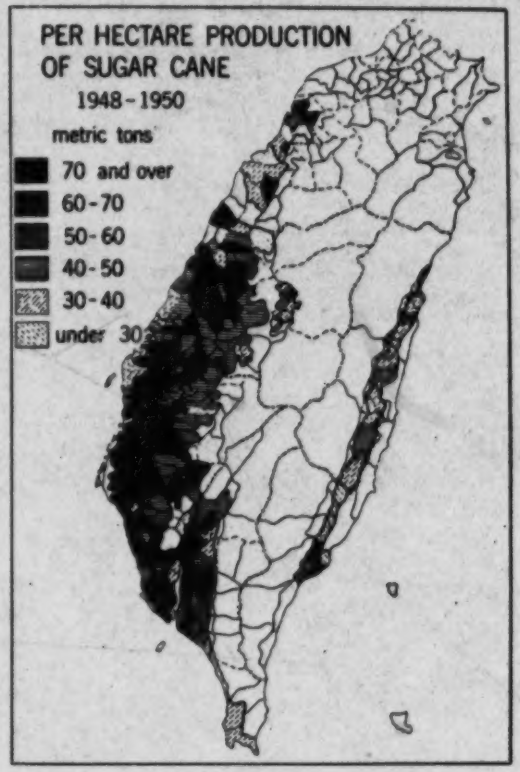

FIG. 23

8: Chen--453
116, 249, 311

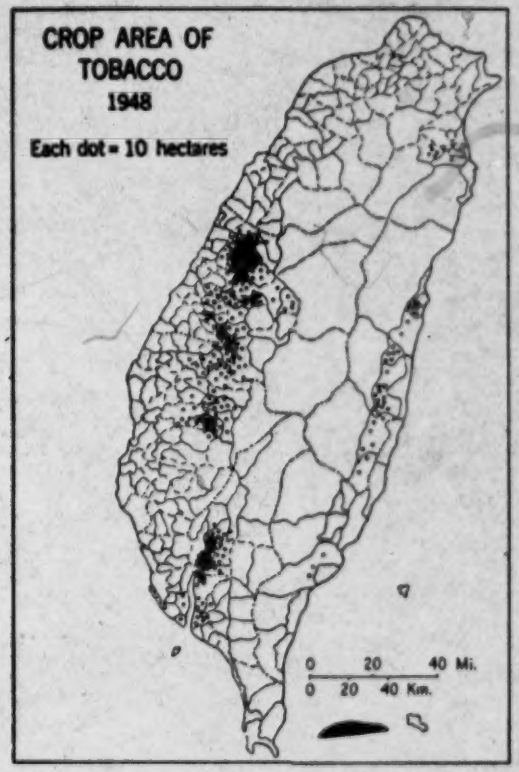

FIG. 30

FIG. 31

9: Yamasaki--232 N-5 (1896-1897) 1900 Formosans
116, 249, 439

The second chief product is sugar-cane. It is noteworthy that sugar-cane in Taiwan is much smaller than in the Riukiu Islands. It grows in large quantities in the plain of Tainan. November is the harvest month. The raw sugar is manufactured with the help of a primitive mill in large, cone-shaped huts, of which many can be seen in the southern plain. The most important centers of the export trade in sugar-cane are Takao and Tainan (Anping), the trade being very lively between January and April.

31: Hofmann--627-628 N-3 (1909) 1912 Formosans
116, 132, 311, 249

The sugar industry on Formosa has increased considerably; this industry will become [628] still more profitable when the projected plan for a system of irrigation with artificial dams has become a reality. In this way the tributary of the southern Tamsui may be utilized and more soil than hitherto will be irrigated. Southern Formosa is affected by the drought every winter.

31: Hofmann--629 N-3 (1909) 1912 Formosans
116, 249, 311

From the coast I went to Ako and visited the extensive sugar plantations there. These are run with modern equipment on a large scale; there are large factories and there is a great deal of activity. Aside from these plantations, however, the land around here has not been exploited to the fullest possible extent.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

A. Production of Rice

433 The production of rice has increased steadily in the postwar years; production in 1950 exceeded the 1938 production level peak achieved by the Japanese. However, because relatively less fertilizer is available for use, the per hectare yield of Formosan fields has not reached the record yield of 2,242 kilograms achieved under Japanese rule. Rice exports have been sacrificed to meet the domestic requirements of the swelling population of the island. In 1938, nearly 50 per cent of the 1.4 million metric tons of rice produced was exported; in 1954, only 36,000 metric tons of rice were available for export in spite of the fact that nearly 1.7 million metric tons were produced in that year. Such a drastic decrease in rice export has affected the dollar reserves of the Formosan people and made it difficult for the country to import the industrial goods necessary for continued economic development.[13]

243 Rice and sugar cane, the two most
249 valuable crops, compete for use of land

13. Industrial Development Commission, Industry of Free China, Vol. 3, No. 6, June 1955, p. 80.

243 resources. Since rice cultivation and
249 harvesting takes about four months and sugar cane takes anywhere from fifteen to seventeen months before it can be harvested, rice has gradually taken the lead. Competition for land is especially keen in the area near Taichung, where paddy fields can be used either for the cultivation of rice or of sugar cane.

243 There are four main types of rice grown on Formosa -- Ponlai rice, native rice, upland rice, and glutenous rice -- and many varieties. Ponlai rice was introduced in Formosa during the Japanese occupation because it suited the tastes of the Japanese. It remains the most popular type of rice cultivated on the island because it has a high yield and good milling quality. Ponlai rice accounts for approximately 55 per cent of current rice production.

B. Production of Sweet Potatoes

244 Sweet potatoes are the second most important food stuff produced on Formosa. They are a staple of diet and are also used as raw material for alcohol and yeast as well as for hog feed. The major part of the annual
251 crop of sweet potatoes is sun-dried to produce chips which can be stored with minimum waste.

C. Production of Sugar Cane

249 648 433 Sugar cane is the raw material for Formosa's sugar industry. Postwar increase in production is all the more remarkable since in the years before the war the Japanese did all they could to exploit the potentialities of sugar cane production to meet the sugar requirements of Japan proper.

Sugar cane is usually planted in the summ June to September. About a year and a half are required before the cane is ready for harvest. Under the International Sugar Agreement concluded in London in 1953, Formosa is permitted to export 600,000 metric tons of sugar annually. Governm t policy has been adapted to meet this quota and allow for domestic consumption. Land once used for sugar cane is now being used to produce other products.

D. Production of Wheat

243 433 Wheat produced on Formosa accounts for less than one per cent of the total value of the island's farm production. For this reason it has been generally believed that Formosa lacks the conditions suitable for

379 Formosa has not yet exploited the hydroelectric potential offered by its heavy annual rainfall and the steepness of its river gradients, and no sustained effort has been made to compensate for the varying water reserves available at different times of year, headwater erosion, the narrow valleys in which the rivers flow, and the silt and gravel which combined to reduce the efficiency of the streams as a source of power. For these reasons, the economic development of potential power sites is as important to Formosa as the implementation of flood control and irrigation programs.

Currently, the Taiwan Power Company has established a committee to investigate and plan the generation of power by atomic energy on Formosa.

IV. FOOD PROCESSING INDUSTRIES

A. The Production of Sugar

249 The history of the sugar industry in Formosa
433 goes back to 1349, when islanders "boiled sea
431 water to make salt and fermented molasses to produce liquor." [17] In 1650, when the Dutch were occupying Formosa, some 6,000 metric tons of sugar cane were produced each year. Of this amount, two-thirds were exported to Japan and marketed in lands as far away as Persia. Under the rule of Cheng Ch'eng-kung (Koxinga), who

17. China News Press, T'ai-wan Ching-chi Nien-pao, 1953 [Annual of Taiwan's Economy, 1953], Taipei, 1953, p. 45.

249 defeated the Dutch, annual production rose to
433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require-
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills came under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
252 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brown Sugar Association produce brown sugar for domestic use and foreign export.

257 The milling capacity of the 26 mills controlled
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is about 12 per cent. These mills operate an average of 150

36: Rowe S-4 (no date) 1955 AF? China AF1
Formosa AD1

C F 423 427

tenants there has been a rent reform program, which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

C F 241 654

By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

C F 652

Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

C F [377] [249] 433

Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

243 resources. Since rice cultivation and
249 harvesting takes about four months and sugar cane takes anywhere from fifteen to seventeen months before it can be harvested, rice has gradually taken the lead. Competition for land is especially keen in the area near Taichung, where paddy fields can be used either for the cultivation of rice or of sugar cane.

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B. Production of Sweet Potatoes

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• 251 crop of sweet potatoes is sun-dried to produce chips which can be stored with minimum waste.

36: Rowe S-4 (no date) 1955 AFl China AFl
Formosa AD1

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use.

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak.

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1952), cement (389,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures.

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 630,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–52, the world market price began to rise, and sugar production is gradually returning to its previous high levels.

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries.

A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government.

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes.

C F 433
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C F 377
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C F 257
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C F 433
[228]
C F 466
C F 651

6: Kirchhoff--33-34 U-4 (no date) 1895 Formosans
116, 252, 439

The main imports from lands other than China are cotton and woolen materials, and Indian opium; then follow metal goods, clocks, maize flour (used by Chinese settlers in baking cakes), boards, lamps, matches, dye for dyeing, umbrellas, needles and related articles. Even more variegated is the list of imports from China, embracing hemp sacks, peas, bricks and fans, jade bracelets, etc., but the value of this commerce which involves for the most part the ports of Amoy, Tsuan-tschau (Tschang-tschou on our maps) and Fu-tschau cannot be estimated. *

*The Europeans acting as customs officials in the treaty ports [34] note only the value of the goods imported from abroad and exported abroad, because they have to collect taxes for the Chinese Government from them alone. Consequently it is obvious that the value of goods from China and exported to China is not included in the sums quoted for Ta-kaô and Tam-sui.

4:Grajdanzev--66-67 S-4 (no date) 1942 Formosans
116, 245, 255, 464, 471, 177.24 Japan
636.24

"Pineapples were cultivated in Taiwan before the occupation of the island by the Japanese, but only after the introduction of canning did the industry begin to expand rapidly. The fruit is raised on the hill slopes and thus does not compete with [67] cereals or sugar cane. The authorities estimate that more than 20,000 ko can be used for pineapple plantations, but the area under cultivation is now only 9,000 ko. Data on production are given below.

Pineapple Production in Taiwan

	1921	1935	1936	1937	1938
Area under pineapples (1,000 ko)	1.3	7.0	8.0	8.9	9.9
Crop (1,000,000 kin)	8.9	87.1	110.2	107.8	116.0
Value (1,000 yen)	367	2,626	3,129	3,115	...
Value of exports of (¥1,000) canned pineapples	865	7,306	5,857	7,600	10,620*

* Exports of canned and fresh pineapples.

Sources: Nogyo Nenkan; for 1938, Taiwan Jijo.

Production, chiefly of the plantation type using hired labor, is chiefly in Japanese hands."

4:Grajdanzev--93 S-4 (no date) 1942 Formosans
116, 241, 255, 257, 433

"Thus the predominant position in Taiwan's industry—from seventy-one to seventy-four per cent of the total—is occupied by the food industry. The latter consists chiefly of the production of sugar from sugar cane, and, to a lesser degree, of the canning of pineapples. In other words, Taiwan industry is closely connected with its agriculture and is largely the transformation of agricultural products into forms suitable for consumption or for storage and transportation. All other industries show little signs of growth. Ceramics and 'other industries' were at the same level in 1937 as they were in 1929. the lumber, textile, metal and machine industries show an increase, but in absolute amounts this increase is small, and only the chemical industry is of any importance, producing about nine per cent of the gross value."

4:Grajdanzev--97-98 S-4 (no date) 1942 Formosans
116. 255. 257. 433

"As was shown above, the food industry occupies a dominant [98] position in the industry of Taiwan. Its composition is as follows: Sugar makes up seventy-seven per cent of the gross value product of the food industry, molasses and candy four per cent, canned pineapples five per cent, and tea five per cent. As will be seen, production of these is concentrated in a few companies.

Gross Value of Production of the Industry,
(1,000 yen)

Sugar	202,240	Fishery products	2,172
Tea	13,452	Soft drinks	1,639
Canned pineapples	12,197	Starch	1,561
Molasses	6,389	Ice	1,496
Flour	6,013	Miso*	789
Candy	5,315	Other foods	5,562
Soya	2,427	Total	261,252"

*Bean paste used as a food.

B. The Production of Canned Pineapple

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The Japanese encouraged the growth and canning of pineapples for export during their rule of Formosa. In 1938, Formosa was the third largest producer of canned pineapple, surpassed only by Hawaii and British Malaya. Since World War II, shortage of tinplate have caused a decrease in Formosa's pineapple production. The crops have been small, Formosa has lot many of its foreign markets, and tinplate for canning is at a premium. Efforts have been made to solve these problems, and production since 1951 has been on the increase.

PRODUCTION OF CANNED PINEAPPLE */
(in 1,000 case lots)

Year	Production
1938	1,674
1939	1,390
1950	226
1951	361
1952	427
1953	370
1954	780

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. The Production of Flour

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433 It has been estimated that, as of 1953, Formosa required 108,000 metric tons of flour in order to meet civilian and military requirements.[19] Demand for flour has greatly increased as the result of the influx of refugees from the China Mainland, most of whom choose flour in preference to rice as the main staple of their diet. At present the island can produce only about 17,000 metric tons of wheat. Of this amount, and apparently far short of the island's requirements, only about 10,000 metric tons is available to be milled as flour; the remainder is utilized in brewing, for seed, and so forth. Natural conditions are believed to limit Formosa's optimum wheat production to 30,000 metric tons a year, and in consequence the island has found it necessary to import either flour or wheat. It was believed that the importation of wheat for domestic milling was most economical, in view of foreign exchange. The Foreign Operations Administration has been of aid in the importation of wheat and its distribution to local mills. As a result, the number of flour mills in Taiwan has increased in recent years, to the point where the milling capacity exceeds the requirements of the island.

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433 The provincial government owns two flour mills, and there are 33 relatively large private

19. James E. Auburn, "Taiwan Wheat and Wheat Flour Requirements," Chinese-American Economic Co-operation, Taipei, Mutual Security Mission to China, Vol. 1, No. 12, pp. 25-30.

[47] mills and 80 smaller mills scattered over the
256 island. Their combined productive capacity is
433 reported to be approximately 1,227 metric tons a day. If the mills were in operation only 250 days a year, their total capacity would be some 306,750 metric tons a year, far exceeding the estimated annual consumption requirement of 108,000 metric tons. The annual consumption requirement may have increased as the population increased in the past two years. The production goal for 1955 was set at 160,000 metric tons of flour, to be processed from 208,000 metric tons of imported wheat in addition to 8,000 metric tons of domestic wheat.

It should be noted that Formosa's production of flour is vitally dependent upon the importation of wheat. Delay or discontinuation of import would immediately affect local markets.

D. The Production of Edible Oil

388 Peanut oil and soybean oil are the most im-
433 portant types of edible oil produced in Formosa. The oils are used in domestic cooking. What remains after the oil has been extracted is used to feed animals or as fertilizer. Although enough peanuts are produced to meet domestic requirements, about one-third of the soybeans needed are imported. Approximately 500 producers of edible oil were reported in 1954. Most use cottage-type pressing mills, operated by human and animal labor. There are only 24 modern oil-pressing mills on the island. The production of peanut oil, peanut cake, soybean oil, and soybean cake is

4:Grajdanzev--93 S-4 (no date) 1942 Formosans
116, 241, 255, 257, 433

"Thus the predominant position in Taiwan's industry—from seventy-one to seventy-four per cent of the total—is occupied by the food industry. The latter consists chiefly of the production of sugar from sugar cane, and, to a lesser degree, of the canning of pineapples. In other words, Taiwan industry is closely connected with its agriculture and is largely the transformation of agricultural products into forms suitable for consumption or for storage and transportation. All other industries show little signs of growth. Ceramics and 'other industries' were at the same level in 1937 as they were in 1929. the lumber, textile, metal and machine industries show an increase, but in absolute amounts this increase is small, and only the chemical industry is of any importance, producing about nine per cent of the gross value."

4:Grajdanzev--97 S-4 (no date) 1942 Formosans
116, 257, 377, 433, 473

"Our analysis has shown that in Taiwan only the electric power, chemical, and food industries are large-scale, and that among them the electric power and sugar industries tower far above the rest—in these the corporations would be huge even by the standards of industrially developed nations. We saw that in agriculture Taiwan is an island of contrasts—huge landholdings and poor 'independent' landowners and tenants. The same picture appears in industry and will become clearer on examination of some individual industries for which data are available. We saw that in Taiwan one should distinguish between the progress and prosperity of agriculture in general and of the agriculture of the small Chinese farmers. The same phenomenon appears in industry."

4:Grajdanzev--97-98 S-4 (no date) 1942 Formosans
116. 255. 257. 433

"As was shown above, the food industry occupies a dominant [98] position in the industry of Taiwan. Its composition is as follows: Sugar makes up seventy-seven per cent of the gross value product of the food industry, molasses and candy four per cent, canned pineapples five per cent, and tea five per cent. As will be seen, production of these is concentrated in a few companies.

Gross Value of Production of the Industry,
(1,000 yen)

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Molasses	6,389	Ice	1,496
Flour	6,013	Miso*	789
Candy	5,315	Other foods	5,562
Soya	2,427	Total	261,252"

*Bean paste used as a food.

4:Grajdanzev--98 S-4 (no date) 1942 Formosans -1-2
116, 257, 477, 563

"Before the Japanese occupation sugar production was carried on in small Chinese enterprises. But these enterprises with their primitive technique, animal power and low-quality products, were compelled to give ground step by step before the modern mills constructed and operated by the Japanese companies. The rapid extinction of these small enterprises and the growth of production of the modern mills may be seen from the following table.

Production of Sugar in Taiwan
(tons)

Year (Nov.- Oct.)	In modern mills	In improved mills	In primitive mills	Total
1905	4,535	385	44,659	49,579
1915	187,839	11,166	9,463	208,468
1917	409,165	26,560	22,367	458,092
1921	241,169	5,217	6,348	252,734
1925	467,264	4,824	7,451	479,539
1927	402,611	3,343	5,186	411,140
1929	777,931	5,776	5,621	789,328
1930	798,304	7,050	5,130	810,484
1932	977,239	6,744	5,065	989,048
1933	616,840	10,070	6,814	633,724

Production of Sugar in Taiwan [Cont.]
(tons)

Year (Nov.-Oct)	In modern mills	In improved mills	In primitive mills	Total
1934	634,403	4,721	7,919	647,043
1935	942,712	9,994	12,946	965,652
1936	880,552	10,402	10,725	901,679
1937	987,451	10,423	9,478	1,007,352
1938	...	...	...	989,778
1939	...	...	...	1,377,000

From this it appears that while in 1905 only nine per cent of the sugar was produced in modern mills, in 1937 these produced ninety-eight per cent of the total. Primitive mills and the so-called 'improved' mills had inevitably to lose the position they occupied."

"Production of sugar in modern mills is concentrated in the hands of nine Japanese corporations, [99] and of these, six produce ninety-seven per cent of all the sugar produced in modern mills and ninety-five per cent of all that produced in Taiwan. In the table on page 100 information is given concerning each of these six largest corporations. Unfortunately this information is not complete. These corporations are closely connected with many other enterprises in Taiwan and also have enterprises in the Pacific Islands under Japanese mandate, in Java and in other southern colonies (1). Many of these enterprises have nothing to do with sugar. But even so, the information given is interesting because it does throw some light on their activities. The paid-up capital and reserves of three of these corporations is about ¥100 million each. The amount of reserves is explained by the remarkable rate of profit which they receive—34 to 40 per cent is 'normal' for them. A lower rate of profit, as in the case of Ensuiko Seito Corporation (20.2 per cent) may be explained by the fact that the corporation has recently doubled its capital, investing it in new enterprises which do not yet bring profit. Thus the rate of profit in the sugar industry is extraordinarily high for all companies. It was shown above that the farmers did not receive any benefits either from the increase of the sugar

1. They also have refineries in Japan proper. Sugar produced in Taiwan is not refined there.

content of the cane, nor from the increase of protection; it now becomes clear that these benefits fell to the manufacturers, for only in this way were these huge profits possible (2).

2. But a certain part of these profits is the result of higher prices paid by the Japanese population for the benefit of these companies, protected by the tariff wall."

4:Grajdanzev--100 S-4 (no date) 1942 Formosans
116, 257, 433, 473, 477

INFORMATION CONCERNING THE SIX LARGEST SUGAR CORPORATIONS OF TAIWAN 1939

	Taiwan Seito	*Dainippon Seito*	*Meiji Seito*	*Furukawa Seito*	*Teikoku Seito*	*Showa Seito*
Established	1901	1896	1908	1908	1910	1927
Paid-up cap. (1,000 yen)	43,080	56,332	45,000	36,938	22,050	11,250
Reserves (1,000 yen)	47,138	23,093	41,500	3,430*	8,081	1,112(1937)
Principal shareholders:	The Emperor of Japan Mitsui bussan Nikkoku chokin Bank Mitsubishi-Shanghai	Toyama-Seimei* Meiji-Seimei Tokyo-Seimei Kaijo-Seimei Nippon-Seimei Yasuda	Daichi-Seimei*	Shinei-Sangyo Meiji-Seimei†	Yamaguchi Nippon-Seimei† Meiji-Seimei Yasuda Bank	not published
Landholdings in Taiwan (ko)	46,630	17,900	13,569	...	3,274	...
Sugar production in 1937/38 (1,000 tons)	256.7	238.6	176.5	150.4	70.6	42.6
Production of molasses, 1936/37 (1,000 tons)	52.4	47.9	33.5	29.5	11.6	...
Other interests	65.7 km. of railways Alcohol Refineries in Japan Etc., etc.	1,000 km. of railways Alcohol Etc., etc.	118 km. of railways Alcohol Refineries Rubber Pulp Etc., etc.	Alcohol Pulp Railways Agriculture Mining Lumber etc., etc.	30 km. of railways Roads Alcohol Etc., etc.	... ... Alcohol Forestry Colonization Etc., etc.
Rate of profit (%)	44.65	34.5	40.0	20.2	22.0	20.7
Dividend rate (%)	12	12	12	8	10	10

* Beside its own capital the company report mentions ¥40.6 million of borrowings.

† *Seimei* (life) are life insurance companies.

Sources: 1. *Kabushiki kaisha nenkan*, 1940; 2. *Toyo keizai, Kabushiki kaisha nenkan*, 1939; 3. Kono, R., *Seito kontsuerun*, 1938.

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249 defeated the Dutch, annual production rose to
433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require-
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills came under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
257 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brown Sugar Association produce brown sugar for domestic use and foreign export.

257 The milling capacity of the 26 mills controlled
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is about 12 per cent. These mills operate an average of 150

433 days a year. The Taiwan Brown Sugar Association's member mills produce only 50,000 metric tons a year, representing approximately 10 per cent to 14.5 per cent of the sugar cane processed.

Since Formosa is only allowed to export 600,000 metric tons of sugar each year, according to the terms of the International Sugar Agreement, recent efforts have been directed toward modernization of plant facilities. The level of production has been reduced, and today Formosa processes only enough sugar to meet the demands of domestic consumption and the export quota.[18] Statistics on the production of sugar and sugar by-products are given in the table below:

PRODUCTION OF SUGAR AND SUGAR BY-PRODUCTS */
(in 1,000 metric tons)

	Sugar	Brown Sugar	Molasses	Yeast (1,000 kgs.)
1937	987	20	189	48
1938	967	24	206	119
1939	1,374	45	324	152
1952	520	11	143	61
1953	883	19	212	279
1954	701	13	185	638

*/ Taiwan Economic Data Book, Vol. 3, Part II, 1955.

18. Local consumption requirements for 1955 may be estimated at 108,800 metric tons, according to the consumption pattern established during 1932-41. During this period per capita consumption of sugar averaged 10.46 kilograms a year.

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use. C F 433 [387] [251] 499

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak. C

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1952), cement (389,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures. C F 377 433 C F

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 630,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–52, the world market price began to rise, and sugar production is gradually returning to its previous high levels. F 257 433 C

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries. F 433 [228] C F

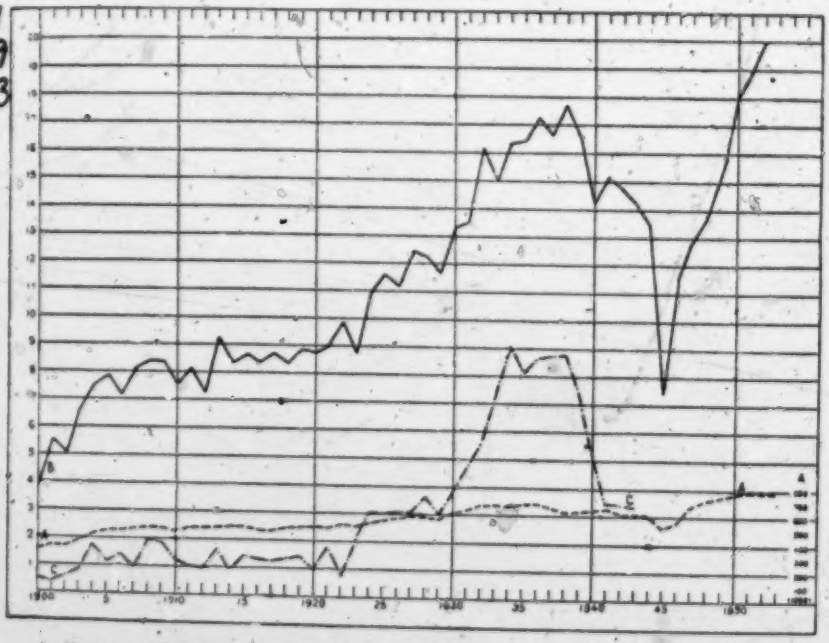
A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government. 466 C F

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes. F 651

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Productivity was raised by improvements in various aspects. The rapid increase in the output of rice from the 1920's was the result of the adoption of a new strain (Ponlai rice). By the 1930's, the production of rice in Taiwan was so large as to be twice its local demand, and the surplus rice was exported to Japan. Though the price of Taiwan rice was controlled by the Japanese government and the profit of trade in rice was mainly monopolized by big Japanese traders, the increase of production did have some benefits for Taiwanese, and no doubt, this contributed to the lowering of the death rate after 1920.

Fig. 6 Acreage of Cultivation, Amount of Production and Exportation of Rice, Taiwan, 1900-1953



A: Acreage of Cultivation (unit: 1,000 ha) B: Amount of Production (unit: 1,000,000 hectoliter)
C: Amount of Net Export (unit: 1,000,000 hectoliter)
Source, 1900-1948, from the Rice of Taiwan, 1949, Taipei.
1949-1952, from Taiwan Agricultural Yearbook, 1952, Taipei.

The condition of sugar was a little different from that of rice. The profit in sugar manufacturing was exclusively monopolized by the Japanese enterprisers. But it is undeniable that, in respect to the improvement of agricultural techniques and the raising of productivity, substantial effects were obtained.

As pointed out by W.S. Thompson, "underfeeding weakens the individual and renders him less resistant to disease, whether it be of the degenerative or of the germ

4:Grajdanzev--56 S-4 (no date) 1942 Formosans -1-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

"Taiwan is famous for its rice production of which it exports almost half. The opinion of Japanese economists is that exports of Taiwan's rice to Japan brought to the island such prosperity that some measures had to be taken to curb it. But the data presented in this table [See page 55--analyst] show quite a different picture. In 1905 the annual per capita consumption of rice in Taiwan was about 1.25 koku. Then it fell, but an increase in production brought it back to that level in 1925. At about that time the heavy exports of Taiwan's rice to Japan started: These exports brought a sharp fall in per capita consumption—it fell to 0.87 in 1935 and has remained on about the same level since that time. Now, 0.87 koku per year is about 0.8 pound per person per day. It was pointed out that the production of other cereals in Taiwan is almost nil. Only sweet potatoes form a significant addition to the diet (more than one lb. per person per day). Some wheat flour is imported but this amounts to only two to three per cent of the exports of rice (by weight).

These figures are for the total population. But the urban dwellers are probably better off than the farmers, so that the average for farmers should be less than 0.87 koku. Exports of rice from Taiwan to Japan cannot therefore be taken as a sign of Taiwan's prosperity, for they resulted in a fall in standards of living for the Chinese in Taiwan. Data for the last five years show that the annual average consumption of rice in Japan is about 1.10 koku, while in Taiwan it is 0.84. In other words, per capita consumption of rice in

4:Grajdanzev--56 S-4 (no date) 1942 Formosans-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

Japan is thirty-one per cent higher than in Taiwan, though the Japanese consume in addition considerable amounts of wheat, barley, and other cereals, which are almost entirely absent in Taiwan, to say nothing of sweet potatoes."

4:Grajdanzev--86-87 S-4 (no date) 1942 Formosans-1-2
116, 171, 262, 435, 439

"As to the general supply of fish for the population of Taiwan, the Japan Year Book has the following to say: '. . . The Taiwanese are a fish-eating people, but the annual catch is so great that a large quantity is exported to Japan proper [87] and other countries' (1).

1. P. 941, 1939-40 edition.

Statistics of the industry tell a different story. Compared with Japan the natives of Taiwan are poorly supplied with fish, for in 1937 the value of fishery products in Japan proper was ¥660,807 or about ¥9.3 per capita as compared with ¥3.8 in Taiwan. It is true that an important part of this catch is exported from Japan and a part is used as fertilizer, but the same is true for Taiwan. As may be seen from the following table, Taiwan is a net importer of fish:

External Trade of Taiwan in Fish
(1,000 yen)

Year	Exports to Japan	Exports to other countries	Gross exports	Imports from Japan	Imports from other countries	Gross imports	Net imports
1937	4,111	832	4,943	10,095	687	10,782	5,839
1938	3,006	491	3,497	11,535	405	11,940	8,443

The secret of this coexistence of exports and imports of fish does not lie in any over-abundance. The Japanese in Taiwan export fresh fish to Japan which they sell for an average price of 26 sen a kin (0.6 kg.), and import two kinds of fish: (a) salted and dried fish at an average price of 12.5 sen a kin and (b) canned fish. It is clear that these two kinds of imported fish are not consumed by the same groups of the population.

We saw above that the population of Taiwan consumes more meat on the average than do the Japanese; now we see that the Japanese consume much more fish than the islanders (2).

2. It was mentioned above that the average consumption of pork in Taiwan is about 37 kin, while in Japan it is only 3 kin; but the average consumption of fish in Japan must be, on the most conservative estimate, 60 to 70 kin."

6: Kirchhoff--31-32 U-4 (no date) 1895 Formosans
116, 241, 262

Up to the present only a modest portion of Formosa is cultivated, for the most part this being the coastal regions of the northeast and the western plain; from there only small cultivated strips [32] stretch out towards the east. The chief cereal is rice, which provides two and in some places three harvests a year. The careful cultivation of rice, like the use of the water buffalo, was naturally introduced by the Chinese. The rice fields are laid out on artificial terraces made in the lowest slopes above the valleys, and they are kept under water by means of skillfully constructed canals so that these areas, after the young plants from the seed beds have been laboriously planted, resemble great pools of mud traversed only by narrow paths. But just before the harvest they look like juicy green carpets. The first rice harvest, for which the seedlings are grown in March and transplanted to the fields in April, becomes ripe at the end of June or the beginning of July, the second (on the same fields) at the conclusion of October. The next most important crop in the people's diet is the sweet potato; two harvests are obtained from this also, at about the same time as the rice harvests. Wheat and barley are seldom planted, and always as a winter crop only.

After rice and sweet potatoes, sugar-cane and the tea plant are most frequently planted. The growing of sugar-cane extends over the whole western side of the island; it is found in enormous quantities in the surroundings of Ta-kaô and Tai-nan, but also upstream from Tam-sui, particularly on the flooded ground on either side of the Sintiam River, where the stalks attain the height of two men.

6: Kirchhoff--32 [3] U-4 (no date) 1895 Formosans
116, 228, 262

Many thousands make their living along the western coasts by sea fishing and the apparently even more profitable cultivation of oysters, in part as "rock oysters" on stones and in part as "bamboo oysters" in planted areas of bamboo cane. The yearly return from this oyster cultivation is said to amount to 116,000 marks and nevertheless to be insufficient for the more wealthy Chinese who dote on them, so that large quantities of dried oysters from the mainland are imported also.

9: Yamasaki--233 [4] N-5 (1896-1897) 1900 Formosans
116, 211, 262

The most important domestic animal is the buffalo (Bos chinensis). It pulls the plow, and its flesh, horns and hide are also esteemed. Ordinary cattle are also found, but horses are rare. Sheep seem to be lacking, but goats exist in fairly large numbers. The most frequent four-footed domestic animal, is however, as in China, the pig, its flesh being eaten gladly by both natives and Chinese. Generally liked and raised both for their eggs and their flesh are ducks, geese, and hens.

9: Yamasaki--233 [5] N-5 (1896-1897) 1900 Formosans
116, 136, 262

Fish naturally play an important part in the diet, especially among the dwellers on the coast. Among the many species of the Taiwan Sea that are favored, the Harder (Mugil cephalus) is to be named before all others. In the winter months the inhabitants of the southwest coast are kept very busy catching it. It is about 3/4 m. long and not only its flesh but also its milt provide an article of diet esteemed by both Chinese and Japanese. In the markets at Tainan and Takao I saw the following species of fish also: Pagrus sp., Peristethus orientalis, Trigon pastinaka, Tachiurus lepturus, Thynnus pelamys (bonito), Trachurus sp., various mackerels, flat-fish, squid, etc. Among freshwater fish Cyprinus carpio (carp), Cerassius auratus (crucian), a species of trout (Plecoglossus altivelis) and Anguilla bostmiensis (eel) are the most important. There are also various species of valuable crustaceans. The king crab (Limulus) is also found in the sea near Taiwan, close to Kilung, especially, and its shell, which is used for ladles, can be bought everywhere. On the southeast coast I have often seen large turtles and their old shells are also found on the shore.

15: U.S. Navy--28 [6] (no date) 1944 Formosans
116, 342, 352, 262

"Poorer [MC: country] people live in huts made of unbaked clay bricks, with heavy thatched roofs, tamped earth floor and the most meager furniture of benches and tables. Pork, rice and a variety of cooked vegetables form the basis of their diet."

15: U.S. Navy--31 [2] (no date) 1944 Formosans
116, 563, 262, 463, 457

"The Japanese diet is simple. Rice is the staple with a garnish of pickle or fish and bean paste soup. Most Japanese are managers of large enterprises, government officials or wholesale businessmen, settled in and around the large cities. They have created a large number of hotspring and recreational resorts. There are few Japanese of great wealth with permanently established residences in Taiwan, for the work of the majority is the creation and transfer of wealth from Taiwan to absentee proprietors in Japan Proper."

Annex "A," Subparagraph 1p,
Sociological Background

HEALTH AND SANITATION IN FORMOSA

I. FOOD AND HOUSING

A. Diet and Food Supplies

146
262

The main diet of the Formosan people consists of rice and vegetables. A moderately active male adult generally consumes one catty (600 grams of 1.321 lbs.) of rice a day, the amount comprising over 75 per cent of his daily requirements of 24,000 to 28,000 calories.[1] A survey conducted by the National Defense Medical College showed that rice supplied 82 per cent and vegetables 7.5 per cent of a soldier's daily caloric requirement, and rice alone provided 64.5 per cent of his protein need.[2] The proportionate nutrient value of food consumed by civilians is probably quite similar. Some poor families, unable to afford rice, rely wholly or in part on sweet potatoes as their staple food. To a considerable extent, rice is supplemented with flour by a part of the immigrant population from the Mainland. Rice, sweet potatoes, tea, sugar, fruit,

1. The caloric content of rice is calculated on the basis of 350 calories per 100 grams of rice.

2. S.C. Hsu, "Nutritional Study of Processed Soybeans," Chinese American Economic Cooperation, Taipei, June 1952, pp. 56-59.

146 and vegetables are produced in plentiful supply on Formosa. The diet of the people generally is
• 262 considered adequate in proteins, minerals, and vitamins, except B2, but the protein is poor in quality, only about 10 per cent of it being derived from animal sources. Fish furnishes about 50 per cent of all animal protein consumed on the island;[3] other principal sources are pork and poultry. Dairy products have a low place in the dietary habits of the people, except for infants whose mothers cannot provide breast-feeding.

B. Housing Conditions and Problems

362 Of the problems of food, clothing, and shelter, the latter still poses a serious problem, but the food and clothing problems have been fairly well met. The housing situation remains critical despite the assistance of the government and U. S. agencies in instituting various housing programs and improving housing conditions during the last few years. Much progress has been made in this area, and the day when every citizen occupies adequate housing may not be too far off.

Formosan dwellings may be divided into three main types. A typical good urban dwelling is built of reinforced concrete with kiln brick walls, new tile roof, and cement floors and is equipped with electric lights and running water. A typical good rural house has mudbrick walls, thatch roof, and dirt or cement floor, the water supply comes

3. Economic Co-operation Administration, Economic Development on Formosa 1951-52, Taipei, 1953, pp. 39-40.

241 433 demands of domestic consumption. Surplus rice is exported each year, and the supply of vegetables is considered adequate. Meat is expensive, and the ability to buy meat [262] determines socio-economic position in Formosan society. Data on dietary habits, 146 433 caloric requirements, and so forth are not available, probably because extensive surveys have never been conducted on the island. There is no way of ascertaining basic food requirements to maintain a desirable nutritional level.

433 The Provincial Food Bureau has estimated the per capita rice requirement for civilians to be 143.4 kilograms, and for the military, 308 kilograms. (These figures do not provide for surplus storage, waste, spoilage, or seeds.) Rice requirements for the next ten years may be estimated as indicated in Table 4. Note that the size of the military force on Formosa is assumed to remain constant (600,000).

48: Chen E-4 (no date) 1955 ADl Formosa ADl

178 484 traveled by train annually, and how many letters he has received and sent annually may be taken as an index of the mobility. The increase in the frequency of travel and the increase in the number letters received and sent are signs of the wider sphere of activity and higher mobility. The increase since 1920 was particularly remarkable (Fig. 7, Fig. 8).

Figure 7 was the number of times of travel per capita per annum on government owned railroads, and does not include travel on privately owned railroads and bus lines. When the latter is included, the figure rises as indicated in Table 7. During the later years of Japanese rule the mobility had increased markedly. In 1938, the number of times traveled per capita per anum was 17.19, but it had risen to 23.64 by 1942.

Table 7: Number of Passengers on Train and Bus Lines in Taiwan in Selected Years

	1938	1942
1. Government-owned Railroads	27,179,194	46,342,569
2. Privately-owned Railroads	2,002,456	1,962,017
3. Government-owned Bus Lines	8,207,474	9,413,577
4. Privately-owned Bus Lines	53,644,809	81,536,398
Total	91,033,933	139,254,561
5. Total Population	5,267,005	5,891,848
Average times travelled Per Capita Per Annum	17.19	23.64

Source: 14, 1: Table 433; 2: Table 446; 3: Table 458; 4: Table 459; 5: Table 64.

762 The consumption of food had also increased. Here we will take sugar and pork as an example (Table 8).

Table 8: Per Capita Per Annum Consumption of Sugar, Taiwan[11]

Year	Per Capita Per Annum Consumption
1903-1909	2.79 kilograms
1910-1920	5.26 kilograms
1921-1925	6.13 kilograms
1926-1938	8.87 kilograms
1939-1943	14.41 kilograms

In later years of World War II the transportation between Taiwan and Japan was hampered by the allied forces, and no doubt, the jump in the amount of consumption in the last period (1939-1943) of the table 8 includes some sugar which was actually stocked in warehouses in Taiwan. For comparision, the per capita per annumn consumption of sugar in other parts of the world in 1939 was as follows. Netherlands was the highest consumer: 81 kilograms. Denmark and Australia came to next, more than 50 kilograms. Britain, U.S.A., and Canada were nearly 50 kilograms, Italy and Portugal were about 9.5 kilograms. India was 6.7 kilograms, Java: 4.6 kilogram, China mainland: 1.8 kilograms. The average of 1939-43 in Tawian was 14.4 kilograms[12].

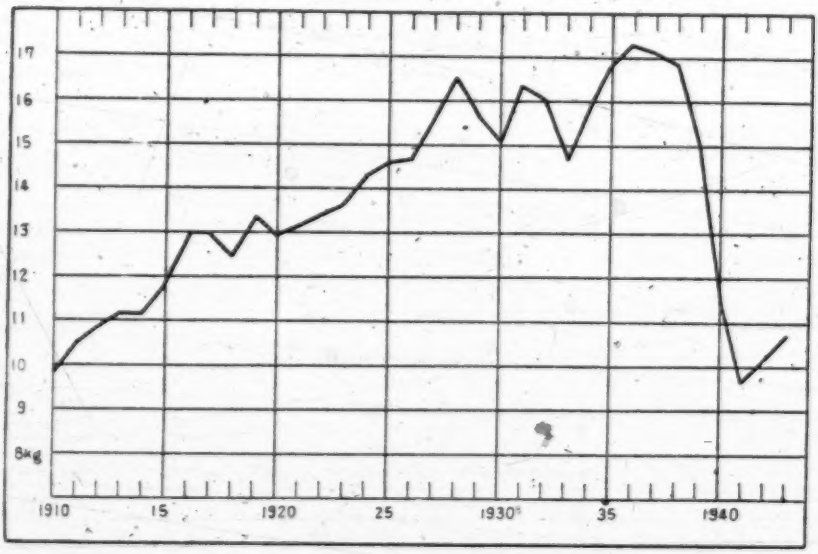
Note 11: Taiwan Sugar Yearbook, 1947, Taipei, Table 55.
Note 12: op. cit., Table 106. cf. 27: Table 144, Table 145.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

The increase in the consumption of pork is given in Figure 9. Beef and mutton are not included in this figure. Increase in the amount of meat consumption is a sign of the improvement of the standard of living. The per capita per annum consumption of meat in France was 20 kilograms in 1840, it increased to 35 kilograms by 1892, and to 40 kilograms by 1939[13]. The consumption of pork in Taiwan was 7.3 kilograms in 1910, it reached a peak of 17.3 kilograms in 1936, and after that decreased as the importation of beans and bean cakes as animal feed became increasingly difficult with the development of the war. For comparision, the per capita per annum consumption of meat in other parts of the world in 1939 was as follows. New Zealand was the highest: 110 kilograms; Australia: 95 kilograms; U. S. A., Canada, and Britain: more than 60 kilograms; Switzerland and France: more than 40 kilograms; Italy: 20 kilograms[14]. The consumption of pork alone in Taiwan was 15 kilograms in 1939.

262

Fig. 9: Per Capita Per Annum Consumption of Pork, Taiwan, 1910-1943



Unit: Kilogram
Source: Animal Resources of Taiwan, pp. 63-64

16. *Change in the Attitude of the People*

People living under many kinds of changes gradually change their attitudes, or the ways of feeling, thinking and behaving. During the early years of Japanese rule, the large part of the Taiwanese were conservative farmers, who persisted in their traditional way of life. They had to face the merciless coercion of Japanese police on

181
178

Note 13: Peyret, H.: La Lutte pour less Dernées Vitaless, 1946, Paris, qu. from Japanese tr. pp. 76-77.

Note 14: op. cit., p. 27. cf. 27: Table 144.

4:Grajdanzev--64-65 S-4 (no date) 1942 Formosans
116, 171, 263, 511

"As with rice it is interesting to note the per capita consumption of sugar in Taiwan. Although almost ninety-five per cent of the sugar output is exported, per capita consumption of sugar in Taiwan was 15.9 kin in 1938, as compared with [65] 23.5 kin in Japan. In other words Japan's consumption is forty-three per cent higher than Taiwan's (1).

1. These figures are taken from Keizai nenkan, 1940, of Toyo keizai shimposha, pp. 205, 206."

9: Yamasaki--232 [6] N-5 (1896-1897) 1900 Formosans
116, 244, 264, 372

Also planted are various species of legumes and the peanut (Arachis hypogaea L.). Peanuts in part are eaten roasted, and in part are worked into cakes and made into oil, which is much used by the Chinese for cooking and illumination.

15: U.S. Navy --221[7]
116, 181, 266, 578, 177.66
636.66

(no date) 1944

Formosans
Japanese

"Through the past twenty years observers have commented on the passivity, and the subserviency of the Formosan-Chinese to Japanese rule. However sullen or resentful the general populace may be, they have been without effective means of resistance. This is not to be attributed to meekness or lack of spirit, but rather to the extremes of force and cruelty with which the Japanese established initial order and imposed their elaborate system of controls, reaching into every household on the island and placing upon the members collective responsibility for the acts of individuals. Even the most generous allowances cannot conceal the fact that before the Japanese came the Formosan-Chinese population as a whole was capable of extremes of ferocity in mob action among themselves, not stopping short of ritual cannibalism (the eating of the hearts and livers of victims to acquire strength and spirit), nor of the cold-blooded sale of the flesh of captured aborigines on the open market both on the island and across the channel along the coast of Fukien. In the years before 1941, educated Formosans commented frequently (and of course privately) upon the probable extremes of mob action likely to be directed against the Japanese if ever an opportunity should be presented. That the Japanese are aware of this was amply demonstrated on February 18, 1938, when the attack of a single bomber from China caused the authorities to barricade public buildings and to set up machine guns throughout the capital city before they sounded the air raid alarm. The guns were directed at the Formosan-Chinese population."

4:Grajdanzev--66 S-4 (no date) 1942 Formosans
116, 171, 272

"Average consumption [of tea--analyst] in Taiwan was 676,000 kin or one-eighth of a kin per capita—not much for a tea-drinking nation and for a tea-producing island. In Japan the average annual per capita consumption of tea for the same period was 0.76 kin, (1)

1. The figure is calculated from the data on tea as given in the International Yearbook of Agricultural Statistics, 1939.

or five times as much as in Taiwan."

"The remaining imports — imports for consumption — should be divided, wherever possible, into two parts — consumption by Japanese and consumption by Chinese. Without attempting any detailed analysis we may make a few remarks on the basis of the material available. In 1939, for example, 2 million yen worth of condensed milk was imported, as well as 7 million yen worth of sake and 5 million yen worth of beer, not including local production of sake and beer. Neither sake nor beer are Chinese drinks; they are consumed chiefly by 100,000 Japanese male adults and by the troops stationed there. To take another example, in 1939 48.6 million yen worth of fabrics and clothing, including shoes, hats, gloves, buttons, pearls, combs, bracelets, laces, etc. were imported into Taiwan. From this amount 8.1 million yen worth of gunny sacks should be deducted, leaving a balance of 40.1 million. If Japanese residents were able in 1939 to spend 12 million yen on drinks (not including locally produced and consumed beverages), they probably spent not less than double this sum on clothing, shoes and other personal articles (1) which—with a [153] few unimportant exceptions—are imported from Japan.

1. That this is not an overestimate may be judged from the following figures: 77.2 yen per person per year or about 25 yen per family per month can hardly be considered as excessive for clothing (including shoes, etc.) in a country where, for example, one yard of muslin cost 1.34 yen. In a special investigation conducted in 1937-1938, which covered 355 Japanese families with 1,397 members, the average

monthly income of a family was 184.6 yen, of which 23.6 yen was spent on food, 16.9 yen on lodging, leaving an ample margin for clothing and other expenditures. (Data on budgets from the Toyo keizai tokei geppo, July, 1940). An investigation conducted in Japan proper in 1936-1937, only one year earlier than the investigation in Taiwan mentioned above, gives the average expenditure on clothing of 10.18 yen per month for persons with an average salary of 88.37 yen; for the low income brackets it was 3.43 yen, for higher (about 100 yen), 12.18 yen. In our case the average salary is 184.6 yen, so that an expenditure of 25 yen on clothing is quite probable. See Kakei chosa hokoku, (Naikaku tokei kyoku) Tokyo, March, 1938.

If this is true , then not more than 3 yen per capita were spent on imported clothing by the Chinese in 1939 (2). But, as was pointed out in the preceding pages, the Chinese

2. The correctness of our estimate is supported by the budget estimates made by the government officials in 1936 and quoted by Nasu (op. cit.). According to them, the per capita annual expenditure on clothing of a representative Taiwanese farmer was 6.02 yen in 1936. This figure includes imported and locally produced clothing (shoes, hats, etc.) whereas our estimate is for the imported textiles only.

society in Taiwan is not uniform. Its wealthier members spend on clothing many times more than the small farmers, workers, or tenants."

4:Grajdanzev--175-176 S-4 (no date) 1942 Formosans
116, 276, 435, 733

"In the early days of British commercial domination Taiwan was notorious for the prevalence of opium smoking. When the Japanese conquered the island, they decided to apply a method of licensing opium smokers. Those who were addicted to this evil practice were permitted to continue it on payment of a certain fee for a license, but no new addicts were permitted. In 1898 95,449 addicts were licensed. However, some years later a more careful survey brought to light (1) as many as 165,752. In 1908 there were

1. Y. Takagi. Japan Magazine, 1930, pp. 244-248.

119,991 licensed opium smokers, in 1926 there were 31,434 and it was said that the majority of them were over 55 years age. However, in 1938 there were 10,788 opium smokers still alive. In 1906 when there were at least 130,000 licensed opium smokers, they bought 4,395,497 yen worth of opium; in 1938, when there were only 10,788 opium smokers, they bought 1,863,063 yen worth. The explanation is that in 1906 one kilo of opium was sold by the government for 23.0 yen, in 1938, it cost 120 yen, or five times as much. This reliance on price increases, however beneficial it may have [176] been for the Treasury, has unfortunately led some addicts to turn to other, cheaper substitutes, such as morphine and heroin."

7: Joest--61 [4] E-5 (no date) 1882 Formosans
116, 276

The Chinwan natives of both sexes are very fond of tobacco and almost always have a pipe in their mouth. When I made them a present of cigars, they cut these up and put them in their bamboo pipes.

In the south of the island the natives chew betel, and indulge in this habit in the same degree.

9: Yamasaki--231 [4] N-5 (1896-1897) 1900 Formosans
116, 137, 276

The betel-nut palm (Areca Catechu L.) is a common tree in the plains. Especially in South Taiwan it is planted in gardens. Slices of the fruit mixed with slaked lime and leaves of the betel-pepper are used on Taiwan, by both Malays and Chinese, as a stimulus and offer an agreeable refreshment, when placed in the mouth.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

early Western contacts with Taiwan. It all but wiped out some of the military expeditions sent there as tentative colonial ventures by European powers, and later helped to persuade the Japanese to embark on large-scale measures of control.

Malaria was ordinarily endemic in Taiwan. The moist heat, and the practice of admitting water into fields for irrigation in pools that were left to stagnate, helped to nurture the mosquitoes that spread the disease. Occasionally malaria broke out in epidemic form. It was likewise impossible to control, but was simply allowed to run its course. Even in the more fortunate years it served to undermine the strength of Taiwanese during much of the year, and probably also their resistance to other sickness.

In addition to these major diseases, Taiwanese were widely afflicted with the more common debilitating ailments that tend to shorten life and lead to complicating illnesses in Asia. Enteric diseases and internal parasites were always prevalent, as in China. Tuberculosis and venereal disease were later found to be widespread, and presumably had existed also at this earlier period. Superficial skin and eye maladies were frequent. Taiwan's position as a transshipping point in the opium trade introduced a plentiful amount of the drug for local consumption, which impaired the health of the inhabitants still further. In the census of 1905, it was found that nearly one-fifth of all Taiwanese men over age 30 were known users of opium, and there were probably others who managed to conceal the fact. As external trade increased, surreptitiously and openly, Taiwan became exposed to a wider variety of diseases and a greater number of transmitting agents from outside. At the same time, the official policy of seclusion also kept out the techniques that the West was evolving to deal with them.

These baneful health conditions added new hardships for the people who migrated to Taiwan. The risks of death thus engendered became a formidable feature of everyday living. Moreover, under the pressure of poverty many families apparently eliminated certain unwanted offspring, either through exposure or deliberate neglect. As a result, a large proportion of those who were born into the population never survived to adulthood. The dangers to life were such that probably Taiwan gained few if any people through natural increase; very high fertility was needed merely to offset the losses through death.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

tation were confined to some of the major cities, the influence of these broader health measures gradually spread evenly over most of the island. In this way Japanese gained results that were very substantial through the use of none but crude techniques.

The Japanese policy toward opium addiction was less consistent, for here they found welfare goals to be in conflict with profit motives. They made the manufacture of opium a government monopoly, and closely regulated its sale. The announced purpose for this control was to eradicate the use of the drug, but the Taiwanese occasionally complained that officials secretly abetted its consumption. The truth of the matter is not clear, but their success in other tasks suggests that opium addiction could have been stamped out far more quickly if they had made a determined effort to do so. Some of their own records show that new users of opium were being granted licenses as late as the 1920's. It is likely that the Japanese appreciated the effectiveness of addiction in enervating the resistance to their rule among wealthy families, and they made no secret of the steady public revenues that they derived from opium sales.[12]

The Evidence for Measurement of Mortality

There is not much point in describing the purposes and methods of public health work without having some independent appraisal of results. Such efforts have often been sponsored elsewhere with much fanfare and little accomplishment. The only trustworthy way to view the results of economic and sanitation policies in prolonging life is through some form of measurement; this is likewise the only precise way of comparing the risks of death in Taiwan and in other areas.

Fortunately the data that exist to gauge mortality in Taiwan are excellent. The occurrence of many kinds of illness involving danger of contagion was required by law to be reported to the authorities. Partly as a means of avoiding contamination of the living by the dead, and partly just as a means of tightening official control over the reporting of disease, the Japanese also strictly regulated burials and cremations.[13] The rigors of enforcing these rules led to concealment of some illness and evasions by mis-stating exact causes of

[12] A careful study of opium addiction in Taiwan and its relation to mortality is contained in Tu Tsung-ming (1935 and 1938).

[13] See Hsü Tze-wei (1946), p. 449.

"With the exception of paper, mineral oil and soap, all the products mentioned here represent the processing of agricultural products or else fertilizers for agriculture. The alcohol is chiefly a by-product of the sugar industry. Formerly all alcohol produced in Taiwan came from molasses, but now part of it is produced directly from sugar cane. The new product—[104]absolute alcohol—is suitable for use as a motor fuel, but no data on its production have been published.

In 1937 the products of this industry were as follows:

	Value (1,000 yen)	Volume (tons)
Mineral oil	1,094	
Soap	941	
Vegetable oils	2,149	3,721 (1936)
Oil cakes	2,382	
Paper	2,165	
Bagasse*	626	
Mixed fertilizers	7,450	67,841 (1936)
Other fertilizers	1,808	
Perfumery and essences	1,211	
Charcoal	1,970	

* Cake for fodder made of the remains from sugar

cane after extraction of the sugar.

	Value (1,000 yen)	Volume (tons)
Refined camphor	1,346	
Alcohol	5,434	
Other products	5,076	
Total	33,652"	

4:Grajdanzev--105 S-4 (no date) 1942 Formosans
116, 28, 433

"This group is made up of following gross values of Products for 1937: (1,000 yen)

Gold and silver paper	630	Needlework	2,360
Bamboo products	1,992	Hats	2,705
Straw goods	663	Other goods	5,209
Leather goods	1,576	Total	15,906 "
Sisal and hemp products	771		

31: Hofmann--613-614 N-3 (1909) 1912 Formosans
116, 137, 245, 283

From Kagi we went to Chikutoki; on that stretch the land is level and the railway has already been completed. This region was also still dry, and the natives had not yet tended the fields. A feature characteristic of tropical vegetation is the abundance of palm groves (betel palms); the trees have an average height of seven to eight meters. The Chinese and Malayans chew betel nuts as a stimulant. The vegetation in the river-beds, most of which are dry at this time of the year, is more copious. The plant most frequently found, which is also cultivated artificially, is the large Nephelium longana (called Ryugan by the Chinese and Japanese) the fruits of which are very tasty. There are also large, old Ficus trees, including several varieties of palm trees (Phoenix humilis), Passiflora (Carica Papaya), Anona squamosa, etc; all these are representative of tropical flora. On the barren slopes there are Pandanus tectorius with leaves like pineapple trees; this furnishes a fiber which is used for hats resembling panama hats. The flora on the whole is rich in textile, especially fibrous plants. There are, first of all, the rattan palms with prickly leaves. The tough fiber of this palm is an excellent substitute for hemp and is used for all sorts of household utensils everywhere on Formosa. I did not see artificial plantations of this palm anywhere, however, [614] the Chamaerops excelsa is planted everywhere by the Chinese as a textile plant. The Liquidambar formosana is also planted artificially in this region; the leaves are used as feed for silkworms and the Japanese government expects to develop a successful industry of this plant.

6: Kirchhoff--32 [5] U-4 (no date) 1895 Formosans
116, 248, 286

This latter fiber [MC: nettle fiber] promises to become even more valuable when it proves possible to free it of the gummy substance that clings to it, makes it more difficult to use and prevents it from taking color evenly when, for example, it is woven together with silk. But even so the Boehmeria ("la ramie" of the French) provides a highly esteemed woven material that gleams like silk, so that it is grown in huge quantities in Ho-nan, Schan-tung, Hu-pe and round Nan-king. In Formosa the stalks reach a height of 3 to 4 m., and can be cut three times a year. In part the stalks are treated as follows: after they have been softened by soaking in water, the bark has been removed and they have been smoothed and dried, they are sent as raw material to China, where they are used to manufacture Schia-pu (summer material, the "grass cloth" of the English); in part the Chinese women and the wives of the Pepo-huan, in Formosa, spin the beautiful fibers to form a shining yarn, and from this they weave broad strips of material up to 30 m. long and 45 cm. wide, two women sitting at a primitive loom out in the open. Boehmeria fiber is already exported from Shanghai, in large amounts, for the world trade, and in London as much as 2,000 marks is paid for the ton.

9: Yamasaki--232 [8] N-5 (1896-1897) 1900 Formosans
116, 137, 248, 286

The pineapple (Hōri or Unrai) is an important plant for Taiwan, not only for its fruit, but also because the leaves have fine fibers from which thin summer clothing is woven. The fine cloth used for this is called Unrai-pu or "pineapple cloth." The most important textile plant of the island is, however, the China-grass (Boehmeria nivea Hook.), Tschumä in Chinese and Karamushi in Japanese, its fibers being exported in large quantities. It is also one of the chief articles of barter for the aborigines in the mountains. In Holisha I saw a large quantity of China-grass fibers, which had been taken there by the natives living on the upper course of the Dakusui-kei.

4:Grajdanzev--101-102 S-4 (no date) 1942 Formosans
116, 288, 473

"The composition of the textile industry in Taiwan may be seen from the following table showing gross value of production in 1937 in 1,000 yen.

Silk goods	845
Cotton goods	898
Hemp and jute goods	2,497
Others	788
Total	5,028

Production of hemp and jute goods is the most important branch. The chief article made is bags for the trade in rice and sugar.

It was shown above [p. 95. category 116--analyst] that the total capital of textile companies in Taiwan in 1937 was ¥2.9 million. Now, in the same year one company alone—Taiwan Seima (Jute Dressing Company)—had a capital of ¥1.4 million. Its rate of profits was 48.5 per cent but only eight per cent was distributed, the [102] balance going into reserves and investments. It had 2,844 spindles. It is worth noticing that almost half its shares were in the hands of the Anda Corporation."

"Japanese economists argue that the prosperous condition of the villagers makes it difficult for industry in Taiwan to secure female workers, so that in 1935, for example, women made up [114] only 30.6 per cent of all workers, (1) while in Japan the proportion

1. In 1936 women made up 32.6 per cent of all workers. Kagaku kogyo nenkan, 1939.

was 47 per cent. Let us make a closer examination of the figures.

Proportion of Women in Different Industries

	In Japan		In Taiwan	
	1935	1933	1935	1936
Textile industry	80.9	80.6	80.9	73.4
Metals	7.1	8.8	10.5	10.6
Machinery	8.5	0.5	0.7	1.2
Ceramics	20.6	13.7	15.2	18.6
Chemicals	35.1	23.4	23.4	26.4
Lumber	9.0	5.6	6.6	5.8
Foodstuffs	18.1	34.3	33.3	34.8
Printing	18.1	12.5	10.8	12.9
Gas and electricity	0.8	—	—	—
Others	51.4	66.0	62.2	68.2
Total	47.0	31.7	30.6	32.6

From this table it may be seen that in the textile and ceramic industries the percentage of women is about the same in Taiwan as in Japan; in metals, foodstuffs, and 'other' industries it is larger, while in machinery, chemicals, and printing it is smaller but is growing. The smaller percentage total (32.6 per cent in Taiwan and 47 per cent in Japan) is explained by the simple fact that in Taiwan there is no significant textile industry. If we exclude the textile industry, then in 1936 the proportion of women in industry was 30.6 per cent for Taiwan and only 18.7 per cent for Japan (2). It is no fault

2. The figure for Japan is calculated from the data of Nippon rodo nenkan, 1938.

of the Chinese women and it is not a sign of Taiwan's prosperity if the industries existing in Taiwan are less suited to women. To say, as Takahashi does, that the textile industry is absent in Taiwan because the women, being prosperous, do not want to work, is naive. Taiwan is in the sphere of the Japanese customs tariff and experiences all the pressure of Osaka and Nagoya competition; it has no cotton of its own, nor has it such good harbors and commercial organization that it could be supplied with cotton cheaper than Kobe. It is natural then [115] that the cotton industry has had no chance to develop. But, as was mentioned, in other branches of industry the proportion of women in industry is higher in Taiwan than in Japan."

VI. TEXTILE INDUSTRY

Among the major industries in Formosa, the textile industry has shown the greatest expansion since World War II. (The production of fertilizer and the production of light and power have expanded only slightly less rapidly.) The textile industry was one of those major industries to which the government gave special encouragement after the war.

During the Japanese occupation of the island, approximately 10-20 per cent of the island's textile requirements were supplied by domestic mills during the period 1920-42. However, the major portion of the production was gunny sacks. Consumers' textiles were imported from Japan.

In 1945, when the island was restored to China, there were only 14,652 serviceable spindles and 1,693 power looms, of which only 8,268 spindles and 428 looms were in operation. As of 1954, there were 18,844 spindles and 11,288 power looms installed in 14 spinning mills and 269 weaving mills. In addition, there were approximately 200 hand-operated looms owned by some 100 small, privately owned mills. There were also 7 worsted mills, with 10,304 woolen and worsted yarn spindles and 208 looms. Production capacity as well as actual production far exceeded consumption requirements. In 1954, worsted mills cut production by 50 per cent, and as of September 1954, of the total of 252 privately operated weaving mills, 9 were closed, 77

288 suspended operations, and the remaining 166
433 mills reduced their work-day to eight hours.

248 The textile industry in Formosa was
433 established on the assumption that a sufficient amount of raw cotton could be imported to furnish the material for the production of cotton yarn and cotton cloth. Now efforts are being made to satisfy this demand through domestic production of cotton, and the initial experiment -- transplanting Texas cotton to Formosa -- has been pronounced a success. It is doubtful, however, that in the near future Formosa can supply her total raw cotton requirements. In 1954, raw materials imported for the textile industry cost the island approximately US$20,000,000, and it is believed that this import rate will continue if Formosa's enormous textile industry continues operation at its present level.[21] The following table gives the textile production of Formosa since 1951.

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21. T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 12, No. 1, July 1954, p. 71.

4:Grajdanzev--104-105 S-4 (no date) 1942 Formosans
116, 289, 473

"Of the paper producers, the most important enterprise is the Taiwan Kogyo Corporation, established in 1935. Its paid-up capital amounts to ¥8 million and its bonded indebtedness to ¥9.5 million. The principal shareholders are Ogawa Gomei, Taiwan Shoken, and Matsumoto. The value of its production in 1938-39 was ¥3,538,000, and profits amounted to 12.5 per cent of its capital. Next in importance is the Taiwan Pulp Kogyo Corporation, established in February 1938, in Taichu. It has a capital of ten million [105] yen in shares and has borrowed about one million in bonds. Its shareholders are two sugar companies and the Kanefuchi Spinning Company. Up to 1939 the corporation had not paid dividends."

9: Yamasaki--232 [9] N-5 (1896-1897) 1900 Formosans
116, 137, 289

A curious and noteworthy plant growing on the island is the Fatsia papyri fera Miq. (Tsungtsau in Chinese and Tsūsō in Japanese). The Chinese cut out of the snow-white pith of Fatsia papyrifera Miq. thin strips like paper with such extraordinary skill that, from a cylindrical piece of pith about 3 cm. in diameter and 6 cm. long, they can make a strip about 5 m. long with one continuous cut starting from the surface and parallel to the axis. The dry strips of pith paper are then dyed various colors and worked into beautiful artificial flowers for the coiffure. To call this pith paper "rice paper" is no less wrong than to use the name "rice broom" or "root broom" for articles made from the panicles of the durra (sorghum vulgare).

31: Hofmann--615 N-3 (1909) 1912 Formosans
116, 289, 313

In the Arisan Forest, the Chinese are exploiting some areas for the paper industry. They cut off the bamboo stems after one year and place them in grooves where they are exposed to caustic lime; after this mass has decomposed, it is crushed in a mill run by animal power and is ground by a second mill with the aid of water. Finally it placed in troughs where the workers stamp it with their feet until it has become a thin, fibrous, yellow paste. The wooden fiber is then taken out and made into thick yellow cardboard; next it is placed into kilns and dried. 1,200 of these cardboards of O. 75 square meters each is worth about 1. 70 K at the place where it is produced (70 sen in Japanese money).

339 in 1954 was approximately 536,400 metric tons.
433 With the exception of gypsum, which must be imported, all the raw materials required for the manufacture of cement can be had locally. (According to production estimates for 1955, approximately 12,900 metric tons of gypsum are required in order to produce 500,000 metric tons of cement.)

D. Paper

289 Waste timber, from which pulp is made
433 for the manufacture of paper, is easily available in Formosa, and the paper manufacturing industry was extensively developed under Japanese rule. As of 1954, there were 40 paper mills in Formosa; the largest is the Taiwan Pulp and Paper Corporation. The corporation produced 12,900 metric tons of paper in 1954; all other mills combined produced a total of 14,620 metric tons.

E. Other Chemical Products

381 The yearly production of other chemical
433 industries on Formosa are listed in the following table:

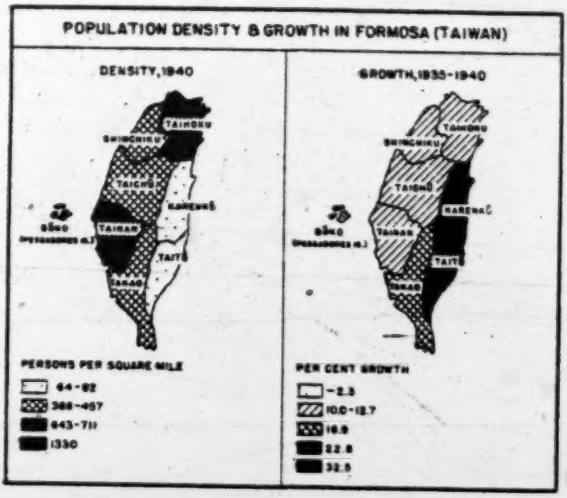
15: U.S. Navy --27 [11] (no date) 1944 Formosans
116, 177, 291, 302, 293

"The peasants wear loose two-piece cotton garments--trousers and coat. Undergarments are optional. A conical wide-brimmed straw hat which serves as an excellent sunshade and as a shelter in rain is a usual item of dress. Bare feet are the rule in the country. In the towns cloth shoes, straw sandals or Japanese wooden clogs (geta) are usually worn. The old Chinese queue ('pigtail') is very rarely seen, having been abolished by the Japanese. Sometimes a very old man will be seen wearing his hair in a stringy plait, wound up about his head in a thin cloth turban. Country people on the road are rarely seen without a large black cloth umbrella."

15: U.S. Navy--27 [13] (no date) 1944 Formosans
116, 291, 511, 177.29 Japanese
636.29

"For years the Japanese have tried to encourage the wearing of Japanese clothing, or at least to abandon traditional Chinese dress for western style clothing. After the war with China began in 1937 the requirement was made mandatory, but had little or no effect. The population is generally too poor to change its entire wardrobe at the wish of the Japanese."

161



Taiwan, Population Density (1940) and Growth (1935-1940)

231
291
854

Peasant Scene in Southern Taiwan

9: Yamasaki--233 N-5 (1896-1897) 1900 Formosan Aborigines
292

The largest beast of prey is a black bear (Ursus Formosanus Sw.), which is close to the Japanese Kuma (Ursus Japonicus Schl.). In one village on the upper reaches of the Dakusui-kei I saw a chief wearing a cap made of the neck-piece of this bear.

15: U.S. Navy --27 [11] (no date) 1944 Formosans
116, 177, 291, 302, 293

"The peasants wear loose two-piece cotton garments--trousers and coat. Undergarments are optional. A conical wide-brimmed straw hat which serves as an excellent sunshade and as a shelter in rain is a usual item of dress. Bare feet are the rule in the country. In the towns cloth shoes, straw sandals or Japanese wooden clogs (geta) are usually worn. The old Chinese queue ('pigtail') is very rarely seen, having been abolished by the Japanese. Sometimes a very old man will be seen wearing his hair in a stringy plait, wound up about his head in a thin cloth turban. Country people on the road are rarely seen without a large black cloth umbrella."

15: U.S. Navy--30 [9] (no date) 1944 Formosans
116, 293, 825

"Strangers notice that most country people, when going any distance, carry with them a large black umbrella. In this they seem to share with the Japanese a curious and pronounced reluctance to let the hair be wet by rain. And they behave toward moths fluttering about in a room as Americans behave when they find a hair in the soup, showing signs of extreme repugnance."

4:Grajdanzev--105 [2] S-4 (no date) 1942 Formosans
116, 294

"In the sea-coast villages of the earthquake zone the production of panama hats is a household industry giving employment to tens of thousands, but it is gradually losing its foreign and domestic market."

11: Haguenauer--31 T-3 (no date) 1929 Formosans
301

The best way of entering the Tayal territory is to take the railroad as far as Toen, and from there a country bus carries you to Taikei. The "car" is rather rickety, and it is full of chattering Formosan women. They put their hands up to protect their chignons, which are adorned with prized gold hairpins.

15: U.S. Navy--28 (no date) 1944 Formosans
116, 301, 556

"The women of both groups [MC: Formosan Chinese of both Fukien or Cantonese and Hakka origin] wear bracelets and earrings which , if they can afford it, are of gold and jadeite and represent a considerable concentration of family wealth."

15: U.S. Navy --27 [11] (no date) 1944 Formosans
116, 177, 291, 302, 293

"The peasants wear loose two-piece cotton garments--trousers and coat. Undergarments are optional. A conical wide-brimmed straw hat which serves as an excellent sunshade and as a shelter in rain is a usual item of dress. Bare feet are the rule in the country. In the towns cloth shoes, straw sandals or Japanese wooden clogs (geta) are usually worn. The old Chinese queue ('pigtail') is very rarely seen, having been abolished by the Japanese. Sometimes a very old man will be seen wearing his hair in a stringy plait, wound up about his head in a thin cloth turban. Country people on the road are rarely seen without a large black cloth umbrella."

15: U.S. Navy--27 [14] (no date) 1944 Formosans
116, 302, 178

"The Formosan-Chinese women of Fukien or Cantonese origin dress their hair sleekly with oil, pulling it smooth and tight to a small knot at the nape of the neck, and usually with some small flower or ornament pinning it there. The Hakka women wear a more elaborate traditional coiffure, surviving from the Ming period in China, and not at all unlike the traditional Japanese Geisha coif."

15: U.S. Navy --21-22 (no date) 1944 Formosans
116, 177, 304, 563

"The Formosan-Chinese are divided into three main groups, the Hakka Chinese, the Cantonese Chinese, and the Fukien Chinese. In addition to differences in dialect between the three divisions, there are differences in costume and folkways. The Hakka women, for instance, have never bound their feet, and are notable for the [22] work they do in the fields and woods with the men. The Fukien women, on the other hand, formerly submitted to foot-binding, which the Japanese have forbidden. It is now rare to observe any woman under forty years of age so crippled. Many who have had bound feet now attempt to treat the foot normally. The Fukien women have never worked in the fields regularly, although they assist with the harvest and in other special circumstances. In the cities both men and women of the lowest economic classes do exceedingly heavy work."

15: U.S. Navy --27 [4] (no date) 1944 Formosans
116, 592, 562, 304, 464

"As in China, the older women who have sons are allowed to wield great influence within the home. Unmarried women and girls have few rights. Footbinding has been forbidden by the Japanese. There has been no attempt to limit female and child labor under even the most extreme conditions."

"It means that Taiwan, and especially the agricultural region around Tainan where the plain is broadest, suffers periodically from a too heavy rainfall and from dry periods.(3)

> 3. Not only seasonal distribution of precipitation is important, but also its distribution by days and even hours, and this distribution is extremely unequal in Taiwan. In Koshun maximum daily precipitation was 240 mm. and in Taichu 310 mm. (12 inches), or in one day (probably in one or two hours) more than in the four months of September-December. This leads, of course, to flood conditions and extensive damage.

For cultivation to be successful in these conditions necessitates, on the one hand, special arrangements for the prevention of floods and for drainage and, on the other, for irrigation. Only with the help of irrigation can the rich soils of Taiwan give maximum returns. One cannot say that the Chinese neglected irrigation before the coming of Japanese administration. However, they were ignorant of efficient Western methods of controlling the rivers, and in many cases only these methods, applied by Japanese specialists, could give good results."

4:Grajdanzev--24 S-4 (no date) 1942 Formosans
116, 162, 311

"As may be seen from the following figures, the population of Taiwan is very unequally distributed:

Province	Area (sq. km.)	Population (thousands)	Density per sq. km.
Taihoku (N.)	4,594	1,101	240
Sinchiku (N. W.)	4,570	766	167
Taichu (W. center)	7,382	1,251	170
Tainan (W.)	5,421	1,422	262
Takao (S. W.)	5,721	795	139
Taito (S. E.)	3,515	77	22
Karenko (E.)	4,628	124	27
Pescadores	126	68	539
Japan proper (1938)	379,000	72,223	191

Two eastern provinces are comparatively thinly populated, while Taihoku and Tainan have a density greater than the average for Japan. However, the actual distribution is even more unequal than these figures suggest. for almost every province consists of two parts—a coastal plain which is extremely densely populated, and the hilly and the mountainous hinterland where the density is very low. This is not to say that the latter is incapable of development; indeed the development of these areas is one of the greatest problems confronting the government."

4:Grajdanzev--28 S-4 (no date) 1942 Formosans
116, 167, 311, 609, 177.16 Japan
636.16

"It should be noted that, even after the pacification of the island, Japanese immigrants were treated in a hostile manner by the Chinese population. Under this pressure many farmers were compelled to leave their villages, some of them renting their land to Chinese and becoming absentee landowners. The total number of Japanese occupied in agriculture in Taiwan in 1938 (including members of their families) was 8,065.

The colonization schemes for fishermen were not much more successful. In 1909 the government-general began its campaign, promising subsidies and other advantages. But those who answered the call preferred some occupation in Taiwan other than that of fishermen. In 1926 in Taihoku province 49 families (172 persons) were settled and most of them continue to work there. Since 1932, the government has again made efforts to attract fishermen to Taito province, and, up to 1937, 54 families had settled there. The plan for 1938 and 1939 foresaw the settlement of 25 families for each year. Such are the very modest results of the continuous efforts of the Japanese government.

Takahashi is of the opinion (1) (and his opinion reflects the ideas prevailing among

1. See his Gendai Taiwan Keizairon, pp. 8-9.

Japanese economists) that there is little room for the Japanese in Taiwan as long as the island remains an agricultural region; hence his belief that Taiwan should be industrialized."

4:Grajdanzev--41-42 S-4 (no date) 1942 Formosans-1-3
116, 241, 311

"We begin our investigation of Taiwan's economy with agriculture because the majority of the population are occupied in this field. First, let us examine the area under cultivation. In considering the figures given below, one should bear in mind the following fact: in Taiwan, as in other southern regions, in many cases two and even three crops a year are taken from the same field, and thus a distinction should be made between cultivated area and crop area. If each field produced two crops a year, then the total crop area would be double that of the cultivated area. Double cropping usually takes place on irrigated fields, although, if rainfall is evenly distributed from month to month, even dry fields can yield two crops. The growth of total cultivated area of Taiwan and of its irrigated area is shown in the following table: [42]

Cultivated Area Of Taiwan
(1,000 ko) (1)

1. Ko (in mandarin Chinese chia) is a local measure of area equal to 2.377 acres or 0.961 hectare.

Cultivated Area Of Taiwan [Cont.]

	Paddy fields producing one crop	Paddy fields producing two crops	Total paddy fields	Dry fields	Total
1900	...	...	200.7	157.5	358.2
1904	...	...	312.6	332.1	644.7
1909	...	...	337.8	344.7	682.5
1911	...	...	346.4	364.9	711.3
1916	...	...	358.8	379.7	738.4
1923	261.5	115.3	376.8	398.6	775.4
1933	313.1	147.4	450.5	395.0	845.5
1934	320.0	142.9	462.9	388.4	851.3
1935	322.2	141.3	463.5	363.2	856.8
1936	327.4	206.4	533.8	338.4	872.3
1937	332.3	212.1	544.4	338.8	883.3
1938	331.8	211.4	543.2	341.2	884.4

Source: for 1900. Nogyo nenkan, 1937; for 1938, Taiwan Jijo, p. 456.

The population of Taiwan is growing rapidly, and its agricultural population is very large. Under these conditions an increase of area under cultivation should be recognized as significant, and if the figures given above are correct, the cultivated area increased

2.47 times in thirty-eight years—a remarkable advance. But if we examine the figures, we find that between 1900 and 1909 the cultivated area increased from 358,200 ko to 682.500 ko, or by 36,033 ko every year, while between 1909 and 1938 the increase was from 682,500 ko to 884.000 ko, or only 6,940 ko every year. The greatest expansion therefore took place when the government did not even have complete control of the island, and only in 1908 did the administration work out a comprehensive scheme of irrigation. The explanation of this striking initial increase would appear to be that between 1900 and 1909 the Japanese government made a complete survey of Taiwan, and many lands were recorded which formerly did not appear in the official figures."

"(1) A special investigation made by a government committee in 1923 estimated the cultivable area in Taiwan at 940,000 ko (900,300 hectares or 2,234,000 acres); another committee in 1929 estimated this area at 930,000 ko (893,700 hectares). (1) The area

1. Quoted by Takahashi, op. cit., p. 94.

cultivated at present is about 850,000 hectares or 23.8 per cent of the total area of the island, which is 3,576,000 hectares. If the estimates of the committees are [44] correct, then the cultivated area of Taiwan is approaching its maximum and only about 40,000 to 50,000 hectares remain to be turned into fields. We do not know what criteria the committees used in their investigations, but there are reasons to believe that their estimates are too low. Almost half of the total area of the island is territory of the aborigines, where fields are almost non-existent. It is true that this territory is mountainous and the cultivable area cannot be great, yet it should be considerably greater than 40,000 to 50,000 hectares. However, it is clear that the greater portion of cultivable land is already under the plough, so that the emphasis should be placed on other methods of increasing agricultural output.

This disparity between the growth of population and the growth of cultivated area has brought a sharp increase in land values. In 1914 one ko of good paddy land in the central

part of Taiwan province cost on the average ¥331; in 1925, ¥700; in 1937, ¥2,000. (2)

2. Ibid., p. 158.

Of course, the depreciation of the yen, the increase of yields and other factors also played a part in this increase, but the pressure of increasing population was probably also an important element."

4: Grajdanzev--44-45 S-4 (no date) 1942 Formosans
116, 241, 311

"(2) Irrigation combined with double cropping is another [45] way of increasing agricultural production. In 1937 one ko of dry field produced on the average eight koku of rice, while one ko of paddy yielded 14.9 koku in one crop or, where two crops were possible, 28.1 koku. (1) Irrigation almost doubles the crop while irrigation and double cropping

1. Figures are taken from Nogyo nenkan, 1939-40, pp. 647-648.

combined increase the yield three and a half times.

Data on the increase of irrigated area and of double-crop area were given in the preceding table. [See p. 42, category 116--analyst] Here we may point out that while in 1909 only 49.5 per cent of the total cultivated land was in paddy fields, in 1937 paddy fields accounted for 61.6 per cent of the total and, according to the same table, 37.6 per cent of the total cultivated area was yielding two crops. If this is true, then the crop area should equal 137.6 per cent of the cultivated area but in the official sources for 1937 the total area of all crops amounts to only 1,120,400 ko or 127 per cent of the cultivated area. A possible explanation of this divergence is that ten per cent of the area was fallow or growing green manure, but this is hardly probable."

4:Grajdanzev--48 [3] S-4 (no date) 1942 Formosans
116. 241, 311

"Let us now see what part the same crops occupy in the sown area of Taiwan and compare this data with gross value of production."

4:Grajdanzev--52 S-4 (no date) 1942 Formosans
116, 243, 311

"Below we give the data on rice production since 1905. Area under rice

(1,000 ko)	1905	1915	1920	1925	1930	1935	1936	1937	1938	1939
Paddy	417	462	471	526	592	657	662	640	617	...
Dry field	44	44	45	42	41	42	41	38	28	..
Total	461	506	516	568	633	700	703	678	645	646
Yield per ko (koku)										
Paddy	9.7	9.8	9.7	11.7	11.8	13.3	13.9	14.0	15.5	14.2*
Dry field	7.7	6.4	6.1	6.9	8.8	8.7	8.4	7.7	7.8	
Crop (1,000 koku)										
Paddy	4,016	4,503	4,567	6,154	7,010	8,759	9,213	8,937	9,599	...
Dry field	338	281	276	289	361	364	345	295	218	...
Total	4,354	4,784	4,843	6,443	7,371	9,123	9,558	9,232	9,817	9,152
Price (yen per koku)	6.6	7.8	22.5	25.2	14.6	21.6	22.4	22.6	24.2†	25.6†

* Average for both paddy and dry field.

† Approximate figures."

4:Grajdanzev--52-53 S-4 (no date) 1942 Formosans
116, 243, 311, 656, 177.24 Japan
636.24

"Thus from 1905 to 1920 the area under rice expanded slowly and the yield per ko showed no increase, while from 1920 to 1935 the area under rice increased by thirty-seven per cent and the yield per ko of paddy increased also by thirty-seven per cent. The explanation of this difference does not lie in Taiwan, but in Japan proper. After 1920 the leaders of the Japanese government became worried over the rice supply of the Empire. The rapid growth of population and the insufficiency of domestic production brought a sharp increase of rice imports from abroad. From the annual average of ¥16.6 million in 1913-17 Japan's imports of rice rose to an annual average of ¥72.0 million in the period 1918-22.

Besides the difficulty of balancing payments abroad, the government did not like this dependence on foreign supplies in time of war. A program for the increase of rice production in Japan proper, Korea and Taiwan was worked out and the necessary measures applied, such as the construction of dams and canals for irrigation purposes, the enlargement of the net-[53] work of agricultural experimental stations, the distribution of small subsidies to new producers of rice as well as to those who would produce new varieties of rice selected by the stations. The fact that these measures were quite effective shows not only the efficiency of the administration but also the ability of the Chinese farmers to act in response to economic factors."

4:Grajdanzev--59-60 S-4 (no date) 1942 Formosans-1-3
116, 249, 311

"The area under sugar cane, the cane crop, and yield per ko were increasing in Taiwan as follows:

	Area (ko)	Cane crop (in million kin or 600 metric tons)	Yield per ko (in 1,000 kin or 600 kg)
1905-06	35,158	1,690.2	48.1
1908-09	39,035	2,219.5	56.9
1914-15	85,150	3,933.8	46.2
1917-18	150,450	6,817.5	45.3
1919-20	108,376	4,382.5	40.4
1920-21	142,032	6,752.8	47.5
1921-22	123,233	7,793.7	63.2
1926-27	101,531	7,412.0	73.0
1927-28	108,318	9,697.6	89.5
1928-29	120,046	12,291.9	102.4
1929-30	109,397	11,618.4	106.2
1930-31	99,094	10,944.7	110.4
1931-32	109,496	13,415.2	122.5
1932-33	83,690	8,782.0	104.8
1933-34	91,163	8,883.8	97.4

	Area (ko)	Cane crop (in million kin or 600 metric tons)	Yield per ko (in 1,000 kin or 600 kg)
1934-35	121,628	13,477.3	110.8
1935-36	128,329	13,190.4	102.8
1936-37	124,555	14,271.9	114.6
1937-38	134,208	15,101.1	112.5
1938-39	149,834*	19,602.1*	130.8

* There are reasons for questioning the data for 1938-39. If they are accurate, the acute shortage of sugar in Japan in 1939-40 is hard to explain. Japanese official figures for the rice crop in 1939 were also extraordinarily optimistic in spite of drought, but it is hard to understand why it was necessary to import rice hurriedly from foreign countries, wasting scarce foreign exchange if there was such an abundance of rice at home. The story is the same with sugar. Why was it necessary to introduce sugar ration cards cutting the average per capita consumption in half, if there was a tremendous increase in production? The estimates for 1940 reveal a sharp fall.

In 33 years the area under sugar cane increased almost four times, total production twelve times, and the yield per ko 2.7 times.

4:Grajdanzev--59-60 S-4 (no date) 1942 Formosans-3
116, 249, 311

In 1939 the Japanese Empire occupied seventh place (1) among [60] producers of sugar

1. Others in order of importance were Cuba, India, U.S.S.R., Germany, U.S.A., Java.

and fourth place among producers of cane sugar. The Japanese sugar industry became a factor of world importance. It is true that Japan exports very little sugar, but her absence from the world market as a purchaser is of considerable importance."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages may be considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

4:Grajdanzev--75-76 S-4 (no date) 1942 Formosans
116, 311, 421, 427, 565

"Let us now turn to the investigation of the problem of tenancy. Its economic importance lies in the fact that (1) a large portion of the farmer's income is paid out for rent on land, and (2) the farmer is less interested in preserving the fertility of the land and in making improvements, because the land does not belong to him and may be taken from him at or even before the expiry of the lease. From the social point of view the phenomenon of tenancy is important in that it often creates an idle class of landlords or rich farmer-owners and a class of poverty-stricken tenants. The widespread existence of tenancy makes average figures for the agricultural population meaningless because on the extreme there are rich landlords and on the other poor tenants. In order to be able to judge more or less correctly the importance of tenancy we should know: (1) the number of farmer-owners, part-owners (i.e. those who own some land, but are compelled to rent additional acreage), and tenants; (2) the area which is farmed and the amount owned of that farmed by each of these groups; (3) the division of each of these groups into at least three [76] sub-groups—large, medium, and small—in order to see whether each of these groups is uniform since, for example, the tenant who rents one ko and the tenant who rents 50 ko belong to quite different groups; (4) the conditions of the rent. The available statistics for Taiwan throw light on but few of these elements."

"The figures given above refer to landownership. But the owners of small plots may increase their holdings by renting land. Some economists see the chief advantage of tenancy in the fact that it permits a capable farmer to get as much land as he is able to utilize. We give above the statistics of the size of the farms as actually operated in 1930 [See p. 79, category 116--analyst].

The picture is about the same as that of ownership. More than 30 per cent of the farmers till on the average less than 0.5 ko each (0.62 acres); 53 per cent till on the average less than one ko (less than 1.71 acre) and 77 per cent of the farmers till less than 2 ko (less than 3.39 acres). But 4.5 per cent tilled 30 per cent of the total area, while 579 farmers (or corporations) tilled 66,410 ko. There are therefore a considerable number of very large plantations in Taiwan, chiefly of sugar cane, bananas, pineapples, and tea. These are figures for 1930 and it is quite possible that even then the investigation did not cover all farmers. (1)

1. An indirect proof of this is that a similar investigation made in 1932 covered 340,000 farming families as compared with 405,000 in 1930.

Since 1930 the plantation area has increased sharply, so that the picture should be by now even less favorable. We have no statistics of land ownership by nationalities, but it is well known that all, or almost all, plantations belong to big Japanese companies.

4:Grajdanzev--80 S-4 (no date) 1942 Formosans-2
116, 241, 311, 427, 565

However, it is clear that among Chinese farmers too, there is a sharp division in respect to landownership—there are wealthy Chinese owners, who though few in number, are very important by virtue of the power they wield."

The more important localities in Formosa all arose as centers of the export trade, and are thus either harbors or at least are situated close to the coast.

The most remarkable degree of development has been attained by Tai-nan, formerly known as Tai-uan or Tai-uan-fu. It now lies more than 3 km. distant from the coast and away from the right bank of the Na-mu-ki. But as late as the 17th century the wide plain between the town and the sea, which is now traversed by creeks and in which there are many fishponds, was a stretch of the sea, and today it is still flooded every year by the southwest monsoon. At the place where nowadays the creek flowing westwards from the town widens out to form a broader stream, more resembling a river, there lies the rather higher ground that bears the village of An-ping, 2 1/2 km. from the town and close to the shore of this creek, which continues on in a southwesterly direction for another kilometer, offering anchorage to junks of shallow draught and finally joining the sea after traversing a shifting sandbank. This hilly ground on which is An-ping measures 1 km. from east to west and 1/2 km. from north to south; it still rises like an island amidst river arms and swampy plains, and is the already mentioned former coastal island of Tai-uan, its name then being given by the Chinese to the whole island of Formosa. At that time, when from 1630 to 1633, the Dutch built their fort of Zelandia, the longitudinal axis of the sandy islet (it was narrower also in those days) ran from southeast to northwest, forming the partial barrier against the open sea of a lagoon bay cutting more deeply into the body of the main island; in the north the entry

to the lagoon was always open, via a broader channel of the sea, and in the south a sandbank one could walk on at low tide already began to connect the isle to the main island.

6: Kirchhoff--36-37 U-4 (no date) 1895 Formosans
116, 311, 361, 487

To the northwest of Ki-lung the coastal village of Kimpaôli is of some significance because of the neighborhood of the solfataras of the Ta-tun Range. A road runs in a southwesterly direction from Kimpaôli and joins the so-called military road beginning opposite the harbor of Tam-sui, at the village of Pa-li-hun, and leading to Tai-nan and even farther along the coast to the southern point of the island.

In North Formosa the open place of Tiong-lek is situated on it, with heavy plantings of [37] rice, sweet potatoes, and turnips, and also the walled town of Teuk-tscham (now officially known as Sin-tschu). This is an important commercial center connected by water the nearby coast. Wide rice fields and luxuriant tea plantations surround it, but unfortunately it is not available for foreign trade, although an excellent market would be found here for materials and opium. Now loads of camphor are transported from here on the backs of bearers to Tam-sui, the nearest treaty port.

6. Kirchhoff--37 [2] U-4 (no date) 1895 Formosans
116, 175, 311, 361

Chinese settlement on the east coast is quite new, and so are the roads laid down on this coast and to the coast. Since the beginning of the 19th century Chinese settlers, for the most part people who had to expect punishment for some offense if they stopped longer in the region controlled by the Chinese Government, went round the northeast point of Formosa to the coastal plain of Kapsulan, now officially called Komalan. This plain is at most 10 to 12 km. broad. The fertility of this plain for crops of rice was soon recognized; so settlers came also who had not taken to flight, and here too, although in a hard struggle with the natives, Chinese villages gradually grew up, as far as the bay of Su-aô in the south. The favorable position of the little village of Su-aô (i.e., Su Bay), on this fine bay, was first recognized during the Japanese expedition of 1874, when it became the headquarters of the commander of the Chinese observation corps. Today Su-aô is a thriving town at the mouth of the river of the same name, whose valley forms a route for several kilometers to the southwest, towards the foot of the coastal range; all around are green rice fields, and the tea plant does well on the cleared forest soil of the surrounding heights.

"LAND UTILIZATION IN FORMOSA*

* Owing to limitations of space, the text of this article has been considerably condensed from the author's original manuscript, and several tables have been omitted. Also, the difficulties of time and distance have prevented the author from seeing galley proof. --Edit. Note.

Cheng-Siang Chen

Land utilization in Formosa is severely handicapped by the topography. Forest-covered mountains rising to impressive heights form a central range, which extends like a backbone the entire length of the island. Only 36 per cent of the land is utilized, and only 24 per cent of this is cultivated.

According to the comparatively reliable statistics of 1947, the total area of utilized land is 1,290,132 hectares, of which 66 per cent is cultivated (paddy fields, 41 per cent; dry fields, 25 per cent). Considerable changes have occurred during the last 20 years or so Table 1 (1). The percentage of paddy fields has increased, and that of dry fields

1. All tables are based on data contained in the Taiwan

Agricultural Yearbook, Dept. of Agriculture and Forestry, Taipei.

has decreased, as a result of the development of irrigation and drainage. The progress of economic forestation is reflected in an increase of the forested land; the growing popularity of cremation has reduced the burial ground. Land in railroads and highways has also increased, because of the expansion and development of communications."

8: Chen--438 [2] N-3 (no date) 1951 Formosans
116, 311

TABLE I—LAND CLASSIFICATION IN FORMOSA
(*In hectares*)

CLASSIFICATION	1920 AREA	1920 %	1930 AREA	1930 %	1940 AREA	1940 %	1947 AREA	1947 %
Paddy fields	354,885	34.7	392,176	31.8	527,192	41.5	524,253	40.6
Dry fields	353,581	34.5	388,083	31.5	316,030	24.9	318,985	24.7
Forested	121,408	11.9	268,424	21.8	273,776	21.6	260,748	20.2
Prairie	97,744	9.5	71,665	5.8	36,423	2.9	59,308	4.6
Building sites	34,521	3.4	36,674	3.0	41,496	3.3	43,325	3.4
Irrigation ditches	....	...	13,229	1.1	15,824	1.2	16,685	1.3
Irrigation ponds	13,838	1.4	13,003	1.0	12,073	0.9	12,167	0.9
Burial ground	15,575	1.5	12,819	1.0	11,624	0.9	11,371	0.9
Railroads and highways	....	...	2,710	0.2	9,349	0.7	10,688	0.8
Piscicultural ponds	24,710	2.4	21,558	1.7	11,820	0.9	10,431	0.8
Salt fields	1,385	0.1	2,054	0.2	4,878	0.4	7,101	0.6
Pasture	3,567	0.3	5,020	0.4	2,267	0.2	764	0.1
Temple sites	484	0.1	511	0.1	626	0.1	677	0.1
Miscellaneous	2,439	0.2	4,596	0.4	6,693	0.5	13,629	1.0
Total	1,024,137	100.0	1,232,522	100.0	1,270,077	100.0	1,290,132	100.0

8: Chen--439 N-3 (no date) 1951 Formosans
116, 133, 311

"The distribution of land use (exclusive of cultivated land) among the hsiens [EJ: i. e. the administrative districts of Formosa] is an index to their geographic characteristics. For example, 56 per cent of the irrigation ditches of the island are in Tainan, a percentage obviously related to the great Kianan irrigation system; and 70 per cent of the irrigation ponds are in Hsinchu, because the topography of the Taoyuan alluvial fan, in the northern part, makes it suitable for damming. Ninety-six per cent of the piscicultural ponds are in Tainan and Kaohsiung, because the waters off the southwest coast are shallow and there are many lagoons and narrow inlets that can be converted into piscicultural ponds; and 89 per cent of the salt fields are in Tainan, whose coastal plain, low, very dry, and with brilliant sunshine in winter, offers good natural conditions for saltmaking. And in Penghu hsien burial grounds occupy 10.3 per cent of the utilized land, both because the Pescadores Islands are the earliest-developed and most densely populated area and because the meager land is unsuitable for cultivation (more than 60 per cent of the inhabitants are dependent on sea fisheries for sustenance).

"CULTIVATED LAND

Formosa's 35,961 square kilometers may be divided into level land (administrative regions) and hilly land (aboriginal regions). The total area of level land is about 19,800 square kilometers; its index of cultivation (2) is [440] 43 per cent. The total area of

2. The 'index of cultivation' is the percentage of cultivated land in the total land area. The total land area of Formosa, including Penghu and other islands, is 3,596,100 hectares; the total area of cultivated land (10-year average, 1936 to 1945) is 846,552 hectares. Hence the index of cultivation is 23.5 per cent, which is higher than that for South China, Japan, or Korea.

hilly land is about 16,100 square kilometers; its index of cultivation is only 2 per cent. Ninety-four per cent of the cultivated land lies in the coastal plains of the five western hsiens; Hwalien, Taitung, and Penghu together contain only 6 per cent (Table II). The extensive mountainous interior is covered with forests, in which there is little farmland.

The amount of cultivated land increased rapidly from 674,100 hectares in 1910 (Table III)

to 860,439 hectares in 1940. But after 1940 there was a gradual slowing down followed by another increase, and the index of cultivation seems now to be approaching saturation. Among the hsiens, the index for Penghu is highest, 58 per cent; that for Hwalien and Taitung is lowest, only 5-6 per cent (Table II).

The cultivated land may be roughly classified into paddy fields and dry fields. In 1910 paddy fields occupied about 49 per cent of the total cultivated land, dry fields 51 per cent. In 1948, as a result of the spread of irrigation and [441] the consequent change of dry fields into paddy fields, the corresponding percentages were 61 and 39 (Table III).

The price of paddy fields differs greatly from that of dry fields, because of the difference in productivity. From 1938 to 1942 the average price of paddy fields was 3615 yen per hectare; that of dry fields, only 1748 yen. The price of both paddy and dry fields was higher in the five western hsiens than in the two eastern hsiens: respectively 3639 yen and 1815 yen per hectare in the west; 2996 yen and only 917 yen in the east. According to the 'Survey on Farm Rent Economy' published in 1937 by the Formosa government, the average rent for paddy fields is about 48 per cent of the value of the products; that for dry fields is 33 per cent."

TABLE II—CULTIVATED LAND BY HSIENS, 1940 AND 1948

HSIEN	1940 CULTIVATED LAND		1940 INDEX OF CULTIVATION	1948 CULTIVATED LAND		1948 INDEX OF CULTIVATION
	Hectares	%	%	*Hectares*	%	%
Taipei	93,657	10.88	20.39	90,389	10.47	19.68
Hsinchu	148,410	17.25	32.47	150,574	17.45	32.95
Taichung	172,058	20.00	23.30	175,511	20.33	23.77
Tainan	267,779	31.12	49.34	261,052	30.25	48.15
Kaohsiung	127,342	14.80	22.25	131,976	15.29	23.06
Taitung	17,376	2.02	4.94	20,701	2.40	5.89
Hwalien	26,803	3.12	5.79	25,582	2.96	5.53
Penghu	7,014	0.83	55.29	7,371	0.85	58.04
Province	860,439	100.00	23.93	863,156	100.00	24.00

TABLE III—CULTIVATED LAND AND INDEX OF CULTIVATION

YEAR	CULTIVATED LAND	INCREASE INDEX	INDEX OF CULTIVATION	PADDY FIELDS		DRY FIELDS	
	Hectares		%	*Hectares*	%	*Hectares*	%
1900	347,408	100	9.7	194,656	56.0	152,752	44.0
1905	624,501*	180	17.4	304,908	48.8	319,593	51.2
1910	674,100	194	18.7	332,372	49.3	341,728	50.7
1915	700,080	202	19.5	343,087	49.0	356,993	51.0
1920	749,419	216	20.8	367,177	49.0	382,242	51.0
1925	775,468	223	21.6	373,629	48.2	401,839	51.8
1930	812,116	234	22.6	396,670	48.8	415,446	51.2
1935	831,003	239	23.1	478,689	57.6	352,314	42.4
1940	860,439	248	23.9	529,610	61.6	330,829	38.4
1945	816,016	235	22.7	504,709	61.9	331,307	38.1
1948	863,156	248	24.0	526,391	61.0	336,765	39.0

* The sudden increase from 1900 to 1905 resulted chiefly from the discovery of unregistered land by the official survey.

"SIZE OF FARMS

The agricultural population of Formosa is constantly increasing, though the percentage has fallen a little. But the area of cultivated land cannot be extended; consequently, the farms are generally very small, as in the provinces of China proper; moreover, the inheritance system breaks up the farms and further reduces the average size. From 1936 to 1945 the total area of cultivated land in Formosa averaged 846, 552 hectares, the number of farm families 448, 474; thus each farm family had only 1. 89 hectares of cultivated land. Although this seems larger than the average farm on the mainland of China, Formosan farm families average 6. 7 persons, as compared with 5. 4 persons on the mainland.

In 1939 more than 85 per cent of the farm families had less than the three hectares estimated necessary to maintain a comparatively reasonable standard of living (Table IV); and at present, because of the usurpations and annexations of the landlords, about 46 per cent operate farms of less than one hectare, of which 26 per cent are less than 0. 5 hectare. The poverty in rural districts and the hard life of farm families are plain. Those who operate farms of more than 10 hectares are less than 1 per cent of the total number of farm families."

"MULTIPLE CROPPING AND KINDS OF CROPS

The climate of Formosa is warm and hot the year round; rainfall is abundant, the growing season long. Therefore most of the cultivated lands have two harvests a year. In other words, the crop area is much greater than the cultivated area. From 1938 to 1942 the area of cultivated land averaged 858,355 hectares, the crop area 1,364,561 hectares; the multiple-crop index was 159 per cent. Among the hsiens, Taichung has the highest multiple-crop index (176 per cent), Hwalien the lowest (142 per cent).

Of all kinds of cultivated land, the double-cropped paddy fields have the highest multiple-crop index. These fields, which produce at least two harvests a year, occupy about 38 per cent of the total cultivated area. In addition, other crops are planted between the seasons or between the rows of paddy, so that there may be five harvests in two years or three harvests in one year. The multiple-crop index of double-cropped paddy fields approximates the average crop index of the lower Yangtze Valley. In view of the total area of cultivated land, Formosa has the highest multiple-crop index of the provinces of China. It is a compensation for the small size of the farms.

Temperatures permit the growing of many kinds of crops in all seasons, but it is mainly the uneven distribution and amount of the rains that set the agricultural season.

In the southern part of the island rainfall is concentrated in the summer; the winter is extremely dry. In places without irrigation, only one crop of paddy rice can grow, and the time for seeding and planting is fixed. In the northern part, though there is no dry season, the low temperatures and frequent rain in winter are not suitable for paddy rice, and there is a longer time for intermediate crops and fallow. The typhoon season and the length of day are also factors controlling the farming rhythm.

According to the Taiwan Agricultural Yearbook, more than 70 kinds of crops are grown in Formosa. However, three -- paddy rice, sugar cane, and sweet potato-- make up 70 per cent of the total value of agricultural products and occupy 72 per cent of the total crop area (Table V).

The crops may be divided into three kinds: food, cash, and horticultural. Among the food crops, paddy rice is first, sweet potato second. The chief cash crops are sugar cane and tea; tobacco and groundnuts come next. The horticultural crops include fruits and vegetables: banana is the most abundant fruit, with pineapple and citrus fruits next; among the vegetables, radish and mustard leaf are grown the most.

There is no obvious regional distribution of the food crops. For example, the area percentages of rice and sweet potatoes do not vary much among [443] the hsiens. (In Penghu, on account of the frequent gales, rice cannot be grown, and consequently the percentages of sweet potato and groundnuts are unusually high.) The distribution of cash

and horticultural crops is comparatively centralized. For example, in Taipei and Hsinchu the crop area of tea gardens exceeds 10 per cent of the total crop area of each hsien (average, 1937-1939); in the other hsiens tea gardens are insignificant or lacking. The total crop area of banana plantations in Taichung and Kaohsiung is 85 per cent, and that of pineapple plantations 83 per cent, of the provincial total. The sugar-cane fields of Tainan and Taichung together occupy about 69 per cent of the crop area of sugar cane of the whole province; the citrus orchards of Taipei and Hsinchu occupy 68 per cent of the crop area of orchards of the whole province. As vegetables are mostly consumed locally, their distribution is similar to that of food crops. Largely because of the widespread cultivation of paddy rice, green manure is grown in all the hsiens except Penghu, but in Taipei the interval between the two paddy crops is too short to permit cultivation of green manure, and its crop-area percentage is therefore unusually low."

TABLE V—VALUE OF AGRICULTURAL PRODUCTS AND AREA OF THE CHIEF CROPS, 1936–1945*

CROP	VALUE (*in yen*)	% OF TOTAL VALUE	AREA (*in hectares*)	% OF TOTAL AREA
Paddy rice	272,153,000	47.09	620,560	46.31
Sugar cane	92,704,000	16.05	143,430	12.65
Sweet potato	40,260,000	6.90	142,768	12.59
Banana	12,932,000	2.23	18,003	1.59
Tea	11,581,000	2.00	42,004	3.70
Tobacco	7,082,000	1.22	3,330	0.29
Groundnuts	5,288,000	0.91	25,906	2.28
Pineapple	5,013,000	0.86	8,128	0.72
Radish	4,798,000	0.83	7,709	0.68
Citrus	4,583,000	0.79	4,881	0.43
Jute	2,606,000	0.45	11,167	0.98
Leaf mustard	2,044,000	0.35	3,178	0.28

* The total value of agricultural products includes the value of animal products, and the total crop hectare area includes green manure.

"ROTATION

Formosa enjoys the peculiar advantage of tropical and subtropical agriculture -- year-round rotation. The cycle of rotations for paddy fields ranges from one to four years, but one-year and two-year cycles are comparatively prevalent. The rotation cycle for dry fields is mostly limited to one or two years, except on sugar-cane plantations, where it runs into more than two years. [444]

The popular rotations and their cycles are as follows:

PADDY FIELDS

a) Paddy rice (Mar., Apr.-July) → Paddy rice (July, Aug.-Nov.) → Green manure (Dec.-Mar.)

b) Paddy rice (Mar., Apr.-July) → Sweet potatoes (Aug., Sept.-Jan. and Feb.)

c) Paddy rice (Mar., Apr.-July) → Paddy rice (July, Aug.-Nov.) → Vegetables (Dec.-Jan., Feb.)

d) Paddy rice (Mar., Apr.-July) → Paddy rice (July, Aug.-Nov.) → Overlapping sugar cane (1) (Oct.-Jan., Feb.) → Green manure (May-Nov.) → Sugar cane (Dec.-

1. 'Overlapping sugar cane' is so called because the young

sugar cane is planted between rows of the second crop of paddy rice when it is nearly ripe.

Mar., 3rd year)

DRY FIELDS

a) Groundnuts (May-Sept.) → Sweet potatoes (Oct.-Mar.)
b) Upland rice (Apr.-Aug.) → Sweet potatoes (Sept.-Mar.)
c) Green manure (May-Nov.) → Sugar cane (Dec.-Mar., 3rd year)

Paddy rice is generally the first crop. The growing season is usually four months; that for the second paddy crop, about three months and a half. Between the two growing seasons there is a so-called 'summer intermediate crop' season of one to two months; between the second season of one year and the first season of the following year there is a so-called 'winter intermediate crop' season of three to four months. The distribution of these seasons through the year varies according to the region. The first paddy crop is planted and harvested much earlier in the south than in the north. The second paddy crop is also planted and harvested much earlier in the south, but the difference in time is not so great. Thus the summer intermediate crop season begins earlier in the south

and lasts longer, but the winter intermediate crop season, though it begins earlier, does not last as long as in the north, because the following first paddy crop is planted much earlier.

The summer intermediate crop season, because of its short length and overabundant rainfall, is suitable only for green manure and two or three kinds of vegetables. On the other hand, the longer duration and better weather of the winter intermediate crop season make possible the cultivation of many kinds of crops. The duration of the winter intermediate crop season and the intensity of land utilization increase progressively northward; however, north of Hsinchu city the winter intermediate crops are usually delayed by the rainy and chilly weather. As a matter of fact, the middle part of the island, in spite of its rather dry winter, is the best area for winter intermediate crops, because of the development of irrigation; that is why Taichung has the highest multiple-crop index.[445]

Sugar cane is the second crop of Formosa. Since autumn planting became popular, the space left by the young sugar-cane crop has been utilized for sweet potatoes, groundnuts, cotton, wheat, and vegetables. In the paddy fields of the middle part sugar cane and paddy rice are alternately grown. Thus all the cultivated area of the island is utilized to the utmost."

"INTENSITY OF LAND UTILIZATION

If compared with the agriculture of the Philippines and Siam, Formosan agriculture can be called 'intensive'; but in comparison with the agriculture of Japan, it is somewhat extensive. Moreover, rice is the staple crop of Formosa, and its chief production factors are manpower, fertilizer, animal labor, and implements.

To maintain the productivity of the land and increase crop yields, great quantities of fertilizer are needed. After the middle 1920's the use of fertilizer gradually increased—to 133 per cent of the 1924 amount in 1930, to 173 per cent in 1935, to 202 per cent in 1940, and to the peak of 410 per cent in 1943. From 1936 to 1945 the consumption of commercial fertilizer averaged 4,293,000 quintals a year, of which rice and sugar cane consumed the largest amounts (about 50 and 35 per cent respectively). But after the outbreak of the Second World War importation and use of fertilizer decreased, and consequently, fertilizer consumption and crop yield being closely related, the yield of rice and sugar cane also decreased.

Among the rice crops, the Ponlai rice, though its fertilizer and labor needs are greater than those of the native rice, is more commercial, and the method of cultivation is comparatively more progressive. But the intensity of Ponlai-rice cultivation is far

behind that of Japan, and only on the same level with that of Korea. For example, Formosa uses (1935) 34.6 per cent of the amount of natural fertilizer used in Japan, though it uses 119.3 per cent of commercial fertilizer; with respect to the cost per hectare, Formosa spends only 83 per cent as much as Japan. The number of manpower days per hectare is only 49.1 per cent of that in Japan, the amount of wages only 47.4 per cent. The number of animal-labor days per hectare is as much as 97.3 per cent of that in Japan, but the expenses for animal labor are only 57.1 per cent. The expenses for farm implements per hectare are only 28.7 per cent of Japan's. In short, the intensity of land utilization in Formosa is about 57.3 per cent of that in Japan and 95.4 per cent of that in Korea.

From 1931 to 1934 the cost of fertilizer used per hectare in Formosa averaged 51 yen a year; in Japan, 81 yen. However, Formosa's multiple-crop index is about 20 per cent higher than Japan's; consequently, the per [446-453 contain maps] [454] hectare cost of fertilizer must be reduced 20 per cent, to 40 yen—about half the cost in Japan. (Table VI).

The intensity of land utilization of a region is reflected in the unit-area production of the farmland. The intensity of land utilization in Formosa being lower than that in Japan, the average per hectare production of many crops is only 50 per cent of the Japanese production and approximates the average of the provinces of South China (Table VII)."

8: Chen--447 N-3 (no date) 1951 Formosans
116, 311

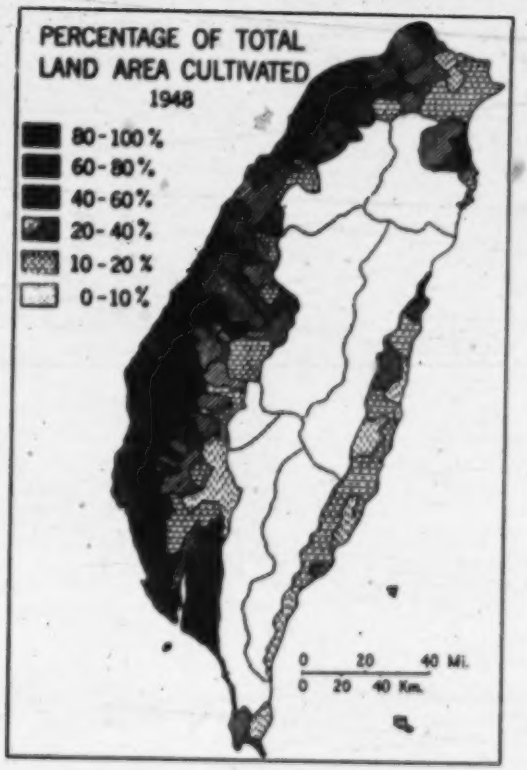


FIG. 6

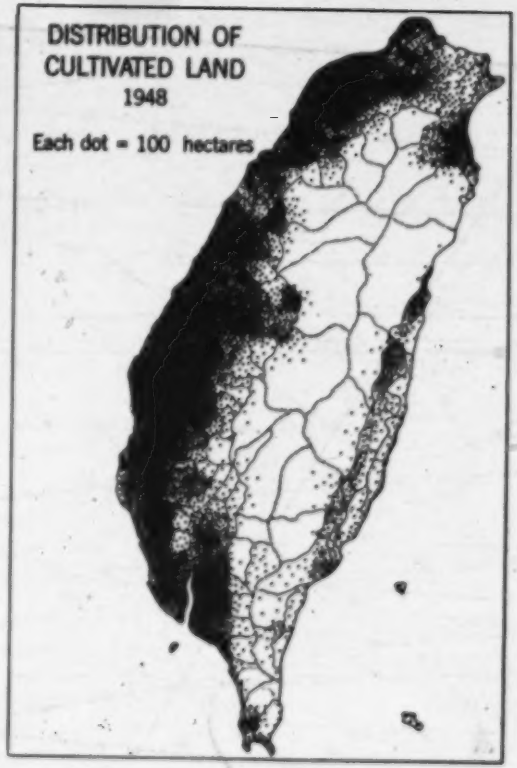
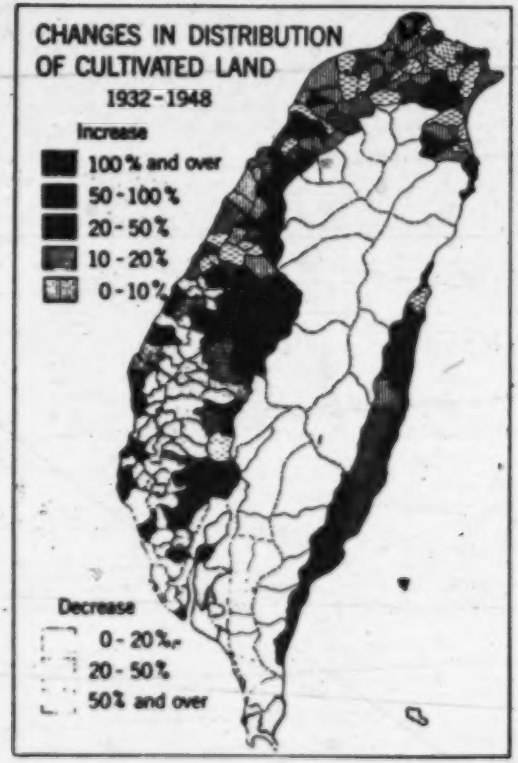


FIG. 7

8: Chen--447[2] N-3 (no date) 1951 Formosans
116, 241, 311



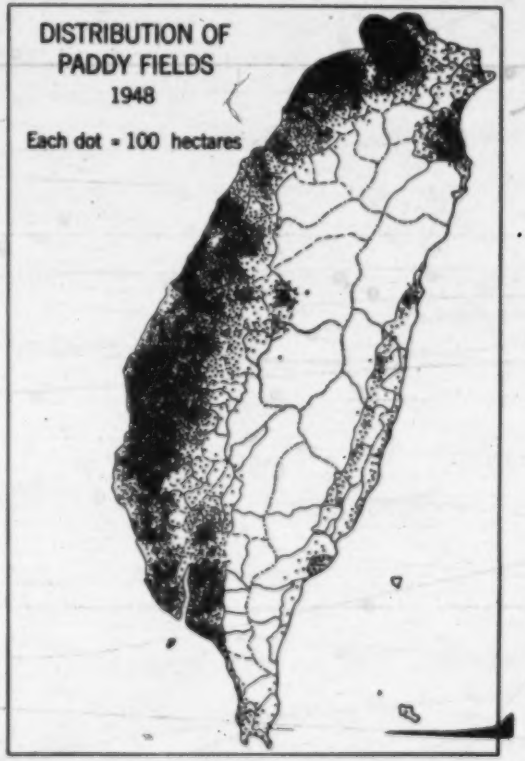


FIG. 8

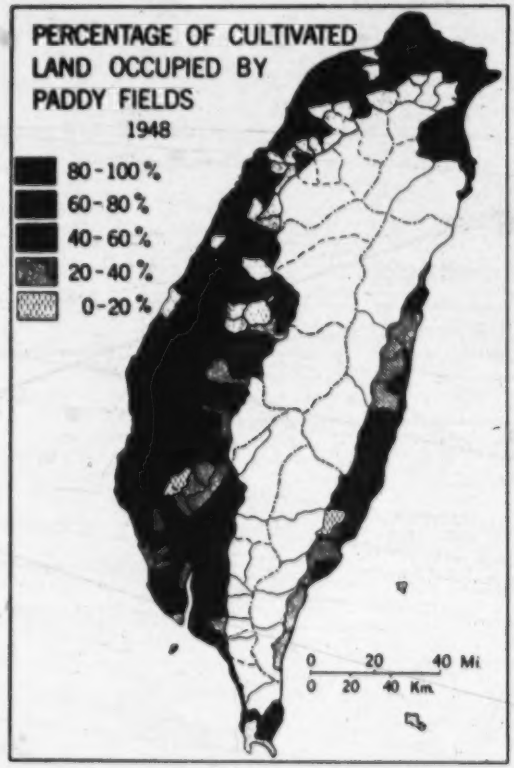

PERCENTAGE OF CULTIVATED LAND OCCUPIED BY PADDY FIELDS
1948
80-100%
60-80%
40-60%
20-40%
0-20%
0 20 40 Mi
0 20 40 Km.

FIG. 10

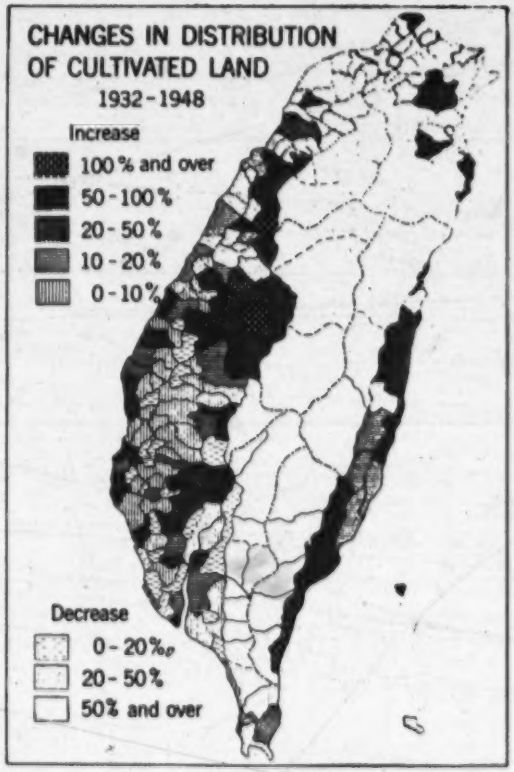

CHANGES IN DISTRIBUTION OF CULTIVATED LAND
1932-1948
Increase
100% and over
50-100%
20-50%
10-20%
0-10%
Decrease
0-20%
20-50%
50% and over

FIG. 11

8: Chen--448 [2]
116, 241, 311

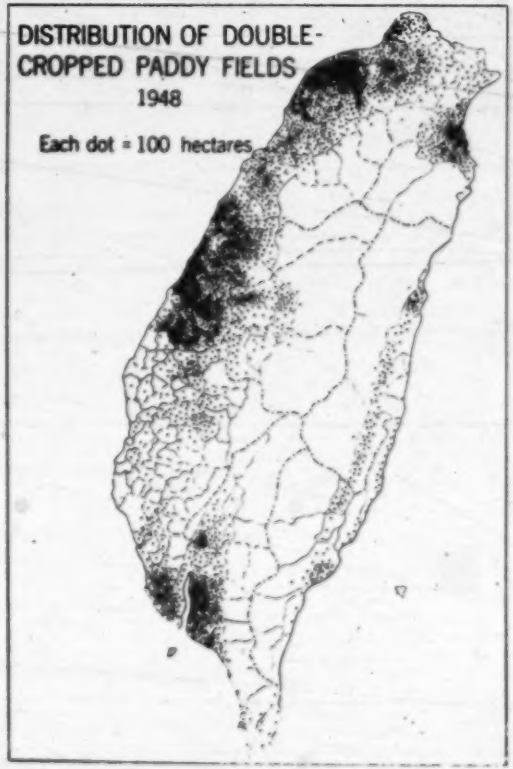


FIG. 12

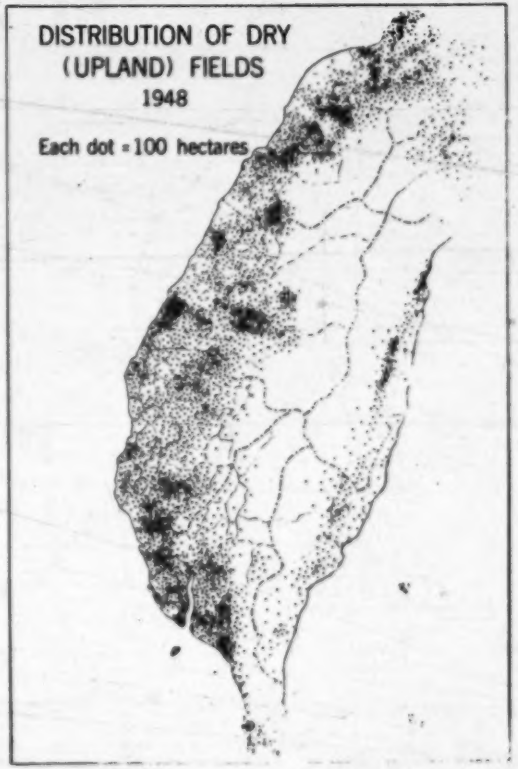


FIG. 11

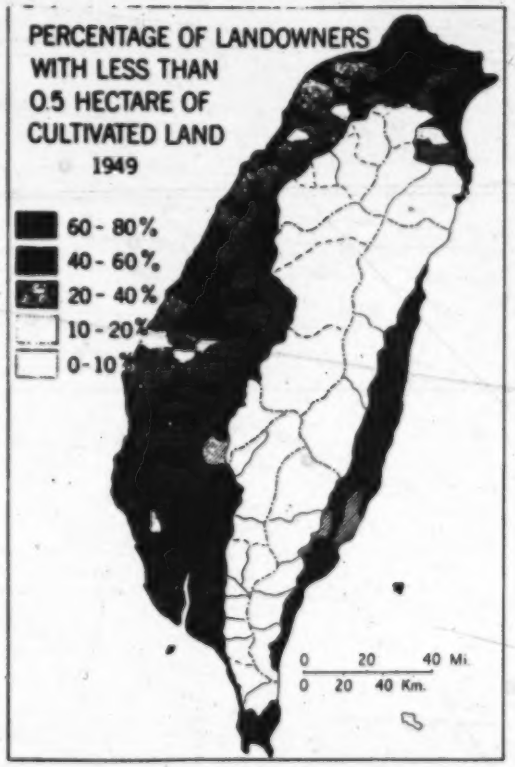

PERCENTAGE OF LANDOWNERS WITH LESS THAN 0.5 HECTARE OF CULTIVATED LAND
1949
60 - 80%
40 - 60%
20 - 40%
10 - 20%
0 - 10%
0 20 40 Mi.
0 20 40 Km.

FIG. 14

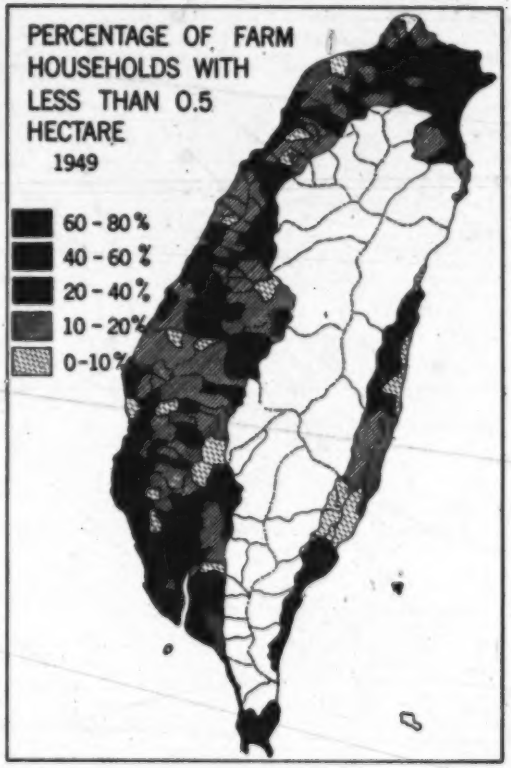

PERCENTAGE OF FARM HOUSEHOLDS WITH LESS THAN 0.5 HECTARE
1949
60 - 80%
40 - 60%
20 - 40%
10 - 20%
0 - 10%

FIG. 15

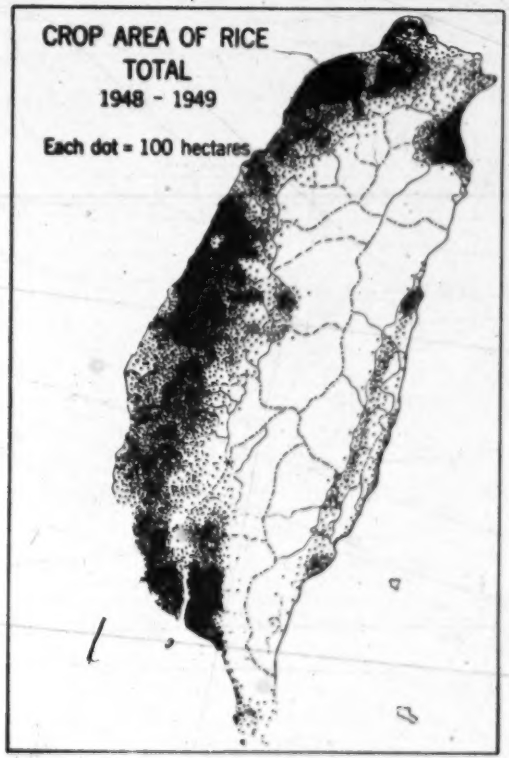

CROP AREA OF RICE
TOTAL
1948 - 1949
Each dot = 100 hectares

FIG. 16

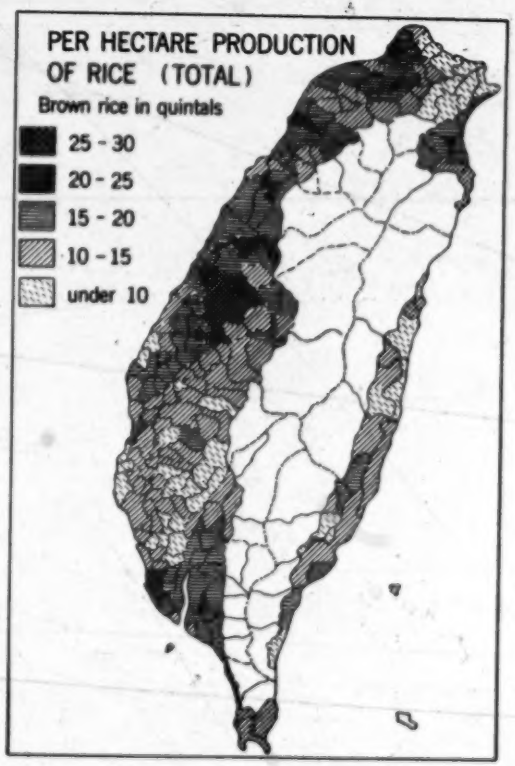

PER HECTARE PRODUCTION
OF RICE (TOTAL)
Brown rice in quintals
25 - 30
20 - 25
15 - 20
10 - 15
under 10

FIG. 17

8: Chen--450
116, 243, 311

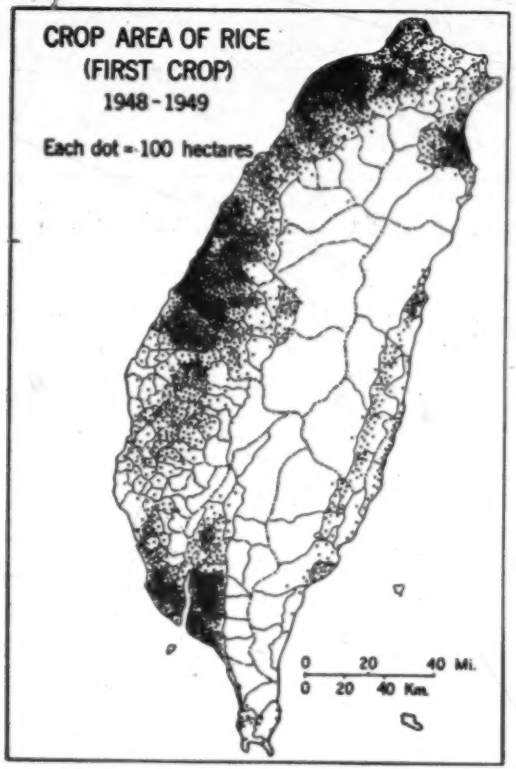


Fig. 18

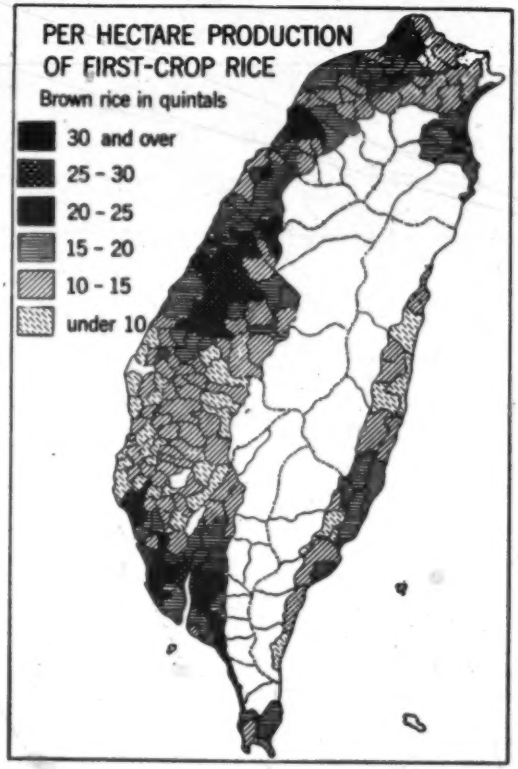


Fig. 19

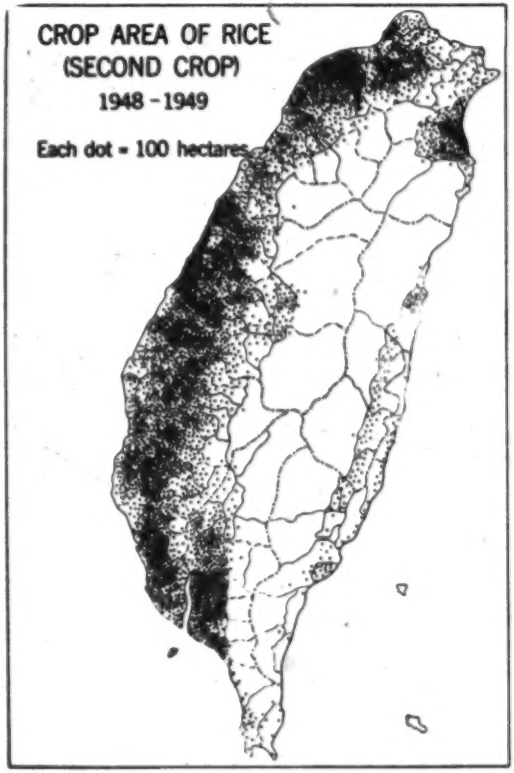

CROP AREA OF RICE
(SECOND CROP)
1948 - 1949
Each dot = 100 hectares

FIG. 20

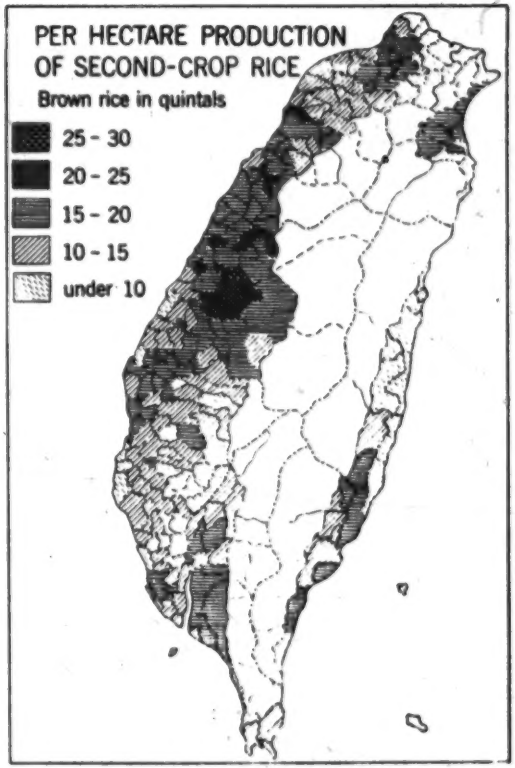

PER HECTARE PRODUCTION
OF SECOND-CROP RICE
Brown rice in quintals
25 - 30
20 - 25
15 - 20
10 - 15
under 10

FIG. 21

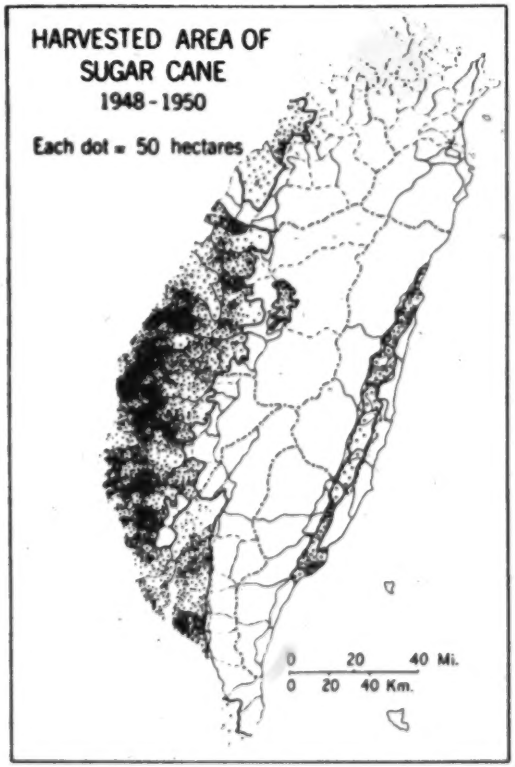

HARVESTED AREA OF
SUGAR CANE
1948-1950
Each dot = 50 hectares
0 20 40 Mi.
0 20 40 Km.

FIG. 22

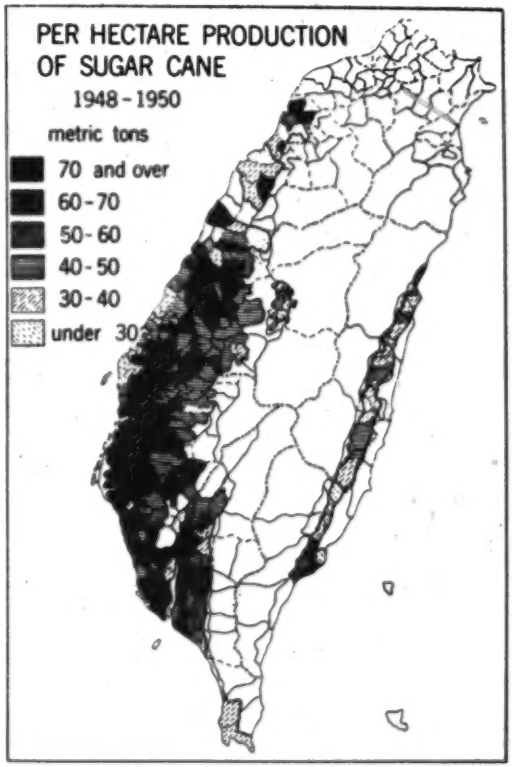

PER HECTARE PRODUCTION
OF SUGAR CANE
1948-1950
metric tons
70 and over
60-70
50-60
40-50
30-40
under 30

FIG. 23

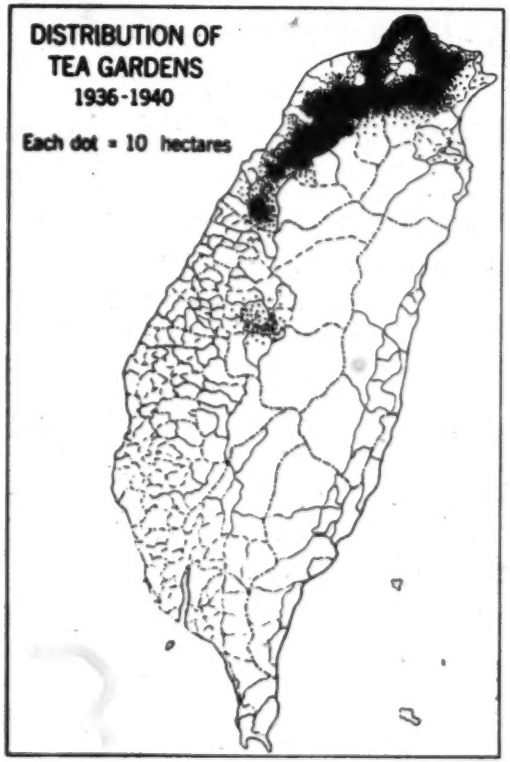

DISTRIBUTION OF
TEA GARDENS
1936-1940
Each dot = 10 hectares

FIG. 24

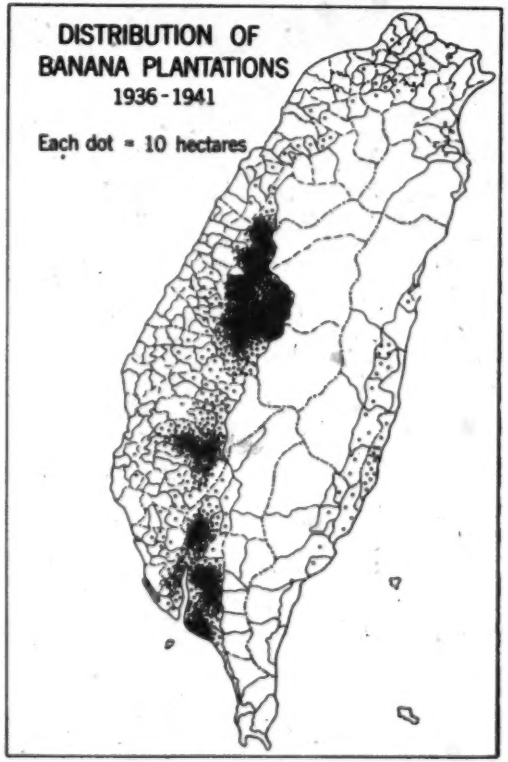

DISTRIBUTION OF
BANANA PLANTATIONS
1936-1941
Each dot = 10 hectares

FIG. 25

8: Chen--452
116, 245, 311

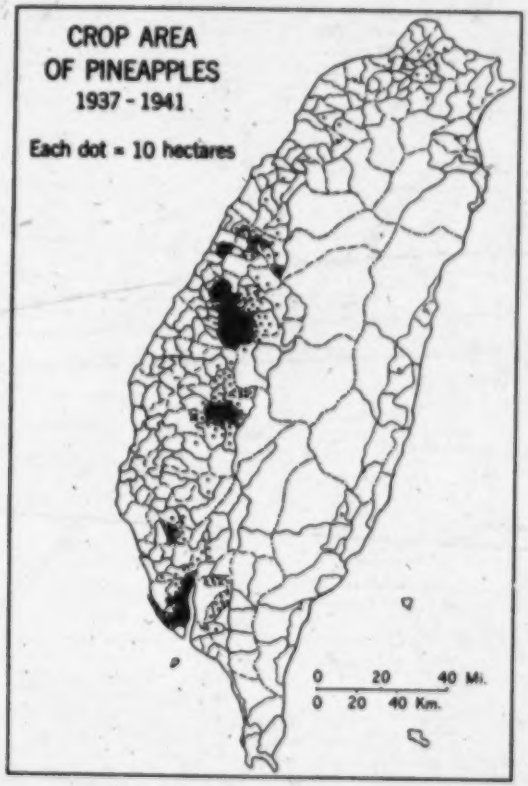


FIG. 26

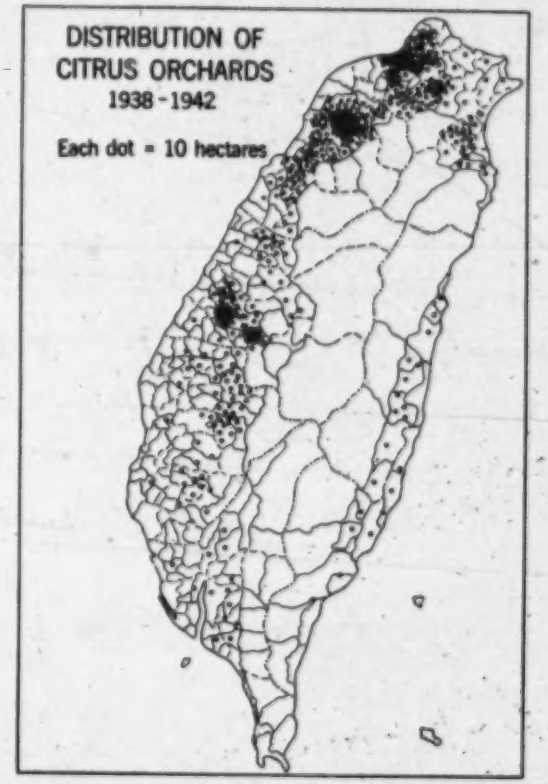


FIG. 27

8: Chen--452 [2]
116, 244, 311

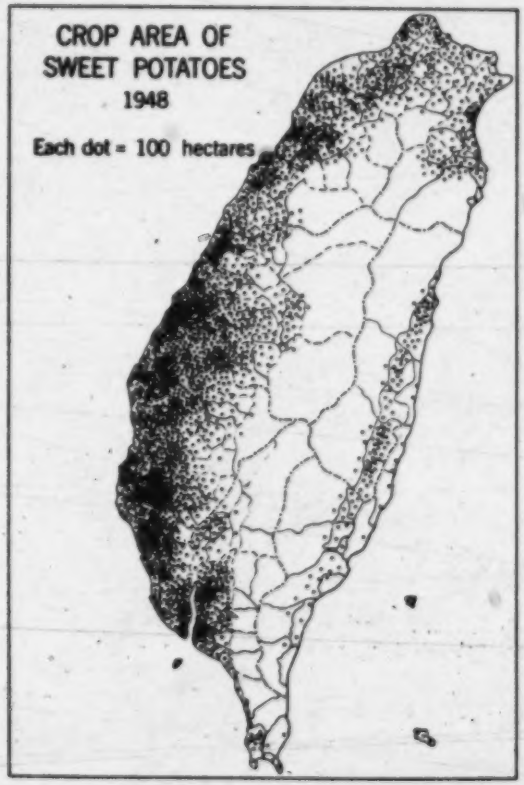


FIG. 28

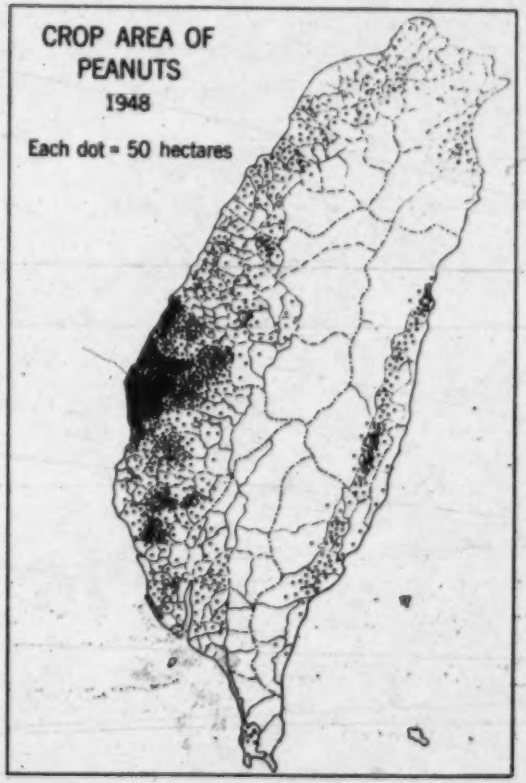


FIG. 29

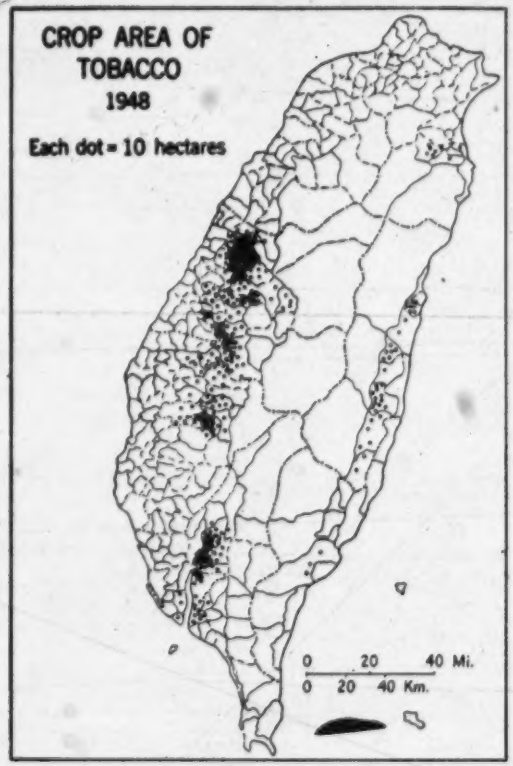

CROP AREA OF
TOBACCO
1948
Each dot = 10 hectares
0 20 40 Mi.
0 20 40 Km.

FIG. 30

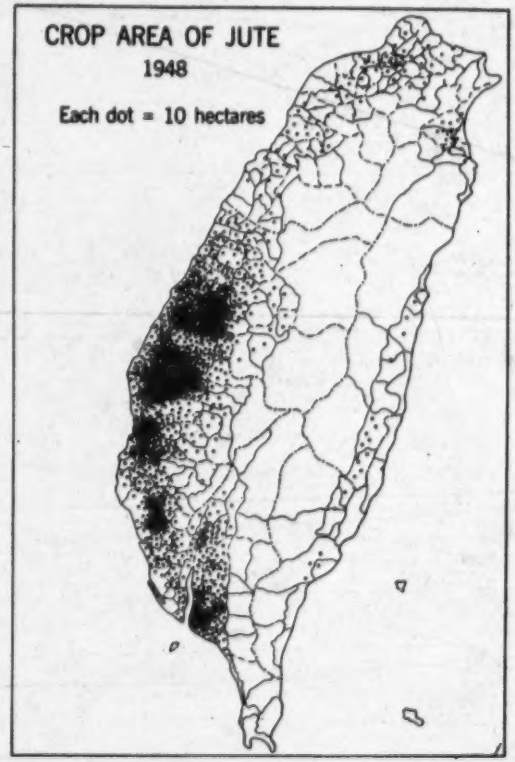

CROP AREA OF JUTE
1948
Each dot = 10 hectares

FIG. 31

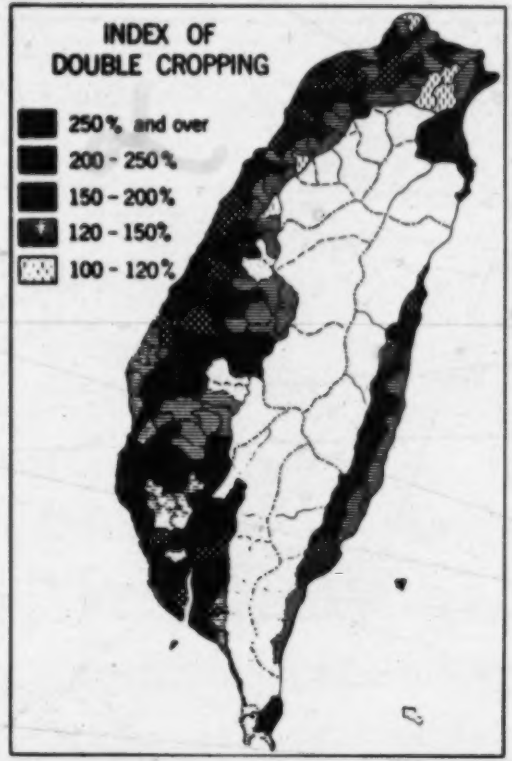

INDEX OF
DOUBLE CROPPING
250% and over
200 - 250%
150 - 200%
120 - 150%
100 - 120%

FIG. 32

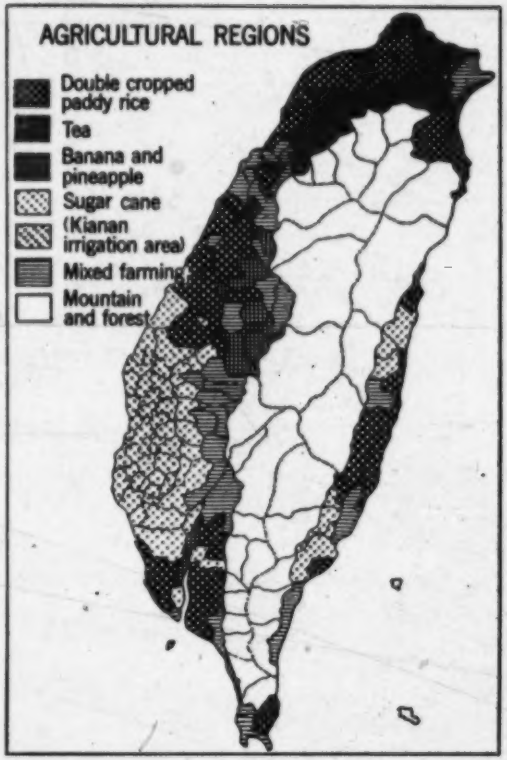

AGRICULTURAL REGIONS
Double cropped paddy rice
Tea
Banana and pineapple
Sugar cane
(Kianan irrigation area)
Mixed farming
Mountain and forest

FIG. 33

9: Yamasaki--231-232 N-5 (1896-1897) 1900 Formosans
116, 243, 311

The most important species of cereal on the island is rice (Orysa sativa L.). In the plains as on [232] the gentle slopes of the hilly regions, the rice fields occupy a great area. The basins of the two Tamsui Rivers, the Kapsiulan Plain near Giran, and the Taichū Plain are its chief centers. In East Taiwan we also find small rice plantations, as far as Chinese colonists have penetrated. There are usually two harvests a year: in South Taiwan even three harvests are obtained from the same fields.

9: Yamasaki--232 [2] N-5 (1896-1897) 1900 Formosans
116, 245, 311

While we have seen sugar in South Taiwan, we find many fields with tea plants in the northern part of the island. The surroundings of the Taihoku Basin yield most of this third most important island product. Tōshien Tableland and the two slopes of the Kilung Valley are covered in the main with these beautiful tea plantations. There are two kinds of Taiwan tea on the market, Oolong tea and Pauchong tea. They come from the same plants, the difference depending on the method of preparation. Oolong tea, which is usually made from the better leaves, is rather weaker in taste and odor than ordinary black tea, while the other is made aromatic by mixing it with flowers, such as jasmine (Matsuri). The leaves of the tea plant are harvested seven or eight times a year; but the best quality is obtained only from the second Spring harvest.

9: Yamasaki--232 [4] N-5 (1896-1897) 1900 Formosans
116, 244, 311

Sweet potatoes (Ipomea batatas Lam.) are one of the inhabitants' most important articles of diet for both the Chinese and the natives, and they are to be found growing on the island, wherever it is inhabited. In the mountain regions, as in Musha on the Dakusui-kei, which is inhabited by the wild aborigines, I have also seen fields of sweet potatoes on the rather steep slopes. There is also a double harvest in the western plain.

In the north of Formosa are cultivated a variety of products. The region from Kelung to Tamsui is the section that has most definitely been under the influence of Europeans because it is close to the port of Tamsui and the main settlement of the Europeans in Tuatutia. Here in the north all available land is utilized. The industrious people have even turned slopes into productive agricultural land. Yet only rice is cultivated on a large scale although there are indications that at one time in the past other less common products must have been grown. During war time [MC: 1895?] the sugar-cane fields were furrowed and ruined and the tea plantations were neglected. The land as far as Gosche is mainly used for fields of indigo and sweet potatoes; batatas and rice are rare. The region as far as Tschanghua, on the other hand, [223] is claimed almost exclusively by rice culture. It has escaped the destructive instinct of the Japanese because the Japanese troops wear straw sandals on their marches and would have dirtied their feet with mud and walked them sore on the irrigated rice fields; this would have been a definite impediment although it would not actually have been a danger. Economically the most valuable and the most beautiful part of Formosa extends from Tschang-hua to about 20 kilometers beyond Kia-y. The palm groves are rather clear in some sections and here one finds many remnants of protective shelters against the tropical sun where formerly the most precious products were cultivated. Here and there palm groves are lacking. It seems that for the last ten years the Chinese in these districts have confined themselves to a cultivation of rice or sugar-cane, because they required less capital and less

labor. In view of the political uncertainty and the greed of the mandarins it did not seem advisable to invest large sums for the cultivation of plants of the optimum state.

12: Garnot--13 G-3 (1884-85) 1894 Formosans
116, 133, 311

While the region near Kelung is very hilly, covered with trees and quite sparsely settled the section around Tamsui is quite different. Red dunes that are overgrown with bushes slope gently down toward the sea and the last mountain spurs give space to large low plains, which are fertilized by the alluvial deposits carried by a number of streams. These broad deep rivers run from one large city to the next and they are dotted with a good many boats. You see fine rice and sugar-cane plantations all through this area.

15: U.S. Navy--28 [12] (no date) 1944 Formosans
116, 312, 361, 311

"Availability of water supply (less favorable in the south) has also helped determine these settlement types. The fairly even distribution of rainfall throughout the year in the north makes springs and wells more constant and obviates the necessity of building near a permanent pool or deep stream. The method of land reclamation had an effect, too. Early militia, stationed in compact settlements, guarded the colonizers during the Koxinga period (early 17th century), and the soldiers themselves spent considerable time cultivating the land. The northern lowland districts, however, were developed in later years by private enterprise rather than by government policy. Ambitious land operators undertook to secure and clear areas unclaimed by the government. In turn, they subsidized tenants whom they brought in from the south, settling them on good land and building farmhouses for them."

Fortunately the Chinese have not yet deeply penetrated into the mountain regions, for they certainly do not know any such thing as consideration of the forest. Wherever they go war is made on the forest with fire. The Chinese inhabit bare plains where nothing but bamboo groves are visible; they are planted close to the dwellings. Incalculable damage has already been done by barbaric devastation.

31: Hofmann--604 [2] N-3 (1909) 1912 Formosans
116, 133, 231, 241, 311, 342

We travelled from Taihoku by train for 1 1/2 hours until we came to the small village of Toyen. Here the land is almost level and has been utilized to the fullest extent. The extensive rice plantations were green and threw into relief the picturesque houses of the Chinese; these are solid brick houses with a curved roof reminiscent of Buddhist temples. In the canals, for which the tributaries of the Tamsui are utilized, there are numerous tame ducks. In the small ponds one may see grey water buffalo, a domestic animal which occurs in large numbers of Formosa. It cannot be compared to European cattle as regards its usefulness in agriculture, and so far attempts to domesticate it have not been successful. Many times I saw the patient Chinese peasants threatened by the buffalo or saw that the animal had broken loose. Next to the rice fields there are extensive tea plantations. This is the region where the famous Oolong tea is produced. There are also banana and pineapple plantations on a smaller scale. The houses are surrounded by slender bamboo trees, and everywhere one may see betel palms, a tree which grows everywhere on Formosa.

31: Hofmann--605 N-3 (1909) 1912 Formosans
116, 133, 311, 314

From Toyen we travelled for 14 kilometers on a small vehicle on tracks (52 centimeter gauge); two Chinese coolies served to propel the car. We stopped at the steep bank of the Tamsui; the river rages far below, washing over the reddish-brown, muddy banks veined with large, round rocks. The rest of the way we went on foot or were carried in a sedan; the coolies were strong enough to carry these anywhere, always at the same regular pace. Every foot of land here has been utilized. Here and there we saw Acacia catechu trees; the sweet smell of their small, fragrant blossoms penetrated everywhere. The acacia, a small tree barely 10 meters high, is also important for tanning; this tree predominates in the plains of northern Formosa. Towards evening we came to Taikokan. (1) Our chief objection on this journey was to study the camphor production

1. The spelling of place names is based on the Japanese pronounciation; the Chinese use a somewhat different system of names.

of the Japanese Mitsui Company. The company had obtained a concession in the forested regions bordering on the territory of the aborigines. We did not succeed in this at first, since the region around Taikokan is a Chinese agricultural district.

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

31: Hofmann--627 [3] N-3 (1909) 1912 Formosans
116, 311

After a short stay in Kagi we proceeded to the south by train. A few kilometers to the south we saw the pillar which marks the point where the railway cuts across the Tropic of Cancer. Our journey proceeded without interruptions to the end station in the south, Takao, the harbor city. On the whole the vegetation here is not so copious as in the north; this is due, of course, to differences in the climate and the frequency of rainfalls. Here, too, most of the soil which is fit for cultivation has been used for rice plantations; instead of tea plantations, however, there are fields of sugar cane here and there.

31: Hofmann--627-628 N-3 (1909) 1912 Formosans
116, 132, 311, 249

The sugar industry on Formosa has increased considerably; this industry will become [628] still more profitable when the projected plan for a system of irrigation with artificial dams has become a reality. In this way the tributary of the southern Tamsui may be utilized and more soil than hitherto will be irrigated. Southern Formosa is affected by the drought every winter.

31: Hofmann--629 N-3 (1909) 1912 Formosans
116, 249, 311

From the coast I went to Ako and visited the extensive sugar plantations there. These are run with modern equipment on a large scale; there are large factories and there is a great deal of activity. Aside from these plantations, however, the land around here has not been exploited to the fullest possible extent.

37: Steere--316 [2] S-3 (1873-74?) 1875 Formosans
116, 132, 311, 241

"The southern part of the island is in the tropics. There is much rain in the north part of the island, especially at Kelung. At Takao and Taiwanfu, it is dry from October to April, but it rains much sooner in the mountains to the east, the rains already beginning there in February. Rice is the principal crop cultivated upon the low level lands to the west, and there is much exported to China. The best lands produce three crops annually. Lands that are harder to irrigate are planted to sugar cane, and large quantities of sugar are exported in foreign vessels to Japan and Australia. Upon the first of March ten or twelve vessels were lying at the ports of Takao and Taiwanfu, all loading with sugar."

37: Steere--316-317 S-3 (1873-74?) 1875 Formosans
116, 245, 311, 314

"The culture of tea has but just commenced, but has already reached considerable importance at Tamsni. The kind mostly cultivated is Oolong, which goes most of it to the United States. The cultivation can be carried to any [317] extent in the north of the island, as there are great plains of high rolling lands lying from Changwha to Tamsni, of the rich red clay which is so favorable for tea. These high plains are the home of the camphor tree, many trunks and stumps of which still lie over the ground, and of the wild tea-tree, of which I saw one specimen, with the trunk a foot in diameter and thirty feet high. The inhabitants gather the wild tea, but it is of bad quality, either by nature or from being badly cured. These high plains are now lying desert, as they cannot be irrigated, while tea is one of the few plants that needs no irrigation. These lands lie near the sea where transportation is easy, while much, or most, of the Chinese tea country is almost inaccessible, the tea having to be carried many days on men's backs and then transported by boats down rapid and dangerous streams, before it can reach a market. Camphor is exported from the island, and most of the mountain land seems to have camphor upon it, but the drug is only procured by the destruction of the tree, and there is no replanting done. There is also quite a trade with China in camphor planks."

37: Steere--318 S-3 (1873-74?) 1875 Formosans
116, 131, 311, 161, 563, 157

"The Pescadores are a group of low flat islands between Formosa and the mainland. They seem to be composed almost entirely of basaltic rock, which is partly columnar in many of the cliffs. There is iron ore found upon Fisher's island. The rock of the island is barely covered with soil, but nearly their whole surface is cultivated during the south-west monsoon, in sweet potatoes, pea-nuts, and millet. The inhabitants are estimated at eighty thousand, and there are said to be thirty towns and villages. The town of Makang, which is the largest, probably has twelve or fifteen thousand inhabitants. Its harbor is good, but the entrance is intricate. The Chinese live generally in houses made of coral rock that is frequently cut into blocks. They are descendants of the Fuh-kienese, and are all fishermen. They have considerable trade with the mainland and with Formosa in dried fish and in hogs, which are fattened upon pea-nuts, and in pea-nut oil. The feet of all the women are small, though their hard and laborious life must make this custom troublesome enough. I saw one small-footed woman ploughing and driving the buffalo, though the wind was blowing a gale at the time, so that we could hardly stand before it. The islanders are a rough and uncivilized race, accustomed to hardships, and the charges of piracy and wrecking made against them, are, without doubt, true. They are the boldest of fisherman, and during the warm monsoon, are almost amphibious. I was there in January, when the weather was cold and the wind and sea high, but when they found that I wished coral and shells, they procured me large quantities living. The islands make a good place for shelter for Chinese junks

42: Schetelig--389 T-2 (no date) 1868 Formosans-1-2
116, 311, 361, 487

Starting from Manka, the point common to the three chief arms of the Tamsui River, I undertook a second expedition up the middle river to the interior. Chintamki, i.e., "the way to the indigo fields," is a small locality at the bend of this river arm where the river changes its southwesterly course for a north-northeasterly one. Up to this point the boats are forced through the rapids at the cost of some exertion, but then the river must be abandoned and the march to the interior must be undertaken on the roughest mountain paths, close to precipices and with the constant danger of plunging into the depths, into the swirling streams below. The traveler is richly compensated for all his labors and his dangerous slips by a delightful journey through the most remote cultural areas of Chinese colonization. On the highest mountain passes, at 2,000 feet and more, year in and year out the camphor trees and tree ferns are uprooted and, untiringly, Convulvulus edulis, the sweet potato, and the profitable indigo are planted; and although every summer terrific downfalls wash away the delicate plants from the very steep cliff walls, the industrious Chinese is not discouraged by the necessity of repeating his work.... It is clear at the first glance that there, along the upper course of the Tamsui River, the world of the primeval forest and the former haunts of the natives are disappearing more and more beneath the axe of the woodcutter. People who took the same path 5 or 6 years ago, in order to investigate the interior, still found primeval forest and natives living their undisturbed and unchanged lives in places where today

there are flourishing Chinese villages. The valley in which lies the village of Takau (this should not be confused with the port of the same name in the district of Fung-schan on the southwest coast), the terminus for our bearers and our assembly point, seems to have been taken in hand during the last few years only, for everywhere charred tree stumps may still be seen between the indigo plants. This valley is reached via a pass more than 2,000 feet high, and one is surprised by the sight of the upper course of the river tumbling and winding in the depths below, and also by the view of the mountain chains, uncountable as they stretch out to the south. Our aim was soon reached, namely to determine the situation of this upper valley and to survey and to measure the mountain ranges round about.

42: Schetelig--392 T-2 (no date) 1868 Formosans
116, 133, 311

The following brief remarks will be made concerning the distribution of heights and plains in the north of Formosa. I have shown that within one day it is possible, from the meeting point of the three chief streams in the Manka Plain, to reach the foot of the mountains in almost every direction. A further day's journey brings one right into the mountains, but generally one is still within the frontiers where Chinese colonists are to be found, and then, after crossing the first and second ridges, one enters the primeval forests. If one considers that, from our observation point near Takau in the middle of the northernmost third of the island and on the upper course of the Tamsui River, 400 feet above sea level, the nearest ranges are 200 to 300 feet high, that from there in a southerly direction mountains up to 5,000 feet high were measured by us and, finally, that the central connecting point of the Central Range, formerly thought to be 12,000 feet, is now known to be more than 13,000 feet with the surveying of Mount Sylvia, and that this highest point on the island is only 2 to 3 miles to the south; considering all this, it becomes clear that everything lying in between must be mountainous, and steep at that, with no tablelands or cultivated plateaus. Yet all the land lying to the north of the lower course of the middle stream, , or that which is situated round the Kilung River, is of surprising fertility, as is also the already mentioned Manka Plain which, strangely enough, is irrigated not by the Tamsui River itself but by one of those admirable Chinese artificial systems of irrigation that brings the water from distant mountains.

161 They have come from various provinces on the Mainland and are composed of government employees, professionals, and technical personnel.

III. PATTERN OF SETTLEMENT AND DENSITY

• 311 In the early days of settlement, Chinese immigrants first cultivated the fertile land and plains of the coastal areas from which the aborigines had been driven. The inhospitable and inaccessible nature of the mountains protected the aborigines from continued exploitation but also served to contain them.

About ninety per cent of the total population now occupies the coastal lowlands; the remainder, among them the aborigines, is scattered over the central mountain area which comprises two-thirds of the island's total area. The people from Kwangtung, arriving later than the people from Fukien, settled in the foothills and cultivated rice terraces. The Fukienese inhabit most of the lowland and urban areas.

161 The average density of the population is 610 persons per square mile.[3] However, 2,500 persons must share the amount of food produced on one square mile of cultivated land (nutrition density).

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3. Statistical Abstract of the Republic of China, Executive Yuan, Directorate-General of Budgets, Accounts and Statistics, Taipei, 1955, p. 28.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

II. ARABLE LAND

433
311

The amount of arable land available for agricultural production was more than doubled during the period of Japanese rule. With improved production techniques and methods of irrigation, there was a twentyfold increase in sugar cane, a fourfold increase in sweet potatoes, and a threefold increase in rice production. The production of pineapple increased over a hundred times.

By 1936, Japan turned its efforts toward the development of industry on Formosa. This was due, in part, to wartime needs as well as to the fact that the development of available arable land had reached its limit. Yet agricultural production under the Japanese set a record that required more than five years' effort after World War II to surpass.

Today, it is generally believed that Formosa has exhausted the possibilities of its arable land. However, if better fertilizer, improved seed, new farming techniques, and adequate pest control are introduced, it

[433] 311 would seem possible for the island to produce more food to meet the needs of an increasing population. It is also possible that irrigation projects, now in the planning stage or but recently begun, may increase the amount of irrigated land available.

Table 2. Cultivated Land*
(1,000 hectares)

	Paddy Fields	Others	Total
1945	504.7	311.3	816.0
1949	528.1	336.8	864.9
1953	533.3	339.4	872.7

* Taiwan Provincial Government, Taiwan Agricultural Yearbook, 1954, Taipei, 1954, p. 20.

Steep and rugged mountains cover the major portion of Formosa. The island's total land area has been estimated at 3,596,000 hectares, of which only 24 per cent is considered suitable for agricultural purposes. For the past eighteen years, the

311 total arable land has remained more or less constant, in spite of the fact that some land along the eastern coast of the island as well as some 300,000 hectares of grass land in the mountains might be developed either for crops or as grazing land if the expense of such projects did not seem to indicate that the cost would be prohibitive.[4] When the [53] Shihmen dam and reservoir project is completed, waste land on the banks of Tanshui River can be converted into paddy fields. It is believed that the completion of the dam will make possible the reclamation of at least 54,000 hectares.[5]

241 Paddy fields constitute about 60 per cent of the total cultivated land in Formosa. They are classified in two categories -- double-cropping fields and single-cropping fields. The former yields two crops of rice each year. Between rice crops, one crop of vegetables is planted and harvested. In single-cropping fields, besides one crop of

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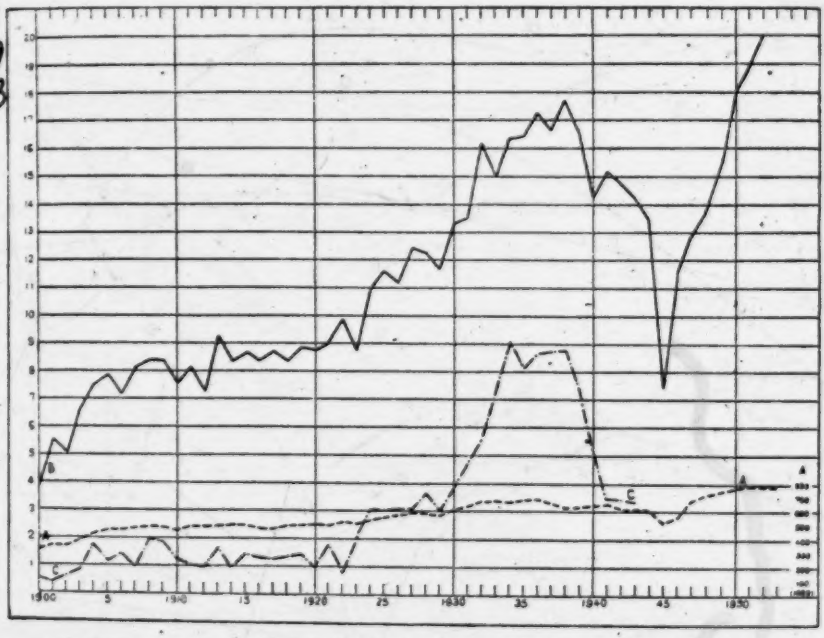
4. Table 196, "Summary of Statistics of Taiwan for the Past Fifty-one Years," Taiwan Agricultural Yearbook, 1954, p. 20.

5. Chung-yang Jih-pao [The Central Daily News], Taipei, July 1, 1955.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

Productivity was raised by improvements in various aspects. The rapid increase in the output of rice from the 1920's was the result of the adoption of a new strain (Ponlai rice). By the 1930's, the production of rice in Taiwan was so large as to be twice its local demand, and the surplus rice was exported to Japan. Though the price of Taiwan rice was controlled by the Japanese government and the profit of trade in rice was mainly monopolized by big Japanese traders, the increase of production did have some benefits for Taiwanese, and no doubt, this contributed to the lowering of the death rate after 1920.

Fig. 6 Acreage of Cultivation, Amount of Production and Exportation of Rice, Taiwan, 1900-1953



A: Acreage of Cultivation (unit: 1,000 ha) B: Amount of Production (unit: 1,000,000 hectoliter)
C: Amount of Net Export (unit: 1,000,000 hectoliter)
Source, 1900-1948, from the Rice of Taiwan, 1949, Taipei.
1949-1952, from Taiwan Agricultural Yearbook, 1952, Taipei.

The condition of sugar was a little different from that of rice. The profit in sugar manufacturing was exclusively monopolized by the Japanese enterprisers. But it is undeniable that, in respect to the improvement of agricultural techniques and the raising of productivity, substantial effects were obtained.

As pointed out by W.S. Thompson, "underfeeding weakens the individual and renders him less resistant to disease, whether it be of the degenerative or of the germ

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

TABLE 6

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IMPROVEMENT IN THE YIELDS OF RICE IN TAIWAN, 1916 TO 1945

Average Yields of Different Strains in Each Year, First and Second Crops Combined (Hectoliters of Rice per Hectare)*

Years	*All Rice*	*Horai Rice*	*Other Strains*	*Per Cent of Rice Land Devoted to Horai*
1916-20	17.8	—	20.1	—
1921-25	19.3	28.5	19.3	4.6
1926-30	20.9	22.7	20.4	19.9
1931-35	23.0	27.2	21.3	33.7
1936-40	25.5	28.2	23.2	47.3
1941-45	21.6	22.7	19.7	59.8

* Crop statistics in Taiwan were not kept in metric units. Figures in the *Statistical Summary of Taiwan* were all converted before publication.
Source: *Statistical Summary*, Table 203.

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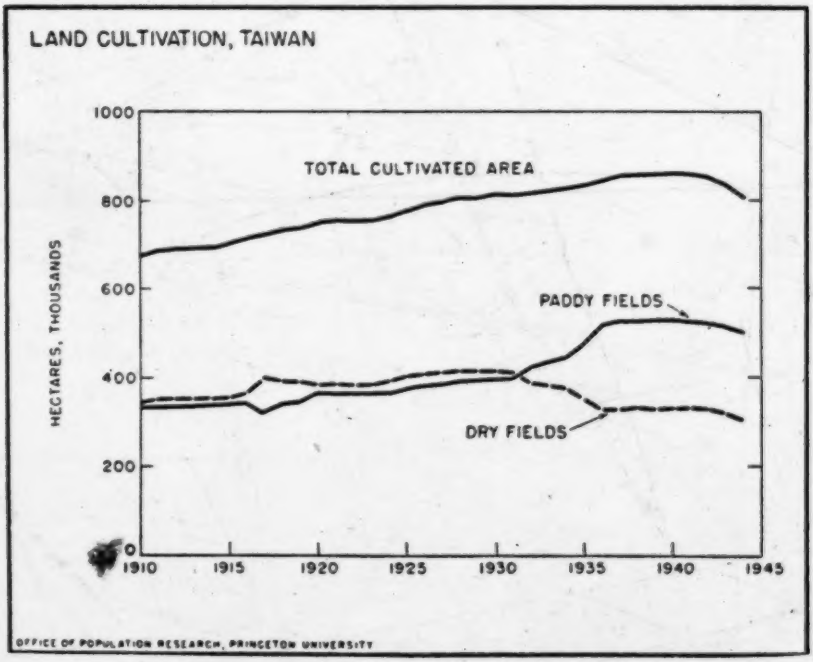

Fig. 5. Area of Cultivated Land, Taiwan, 1910-1944.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

632 621 ments, health program, and construction for public works all depended on generous amounts of labor. Without such cheap incentives to mobilize this labor, these projects could not have been pursued so effectively.

As obvious as these advantages of "indirect rule" may be, it should be as clear that it is a poor vehicle for introducing social change. The more it is used to wield authority, the stronger and more resistant to change it can become; the more it is undermined by altering local relationships that sustain it, the less remains of its usefulness. Hence, from adoption of this scheme initially as an expedient to "pacify" the island, Japanese authorities acquired a positive interest in preserving the same set of agrarian institutions that had existed in Taiwan before their arrival.

Thus they abandoned the idea of reorganizing the rural society—primarily because they tried and failed, but also because as it stood it gave them the best access to regulation of the agricultural population and farming practices. It was in some respects a ready-made instrument for exerting the necessary control with the least disturbance of customary affairs, having in the past enabled the various parties to the export trade to prosper at the expense of farmers. For better coordination of their policies, Japanese gradually did erect a more formal type of government administration, but the basis of the system in rural areas was not greatly affected by this modification.

The Impact of Improvements in Agriculture

185 The Japanese who were charged with remodeling Taiwan's economy gave first priority to long-range investments around the fringes of agriculture. The rural economy was already geared to exchange food and related products for special capital services. Certain of these services were soon altered under Japanese influence. Positions that provided them, or that could usurp them, gradually began to be occupied by Japanese nationals—official, private, and always an indistinct class in between that wielded quasi-official sanctions.

Those innovations that worked their way into agriculture were directed chiefly to raising crop yields per unit of tilled land. Another avenue of increasing the total agricultural product was by extending

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construed as a lament that there were few opportunities for advancement outside the rural villages and towns dominated by petty gentry. Discontent from this source bore few signs of being the awakening of a popular movement for independence among the Taiwanese, as it is sometimes represented. See Hsü Tze-wei (1946), p. 161 ff.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

the land area that yielded crops. From 34.2 per cent of all "level" land (under 500 meters elevation) in 1910, this area cultivated was raised to 43.7 per cent by 1940. The *effective* crop area was extended still further by irrigation, terracing and careful crop rotation. Irrigation converted many dry fields into paddy fields, as we found in the previous chapter. Improvement in irrigation made more of the paddy fields yield two or more crops each year (see Table 9). Evidently

TABLE 9

SPREAD OF DOUBLE-CROPPING IN IRRIGATED FIELDS, 1917 TO 1945

Area of Paddy Fields That Was Double-Cropped in Taiwan

(Thousands of Hectares)

Yearly Average in Each Period

				Per Cent Double-Cropped:	
Years	*Total Cultivated Area*	*Area in Paddy Fields*	*Area of Double-Cropped Paddy Fields*	*of Total Cultivated Area*	*of Total Paddy Area*
1917-1919	730	336	217	29.7	64.5
1920-1924	753	366	252	33.4	68.7
1925-1929	795	386	274	34.4	71.0
1930-1934	816	422	300	36.8	71.2
1935-1939	850	516	320	37.6	61.9
1940-1944	844	520	314	37.2	60.4

Sources: *Statistical Summary*, Table 196.
Ch'en Cheng-hsiang, *Land Utilization in Taiwan*, Appendix, Table 2.

much of the advance in crop production took the form of increasing the number of harvests from land already cultivated, which in Taiwan was already the "highest in the [Japanese] Empire."[14]

Land was not the only element of agriculture that was put to harder use. With a few exceptions,[15] cultivation continued to be carried on with little difference in ways of applying human labor to the land. Agricultural implements were improved, but remained similar in design; irrigation facilities opened new land, but their construction was itself labor-intensive; transplanting of rice became generally practised to save land, but it is inherently a very laborious process. One of the major problems of farmers in the Far East has long been that their work is distributed unevenly throughout the

[14] Nasu, Shiroshi (1941), p. 96.

[15] A few large-scale plantations experimented with the use of tractors in raising sugar cane.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

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The Setting

T 128 In any community study there is always the question of where to begin outlining the picture of village life: on what does one focus first? While the question is perhaps just as urgent during the actual fieldwork, in the field it is possible to observe and ask questions on many subjects at the same time and to move from one subject to another in the course of an interview. But in attempting to put the ethnography down on paper, the decision must be made where to begin.

I have chosen to begin this book as I began my fieldwork—with a general picture of village life that will provide a context which can give meaning to particular aspects of village life. This picture will be followed in Chapters 3 and 4 by a description of the village livelihood, although it has perhaps been more common to begin Chinese ethnographies with a discussion of family and kinship (here Chapters 5 and 6). The importance of the economic sphere in Hsin Hsing is explicit in the very purposes of this book as noted in Chapter 1 and the conclusions of Chapter 9; its importance was implicit throughout the fieldwork as it will be throughout this book. We now turn then to the setting of the village so that specific topical chapters which follow will have some contextual meaning.

T 131 F 497 Travel to Hsin Hsing village from the capital city, Taipei, is neither easy nor brief. The approximately one hundred and seventeen-mile trip to Chang-hua, the closest major city, must be made mostly by train via the seacoast or by the interior route through Taichung City. This takes about three hours by diesel express or six hours or more by a local train. It is generally possible to find a seat on the diesel express, but on the local trains one must almost always stand a good part of the way.

F 311 F 499 175 648 Once out of Taipei the countryside is almost all rice paddies and farmland. Even in the mountain area between Taipei and Taichung, terraced rice paddies form a part of the green and lush vegetation typical of Taiwan. The train goes through a series of tunnels in these rugged mountains, and if one happens to be traveling with a Taiwanese companion, he will probably point out that these tunnels, like the railroad lines, were all built during the Japanese occupation.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

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The mountain ranges serve as a kind of climatic divide. The area north of the mountains, which includes the Taipei region, is known for its long rainy season and cold raw winters. In the area south of the divide, and especially around Taichung and the interior mountain region, the weather tends to be milder, with far less rain and many days of bright sunshine.

On the trip south from Taipei to Chang-hua City the train crosses several large rivers which originate in the interior mountains and flow west to the Strait of Formosa. The rushing torrents of water during and immediately after the rainy season dwindle to a trickle during the dry season, meandering through wide, sandy, and rocky river beds.

At Chang-hua City the traveler must leave the train for a bus headed southwest to the old port city of Lukang. Although the buses leave every fifteen minutes during the day, they are invariably crowded with people and their bundles of produce, fish, a chicken or two, or even building materials.

The thirty-minute trip in an old wooden Japanese bus is made entirely on dirt roads. The ride may be dusty or wet according to the season, but it is always bumpy and noisy. In the dry season strangling dust pours into the bus from all sides. During the wet season, there is always a possibility that the passengers will have to leave the bus and wade while the bus creeps slowly along over the flooded roadbed. Many menthol-distilling factories, brickworks, and small rice mills line the way. The bus must cross many small irrigation canals and maneuver around oxcarts. As the bus moves further away from Chang-hua City and approaches the seacoast area of Lukang, a change in the agricultural landscape, resulting from differences in irrigation systems, becomes more and more noticeable. In those places where there is still no irrigation system, there are large areas of dry fields.

After a half-hour wait in Lukang, the traveler boards another, similar bus for the trip to the village, which lies about three miles inland or southeast of Lukang. The uncomfortable fifteen-minute ride ends when the bus comes to a halt in front of the Hsin Hsing village store.

The houses in the village are constructed of bamboo, mud or fired brick, and plaster. The foundations and structural uprights are usually brick; the walls are a latticework of bamboo strips, filled in with plaster which is a mixture of mud and cow dung. The plaster filling is usually whitewashed. Sometimes the main supports are not brick but heavy bamboo poles. Newer houses, and the older houses of the wealthy, generally have roofs of cement tile, while the oldest and poorest houses have thatched roofs. Houses made of mud bricks are always thatched.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1 •

just north of the Tropic of Cancer—the winters of this coastal area, unlike the interior, are cold and raw while the summers are extremely hot and humid. Winter temperatures seldom fall below the middle forties, but icy winds frequently blow with almost gale force across from the mainland and the Strait of Formosa. Although the area itself never has snow, on a clear January or February day snow-capped peaks of the high interior mountains to the east can be seen from the village.

As in most of Asia, rain is seasonal. Between 80 and 85 percent of the annual rainfall comes during the late spring and summer months (April to September) (Chen, 1950:5).[1] During the heaviest rains and the late summer typhoon season, roads as well as paddy fields are often flooded. In this particular area, frequently the rain alone makes it possible to transplant the rice seedlings, for the irrigation water is often late in reaching the Hsin Hsing area, lying as it does so far from the mountain headwaters. With the passing of the rainy season the weather is relatively dry for the remainder of the year, and all crops depend almost entirely on water from the elaborate irrigation system.

For two decades or more this area has been able to harvest three crops annually. In the irrigated areas two crops of rice are grown; sometimes a vegetable or some other crop is substituted. The third dry crop is usually wheat or sweet potatoes. On dry land, two or possibly three crops a year are grown as well. Such intensive cultivation has been made possible through a favorable climate, irrigation facilities, and an increased availability of chemical fertilizer. It has also come about partially as a result of the population increase, which has provided additional labor to work the available land and to exploit previously undeveloped lands.

Although most of the original inhabitants from the mainland settled on the relatively fertile coastal plain where Hsin Hsing is located, the land resources could not be fully exploited because of their small number. Today, this situation is reversed, and in spite of large-scale irrigation, land scarcity makes it necessary for parts of expanding families, and even whole households, to move to urban centers to find work. Land scarcity in the whole Hsin Hsing area is so severe that even villagers who remain there must go outside the village to earn a livelihood for their families or to supplement the family income. Although the problem may be unusually acute in Hsin Hsing village and in some neighboring villages, it must nevertheless be recognized that it is characteristic of a large part of Taiwan. If the population of the rural areas of the island continues to grow at its present rate, the land scarcity which is now so severe in the Hsin Hsing area will undoubtedly become a major problem for the greater part of the Taiwan countryside.

4:Grajdanzev--45 S-4 (no date) 1942 Formosans
116, 312, 471, 655, 177.31 Japan
636.31

"In any case the success in irrigation should be recognized as conspicuous, and it is not less striking that it was achieved with the relatively modest investment of about fifty million yen by the state since 1908. But the state has gradually withdrawn from the field, leaving irrigation works to private enterprise and to special irrigation associations. In 1937 the irrigated area was divided among three groups as follows: 140,500 ko were irrigated from the public canals, 132,000 ko from canals belonging to private persons, 259,000 ko from those of irrigation associations. The last are under the influence of landowners and of the owners of enterprises processing agricultural products."

4:Grajdanzev--62-63 S-4 (no date) 1942 Formosans
116, 241, 312, 471, 177.24 Japan
636.24

"By putting irrigation works at the service of the farmers (at a price) the government, the local bodies, and the companies [63] impose a condition that a certain part of the newly-irrigated area should be devoted to sugar cane. This stipulation may be to the advantage of the farmer or to his disadvantage, but it is clear that he is not free to decide."

8: Chen--446 [2]
116, 175, 312

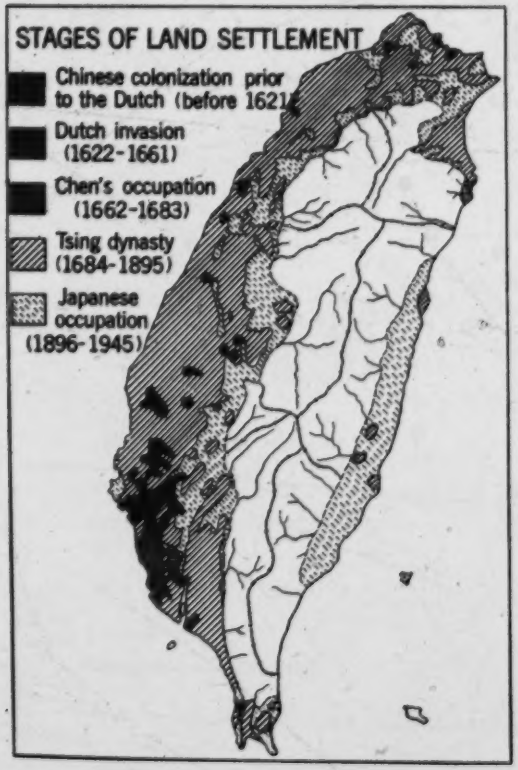

FIG. 4

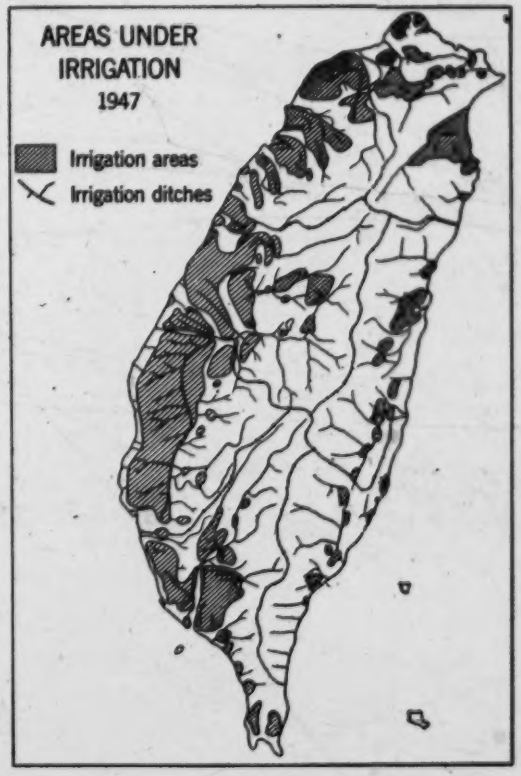

FIG. 5

8: Chen--454[2] N-3 (no date) 1951 Formosans
116, 132, 241, 312

"IRRIGATION

The general increase in per hectare production in Formosa in recent years is largely due to the progress of irrigation and additional fertilization, as well as to improvement of cultivation and seeding. Because of the great variation in rainfall and the location of the main agricultural region on the western coastal plan, where the winter is extremely dry and the dry season is long, irrigation is necessary. On the other hand, in summer, especially when typhoons pass over the island, the precipitous topography results in floods. The northeast corner, facing the northeast winter monsoon, has plenty of rain the year round; in fact, in many places the winter rainfall is greater than that of summer, and floods are not infrequent. Consequently, drainage and flood control are as important as irrigation."

8: Chen--455
116, 241 312

TABLE VIII—AREA UNDER IRRIGATION AND DRAINAGE IN FORMOSA
(*In hectares*)

YEAR	CULTIVATED AREA	IRRIGATION AND DRAINAGE	%
1903	534,157	150,456	28.2
1910	674,100	226,706	33.6
1920	749,419	305,270	40.7
1930	812,116	441,477	54.4
1940	860,439	530,113	61.6
1948	863,156	505,933	58.6

TABLE IX—CULTIVATED LAND UNDER IRRIGATION AND DRAINAGE, BY HSIENS
(*In hectares*)

HSIEN	1940 AREA	1940 %	1948 AREA	1948 %
Taipei	43,801	46.77	47,728	52.80
Hsinchu	89,077	60.02	56,269	37.37
Taichung	120,323	69.93	102,654	58.49
Tainan	178,612	66.70	222,160	85.10
Kaohsiung	77,194	60.62	61,500	46.60
Taitung	7,508	43.21	5,907	28.53
Hwalien	13,598	50.73	9,715	37.98

8: Chen--455-456 N-3 (no date) 1951 Formosans--1-2
116, 241, 312, 177.31 Japan
636.31

"To a certain extent, irrigation in Formosa was well developed long before the Japanese occupation. As recorded in the twenty-seventh volume of the 'General History of Taiwan' in the later years of the Tsing dynasty, the total number of irrigation reservoirs and ditches was 234. After the occupation the Japanese paid considerable attention to irrigation and drainage. In 1901 'Regulations Governing Public Irrigation Systems' were promulgated, and since then the area under irrigation and drainage has increased annually (Table VIII). In 1903 the total area under irrigation and drainage was 150,456 hectares, 28 per cent of the total cultivated area; in 1942 it had increased to 545,094 hectares, about 64 per cent of the total cultivated area. In area under irrigation and drainage Tainan is first among the hsiens (1948); Taichung comes next; then follow Hsinchu, Kaohsiung, Taipei, Hwalien, and Taitung; Penghu has no irrigation (Table IX). In percentage of cultivated land under irrigation and drainage Tainan is again highest, Taitung lowest.

Among irrigation works in Formosa, the Kianan system, in western Tainan, is the most famous. Construction was begun in 1920 and was finished in 1930, at a total cost of 54,013,000 yen. Today 140,000 hectares of cultivated land are irrigated from the Chenven and Chuhsiu Rivers. Since completion of the Kianan system, land price and land rent within its irrigating area have greatly increased. In 1920 the average land price was

313 yen per hectare, in 1935 it was 1144 yen; land rent rose from an average of [456] 36 yen per hectare to 128 yen; and the value of the yield per hectare increased from an average of 90 yen to 361 yen.

Before the Kianan irrigation system was completed, the average per hectare yield of the rice grown in the western part of Tainan was only 19 quintals. After its completion, because there were still limitations on water supply, paddy rice was grown with sugar cane and sweet potato in a three-year rotation; the yield increased to 27 quintals per hectare. The annual profit on paddy rice, when grown alone, had been 194 yen, totaling 582 yen in three years, but the profit on the rotation was 524 yen for the first year, 272 yen for the second year, and 454 yen for the third, totaling 1250 yen — more than twice the original three years' profit."

9: Yamasaki--227-228 N-5 (1896-1897) 1900 Formosans
116, 133, 312, 505

The Tamsui-kei, which together with its two tributaries on the right-hand side, the Shinten and Kilung, flows through the fertile plain of Taihoku, is important not only for watering the fields but also in communications. At its mouth lies the harbor of Tamsui, already mentioned. From there there always travel many Chinese ships and river steamers 20 km. farther up the river to Tai-tō-tei (Tautuatea), which is the largest freshwater port of Taiwan and is quite close to the capital of Taihoku. The trading vessels [228] can travel another 20 km. to the southeast as far as Taikokan (Takoham), a small town on the border of the native territory. The surroundings of the town of Taikokan are well known for camphor and other forest products. So one can always see many small boats with these products traveling from there to Taitotei on the swift flowing Taikokan-kei. The largest tributary of Tamsui-kei is the Kilung-kei. It flows through a longitudinal valley in the Tertiary range of Sanshōrei, a famous battlefield and a difficult mountain pass. It is about 60 km. long and navigable over most of its extent. Along the upper course of the Tamsui-kei river there are gold fields and bituminous coal deposits. The port of Kilung also lies quite close to the side of a small hill on the river. Thus this small but voluminous river also has considerable importance for transport in this region, where the roads leading into the country are in a bad condition.

10: Schumacher--223 [3] T-1 (ca. 1896) 1898 Formosans
116, 312

A good deal of stagnant water is found in all villages. Wells are located close to the dwellings which can thus easily be reached by the bacteria. The water of the wells is ordinarily clear but contains such a high percentage of animal salts that they are rendered unhealthy and disgusting.

10: Schumacher--224 T-1 (ca. 1896) 1898 Formosans
116, 241, 312

It has been mentioned that the agricultural population of Formosa is almost exclusively concerned with the cultivation of rice. It is indeed, the extensive cultivation of this product that has changed the character of the climate of Formosa. All the land utilized by rice fields is repeatedly flooded and very ingenious systems have been devised to assure an even distribution of the regularly flowing water of irrigation. The water trickles along in the most intricately arranged channels and often hydraulic engines are used in order to direct the water from one field to another. This continues until the heat of the sun has done away with all of it and the humidity of the air has been increased considerably. The Chinese bring all their manure and refuse to the area surrounding their settlements and therefore the air is most unhealthy and dangerous right there.

15: U.S. Navy--28 [12] (no date) 1944 Formosans
116, 312, 361, 311

"Availability of water supply (less favorable in the south) has also helped determine these settlement types. The fairly even distribution of rainfall throughout the year in the north makes springs and wells more constant and obviates the necessity of building near a permanent pool or deep stream. The method of land reclamation had an effect, too. Early militia, stationed in compact settlements, guarded the colonizers during the Koxinga period (early 17th century), and the soldiers themselves spent considerable time cultivating the land. The northern lowland districts, however, were developed in later years by private enterprise rather than by government policy. Ambitious land operators undertook to secure and clear areas unclaimed by the government. In turn, they subsidized tenants whom they brought in from the south, settling them on good land and building farmhouses for them."

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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the Japanese undertook primarily in anticipation of long-term benefit, without being able to justify its initial cost for many years. In terms of kilometer-tons of freight carried, the railroad made only partial use of its physical facilities until late in the colony's existence.[33] This sort of schedule was also followed in establishing a system of improved roads and trails over the island. In both cases, Japanese had to bear the burden of ambitious engineering projects when they could least afford it, for basic transportation networks are more valuable as networks than they are piecemeal.

312
653
[61]

Public irrigation was a project closely tied to agriculture, and followed a different timetable (see Fig. 7). After 1895 there was no large

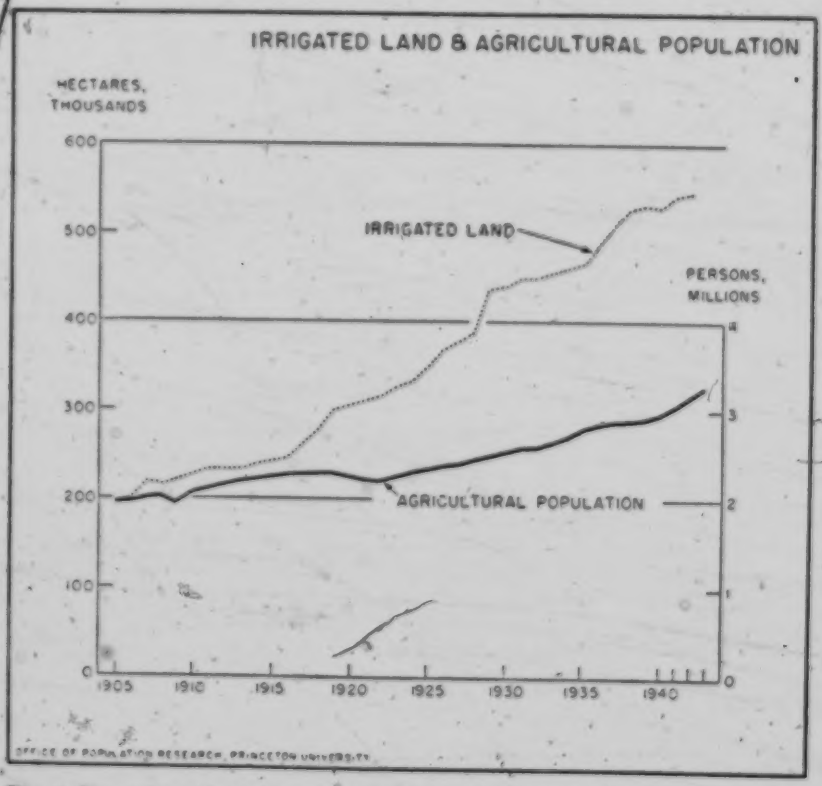

Fig. 7. Expansion of Irrigation and Agricultural Population in Taiwan, 1905-1943.

[33] Then it suddenly became overtaxed with cargo connected with the war, stemming from industrial growth and from Taiwan's role as a military base. See OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement* (1944), p. 60.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

supply of unoccupied land in Taiwan that could be drawn into cultivation, and so the needs of an expanding farming population and growing export demand had to be met by other means. The Japanese turned again to large investment to improve the effectiveness of the land that there was. The manner of constructing and upkeep of irrigation canals in Taiwan depended on mass labor. They were turned into an investment of labor, employed so as to produce an important form of capital equipment. The extent of irrigation more than kept pace with rural population growth while the Japanese were in control. Water for this purpose became indispensable in maintaining the output of farms. It was a hidden element in the improvement of rice and sugar yields, for the new varieties of seed that were developed were types that needed to be carefully irrigated.

Finally, the development of electric power was so closely related to the growth of Taiwan's newer industries that it should not be passed over without mention. Generation of electricity was one of the specialized heavy investments that formed the nucleus of the "industrial" progress after 1930. This is evident in a circumstantial way from the trends of capacity in generating power and the spread of factory employment (see Fig. 8). Factories in Taiwan came to depend on the cheap electricity that was developed at state instigation from water power. Judged from the size of their employment, the most important of the mechanized factories in the island were "food" (i.e., sugar) and metallurgical plants, which were the heaviest users of electricity.

As the next chapter will indicate, the Japanese broadened their objectives in Taiwan too late to put its human resources to best use in the new effort. Drawing the developed wealth of the island together into centralized control had turned out to be singularly advantageous. It had erected an entire structure of corporate organization from specialized financial services down to the coordinating of actual physical production of commodities. The Government-General had retained a close supervision over this structure, by licensing, regulation, and participation as a shareholder. As a program it quickly marshalled the production of Taiwan's farms into a profitable colonial enterprise.

When it came to pressing this development further, however, the Japanese made no real progress, for they had frustrated these aims in advance. Under agrarian conditions, industrial skills and experience in management are slower and more difficult to accumulate

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

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On the trip south from Taipei to Chang-hua City the train crosses several large rivers which originate in the interior mountains and flow west to the Strait of Formosa. The rushing torrents of water during and immediately after the rainy season dwindle to a trickle during the dry season, meandering through wide, sandy, and rocky river beds.

At Chang-hua City the traveler must leave the train for a bus headed southwest to the old port city of Lukang. Although the buses leave every fifteen minutes during the day, they are invariably crowded with people and their bundles of produce, fish, a chicken or two, or even building materials.

The thirty-minute trip in an old wooden Japanese bus is made entirely on dirt roads. The ride may be dusty or wet according to the season, but it is always bumpy and noisy. In the dry season strangling dust pours into the bus from all sides. During the wet season, there is always a possibility that the passengers will have to leave the bus and wade while the bus creeps slowly along over the flooded roadbed. Many menthol-distilling factories, brickworks, and small rice mills line the way. The bus must cross many small irrigation canals and maneuver around oxcarts. As the bus moves further away from Chang-hua City and approaches the seacoast area of Lukang, a change in the agricultural landscape, resulting from differences in irrigation systems, becomes more and more noticeable. In those places where there is still no irrigation system, there are large areas of dry fields.

After a half-hour wait in Lukang, the traveler boards another, similar bus for the trip to the village, which lies about three miles inland or southeast of Lukang. The uncomfortable fifteen-minute ride ends when the bus comes to a halt in front of the Hsin Hsing village store.

The houses in the village are constructed of bamboo, mud or fired brick, and plaster. The foundations and structural uprights are usually brick; the walls are a latticework of bamboo strips, filled in with plaster which is a mixture of mud and cow dung. The plaster filling is usually whitewashed. Sometimes the main supports are not brick but heavy bamboo poles. Newer houses, and the older houses of the wealthy, generally have roofs of cement tile, while the oldest and poorest houses have thatched roofs. Houses made of mud bricks are always thatched.

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

4:Grajdanzev--87-88 S-4 (no date) 1942 Formosans
116, 167, 313, 423, 659, 177.31 Japan
636.31

"When the Japanese occupied the island, the new administration immediately became interested in its forest resources. One part of forests was in the possession of the Chinese farmers, but the other, more important one was the area of the aborigines. The Chinese were required to register the documents of ownership of forest lands, and since in most cases they had no such documents—their possession and use of forests being based on [88] custom—this device enlarged the government forest reserves (1). It has

1. This is described in Section 3, Ch. 11, p. 1 of T. Yanaihara, Teikoku Shugishita no Taiwan, pp. 23-26.

already been mentioned that in order to use the forests, formerly occupied by the aborigines, the government began to settle the latter by force in the plains. It is said that the settlement of one family of aborigines on the plains cost only ¥70, and this may be compared with the ¥1,000 or more which are spent on the settlement of a Japanese family. Many hundred thousands of ko of forest were acquired in this way."

4:Grajdanzev--88-89 S-4 (no date) 1942 Formosans-1-2
116, 137, 171, 313, 435

"The present distribution of forests and waste lands (i.e. formerly forest or which can be afforested) may be seen from the following table:

Forest Area in Taiwan, December 1936
(1,000 ko)

	On the plains	In the aborigines' territory	Total
State: forests	399,086	1,312,562	1,711,648
waste land	195,529	308,137	503,666
Public: forests	12,112	...	12,112
waste land	3,529	...	3,529
Private: forests	219,095	1,568	220,663
waste land	45,131	...	45,131
Total: forests	630,293	1,314,130	1,944,423
waste land	244,189	308,137	552,326

The Japan Year Book say: 'Reckless cutting of trees was done by Chinese immigrants and this . . . resulted in the devastation of forest districts.' But it is surprising to find that the forest area on the plains (excluding waste land) is about three-quarters of the area under cultivation. However, the exploitation of this tremendous area—2,496,749 ko or about 5.8 million acres—leaves much to be desired. According to official

statistics. the total value of forest products in 1936 was only ¥15.1 million—much less than the value of fishery products or only two per cent of the gross value of the island's production. This sum was made up of the following items: [89] timber, ¥5.6 million; charcoal. 1.9 million; bamboo, 1.7 million; firewood, 2.7 million; and others 3.2 million. If these figures are correct, then of the 2,496,749 ko, one ko brings on the average only six yen, or less than half that in Japan."

9: Yamasaki--231 [3] N-5 (1896-1897) 1900 Formosans
116, 137, 313, 342, 501

As the name of Formosa shows, we find all over the island very heavy tropical vegetation.

Bamboo. This grows everywhere on inhabited plains and hills. The useful species become much thicker and larger than in Japan. It is used for many purposes. In the mountains the inhabitants build their huts of it, and in South Taiwan the fishermen build of it their boats and Teppai or Takamalan. These latter are curious sailing boats with raft-like bottoms of bamboo stems laid beside each other.

31: Hofmann--615 N-3 (1909) 1912 Formosans
116, 289, 313

In the Arisan Forest, the Chinese are exploiting some areas for the paper industry. They cut off the bamboo stems after one year and place them in grooves where they are exposed to caustic lime; after this mass has decomposed, it is crushed in a mill run by animal power and is ground by a second mill with the aid of water. Finally it placed in troughs where the workers stamp it with their feet until it has become a thin, fibrous, yellow paste. The wooden fiber is then taken out and made into thick yellow cardboard; next it is placed into kilns and dried. 1,200 of these cardboards of O. 75 square meters each is worth about 1. 70 K at the place where it is produced (70 sen in Japanese money).

243 optimum wheat production. Postwar research
433 has proved that wheat can be grown between rice crops in the regions centering on Taichung, Changhua, and Tainan, and the amount of land given to wheat production has been increasing gradually.

E. Production of Tea

245 About 90 per cent of the tea produced
433 on Formosa is exported to American and European markets. The production of tea and its planted acreage has been more or less constant since 1880. Commercial growing of tea began about 1865, and there are three major groups -- Paochung, Oolong, and black -- which are most successfully grown on the island.

VII. FORESTRY

313 Forests cover about 64 per cent of
433 the total area of Formosa because abundant rainfall is favorable to the growth of trees. The island's forests furnish all domestic lumber and prevent erosion in mountainous areas. Forestry products accounted for approximately three per cent of the total value of all goods produced in 1953. The total timber reserve, as of 1954, was estimated

313 at approximately 202,258,000 cubic meters.[14]
433 Broadleaved trees account for about 65 per cent of this reserve; the remainder is made up of coniferous trees. Only 4.3 per cent of the reserve is privately owned; about 90 per cent is owned by the government, which maintains complete control of the island's forestry. It is estimated that about 1,000,000 cubic meters of timber may be cut annually without impairing the total reserve. Production of timber in 1953 was estimated at 515,000 cubic meters; in 1954, at 546,000 cubic meters. Government policy has been to cut less than 50 per cent of available timber, and the government's reforestation program assures that an area equivalent to the timberland cut is replanted each year.[15]

VIII. FISHERIES

228 433 There are four main categories of fisheries on Formosa -- deep sea, inshore,

14. Ibid., No. 3, March 1955, p. 104.
15. Ibid., p. 106.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

"ECONOMIC DEVELOPMENT" IN TAIWAN

TABLE 7

433 GROSS RECORDED VALUE OF ALL PRINCIPAL TYPES OF PRODUCTION, 1915-1942

241 (Yearly Average for Each Period)

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Years	Total	Agriculture	Mining	Fishing and Forestry	Industry
A. Millions of Yen:					
1915-19	262.7	144.5	7.2	9.1	101.9
1920-24	411.5	207.0	12.0	23.0	169.5
1925-29	559.0	293.6	16.8	31.8	216.8
1930-34	525.5	255.8	15.5	26.5	227.7
1935-39	901.0	432.9	39.6	41.5	387.0
1940-42	1388.4	576.4	62.8	91.8	657.4
B. Percentages of Total:					
1915-19	100.0	55.0	2.8	3.4	38.8
1920-24	100.0	50.3	2.9	5.6	41.2
1925-29	100.0	52.5	3.0	5.7	38.8
1930-34	100.0	48.7	3.0	5.0	43.3
1935-39	100.0	48.0	4.4	4.6	43.0
1940-42	100.0	41.5	4.5	6.6	47.4

Source: *Statistical Summary*, Tables 225-229.

TABLE 8

GROSS VALUE OF PRODUCTION RECORDED FOR "INDUSTRY" IN TAIWAN, BY LINE OF PRODUCT, 1921-1942

433 (Yearly Average for Each Period)

Years	Total	Textiles	Metal Products	Machinery & Equip.	Misc.*	Chemical Products	Food Products
A. Millions of Yen:							
1921-24	165	3	3	4	20	13	122
1925-29	217	3	4	5	32	20	153
1930-34	228	3	6	5	29	18	167
1935-39	387	6	17	12	45	38	269
1940-42	664	11	46	30	91	80	406
B. Percentages of Total:							
1921-24	100.0	1.7	1.9	2.1	11.9	7.9	74.6
1925-29	100.0	1.5	2.0	2.2	14.7	9.3	70.3
1930-34	100.0	1.1	2.5	2.3	12.9	7.8	73.3
1935-39	100.0	1.5	4.5	3.1	11.6	9.9	69.4
1940-42	100.0	1.7	7.0	4.5	13.7	12.1	61.0

* Includes Printing, Wood Products, Ceramics, and Other.
Source: *Statistical Summary*, Table 269 and Table 270.

4:Grajdanzev--149 S-4 (no date) 1942 Formosans
116, 314, 439, 655, 177.31 Japan
636.31

"The government, desiring to utilize the unique position occupied by Taiwan in the supply of camphor, made it a government monopoly. However, in the last few years synthethic camphor production has made striking progress and the monopoly is now definitely broken. This does not mean that natural camphor will lose its market for the expanding celluloid industry can successfully absorb the surplus, but the former advantageous position of the Japanese government is lost."

6: Kirchhoff--33 [4] U-4 (no date) 1895 Formosans
116, 314, 563

Camphor is obtained in a curious way. It is the result of a never ceasing guerrilla warfare on the forest border, where the region inhabited by the Tsche-huan begins. Risking his head in the process, the Chinese frontiersman either sets out at random with his axe into the woods or he deceives the unsuspecting savage, after having intoxicated him with Sam-schu, by swindling out of him a certificate or authorization to fell wood in his district. The greater part of the camphor tree is then used as a building wood and the rest is hacked up into chips, from which commercial camphor is obtained by moist distillation.

9: Yamasaki--223 [2] N-5 (1896-1897) 1900 Formosans
116, 133, 135, 314

It is worthy of note that the wealth of the island depends chiefly on the Tertiary mountains. The most important minerals, such as gold, soft coal and petroleum, are found here. The camphor trees also grow in this region, for the most part.

9: Yamasaki--232-233 N-5 (1896-1897) 1900 Formosans
116, 137, 314

Camphor (Chang-nau or Nau in Chinese, Shōnō in Japanese) plays the most important part among the forest products, in fact the island is the largest provider of it. The camphor tree (Cinnamomum camphora Nees.) or, as one also says, the "king of the Formosan forests," is found in abundance in the luxuriant virgin forests of the northern half of the Kali chain and the neighboring regions of the Central Range, up to a height of 2,000 m. The trees attain an imposing height and sometimes, [233] with a diameter of 3 m., are between 40 and 50 m. high.

9: Yamasaki--233 N-5 (1896-1897) 1900 Formosans
116, 314

Here and there, on the border territories of the aborigines on the western slopes of the Central chain, there stretch out a number of devices for obtaining camphor, in which the Hakka, a hardy clan that formerly transferred themselves here from the province of Canton, prepare the raw camphor. The apparatus is very simple and not very well adapted to its purpose. Only the juicy roots and the lower pieces of the trunk are used, while the corona is thrown away.

9: Yamasaki--233 [2] N-5 (1896-1897) 1900 Formosans
116, 314, 655

The Japanese Government on the island has now made the camphor trade into a monopoly, like the obtaining of sea salt on the west coast.

10: Schumacher--226 [4] T-1 (ca. 1896) 1898 Formosans
116, 314

Many mountain spurs branch off the large inner mountain chain in the direction of the ocean. At one time all these heights were covered with camphor forests which were mostly exploited by the Chinese but partly by the Europeans. Today camphor is found only in the principal mountains and the increased demand for this valuable article of trade has induced the Chinese to search for new camphor forests.

On the first day (November 13) we advanced from Ling-ki-ho 24 kilometers toward Mt. Morrison through hilly or cultivated land. On the second day we marched on through grass three meters in height or through bamboo woods which in the valleys were replaced by banana woods. As we climbed higher, we soon reached the evergreen foliaceous woods. In the past they had apparently occupied areas now claimed by bamboos and banana trees. But the leafy woods could not maintain themselves when they were attacked by fire, and thus had to give way to the bamboos. In places where the bamboo forests were frequently subjected to fire, vegetation is limited to the bothersome kaya grass (Imperata arundinacea, Cyr.). In the foliaceous woods most of the trees are fig or camphor trees occupying large areas in many instances and mixed with palm trees and creepers. Here the vegetation is extremely luxuriant. The camphor trees reach a circumference of up to ten meters and a height of 50 meters. Ferns twenty meters high fight their way up between the trees, giant aerial roots hang down, and often we were at a complete loss facing the impenetrable confusion of the thicket. This virgin forest detained us for two days. I noticed that unfortunately many of the huge camphor trees had been hacked at by men in search for camphor and that they had died as a consequence of this treatment. As a result many of the giant trees had fallen or had been blown over by the wind. Only about five percent of a tree had been used for the exploitation of camphor and then thousands of trunks of precious wood had simply been left to rot. Of

course we immediately tried to stop such devastation and waste by strict regulations, but so far we have not yet the necessary personnel to create order in these dangerous parts of the country. In many cases the dead giants of the forest necessitated detours and we lost much time. We spent the second night in a lonely hut that must have been erected by camphor collectors.

I wish to stress the following points of our scientific observations:

1. The common notion that Mt. Morrison is of volcanic origin is erroneous. The main rock materials of the mountain and its environment are argillaceous schists and quartzite. The beds of the former strike with a dip of 70° from EN 10° to WS 10°. Therefore the northern slopes are much steeper than the southern slopes, and rock slides are frequent.

2. The height of the peak is not 12830 feet, as had been determined by means of trigonometric measurements from the sea, but our barometric observations showed that the height should be 14350 feet. It is likely that the peak itself, as seen from the ocean, may be hidden by another summit close to it.

3. At noon of November 21, our barometer stood at 453 mm and the thermometer at 4.5° centigrade with a relative humidity of 90%.

4. We did not find snow anywhere, not even in the rock fissures on the mountain. The notion prevalent among the Chinese of Formosa that eternal snow covers the mountain is due to the white quartz which from a great distance may be mistaken for snow.

5. The mountainland of Formosa by no means everywhere [473] consists of impenetrable virgin forest. The southern slopes of the mountains are often covered with extensive grass areas for which, in part, the fires started by the natives to facilitate hunting are responsible. Through the telescope from the peak, we have observed a good

deal of the mountain region, and have found that at the most forty per cent of the area visible from that position was occupied by forests.

6. Up to an altitude of 1700 feet, the lowland of Formosa is claimed by tropical vegetation among which ficus, pandanus, palm trees, and pineapple are predominant. From here to an elevation of 6000 feet above sea-level, we find sub-tropical evergreen foliaceous woods; camphor trees occur up to 6500 feet and the same is true of evergreen oak trees. At 6000 feet the region of coniferous trees begins; the species found are at first Cryptomeriae and Chamaesyparis then followed at 7000-8500 feet by firs (variety of Picea Glehni), and Tsuga diversifolia Maxim. at 8500-10, 500 feet. Finally from 10, 500 feet to the peak of Mt. Morrison, we find pine trees and juniperus and principally Abies Mariesti.

7. The abundance of water in the mountain lakes makes it possible to follow the watercourses into the region of the fir trees and the wood may be transported down the streams.

8. The exploitation of camphor on Formosa is still at a very primitive stage. If the methods of Kiushiu were employed production could easily be doubled.

9. The aborigines are by no means hunters. Only the chiefs and a few of their subjects go hunting. The main occupation of the people is agriculture. In particular,

sweet potatoes and millet are important products. In addition tobacco and a variety of pea are grown. The system of agriculture is communistic. Its advantages are that nothing is stolen because nobody is permitted to have private property. Both work and harvest are arranged on a cooperative basis.

10. The men are willing workers and like to use axes, which makes me believe that they would be good forestry workers.

From Toyen we travelled for 14 kilometers on a small vehicle on tracks (52 centimeter gauge); two Chinese coolies served to propel the car. We stopped at the steep bank of the Tamsui; the river rages far below, washing over the reddish-brown, muddy banks veined with large, round rocks. The rest of the way we went on foot or were carried in a sedan; the coolies were strong enough to carry these anywhere, always at the same regular pace. Every foot of land here has been utilized. Here and there we saw Acacia catechu trees; the sweet smell of their small, fragrant blossoms penetrated everywhere. The acacia, a small tree barely 10 meters high, is also important for tanning; this tree predominates in the plains of northern Formosa. Towards evening we came to Taikokan. (1) Our chief objection on this journey was to study the camphor production

1. The spelling of place names is based on the Japanese pronounciation; the Chinese use a somewhat different system of names.

of the Japanese Mitsui Company. The company had obtained a concession in the forested regions bordering on the territory of the aborigines. We did not succeed in this at first, since the region around Taikokan is a Chinese agricultural district.

37: Steere--316-317 S-3 (1873-74?) 1875 Formosans
116, 245, 311, 314

"The culture of tea has but just commenced, but has already reached considerable importance at Tamsni. The kind mostly cultivated is Oolong, which goes most of it to the United States. The cultivation can be carried to any [317] extent in the north of the island, as there are great plains of high rolling lands lying from Changwha to Tamsni, of the rich red clay which is so favorable for tea. These high plains are the home of the camphor tree, many trunks and stumps of which still lie over the ground, and of the wild tea-tree, of which I saw one specimen, with the trunk a foot in diameter and thirty feet high. The inhabitants gather the wild tea, but it is of bad quality, either by nature or from being badly cured. These high plains are now lying desert, as they cannot be irrigated, while tea is one of the few plants that needs no irrigation. These lands lie near the sea where transportation is easy, while much, or most, of the Chinese tea country is almost inaccessible, the tea having to be carried many days on men's backs and then transported by boats down rapid and dangerous streams, before it can reach a market. Camphor is exported from the island, and most of the mountain land seems to have camphor upon it, but the drug is only procured by the destruction of the tree, and there is no replanting done. There is also quite a trade with China in camphor planks."

42: Schetelig--392-393 T-2 (no date) 1868 Formosans
116, 135, 314, 433

Among the products of the country I mention those of special interest for Europeans; coal, camphor and sulphur, for indigo and hemp are sent to the Chinese market only. No great quantities of sulphur are found, but more could be obtained nevertheless by the improvement of the methods used. Camphor alone makes a treasure chamber of the island of Formosa. It is known that the Laurus camphora is found only in Japan and Formosa, and there only in some districts. Since only trees of a particular age can be used for obtaining the valuable resin, and since every time, unfortunately, the whole tree with trunk and branches is thrown into the subliming pot, one can foresee a time when camphor will go up in price in geometric progression [393] and when finally production will become so small that not even Germany alone can be provided with it. This matter of camphor production seems to me to be of no means inconsiderable economic importance...

4:Grajdanzev--107 S-4 (no date) 1942 Formosans
116, 315, 472

"There are also five companies engaged in gas utilization with capital above ¥500,000 each—Taiwan Gas, Tokokogyo, Taiwan Denka, Taiwan Kagaku, (chemicals) and Taiwan Menka (cotton), but it is not clear whether their capital is included in the ¥46.6 million mentioned above."

4:Grajdanzev--109 S-4 (no date) 1942 Formosans
116, 135, 315, 382, 177.31 Japan
636.31

"Since 1908 the Taiwan government-general and the Japanese navy have paid special attention to oil production in Taiwan, but up to now this branch of mining has been more productive of subsidies to oil producers than of oil itself. It was mentioned above that in 1936 the value of oil produced in Taiwan was ¥312,000 and that of gasoline, ¥456,000. However, in the 1937 budget of the government-general ¥1,005,000 was earmarked as subsidies for oil producers and prospectors. Daily production of oil in the last few years has been about 5,000 American gallons."

4:Grajdanzev--109 [2] S-4 (no date) 1942 Formosans
116, 135, 171, 315, 354

"From the local point of view the production of natural gas is more important[than that of oil--analyst]. The region richest in gas is Kinsui in Shinchiku province, and the gas is used for the production of benzine and carbon-black, as a fuel for sugar mills, and for domestic use. However, in 1937 only 7,411 families had gas facilities (as compared with 2,233,136 in Japan proper)."

4:Grajdanzev--109-110 S-4 (no date) 1942 Formosans
116, 135, 315

"Recently manganese ore was discovered in eastern Taiwan and plans were pushed for the production of magnesium from [110] sea water, but no concrete data are available as to the character of the deposits or the output."

4:Grajdanzev--110 S-4 (no date) 1942 Formosans
116, 315, 463

"There are no recent data on the number of workers occupied in mining but in 1930, according to the census of population, the number was 24,000 persons or about 1.4 per cent of the active population of the island."

A. Coal

135 316 The coal mines of Formosa form a belt, roughly northeast-southwest, in the northwestern section of the island. Although relatively abundant, the coal is generally low-grade bitumen; only a limited quantity is suitable for cooking purposes. Annual production is about 2,000,000 metric tons; the estimated total reserve is 670,000,000 metric tons, most of which is located near Taipei Basin. More than 80 per cent of the coal produced is for domestic consumption. The remainder is exported.

B. Petroleum.

316 Crude oil production is limited, and supplying only about one per cent of the island's requirement. There are five refineries on the island; Kaohsiung Refinery is the largest. The other four refineries are small in scale, located near oil fields in Miaoli, Chuhuangkeng, Chinshui, and Chutung. Kaohsiung Refinery, equipped with three crude distillation units, one thermal cracking and reforming unit, and one vacuum distillation unit, as well as auxiliary plants, is capable of processing 25,000 barrels of crude oil a day. The principal products are motor gasoline, jet fuel, kerosene, diesel fuel, heavy fuel oil, and asphalt. Geology experts generally agree that Formosa has ample oil reserves for domestic needs. Further exploration and the drilling of additional wells will contribute to increased production.

4:Grajdanzev--106-107 S-4 (no date) 1942 Formosans
116, 316, 433, 454, 177.31 Japan
636.31

"Mining occupies a relatively unimportant position in Taiwan. In 1936, the last year for which data are available, the gross value of mineral products was Y28,727,000, less than ten per cent of the value of industrial production and less than one per cent of total production. But as regards the capital invested, the attention given by the government to oil and, recently, to gold, and the subsidies lavished on actual and potential producers of oil, it occupies quite a prominent position. The caiptal of the mining industry at the end of 1937 was Y46,635,000 (1). There were twenty-four companies, [107] but, just

1. It is not clear whether this is subscribed or paid-up capital, or whether this sum includes reserves and other investments.

as in other fields, three companies dominated the field; Taiyo Kogyo, Taiwan Kogyo, and Keelung Tanko (coal), (2) each having capital of over Y5,000,000.

2. The paid-up capital of this corporation is Y7 million and out of 140,000 shares 43,473 are in the hands of Mitsui Kosan and 41,656 in the hands of Mitsui Bussan."

4:Grajdanzev--107-108 S-4 (no date) 1942 Formosans-1-2
116, 316, 433

"The relative importance of mining products produced in 1936 may be seen in the following table:

Metals or minerals	Value of output (1,000 yen)	Per cent of total	Volume
Gold	4,224	14.7	
Gold-silver-copper ores	5,881	20.5	
Placer gold	160	0.6	
Gold ores	2,078	7.2	
Total gold and gold ores	12,343	43.0	41,608 oz. (1936) 50,000 (1937)*
Silver	17	0.1	
Copper	470	1.6	2,299 tons (1934) 4,000 (1936)*
Coal	11,365	39.6	1,744,000 (1937)
Sulphur	87	0.3	1,071 tons (1935)
Phosphorites	1	—	
Petroleum	312	1.1	1,780 thous. gall. (1935)

* Approximate figures

Metals or minerals	Value of output (1,000 yen)	Per cent of total	Volume
Natural gasoline	456	1.6	1,480 thous. gall. (1935)
Carbon black	292	1.0	1,237 tons (1935)
Others	3,384	11.7	
Total	28,727	100.0	

As shown in this table, gold and coal make up about eighty-three per cent of the total value, and are thus of paramount importance. No explanation is available of the group 'others', [108] representing 11.7 per cent of the total. In 1935 this group made up only about four per cent and the sudden leap to 11.7 per cent is difficult to explain."

4:Grajdanzev--108 S-4 (no date) 1942 Formosans
116, 135, 316

"Gold mining was carried on in Taiwan before the Japanese occupation, but gradually, as the best areas were worked out, the amount of gold produced declined and remained low up to 1931, when the depreciation of the yen and the consequent rise in the price of gold made mining more profitable. At the same time the introduction of machinery in modern enterprises decreased costs and, as a result, in five years (1931-36) the value of gold produced was tripled. Since 1936 no data have been published, though the discovery of new ore deposits was mentioned in the newspapers (1). Placer gold is mined in

1. In the February 1940, issue, of Keizai Chishiki it is reported that in October 1939, in the eastern part of the island in the valley of the Takkiri (Keikoku), placer gold was discovered by a mining engineer. This placer deposit was estimated to contain one billion yen worth of gold. However, as early as 1907 Yokobori estimated the value of gold in placers and ores in Taiwan at four billion yen.

Taihoku and Karenko provinces, while ores containing gold in conjunction with silver and copper are found only in Taihoku province."

"Actual production of coal reached its maximum in 1927, when 1,850,000 tons were produced. After that a decline set in, the lowest point occurring in 1932 (1,355,000 tons). With the general revival, production rose to 1,550,000 tons in 1935 and in 1937 to 1,744,000 tons. However, the low development of industry and the poverty of the population combine to [109] make the marketing problem difficult. Production capacity is considerably larger than actual production, and as may be seen from the following table, the market for coal is chiefly outside Taiwan.

Consumers of Taiwan's Coal 1932-34

	Quantity (1,000 tons)	% of total
Industry	399.7	27.6
Railways	150.5	10.4
Homes	48.8	3.4
Shipping	498.8	34.4
Exports	330.0	22.8
Other	21.3	1.4
Total	1,449.1	100.0

Source: Taiwan ginko chosa kacho, quoted by K. Takahashi.

Thus only slightly more than forty per cent of the output is consumed in the island

itself. Taiwan is capable of producing more coal than it does now, but the limiting factor is the smallness of the domestic market."

Petroleum is obtained in various spots, but is inferior. According to old Dutch chroniclers, gold was formerly mined in the northeast; it is also said that, in the trenches dug to receive it, quantities of gold were obtained at the foot of the hills in this region, when the August rains had swelled the rivers. The river of Su-aô actually carries down from the mountains particles of gold in the sand. Other regions of the island have also proved to contain gold recently. Thus, in the southern part of the country, near Liang-tschian (within the territory still left to the natives), a landslide caused by heavy rains is said to have revealed a considerable quantity of gold. Most surprising was the discovery of goldbearing river sand while building a railroad bridge over a tributary of the upper Ki-lung, in 1890. At once thousands of Chinese hastened thither who had learnt goldwashing in California or Australia; and in the course of the last years the stones carried down by the Ki-lung have been most industriously exploited by these goldwashers, and it would appear with considerable success. But in the fixed rock no gold has been discovered there (Hosie, pp. 23 ff.).

But much greater profit is promised by the extraction of coal, which is met with far and wide in extensive beds, both in north and south (Hosie, p. 21). Up till now the only extraction of importance has taken place in the beds that can be traced along the northeast coast, on the right side of the Ki-lung River, through the Ki-lung Mountains as far as the mountain spurs of Pi-taô. The coal mines there lie close to the coast near

the port of Ki-lung, and provide, in part, a very good anthracite; formerly the coal was extracted only in Chinese fashion in galleries that sank diagonally, but since 1875 machines have been used.

7: Joest--55 [12] E-5 (no date) 1882 Formosans
116, 316

Formosa has abundant deposits of bituminous coal, sulphur, and oil. The Chinese, however, have hardly exploited these at all.

42: Schetelig--393 T-2 (no date) 1868 Formosans
116, 135, 316

Coal is found everywhere in narrow beds that are almost always horizontal and lie between graywack and clay schist. It is not of the first quality and is of light specific gravity, but when mixed with English or Australian coal it provides a fairly satisfactory fuel. Of the galleries I visited, some were 600 paces long before one reached dimensions of 6 to 7 feet vertically and 20 to 40 feet horizontally. Statements have also been made about precious metals that are said to occur in Formosa. I myself have seen nothing of the kind, but before all else I wish to stress the fact that the value of precious metals does not depend on their inherent worth alone, but on the location and the surroundings.

45:Stanford U. S-4, 5 1956 AD I Formosa
AD-1 AD1

II. MINERAL RESOURCES [16]

135 Although many of the mountainous areas in Formosa have not been fully explored, the island does not appear to be rich in mineral resources nor are those that are known available 328 in quantity. Formosa does produce coal, some 316 gold, copper, petroleum, salt pyrite, and 317 sulphur. Some coal and salt is exported. All of the other minerals are for domestic consumption. Smaller quantities of mercury, manganese, asbestos, mica, and gypsum are also produced. Bauxite, necessary for the aluminum industry, and gypsum, used in cement production, are imported, since they are not found in sufficient quantities on the island. 316 The production of the various mining industries 433 in 1953 and 1954 is given below.

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16. Statistical information in this section, unless otherwise specified, is in large part from Taiwan Economic Data Book, Vol. 3, Taipei, 1955, by Foreign Operations Administration, MIssion to China.

438
316
328

PRODUCTION OF MINING INDUSTRIES 1953-54 */

	1953	1954
Coal (1,000 metric tons)	2,393	2,100
Crude petroleum (kiloliters)	2,830	5,571
Natural gas (1,000 cubic meters)	30,925	28,962
Sulphur (1,000 metric tons)	3	6
Pyrite (1,000 metric tons)	23	25
Gold (kilograms)	772	670
Silver (kilograms)	651	624
Copper (1,000 metric tons)	13	10
Salt (1,000 metric tons)	162	369
Gypsum (1,000 metric tons)	6	3
Mica (1,000 metric tons)	24	20

*/ China Annual 1954, Vol. 3, p. 48.

135 Estimated reserves of selected minerals are given in the following table. It would appear, from this brief survey, that Formosa possesses limited mineral resources and few of the mineral requirements of modern industry.

A. Coal

135 316 The coal mines of Formosa form a belt, roughly northeast-southwest, in the northwestern section of the island. Although relatively abundant, the coal is generally low-grade bitumen; only a limited quantity is suitable for cooking purposes. Annual production is about 2,000,000 metric tons; the estimated total reserve is 670,000,000 metric tons, most of which is located near Taipei Basin. More than 80 per cent of the coal produced is for domestic consumption. The remainder is exported.

B. Petroleum.

315 Crude oil production is limited, and supplying only about one per cent of the island's requirement. There are five refineries on the island; Kaohsiung Refinery is the largest. The other four refineries are small in scale, located near oil fields in Miaoli, Chuhuangkeng, Chinshui, and Chutung. Kaohsiung Refinery, equipped with three crude distillation units, one thermal cracking and reforming unit, and one vacuum distillation unit, as well as auxiliary plants, is capable of processing 25,000 barrels of crude oil a day. The principal products are motor gasoline, jet fuel, kerosene, diesel fuel, heavy fuel oil, and asphalt. Geology experts generally agree that Formosa has ample oil reserves for domestic needs. Further exploration and the drilling of additional wells will contribute to increased production.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

TABLE 7

433 GROSS RECORDED VALUE OF ALL PRINCIPAL TYPES OF PRODUCTION, 1915-1942

241 (Yearly Average for Each Period)

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Years	Total	Agriculture	Mining	Fishing and Forestry	Industry
A. Millions of Yen:					
1915-19	262.7	144.5	7.2	9.1	101.9
1920-24	411.5	207.0	12.0	23.0	169.5
1925-29	559.0	293.6	16.8	31.8	216.8
1930-34	525.5	255.8	15.5	26.5	227.7
1935-39	901.0	432.9	39.6	41.5	387.0
1940-42	1388.4	576.4	62.8	91.8	657.4
B. Percentages of Total:					
1915-19	100.0	55.0	2.8	3.4	38.8
1920-24	100.0	50.3	2.9	5.6	41.2
1925-29	100.0	52.5	3.0	5.7	38.8
1930-34	100.0	48.7	3.0	5.0	43.3
1935-39	100.0	48.0	4.4	4.6	43.0
1940-42	100.0	41.5	4.5	6.6	47.4

Source: *Statistical Summary*, Tables 225-229.

TABLE 8

CROSS VALUE OF PRODUCTION RECORDED FOR "INDUSTRY" IN TAIWAN, BY LINE OF PRODUCT, 1921-1942

433 (Yearly Average for Each Period)

Years	Total	Textiles	Metal Products	Machinery & Equip.	Misc.*	Chemical Products	Food Products
A. Millions of Yen:							
1921-24	165	3	3	4	20	13	122
1925-29	217	3	4	5	32	20	153
1930-34	228	3	6	5	29	18	167
1935-39	387	6	17	12	45	38	269
1940-42	664	11	46	30	91	80	406
B. Percentages of Total:							
1921-24	100.0	1.7	1.9	2.1	11.9	7.9	74.6
1925-29	100.0	1.5	2.0	2.2	14.7	9.3	70.3
1930-34	100.0	1.1	2.5	2.3	12.9	7.8	73.3
1935-39	100.0	1.5	4.5	3.1	11.6	9.9	69.4
1940-42	100.0	1.7	7.0	4.5	13.7	12.1	61.0

* Includes Printing, Wood Products, Ceramics, and Other.
Source: *Statistical Summary*, Table 269 and Table 270.

6: Kirchhoff--33 [5] U-4 (no date) 1895 Formosans
116, 135, 317

Among the minerals, there should first be mentioned the sulphur of North Formosa. The sulphur is broken into blocks or it is cut out of sulphurous earth by melting.

12: Garnot--14 G-3 (1884-85) 1894 Formosans
116, 317, 361

There is a regular sulphur industry in the region around Masou and Kimpaoli. The population is very scattered in the interior of the massif but the largest centers are in the low area where the valleys open into broad plains which furnish the Chinese farmers with large fields for cultivation.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
AD-1
AD1

II. MINERAL RESOURCES [16]

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C. Salt

317 433 Salt, available in quantity, is not produced from rock salt but by the evaporation of sea water on the western seaboard. The fields are centered around the towns of Anping, Putai, and Peimen. About 5,000 hectares of land were used as salt fields in 1954; production amounted to 369,000 metric tons. Domestic markets require approximately 75,000 metric tons a year, thus leaving a sizable amount of salt for export.

III. ELECTRICITY

376 Formosa has a number of short, swift-flowing rivers which are estimated to possess a total gross hydroelectric potential of some 3,300,000 kilowatts. According to a report made by the Taiwan Power Company, approximately 12 per cent (378,000 kilowatts) of the gross poten-
377 tial had been developed as of 1955. Formosa's
375 estimated thermoelectric generating capacity is 142,550 kilowatts, giving the island, as of 1955, approximately a total generating capacity of 520,550 kilowatts. The peak load in that year is estimated to have been 360,000 kilowatts.

377 Only the Taiwan Power Company produces electric power for general distribution. Some government and private enterprises generate power for their own consumption; notable among these enterprises are the Taiwan Sugar Corporation, the Taiwan Pulp and Paper Corporation, the Taiwan Cement Corporation, and the Taiwan

656
438each year to meet emergencies and maintain a stable market price.

2444 Vegetables: Taipei, with a population
413of nearly 700,000 as of late 1955 consumes more vegetables (as well as other commodities) than other cities on the island. Vegetables for the city are produced in its suburban areas and in the regions of Taichung and Changhua during spring and winter. Yilan also supplies a sizable quantity of vegetables to Taipei (about 3,000 metric tons a year). Producers in the vicinity of Taipei sell vegetables directly to consumers or to local vegetable traders who sell to city dealers. In areas at a greater distance from the consumer, local vegetable traders sell to sales-agents, who sell to retailers at 6 per cent commission. The retailers clean and grade the vegetables before offering them to the public.

656 Salt: The Taiwan Salt Works, the sole
317producer of salt in Formosa, supplies salt directly to industrial consumers. The supply to general consumers is controlled by the Provincial Food Bureau, which has offices near railroad stations in the vicinity of the salt fields. The allotment of salt to licensed wholesalers is governed by directives from the Provincial Food Bureau.

4:Grajdanzev--103 [2] S-4 (no date) 1942 Formosans
116, 323, 339, 439

"Composition of Ceramic Products by Value in 1937
(1,000 yen)

Bricks	3,063
Tiles	923
Cement	3,264
Cement tiles	503
Other products	1,075
Total	8,828

As may be seen from the figures quoted, this industry is practically limited to the production of cement and bricks. Production of cement in 1936 was equal to 143,076 tons and about an equal amount is imported from Japan."

VII. METALLURGY AND METALWORKING

A. Aluminum

325 433 The Japanese, in the second phase of their economic development of Formosa, constructed aluminum plants at Kaohsiung and Hualien in order to take advantage of the abundant power available in the island. The Kaohsiung plant then had an annual capacity of 20,000 metric tons of aluminum ingot. (The Bayer process was utilized for ore separation.) During World War II, the plants were badly damaged. Following the war, the Kaohsiung plant was rebuilt, and what remained of the Hualien plant was sold to a fertilizer manufacturing company.

Formosa's only producer of aluminum ingot, the Taiwan Aluminum Corporation, has a productive capacity of approximately 8,000 metric tons of ingot and 4,000 tons of sheet aluminum at the Kaohsiung plant. Aluminum goods, such as home appliances, kitchen utensils, and quartermaster supplies for the military, are produced by 77 small privately owned companies and one government-owned company.

Of the raw materials needed for the production of aluminum, bauxite is imported from Bintam Island, Malaya, and petroleum coke is imported from the United States.

B. Steel and Iron

327 433 The island of Formosa produces little iron ore. Production of pig iron, derived from

327 imported iron ore, amounted to 8,6000 metric
433 tons in 1954; reclaimed pig iron, derived from scrap iron, amounted to 8,672 metric tons in the same year. The island has the facilities to produce 13,000 metric tons of pig iron and 15,290 metric tons of reclaimed pig iron annually. Small iron and steel plants (foundries, blast furnaces, rolling mills, electric furnaces) are located in Kaohsiung, Taipei, Patu, Tainan, Kangshan, Sungshan, Hualien, and Keelung.

325 Production of basic metals is given below:
327
433

PRODUCTION OF BASIC METALS */

(in metric tons)

	Aluminum ingot	Pig iron	Reclaimed pig iron
1948	2,509	9,221	3,284
1949	1,317	1,559	4,275
1950	1,764	78	5,600
1951	2,984	733	5,385
1952	3,856	620	6,415
1953	4,915	3,927	6,929
1954	7,131	8,591	8,772

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

45:Stanford U. S-4, 5 1956 ADI Formosa
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NUMBER OF PERSONS ENGAGED IN MANUFACTURING AND MINING AS OF DECEMBER 1951 IN FORMOSA*

Hsien	Manufacturing	Mining
Taipei (incl. Yangmingshan Adm)	67,963	40,686
Yi-lan	5,449	-
Tao-yuan	5,800	941
Hsin-chu	8,382	2,363
Miao-li	8,797	4,465
Tai-chung	17,880	66
Nan-tou	3,148	-
Chang-hua	8,909	-
Yun-lin	6,568	-
Chia-yi	11,743	-
Tai-nan	24,027	256
Kaohsiung	28,109	-
Tai-tung	2,615	-
Hua-lien	1,117	39
Peng-hu (Pescadores)	1,343	-
Total	206,740	49,756

45:Stanford U. S-4, 5 1956 AD1 Formosa
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* Taiwan Provincial Government, The Structure of the Taiwan Economy, Taipei, 1953.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

"In 1937 the gross value of products of the metal industry was made up of the following items (in 1,000 yen):

Gold and silver refining	4,101
Gold and silver goods	2,588
Alloys	1,710
Foundry	1,081
Tin cans	3,175
Construction and household goods	623
Total	13,278

As may be seen, this group consists chiefly of gold and silver produced and refined on the island--a branch of industry which has a very close connection with mining--and of tin cans manufactured for Taiwan's export industries. We do not know whether Taiwan' statistical service puts the production of aluminum in the metal group or in the chemical group, but it will occupy an important place in the war industry of Taiwan in the near future. The Nippon Aluminum Company was established in June 1935 with a capital of ¥30 million. Its 600,000 shares were divided between the biggest concerns in Japan: 83,500 shares went to Mitsubishi Kogyo, 45,000 to Mitsui Kosan, 44,000 to Taiwan Denryoku (described below), 30,000 to Mitsui Gomei, 15,000 to Mitsui, etc. Besides the paid-up capital there were reserves of ¥733,000, and borrowed capital amounting to ¥2,300,000 on September 1, 1939. The plants in Takao and Karenko use bauxite ore

from the Netherlands Indies and electricity is supplied by Taiwan Denryoku. Data on production are not published, but in one Japanese publication (1) it was stated that the

1. Kogyo nenkan, 1939.

capacity in 1938 was 8,000 tons, but that after expansion it will be 10,000 tons. Judging by the distribution of profits it went into operation in the second half [103] of 1937 and in 1939 profits amounted to seventeen per cent, of which eight per cent was distributed."

4:Grajdanzev--191 S-4 (no date) 1942 Formosans
116, 328, 724

"It should be pointed out also that since 1936 the government spared neither money nor efforts in development of gold production on the island, and, judging by the official reports, (which do not give actual figures of production) was quite successful. However, this success is hardly success in war-time, because of Japan's isolation and consequent inability to export the gold. Another important industry—production of aluminum—is dependent upon the import of bauxite from the Netherlands Indies."

45:Stanford U. S-4, 5 1956 AD I Formosa
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II. MINERAL RESOURCES [16]

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116, 323, 339, 439

"Composition of Ceramic Products by Value in 1937
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Other products	1,075
Total	8,828

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B. Alkali Products

385 433 The alkali industry, in support of various other chemical industries, has been expanding steadily since World War II. Caustic soda and soda ash are used in pulp-making, aluminum-making, soap-making, and glass-manufacturing. Chlorine is used for the production of bleaching powder, insecticides, and so on. Production of some alkali products are given in the table below.

ALKALI PRODUCTION *

	Caustic Soda	Soda Ash	Liquid Chlorine	Bleaching Powder
1952	8,526	609	1,286	1,526
1953	10,181	915	1,823	1,330
1954	14,487	1,163	2,667	1,787

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. Cement

339 433 Formosa's sole domestic source of cement, the Taiwain Cement Corporation, was established in 1946 when the government consolidated and reorganized three cement works and two cement-products plants formerly owned by Japanese concerns. In 1954, the management of the corporation was transferred to private ownership. The total productive capacity of the three plants -- in Kaohsiung, Suao, and Chutung-- was estimated at 670,000 metric tons a year; actual production

339 in 1954 was approximately 536,400 metric tons.
433 With the exception of gypsum, which must be imported, all the raw materials required for the manufacture of cement can be had locally. (According to production estimates for 1955, approximately 12,900 metric tons of gypsum are required in order to produce 500,000 metric tons of cement.)

D. Paper

289 Waste timber, from which pulp is made
433 for the manufacture of paper, is easily available in Formosa, and the paper manufacturing industry was extensively developed under Japanese rule. As of 1954, there were 40 paper mills in Formosa; the largest is the Taiwan Pulp and Paper Corporation. The corporation produced 12,900 metric tons of paper in 1954; all other mills combined produced a total of 14,620 metric tons.

E. Other Chemical Products

381 The yearly production of other chemical
433 industries on Formosa are listed in the following table:

339 656 435 Cement: Cement was originally distributed under the supervision of the Cement Distribution Secreening Committee of the Provincial Department of Reconstruction. To effect tighter control over the sale and use of all building materials, cement was placed under the supervision of the Provincial Supply Bureau in September 1953. The bureau determines allotments to building material traders' associations and cement traders' associations throughout the island; they in turn allocate cement to their members, and the members to consumers. The wholesale price is fixed, currently at NT $30 per bag (about 50 kgs.); however, the retail price is allowed to fluctuate according to supply and demand -- about NT $50 per bag in early 1955, and about NT $40 in late 1955.[4]

655 Tobacco and Alcoholic Beverages: Production and distribution of these goods are completely under government monopoly. The Taiwan Tobacco and Wine Monopoly Bureau has eleven branches and two business offices, which handle distribution of these commodities to three types of wholesale establishments -- the city, county, and town co-operatives; the

4. Kung-shang Yüeh-k'an [Industry-Commerce Monthly], Vol. 3, No. 10, p. 94; The Central Daily News, Dec. 4, Dec. 15, 1955.

6: Kirchhoff--35 U-4 (no date) 1895 Formosans
342

...most of the houses are built of bamboo or clay, only a few of brick. The roofs of the houses, which are without exception low, are of straw or slate, and cannot be seen for the seven or eight months of the worst heat, for they are then covered by the huge sheets of canvas that are stretched over the streets.

12: Garnot--19 G-3 (1884-85) 1894 Formosans
116, 342, 363

Kelung is a city of 10,000 inhabitants that is squeezed between the roadstead and the mountain, but it resembles all Chinese cities in that it is simply an agglomeration of houses built of wood, brick and mud. The narrow fronts are carved and painted in various colors and they are crowded together in dark alleys which are paved with broad granite blocks. The upper floors project over the street ... until they touch in some places and they make it difficult to obtain any fresh air. Wooden bridges connect the various sections that were built on the little islands dotting the estuary.

Except for the important group of houses at Loan-Loan or Wang-Wang the dwellings in the region around Kelung are scattered here and there at the foot of the hills or in the groves composed of bamboo, banana or areca trees. Most of the houses are fairly neat and they are made of a bamboo framework that is covered with rice straw. The corner supports are made of several beams that were taken from the neighboring forest and planted securely in the ground. The skeleton is a bamboo wattling and the whole thing is solidly tied together with little cords and pegs of the same kind. A broad pent-roof runs around the dwelling and protects it both from the sun and the rain. Very few of these houses have windows and they are all equipped with movable doors which can be dropped at night. The floor is covered with a kind of concrete made of lime and sand.

The land around the dwelling is enclosed by a bamboo hedge [20] and it is an orchard as well as a vegetable garden; you see banana trees, arecas, oranges and lemons, then there are litchis and mangoes, sweet potatoes and the kind of taro that grows in swamps.

15: U. S. Navy--28 [4] (no date) 1944 Formosans
116, 342, 353, 513

"Certain features are common to the majority of country houses in Taiwan. The usual construction takes the form of three units, a main room or building, with two wings closely adjoining to form three sides of an open courtyard. The doors and windows opening on this court are larger than the few doors and windows opening on the outer side, and these latter are usually closely barred. The main room or building is open to the roof and contains the altar bearing the ancestral tablets and perhaps a small shrine. Immediately behind the altar or in rooms opening into the main room, the eldest members of the family sleep and keep their personal effects. Passages to right and left lead to kitchen rooms and the sleeping and living quarters of other members of the family."

15: U.S. Navy--28 [5]
116, 342, 592, 352, 354

(no date) 1944

Formosans

"Usually at least three generations are resident in a house. If the family is a large one, there are many additional rooms and buildings, all arranged symmetrically at the side and back of the main court. If the [MC: country] house is a large one and quite prosperous, there may be a series of courts one behind the other. The roof of the main building or room dominates the whole structure. The floors are tile, brick or tamped earth. Lighting arrangements are poor. The house is furnished with chairs, tables and beds in Chinese style, which is not unlike Occidental furniture."

15: U.S. Navy--28 [6] (no date) 1944 Formosans
116, 342, 352, 262

"Poorer [MC: country] people live in huts made of unbaked clay bricks, with heavy thatched roofs, tamped earth floor and the most meager furniture of benches and tables. Pork, rice and a variety of cooked vegetables form the basis of their diet."

9: Yamasaki--231 [3] N-5 (1896-1897) 1900 Formosans
116, 137, 313, 342, 501

As the name of Formosa shows, we find all over the island very heavy tropical vegetation.

Bamboo. This grows everywhere on inhabited plains and hills. The useful species become much thicker and larger than in Japan. It is used for many purposes. In the mountains the inhabitants build their huts of it, and in South Taiwan the fishermen build of it their boats and Teppai or Takamalan. These latter are curious sailing boats with raft-like bottoms of bamboo stems laid beside each other.

5: U.S. Navy--28 [8] (no date) 1944 Formosans
16, 342, 362

"Most urban houses have a narrow frontage in proportion to their depth--14, 16 or 18 feet re usual, with depths of the building ranging from 24, 30 to 36 feet. A court may intervene and a second or even a third building of the same proportions be added beyond intervening courts. Houses look much alike and since they abut upon one another, they present a tenement-like aspect. They are shabby and often quite unclean. In towns and cities he average building is two stories high. Sometimes the space above the street arcade s open, forming a balcony."

15: U.S. Navy--31 (no date) 1944 Formosans
116, 511, 177, 563, 342

"The Japanese have the highest average living standards. Insofar as their mode of living is concerned there is little to distinguish the Japanese here from the Japanese in the homeland, except that the wage scale of the former is higher. Without modification the Japanese retain their native style of architecture, which is admirably suited to a subtropical climate. A platform is raised about two feet over the ground. On it a layer of thick straw mats is laid. A tile roof is erected over this and the space between roof and floor enclosed by light planking and sliding panels of glass panes or paper."

31: Hofmann--604 [2] N-3 (1909) 1912 Formosans
116, 133, 231, 241, 311, 342

We travelled from Taihoku by train for 1 1/2 hours until we came to the small village of Toyen. Here the land is almost level and has been utilized to the fullest extent. The extensive rice plantations were green and threw into relief the picturesque houses of the Chinese; these are solid brick houses with a curved roof reminiscent of Buddhist temples. In the canals, for which the tributaries of the Tamsui are utilized, there are numerous tame ducks. In the small ponds one may see grey water buffalo, a domestic animal which occurs in large numbers of Formosa. It cannot be compared to European cattle as regards its usefulness in agriculture, and so far attempts to domesticate it have not been successful. Many times I saw the patient Chinese peasants threatened by the buffalo or saw that the animal had broken loose. Next to the rice fields there are extensive tea plantations. This is the region where the famous Oolong tea is produced. There are also banana and pineapple plantations on a smaller scale. The houses are surrounded by slender bamboo trees, and everywhere one may see betel palms, a tree which grows everywhere on Formosa.

31: Hofmann--630-631 N-3 (1909) 1912 Formosans
116, 342, 423, 556

In Tainan I stayed in an old house which belonged to a member of the Chinese nobility; there I was able to observe the luxury with which the Chinese surround themselves. Many of the Chinese have accumulated considerable wealth on Formosa; there are several millionaires among them who had remained after the conquest of the island, while others fled to the mainland with all their possessions. In contrast to the Japanese, who throughout their history have looked down upon capitalists and traders, who even despise merchants and today still do not always accept them socially, the Chinese are all motivated by a desire for profit. The pioneers among them took large areas of the most fertile land from the natives; these were leased and subleased to later immigrants. Thus when the Japanese took possession of Formosa they encountered a complicated system of land ownership and tenure which yielded great profits to some individuals. In the management of real estate problems, [631] which resulted in the large-scale exploitation of tenants and subtenants, the new regime has constantly taken the side of the exploited and it has succeeded in bringing order into the system as a whole. There is still a wide field of activity for the Chinese capitalists, however, since they apply only to their compatriots for credit, never to the Japanese.

31: Hofmann--631 [2] N-3 (1909) 1912 Formosans
116, 342, 351, 871

These Chinese capitalists know how to live luxuriously; their houses are beautiful even by European standards. A drive leads from the street to a large garden enclosed by the house and annexes. There are high, cool porticos leading to the residence proper. Many of the houses have a small theater. Since in former times there were no public schools in China, or at least none that were attended by the children of the rich, the Chinese here have set aside one wing of the building for the children and their tutors. As the Chinese ideal is to have a large family and this ideal is often realized, this wing is usually very large. In the center of the courtyard, there is a pond. There are small arbors and arcades arranged in excellent taste. From the terrace one has a beautiful view of the estate, which is hidden from the observer on the street. The house where I stayed had been made into a Japanese hotel but the features characteristic of the original estate had been retained.

15: U.S. Navy--28 [7] (no date) 1944 Formosans
116, 351, 343

"Around the back and sides of the door-yard [MC: of the huts occupied by the poorer people] are to be found thick hedges of bamboo, usually of an impenetrable giant variety (bambusa stenostachya Nakai), which affords a resilient barrier to attack from without. In front of the open court there is often found a semi-circular pond, used for breeding fish as well as for protection. The entrances to such a houseyard are few and narrow. Within the enclosure are the well, fruit trees and gardens, chicken pens and pig sties and at the back or side, the open-pit latrine."

Kelung stretches along the roadstead and it is marked off into several districts. In the northern part the European buildings form a line that follows the beach and they are backed by the last slopes of the Ber lines. There are two handsome buildings for the customs but the rest are uninteresting; they are simply ware-houses belonging to English or German companies from Amoy or Hong Kong. Farther south the Chinese district called Soo-Wan is connected to the citadel and the Chinese city by a narrow stone causeway bordering the beach. A native cemetery with cement tombs runs along this causeway and finally there is a porch with several steps leading up to the Yamen or citadel. It is surrounded by a [page 17-18 contains photograph, omitted] [19] wall of coarse sandstone that is irregular in its outline. About fifteen sheds of wood and mud with tile roofs are usually adequate for the barracks. They surround the governor's dwelling. On the southern side a wooden door opens out toward the city. It is separated from the mansion by a river that is crossed by a stone bridge; this was not finished when the expedition visited the island.

4:Grajdanzev--170 S-4 (no date) 1942 Formosans
116, 171, 345

"In Japan there were 32, 338 theatres in 1937 and 94, 853 cinemas (including temporary ones). In Taiwan there were only 120 theatres and 19 cinemas."

4:Grajdanzev--140 [2] S-4 (no date) 1942 Formosans
116, 346, 563, 659, 177.65 Japan
636.65

"The shrines and temples mentioned above are not Chinese temples, but Japanese shrines, including a shrine to the spirits of the war-dead on which 100,000 yen was expended in 1939. It may be interesting to note that construction of Japanese shrine in Taito (1937-1939) was to cost 1,078,000 yen, while the appropriations for the Chinese temple of Confucius in Taihoku (1935-1936) amounted to only 20,000 yen."

4:Gra lanzev--169-170 S-4 (no date) 1942 Formosans
116, 171, 217, 346, 563

"Let us now consider briefly other cultural institutions in Taiwan. Below we give the data on libraries in Japan and in Taiwan.

Libraries in Japan and in Taiwan, 1936

	Japan	Taiwan
Number of Libraries	4,730	86
Books	12,647,973	369,961
Readers	24,124,344	886,084
Readers per year per capita of population	0.34	0.16

Source: Dainippon teikoku nenkan.

The libraries in Japan are not visited very often—on the average only one out of three persons visits a library once a year—but in Taiwan only one out of six persons finds his way to a library once during the year. There is nothing astonishing [170] in this when we recall that there are only eighty-six libraries for a country with a population of six millions; it means that only the cities, where the Japanese are concentrated, are supplied with them."

12: Garnot--19 [2] G-3 (1884-85) 1894 Formosans
116, 346, 361

On the outskirts of the city [MC: of Kelung] you see a few isolated pagodas which are surrounded by ancient trees; they are a delightful diversion from the filth of the Chinese streets. The city has a rather unusual pagoda, which is on the northern side across from the roadstead. On each side of the entrance you see two enormous granite dragons that have a strange appearance. Several feet away some finely carved bronze caruncles sleep in the dust of the centuries; they bear inscriptions dating from the time of Charles the Fifth.

15: U.S. Navy--28-29 (no date) 1944 Formosans
116, 346, 363, 499, 177.33 Japanese
636.33

"In many villages, especially the elongated type built between rivers and irrigation canals, the temples of the patron saints are constructed at corners or bends in the main streets, making them visible from some distance. These have proved a great obstacle in the construction of new streets for motor-[29]ized traffic. Public opinion strongly opposes drastic changes.

The Japanese have not always been considerate of popular sentiment in clearing lands adjacent to some Japanese enterprise. In road-building, Formosan cemeteries have frequently been disturbed and the owners of burial plots forced to move graves to land of little economic use. Many temples and large mansions obstructing government projects have been torn away with little effort to explain or to compensate."

15: U.S. Navy--29 [2] (no date) 1944 Formosans
116, 361, 349, 177.36 Japanese
636.36

"Before the Japanese took over the island, all the cities and many of the towns were surrounded by great walls, pierced by well-defended gates. The Japanese have torn down most of the walls, preserving only the gates as decorative monuments. Settlement and development have gone forward rapidly. The result is a quadrilateral or circular arrangement of city streets within the old town areas and a very irregular pattern of streets and alleys developed outside. The Japanese have been cutting through old settlements and imposing a well-developed grid and radiation system of streets and roads upon many towns."

15: U.S. Navy--29 [3] (no date) 1944 Formosans
116, 347, 363

"City streets are paved with asphalt. Shady, cool arcades provide shelter in all weather for pedestrians and displays of shop goods. Although they darken the interiors of buildings, they serve a useful purpose in all seasons."

4:Grajdanzev--173-174 S-4 (no date) 1942 Formosans
116, 171, 278, 744, 759

"In the section on education it was shown that Chinese college students from Taiwan prefer to study medicine because this is a profession in which it is relatively easier to establish oneself than in others. Now we see that in spite of this attraction [174] there are two and a half times as many physicians per 10,000 population in Japan as there are in Taiwan. The same is true of midwives, though the need for midwives is greater in Taiwan, where the birth rate is one and a half times as high as in Japan. On the same per capita basis there are four times as many dentists and thirteen times as many pharmacists in Japan as in Taiwan. These and many other figures which could be quoted show that as regards health services Japan is several times better served than Taiwan. And actual conditions are even worse than these figures suggest because the equipment of hospitals is poorer and the physicians rely chiefly on advice and prepared drugs, which are sold by some 6,600 stores as well as 6,700 peddlers."

31: Hofmann--608 N-3 (1909) 1912 Formosans
278

For barter between the aborigines and the Chinese, the antlers of deer killed by the latter are an important article of exchange. The Chinese pulverize these and use them for medicinal purposes; they pay a high price for them.

occupation in the first half of the seventeenth century, rice and sugar have been the staple products of the island.

Under Chinese rule in the eighteenth and nineteenth centuries, a constant influx of immigrants from the mainland reclaimed the extensive western plains of Formosa for the cultivation of rice and sugar. The foothills surrounding the plains were terraced for the growing of tea. Further in the mountains, camphor was gathered from the dense forests. In the more isolated mountain region, aboriginal tribes practiced hunting and slash-and-burn agriculture. Coal mines were operated for a time by the government but were later abandoned.

Except for a 60-mile stretch of railway between Keelung and Hsinchu, communications was primitive until the present century. Rafts, boats, and junks were used along the coast and on lakes and rivers. Overland, the inhabitants were obliged to travel either in man-borne palanquins[3] or ox-drawn carts. Western merchants handled a small international trade, consisting of tea, camphor, and sugar.

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3. A closed litter commonly used as a conveyance in China.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

eating, while continuing to push more food on him. When old people talk, even though the younger people may consider their words pure nonsense, they merely smile and agree. When the evening is over there is usually some young grandchild waiting to lead the old man back over the dark paths to his house.

Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

ILLNESS, DISEASE, AND MEDICINE

As has already been shown in Chapter 2, the tremendous increase in population on Taiwan is a reflection of the great reduction in the death rate, which results, primarily, from the lower incidence of fatal diseases. The control of disease has been effected by such factors as public health programs which have helped eliminate diseases like cholera and malaria, an increase in the number of Western-style doctors, an increased reliance on Western medicine and medical techniques, and somewhat better sanitation as a result of education of the public and governmental enforcement of health standards.

It was during the Japanese period that Taiwan saw the advent of Western-style doctors and medicines, especially in the 1930's. However, they were few, and their practice was limited mainly to the wealthy. The benefits of their knowledge, therefore, and the everyday use of Western-style medicines did not reach many of the rural people. During this period the rural people continued to rely primarily on Chinese doctors and herbal medicines, as well as magical cures effected by shamans and healing priests. (The magical techniques are discussed more fully in Chapter 8.) However, public health measures introduced by the Japanese government to combat epidemic diseases did benefit

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA

Since March 1948, a refining process has been instituted in the government-managed camphor industry.[37] In areas where Taiwan and Japanese economy complement each other, a trade agreement was signed with Japan on September 6, 1949 under which Taiwan sugar, salt, camphor, cement, and pears are to be exchanged for Japanese consumer and capital goods at an estimated annual volume of US$100,000,000.[38]

Government-owned and -operated enterprises dominate Taiwan's industrial field. As of 1950, there were 79,058 publicly operated units employing 63,065 workers. Available statistics place privately owned industrial units at approximately 67,660 employing 53,310 workers. Production figure for public industries in 1949 is about NT$718,000,000 as against NT$600,000,000 for private enterprises.[39]

This situation may be accounted for by the predominant position of Japanese-owned industries in Taiwan which were acquired by the Chinese Nationalist government following the Japanese surrender in September 1945. Since then, petroleum, aluminum, gold and copper mining, salt, coal mining, and steel works have been taken over by the National Government. Power, sugar, fertilizer, cement, alkali, pulp and paper, shipbuilding, and machine tools have been jointly operated by the national and provincial authorities on a capital division of 6 to 4. Some smaller mining units, camphor, tobacco and wine monopoly, and agricultural and forestry enterprises have been managed by the provincial government. The rest, being of smaller scale, have either been taken over by county or municipal govern-

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*Reconstruction**, Vol. 2, pp. 473–74, where the total 1948 demand was estimated to be 141,727 tons.

[37] For a general description, see *Taiwan Reconstruction**, Vol. 2, pp. 436–46.

[38] For detailed listings, see *Taiwan Reconstruction**, Vol. 2, pp. 357–61.

[39] *Taiwan Today*, pp. 121–22.

[p. 219(B)]

10: Schumacher--223 [2] T-1 (ca. 1896) 1898 Formosans
116, 351, 361, 764

The Chinese villages in the lowland plain are mostly hidden in bamboo jungles. Some of them are situated at the foot of mountain spurs where they are well protected against the weather. They are surrounded by burial grounds and enclosed within high brick walls. Wide and swampy ditches gird these unimpressive places, whose inhabitants make a meager living. But for centuries the Chinese have preserved the ruins and trash with sentimental care.

Except for the important group of houses at Loan-Loan or Wang-Wang the dwellings in the region around Kelung are scattered here and there at the foot of the hills or in the groves composed of bamboo, banana or areca trees. Most of the houses are fairly neat and they are made of a bamboo framework that is covered with rice straw. The corner supports are made of several beams that were taken from the neighboring forest and planted securely in the ground. The skeleton is a bamboo wattling and the whole thing is solidly tied together with little cords and pegs of the same kind. A broad pent-roof runs around the dwelling and protects it both from the sun and the rain. Very few of these houses have windows and they are all equipped with movable doors which can be dropped at night. The floor is covered with a kind of concrete made of lime and sand.

The land around the dwelling is enclosed by a bamboo hedge [20] and it is an orchard as well as a vegetable garden; you see banana trees, arecas, oranges and lemons, then there are litchis and mangoes, sweet potatoes and the kind of taro that grows in swamps.

15: U.S. Navy--28 [7] (no date) 1944 Formosans
116, 351, 343

"Around the back and sides of the door-yard [MC: of the huts occupied by the poorer people] are to be found thick hedges of bamboo, usually of an impenetrable giant variety (bambusa stenostachya Nakai), which affords a resilient barrier to attack from without. In front of the open court there is often found a semi-circular pond, used for breeding fish as well as for protection. The entrances to such a houseyard are few and narrow. Within the enclosure are the well, fruit trees and gardens, chicken pens and pig sties and at the back or side, the open-pit latrine."

31: Hofmann--631 [2] N-3 (1909) 1912 Formosans
116, 342, 351, 871

These Chinese capitalists know how to live luxuriously; their houses are beautiful even by European standards. A drive leads from the street to a large garden enclosed by the house and annexes. There are high, cool porticos leading to the residence proper. Many of the houses have a small theater. Since in former times there were no public schools in China, or at least none that were attended by the children of the rich, the Chinese here have set aside one wing of the building for the children and their tutors. As the Chinese ideal is to have a large family and this ideal is often realized, this wing is usually very large. In the center of the courtyard, there is a pond. There are small arbors and arcades arranged in excellent taste. From the terrace one has a beautiful view of the estate, which is hidden from the observer on the street. The house where I stayed had been made into a Japanese hotel but the features characteristic of the original estate had been retained.

15: U.S. Navy--28 [5] (no date) 1944 Formosans
116, 342, 592, 352, 354

"Usually at least three generations are resident in a house. If the family is a large one, there are many additional rooms and buildings, all arranged symmetrically at the side and back of the main court. If the [MC: country] house is a large one and quite prosperous, there may be a series of courts one behind the other. The roof of the main building or room dominates the whole structure. The floors are tile, brick or tamped earth. Lighting arrangements are poor. The house is furnished with chairs, tables and beds in Chinese style, which is not unlike Occidental furniture."

15: U.S. Navy--28 [6] (no date) 1944 Formosans
116, 342, 352, 262

"Poorer [MC: country] people live in huts made of unbaked clay bricks, with heavy thatched roofs, tamped earth floor and the most meager furniture of benches and tables. Pork, rice and a variety of cooked vegetables form the basis of their diet."

15: U. S. Navy--28 [4] (no date) 1944 Formosans
116, 342, 353, 513

"Certain features are common to the majority of country houses in Taiwan. The usual construction takes the form of three units, a main room or building, with two wings closely adjoining to form three sides of an open courtyard. The doors and windows opening on this court are larger than the few doors and windows opening on the outer side, and these latter are usually closely barred. The main room or building is open to the roof and contains the altar bearing the ancestral tablets and perhaps a small shrine. Immediately behind the altar or in rooms opening into the main room, the eldest members of the family sleep and keep their personal effects. Passages to right and left lead to kitchen rooms and the sleeping and living quarters of other members of the family."

4:Grajdanzev--109 [2] S-4 (no date) 1942 Formosans
116, 135, 171, 315, 354

"From the local point of view the production of natural gas is more important[than that of oil--analyst]. The region richest in gas is Kinsui in Shinchiku province, and the gas is used for the production of benzine and carbon-black, as a fuel for sugar mills, and for domestic use. However, in 1937 only 7,411 families had gas facilities (as compared with 2,233,136 in Japan proper)."

15: U.S. Navy--28 [5] (no date) 1944 Formosans
116, 342, 592, 352, 354

"Usually at least three generations are resident in a house. If the family is a large one, there are many additional rooms and buildings, all arranged symmetrically at the side and back of the main court. If the [MC: country] house is a large one and quite prosperous, there may be a series of courts one behind the other. The roof of the main building or room dominates the whole structure. The floors are tile, brick or tamped earth. Lighting arrangements are poor. The house is furnished with chairs, tables and beds in Chinese style, which is not unlike Occidental furniture."

4:Grajdanzev--74-75 S-4 (no date) 1942 Formosans
116, 162, 361

"Let us now consider some indirect evidence. In 1938 the urban population (i.e. of towns and cities having 10,000 and more inhabitants), made up 35.8 per cent of the total and the rural population 64.2 per cent. But in Taiwan, just as in China and Japan, towns with a population of 10,000 to 30,000 are mainly agricultural. Only cities with 50,000 inhabitants and over have few farmers (chiefly producers of vegetables on the outskirts of the city). In 1938 the population of the cities of over 50,000 in Taiwan amounted to 17.2 per cent. Thus [75] there is nothing in these statistics that contradicts our assertion that the agricultural population of Taiwan must amount to at least 65 per cent of total. But if one accepts the official figure of 50 per cent, it means first that there are no farmers in towns and cities with populations above 10,000, and secondly that about one-quarter of the rural population are not farmers, which seems hardly probable."

"The situation in the latter [80] country as regards land distribution is worse now than it was several decades ago and the large holdings are growing.

Distribution of Farmers and Land Tilled and by Size of Farms, 1930

Size of farms cultivated (ko)	Less than 0.5	0.5-0.99	1.0-1.99	2.0-4.99	5 and over	Total
Number of farmers(1,000)	128.0	96.9	100.4	78.9	19.0	423.2*
Per cent	30.3	22.9	23.7	18.6	4.5	100.0
Area of land tilled (1,000ko)	33.7	69.7	143.2	236.1	208.6	601.3
Per cent	4.9	10.1	20.7	34.2	30.1	100.0
Average for groups (ko per farmer)	0.26	0.72	1.43	2.99	11.0	1.63
Average in acres per farmer	0.62	1.71	3.39	7.11	26.15	3.87

*In Nogyo nenkan, 1940, from which we quote, the total is 433,300 but this appears to be a misprint. Even so, it is less than the total should be because, as was shown in the preceding table, there were in the same year 405,181 owners and the number

of tenants was not less than 150,000. In other words this investigation evidently covered only a part of the cultivators. This is proved by the figures of the area of land cultivated.

Source: Ibid."

4:Grajdanzev--83 [2] S-4 (no date) 1942 Formosans
116, 241, 361, 427

"Let us now consider the economy of the tenant. We saw that the tenants and semi-tenants make up about sixty-nine per cent of all the agricultural families. From the table on page 79 it appears that seventy-seven per cent of the farmers (the first three groups) cultivate on the average 0.75 ko each. These two groups should coincide approximately."

The more important localities in Formosa all arose as centers of the export trade, and are thus either harbors or at least are situated close to the coast.

The most remarkable degree of development has been attained by Tai-nan, formerly known as Tai-uan or Tai-uan-fu. It now lies more than 3 km. distant from the coast and away from the right bank of the Na-mu-ki. But as late as the 17th century the wide plain between the town and the sea, which is now traversed by creeks and in which there are many fishponds, was a stretch of the sea, and today it is still flooded every year by the southwest monsoon. At the place where nowadays the creek flowing westwards from the town widens out to form a broader stream, more resembling a river, there lies the rather higher ground that bears the village of An-ping, 2 1/2 km. from the town and close to the shore of this creek, which continues on in a southwesterly direction for another kilometer, offering anchorage to junks of shallow draught and finally joining the sea after traversing a shifting sandbank. This hilly ground on which is An-ping measures 1 km. from east to west and 1/2 km. from north to south; it still rises like an island amidst river arms and swampy plains, and is the already mentioned former coastal island of Tai-uan, its name then being given by the Chinese to the whole island of Formosa. At that time, when from 1630 to 1633, the Dutch built their fort of Zelandia, the longitudinal axis of the sandy islet (it was narrower also in those days) ran from southeast to northwest, forming the partial barrier against the open sea of a lagoon bay cutting more deeply into the body of the main island; in the north the entry

to the lagoon was always open, via a broader channel of the sea, and in the south a sandbank one could walk on at low tide already began to connect the isle to the main island.

6: Kirchhoff--35 U-4 (no date) 1895 Formosans
116, 133, 175, 361

On the eastern side of the lagoon of Tai-uan lay the small locality of Sakkam (in Chinese: Tsche-kan), a native village of about 100 houses. In front of this the Dutch erected another fort, called Provintia or Providentia, exactly opposite Fort Zelandia, so that the lagoon was dominated on either side. After the collapse of Dutch power in Formosa, Zelandia still remained the key to the entry of the lagoon, behind which little Sakkam had grown to be the most important trading center on the island. For this reason Koschinga made it his residence and the Chinese, when they took possession in 1683, made it the seat of government and consequently called it Tai-uan-fu. But the continued growth of sandbanks that gradually rose above sea level, to the west of Fort Zelandia, made this fort useless as a coastal protection, so that it was dismantled in 1874 and a new fort built of its materials 1 1/2 km. to the south, close to the present coastline. Fort Provintia, in which the consul Swinhoe saw the Chinese temple in 1863, and which was built as a protection against the maleficent influences of the wandering spirits of the hung maô ("redhaired," the Dutch), has also been demolished since that time. It had long before been absorbed in the big irregular rectangle of Tai-uan-fu.

6: Kirchhoff--35 [2] U-4 (no date) 1895 Formosans
116, 361

This rectangle, [MC: i.e., Tai-uan-fu] like that of Peking, is roughly orientated with respect to the points of the compass, and is surrounded by a crenellated wall covered with slate about 9 km. in length, and pierced by eight gateways surmounted by rectangular towers. The town is built in Chinese style. The main streets cut each other at right-angles; most of the houses are built of bamboo or clay, only a few of brick. The roofs of the houses, which are without exception low, are of straw or slate, and cannot be seen for the seven or eight months of the worst heat, for they are then covered by the huge sheets of canvas that are stretched over the streets. In front of the western gate there is a suburb with narrow, dirty streets, and this is the business quarter. But the few foreign traders do not live here, they live in An-ping, and have their warehouses there; there the climate, in view of the marshy surroundings, is admittedly unhealthy, but the junks, as we have seen, anchor close at hand. Tai-uan-fu itself has long since ceased to be mainly a commercial town or even a harbor, it is the tranquil site of the administration and of the agency conducting the great state examinations for officials. Large areas within the town wall are occupied by cultivated fields, flower gardens and public squares planted with fine old trees, so that the German traveler Joest, who estimated at 200,000 the population of Tai-uan-fu (for a little while now called Tai-nan), is probably further away from the truth than the usual figure of 70,000. The population is even said to be declining sharply, since the constant sanding up of the entry near An-ping make things ever more difficult for the passage of junks.

It is therefore [MC: in view of the decline of Tai-uan-fu as a commercial city] natural that the greater part of the export trade of South Formosa should have gone over to Ta-kaô, 40 km. farther south, which has been connected telegraphically with Tai-nan since 1874. This small but important port is reached by passing between two precipitous cliffs that can easily be seen from far out at sea; on the left rises the Ape Mountain (of coral limestone) to a height of 400 m., and on the right there rises even more precipitously a cliff 120 m. high, called the Saracen's Head after the English cannonboat that surveyed the west coast of Formosa some decades ago. Between these two heights, which are occupied by forts, even smaller steamers can enter a bay which, however, is of very limited extent, and which is surrounded on either side by the installations recently constructed by the Europeans: immediately behing the fort at the foot of the Ape Mountain is the quay alongside which ships lay to, the customs, the English consulate and the dwellings of the foreign traders, while opposite (that is, behind the Saracen's Head) can be seen the hospital of the Presbyterian mission station, transferred from Tai-nan to Ta-kaô, the hospital doing a great deal of good, and the European warehouse. The very shallow lagoon, which stretches out from this harbor to the southeast, parallel to the coast, is separated from the sea by a sandy tongue of land (which first attached the Saracen's Head to the mainland). On this tongue of land is a fishing village with between 1,500 and 2,000 inhabitants, and called Ta-kaô after the harbor. Beyong the lagoon the glance passes over stocks of bamboo, palm and mimosa in the

foreground, and then over an intensively cultivated plain with small villages peeping from amidst the green sugar-cane fields, finally reaching the hazy blue mountains. In this coastal plain, which stretches out farther than the eye can see to the southeast, there lies the town of Fung-schan and, beyond the mouth of the Tan-tschui-ki, Pang-leaô, the center for the junk traffic of this southern region. When the southwest wind develops its full force, no vessel can lie to on this coast, which is most immediately exposed to this wind. The most southerly town on Formosa, which was founded quite recently, is Heng-tschun, the capital of the southern region of the same name, distinguished for its huge rice harvests. It lies at the foot of the western chain of the southern tongue of land.

Rather farther inland is the group of towns of the North Formosan Tam-sui River region. The harbor [36] of Tam-sui consists only of the mouth of this river. The entry into the harbor over the constantly shifting sandbank, because of the strong surf this causes, is free of danger for steamers only in calm weather and when the tide is high. The channel of the river, which flows in a northwesterly direction at its mouth, is deeper on the right-hand side, while the bed is exposed at low tide on the left-hand side, for far more than half the width of the bed. Consequently all settlements are found on the right bank. Once the bar has been crossed there can first be seen, on the left, the Chinese fort, and then the former Dutch fort, built of red brick, where the English consul now lives, and after this the customs house and the open ground of Huüei or Ho-be, which only the foreigners call Tam-sui after the river. Busy as the port may be, the spot really consists only of a narrow street along the stream in which only two people can avoid each other. But it is adorned by a Chinese temple born on stone columns and is well situated. Close to the locality there rise amphitheater-like the slopes used as a burial ground. Behind this the sides of the Ta-tun bears peanut and sweet potato fields on the lower parts, among which are strewn Chinese farmhouses, and from a height of 500 to 600 m. forests consisting of bamboo and tree ferns.

6: Kirchhoff-- 36 U 4 (no date) 1895 Formosans
116, 361, 505

Upstream [VMM: from Tansui] on the right bank also, there follows the populous town of Tua-tu-tia, the chief center for the preparation and export of tea, and farther along Mang-ka or Bang-ka, important because of the fact that larger junks come up this far on the Tam-sui (which should really be called the Sintiam at Bang-ka); this explains the dense crowds in the terribly filthy streets of Bang-ka, where humans and pigs fight for room. In particular, the small vessels bring down camphor from the mountain streams to be reshipped here.

6: Kirchhoff--36 [2] U-4 (no date) 1895 Formosans
116, 133, 361

Bang-ka ceased to be a seat of administration since the foundation, in 1879, of Tai-pe (or Ko-ping) as the center of administration in North Formosa, in the densely cultivated plain between Bang-ka and Tua-tu-tia, and at almost equal distances from the two towns. The whole fruitful but marshy plain of the three towns has only unhealthy, brackish water, but it receives good water from the southeast from the mountains behind the village of Kieng-be, through an artificial connection that was laid down quite a long time ago.

Beyond this fertile plain there soon begins the still little known land of the "wild savages," the Tsche-huan. Here Sintiam and Tokoham are the most advanced posts of civilization. The two sources of the Tam-sui called after these towns rise in the wooded mountain regions not yet subject to China, but finally flow through rice, sugar-cane and sugar fields... The Tokoham River in particular forms a sharp line of cultural demarcation: to its left are vivid green tea plantations and rice fields along all the heights as far as the sea, and on the right stretches out dark primeval forest.

6: Kirchhoff--36 [4] U-4 (no date) 1895 Formosans
116, 361

Ki-lung is a locality of but 1,000 to 2,000 inhabitants; it owes its importance almost exclusively to the export of coal from the mines that lie a bare 1 1/2 km. to the east-southeast; camphor and indigo play quite a subordinate part in its export trade.

6: Kirchhoff--36-37 U-4 (no date) 1895 Formosans
116, 311, 361, 487

To the northwest of Ki-lung the coastal village of Kimpaôli is of some significance because of the neighborhood of the solfataras of the Ta-tun Range. A road runs in a southwesterly direction from Kimpaôli and joins the so-called military road beginning opposite the harbor of Tam-sui, at the village of Pa-li-hun, and leading to Tai-nan and even farther along the coast to the southern point of the island.

In North Formosa the open place of Tiong-lek is situated on it, with heavy plantings of [37] rice, sweet potatoes, and turnips, and also the walled town of Teuk-tscham (now officially known as Sin-tschu). This is an important commercial center connected by water the nearby coast. Wide rice fields and luxuriant tea plantations surround it, but unfortunately it is not available for foreign trade, although an excellent market would be found here for materials and opium. Now loads of camphor are transported from here on the backs of bearers to Tam-sui, the nearest treaty port.

6: Kirchhoff--37 [2] U-4 (no date) 1895 Formosans
116, 175, 311, 361

Chinese settlement on the east coast is quite new, and so are the roads laid down on this coast and to the coast. Since the beginning of the 19th century Chinese settlers, for the most part people who had to expect punishment for some offense if they stopped longer in the region controlled by the Chinese Government, went round the northeast point of Formosa to the coastal plain of Kapsulan, now officially called Komalan. This plain is at most 10 to 12 km. broad. The fertility of this plain for crops of rice was soon recognized; so settlers came also who had not taken to flight, and here too, although in a hard struggle with the natives, Chinese villages gradually grew up, as far as the bay of Su-aô in the south. The favorable position of the little village of Su-aô (i. e., Su Bay), on this fine bay, was first recognized during the Japanese expedition of 1874, when it became the headquarters of the commander of the Chinese observation corps. Today Su-aô is a thriving town at the mouth of the river of the same name, whose valley forms a route for several kilometers to the southwest, towards the foot of the coastal range; all around are green rice fields, and the tea plant does well on the cleared forest soil of the surrounding heights.

7: Joest--56 E-5 (no date) 1882 Formosans
116, 133, 361, 504

Unfortunately, there are no large harbors on Formosa, or rather, there are none in those places where the Chinese companies have trading posts. Taiwanfu is situated two miles from the coast; the harbor, Amping, is situated at that point where Nova Zelandia was situated formerly, but even there landing facilities for passengers and goods are very poor.

9: Yamasaki--225 N-5 (1896-1897) 1900 Formosans
134, 361

The large plain of Taiwan forms the western part of the island. The alluvial soil is fertile and there are many towns and villages in all quarters of the plain.

9: Yamasaki--225 [4] N-5 (1896-1897) 1900 Formosans
116, 133, 361

The middle and southern parts of the western coastal territory of Taiwan begin at the lower course of the Hōri-kei and stretch to the little town of Hōryō towards the south. The whole length of this plain is 220 km, and its greatest width is 48 km. It is heavily populated and has many towns, e.g. Kagi (Kia-ji), Taikō (Taikia), Unrin (Jünlin), Shōka (Tschang-hwu), Rokkō (Lokiang), Tainan (Tainanfu), Hōzan (Fōng-schan), Takao (Takau), etc. In the north there is the small basin-shaped plain of Taihoku, watered by the Tamsui-kei and its tributaries. The capital of Taihoku (Taipei), with its commercial suburbs of Taitōtei (Tautuatea) to the north and Banka to the southwest, lies in the middle of the plain. There is also a small plain with the little town of Kōshun (Höngschön) at the southern end of the island.

9: Yamasaki--225 [6] N-5 (1896-1897) 1900 Formosans
116, 162, 361, 563

The Capsiulan plain is naturally not so heavily populated as the western plain, yet on its fields and meadows the more cultivated Amis, a branch of the Malayan race, enjoy an unclouded existence.

9: Yamasaki--226 [2] N-5 (1896-1897) 1900 Formosans
116, 133, 361

Southwards from Karenkō to Pinan along the foot of the coastal chain, the coastline first proceeds for a few kilometers along the first low hills; then there follows a steep stretch near Kororan, and again a low section with a steep edge lying farther back. The precipitous coast is wonderfully developed between the mouth of the Shūkoran-kei and Pinan. But at times we go through sandy beaches at the foot of the terraces, which are only a few meters high. There are three steps in the coastal terraces, with a total breadth of 300 to 1,000 m., and on this are found the villages and fields of the natives and also of the Chinese who have settled there. Many coral reefs can be seen on the shore.

9: Yamasaki--226-227 N-5 (1896-1897) 1900 Formosans
116, 133, 361, 503

When we proceed northwards from Hōryō, we find a harbor, Tōkō, at the mouth of the Tamsui-kei, a large river in southern Taiwan with a fertile basin. In the harbor, at least twenty large Chinese trading vessels always lie at anchor. Not very far to the north is a lagoon harbor, Takao, which is very famous, both because of its trade and also for the beauty and salubriousness of its location. Between the lagoon and the sea there stretches out a 12 km. long tongue of land, called Haisa ("sea sand"), on which are many fishermen's huts. At the northern end of the Haisa there rises up a crag, called Saracen's Head by the English, which was doubtless separated from the "Ape Mountain" opposite it by erosion of the sea waves. The Ape Mountain is joined by the higher Takao-san (327 m.), which is an important landmark for travelers. A narrow channel between these two hills forms the mouth of the bay and the harbor. Unfortunately the entrance to the lagoon, like the lagoon itself, is shallow so that only small steamers and junks can enter, while the [227] larger ships must anchor outside the harbor. All official buildings and foreign concessions lie beneath the Ape Mountain, while the shops of the natives are grouped opposite, at the foot of the Saracen's Head. This locality is usually called Kigo. Many mangrove trees can be found in the lagoon. They are not so large as those I later saw in Singapore. At some distance from the lagoon shore is the town of Hozan (Föngschan), in much the same position as Königsberg on the Danzig Haff. The two hills mentioned, Ape Mountain and Saracen's Head, consist of old coral reefs.

9: Yamasaki--229 N-5 (1896-1897) 1900 Formosans
116, 131, 133, 361 Pescadores

Apart from the chief island of Taiwan, there are various subsidiary islands. Among these the Pescadores are the most important. This group consists of about eighty islets and cliffs, situated to the west of Taiwan in the Formosa Channel, between lat. N. 23° and 24°. The Portuguese called these islands Pescadores (Fisher Islands) because of the extensive fishing which the Chinese have practised there for many centuries. The largest island is called Hōkō-tō (Penghu Island). It consists of basalt and coral reefs. On its western side a bay is formed by the two islands next in importance, Hakusa-tō (Pehoe Island), or "white sand island" and Gyo-ō-tō (Fisher Island). This protected area offers an important haven in the stormy China Sea. The chief locality on the largest island, Makō or Mekon, is a small harbor on this bay with about 3,000 inhabitants, to which there must now be added a small Japanese garrison. The harbor is deep and quiet; always to be found there are some steamers and Chinese trading junks, together with a large number of fishing boats. The island is flat and poor in flora. The highest elevation is only 48 m. high. Other islands worthy of note in this group are Kitsubai or "Bird Island" to the north and the Pachan (Rover) group with Pachan and Tsiang, the Kitsu group (East group) with Tōkitsu and Saikitsu and Taisho or "Junk Island" in the south.

10: Schumacher--223 [2] T-1 (ca. 1896) 1898 Formosans
116, 351, 361, 764

The Chinese villages in the lowland plain are mostly hidden in bamboo jungles. Some of them are situated at the foot of mountain spurs where they are well protected against the weather. They are surrounded by burial grounds and enclosed within high brick walls. Wide and swampy ditches gird these unimpressive places, whose inhabitants make a meager living. But for centuries the Chinese have preserved the ruins and trash with sentimental care.

10: Schumacher--223 [5] T-1 (ca. 1896) 1898 Formosans
116, 164, 361, 364

The origin, spread, and finally the endemic occurrence of illnesses are favored among the Chinese of Formosa by the layout of their towns, villages and dwellings. Nearly all the settlements have grown up in depressions which could be fed but not drained. It is true that sewers are found in all large settlements; they receive dirty water but there is no outlet for it. The water is left to evaporate and naturally infects the air. The sewers are deep ditches occupying the entire width of the narrow alleys; they are lined with tiles or planks. Add to that the fact that the Chinese are not very much concerned with bodily cleanliness, that individuals are not segregated in any way from a large group of people, that there is continued contact even at the time of contagious epidemics, and that they do not receive any medical attention, and then it becomes obvious that the origin of many illnesses should not simply be attributed to the climate of the island.

10: Schumacher--224 [3] T-1 (ca. 1896) 1898 Formosans
116, 361

Of the purely Chinese towns of Formosa the sea-port of Lokkang should be given the first place from the economic point of view. Lokkang is located approximately half way down the western coast of Formosa on almost the same parallel as Tschang-hua. Its hinterland is very extensive and extremely fertile. Lokkang is not only the most prosperous of the Chinese towns, but I am also inclined to give it first place from the point of view of hygienic and sanitary conditions. Lokkang is situated at the mouth of the river of the same name, sloping down towards it and to the sea which washes its beaches and receives refuse just like the Lokkang river.

11: Haguenauer--26 T-3 (no date) 1929 Formosans
116, 361

Taihoku is the capital, and it is located about 25 kilometers from the harbor of Keelung. Taihoku is a modern city and a very clean one; it reminds you of the tropics, for it has palm trees and houses with arcades which are intended to protect the passers by from the burning rays of the sun. The Japanese sections are in the center of the city around the Government buildings and the Ethnographic Museum. The latter raises its imposing structure in the midst of a lovely park.

11: Haguenauer--26-27 T-3 (no date) 1929 Formosans
116, 361

The Chinese quarters Daitodai and Manka [MC: of Taihoku, the capital] are not nearly so neat, but they are very picturesque. As you visit them you can observe the life of the corporations, have fun deciphering the pompous meaning of the characters which compose the signs in front of the shops, and marvel at the things which a Chinese stomach [27] is capable of digesting. The street is full of people, the shops do a thriving business, and the temples are darkened by the fumes of the little sticks of incense, which burn on the altars of the gods.

11: Haguenauer--27 [3] T-3 (no date) 1929 Formosans
116, 361

The land around Taihoku is fertile. Our first excursion took us to Tamsui, and the landscape is so pretty that it is a trip well worth taking. Although the little city has declined in importance, it has an historic interest, for it was there that the Spaniards erected the Fort of the Holy Trinity in 1629, but the Dutch wrested it from them in 1641. They reconstructed the little fortress, making the walls eight feet thick and so strong that they withstood the shells which were fired by the battleships of Admiral Courbet in 1884. The "fort" contains the English consular offices today, and its roof is used as an observation platform for tourists. On the way back you visit the thermal spring of Hokuto, which is a kind of little Enghien for officials.

12: Garnot--14 G-3 (1884-85) 1894 Formosans
116, 317, 361

There is a regular sulphur industry in the region around Masou and Kimpaoli. The population is very scattered in the interior of the massif but the largest centers are in the low area where the valleys open into broad plains which furnish the Chinese farmers with large fields for cultivation.

12; Garnot--14 [3] G-3 (1884-85) 1894 Formosans
116, 361

Large junks sail up the Tokoham River as far as Menka or Banca, which is a very industrious and productive city of 40,000 inhabitants. The little city of Sintiam gave its name to the river; it is a recent creation several miles above Menka and it lies at the spot where the river ceases to be navigable.

After the three rivers merge the alluvial plain broadens and the population increases rapidly. We come to Patchina and then to Taotutia, which is at the junction of the Tokoham and Sintiam rivers; it is the site of the foreign colony and the largest tea market in the region. A little farther upstream and between the two rivers we find the administrative center of Taï-Pak-Fou. Tokoham is rather far away in the mountainous area but it is the city which gave its name to the third river. Kantou or Kantow which is a little below the junction has become a suburb of Tamsui, the large commercial center of the whole area.

The Tamsui harbor is really only the enlarged estuary of the river. [15] It is the port of embarkation for all the Menka products and it has a population of 70,000. The entrance is blocked by a sandbar just two meters below the surface but as the tide rises from 2.10 to 2.60 meters ships that draw an average amount of water can cross it daily. Mountains rising to a height of 500 to 700 meters border the entrance to the estuary, which is marked by a beacon at the end of a rocky reef.

Several fishing villages are hidden in the little valleys along the coast: Alibong and Alilou, Kimpaoli and Masou. They are connected to the Tamsui valley by some mountain trails which have scarcely been explored and which are only known by hearsay.

12: Garnot--16-19 G-3 (1884-85) 1894 Formosans
116, 344, 361

Kelung stretches along the roadstead and it is marked off into several districts. In the northern part the European buildings form a line that follows the beach and they are backed by the last slopes of the Ber lines. There are two handsome buildings for the customs but the rest are uninteresting; they are simply ware-houses belonging to English or German companies from Amoy or Hong Kong. Farther south the Chinese district called Soo-Wan is connected to the citadel and the Chinese city by a narrow stone causeway bordering the beach. A native cemetery with cement tombs runs along this causeway and finally there is a porch with several steps leading up to the Yamen or citadel. It is surrounded by a [page 17-18 contains photograph, omitted] [19] wall of coarse sandstone that is irregular in its outline. About fifteen sheds of wood and mud with tile roofs are usually adequate for the barracks. They surround the governor's dwelling. On the southern side a wooden door opens out toward the city. It is separated from the mansion by a river that is crossed by a stone bridge; this was not finished when the expedition visited the island.

12: Garnot--19 [2] G-3 (1884-85) 1894 Formosans
116, 346, 361

On the outskirts of the city [MC: of Kelung] you see a few isolated pagodas which are surrounded by ancient trees; they are a delightful diversion from the filth of the Chinese streets. The city has a rather unusual pagoda, which is on the northern side across from the roadstead. On each side of the entrance you see two enormous granite dragons that have a strange appearance. Several feet away some finely carved bronze caruncles sleep in the dust of the centuries; they bear inscriptions dating from the time of Charles the Fifth.

12: Garnot--20 [2] G-3 (1884-85) 1894 Formosans
116, 135, 361

Kelung is important because it is near some coal deposits; it and Port-Coal which lies several kilometers to the east are the ports of embarkation for the mineral.

These deposits are about one league east of the city and about two kilometers south of the villages of Gia-Kow and Petao in the mountainous massif, which borders the Kelung basin on this side.

The enormous elevation of the plateau is almost completely carboniferous. Coal comes practically to the surface and in certain spots you find it as soon as you begin to scratch the vegetable surface.

15: U.S. Navy --21 [8] (no date) 1944 Formosans
116, 361, 563

"At Taihoku, where almost one-half of the entire Japanese population of the island have their homes, there is a distinct difference in the residential areas. The Formosans live north, west and southwest of the old administrative city area. The higher Japanese officialdom lives within the administrative center, together with the Japanese tradesmen whose retail shops are on the principal commercial streets. A distinctly Japanese housing development is spreading to the east of the administrative center. In other cities there is the same tendency toward voluntary segregation, but to a less marked degree. Although the Government maintains various relief agencies for the poorer people, there is little evidence of individual good feeling between classes. While generous among their own large families, both the Formosans and the Japanese are conservative in extending charity through impersonal channels."

15: U.S. Navy --22-23 (no date) 1944 Formosans
116, 162, 361

"A first-hand observer, in 1903, stated that there were about 500,000 Hakka people on the island in 1901, most of whom were settled in the Shinchiku area between Byoritsu and [23] Nanto. There were a few settlements southeast of Takao and some on the east coast near Taito. The latest estimate available (1928) placed the number of Hakka at 'about 700,000'. It may be reasonable to assume the present number of Hakka people to be at least 1,000,000.

Villages in which the Hakka element dominates are Koro, Taiko, Gyubato, Gosei, Tokatsukutsu and Rokko."

15: U.S. Navy--23 [2] (no date) 1944 Formosans
116, 162, 361

"The Fukien Chinese. The Formosans whose ancestors came from the Fukien coastal area have settled throughout most of the arable lowlands and foothills. They represent, roughly, three-fourths of the total population and hence through sheer weight of numbers exercise considerable influence in the total economy."

15: U.S. Navy--28 [11] (no date) 1944 Formosans
116, 175, 178, 361

"The first Chinese settled in Taiwan along the southwest coast, in and about the Tainan region. Because early settlement among the aborigines was dangerous, the settlers kept their dwellings together in defensible clusters, often selecting a prominent elevation or point overlooking a stream which could serve as a moat about a compact settlement. Further north the later settlements tended to become elongated strings of houses on either side of a road or street, often along a river bank. Often they were an extension of a settlement around a temple or the walled house of a wealthy family. Throughout the north the scattered farmhouse is most common, solitary dwellings depending upon their walls and hedges for defense. Near the borders of the aborigine territory the villages still retain a fortress arrangement of many houses within a highly defensible area."

15: U.S. Navy--28 [12] (no date) 1944 Formosans
116, 312, 361, 311

"Availability of water supply (less favorable in the south) has also helped determine these settlement types. The fairly even distribution of rainfall throughout the year in the north makes springs and wells more constant and obviates the necessity of building near a permanent pool or deep stream. The method of land reclamation had an effect, too. Early militia, stationed in compact settlements, guarded the colonizers during the Koxinga period (early 17th century), [illegible] the soldiers themselves spent considerable time cultivating the land. The northern [illegible]land districts, however, were developed in later years by private enterprise rather than by government policy. Ambitious land operators undertook to secure and clear areas unclaimed by the government. In turn, they subsidized tenants whom they brought in from the south, settling them on good land and building farmhouses for them."

15: U.S. Navy--29 (no date) 1944 Formosans
116, 361, 369, 177.36 Japanese
636.36

"Many city or town planning ordinances are in effect in Taiwan. The Japanese have drawn up overall schemes for the modernization of urban life everywhere, but these have gone into effect only in the larger settlements. Hence a sharp contrast is presented between the excellence of some city arrangements and the extreme primitiveness of nearby settlements."

15: U.S. Navy--29 [2] (no date) 1944 Formosans
116, 361, 349, 177.36 Japanese
636.36

"Before the Japanese took over the island, all the cities and many of the towns were surrounded by great walls, pierced by well-defended gates. The Japanese have torn down most of the walls, preserving only the gates as decorative monuments. Settlement and development have gone forward rapidly. The result is a quadrilateral or circular arrangement of city streets within the old town areas and a very irregular pattern of streets and alleys developed outside. The Japanese have been cutting through old settlements and imposing a well-developed grid and radiation system of streets and roads upon many towns."

The actual ascent of Mount Morrison started from the village of Ling-ki-ho. It is surrounded by bare hills between which spread fields of rice and sweet potatoes. The little town has a population of about a thousand who initially showed themselves very hostile towards the Japanese; the ranks of the rebels included people engaged in the camphor trade. We had an extremely hard time finding porters in Ling-ki-ho and were completely unsuccessful in our search for guides. We had finally managed to engage twenty men who, when they learnt of our destination, promptly deserted us to the last man for fear of the aborigines, among whom individuals can distinguish themselves by capturing the heads of several Chinese. A youth of their group can think of marriage only after he has proved his courage by such an achievement. Once more twenty porters were hired; they were locked up overnight, examined by the doctor who eliminated four of them, and the next morning a load of about 24 kilograms was tied on the back of each one of them in the presence of armed soldiers, so that there was no opportunity for desertion. Our group included two officers with twenty-five men and their equipment and seven Japanese including a newspaper reporter, an interpreter, a doctor, geologist, and a topographer. I was not only supposed to be the leader of the expedition but was also entrusted with the task of studying the forest conditions in detail and of photographing everything of interest. Naturally we were well equipped with all kinds of scientific

instruments and tools for clearing our way through the thicket, for building huts against the rain, etc.

31: Hofmann--612 N-3 (1909) 1912 Formosans
116, 132, 361

My stay in the region of the Tsou aborigines was longer and more rewarding than my visit to Taikokan. We started from the small village of Kagi approximately in the center of the island. We arrived there after a journey during hot weather, having traveled by train, on May 12th, 1909. We immediately become aware of the change in climate. While in the north there had been a great deal of rain and humidity, here there was drought; the humid northern winds which predominate in the spring do not penetrate to the center of Formosa. In Kilung and Tahoku the abundant rainfalls are evenly distributed throughout the entire year while in this region the rainy season begins at the end of May and lasts until October. The effect of these climatic differences may be seen in the vegetation; here there are far more xerophytic plants. In the north at this time of the year the rice fields are already green, while here the soil has not yet been plowed since the plants could not grow. There was not a cloud in the sky and we were exposed to the full heat of the sun. Kagi, a village which otherwise does not offer anything of interest, was shrouded in a cloud of yellow dust. In 1907 a violent earthquake occurred here; of the buildings of former times little has remained except the gates of the city. On Formosa all the cities in the Chinese region are enclosed by walls and ramparts (cf. Fig, 1); a European who visits these cities is reminded of the medieval cities of Europe.

From Chikutoki we started to ascend the mountain; where the ground was fairly level we used sedan chairs made of two bamboo poles in which we sat in a half squatting, half lying position. Four strong Chinese were able to carry my weight, 78 kilograms, with no difficulty. They were able to climb ascents of 20 to 30 at the same steady pace. The carriers in back change about every fifteen minutes.

After an ascent of about five hours, at a height of about 600 to 700 meters, we found that the landscape had changed considerably. We went through bamboo forests, more dense and more extensive perhaps than anywhere else on the Japanese islands; forests like these are not found, so far as is known, anywhere else on Formosa. In an area of about 10,000 hectares the vegetation consists entirely of bamboo trees; these grow so close together that there is no space for other plants to develop. The average height of the bamboo trees is not more than 13 meters. Whether these bamboo forests represent the original vegetation or whether they have taken the place of leafy trees which were destroyed by a forest fire cannot be determined. The fact that they are spread over a large area supports the assumption that the vegetation is original and has a xerophilous character. The forests of bamboo trees grow on dry, low elevations composed of sandstone which are exposed to the sun; at the level at which they grow there are dry and rainy seasons. At a height of about 1,000 meters there are rainfalls of short duration with an intensity characteristic of the tropics almost every day; at this level bamboo trees no longer predominate. Chinese settlers have penetrated as far as the bamboo

forests, however, and from this it might be concluded that the original jungles were destroyed by the fires of the colonists [615] and that new shoots of bamboo took their place by a natural process. This has happened several times on the Japanese islands. On the other hand the settlements are sparse and do not penetrate very deeply into the region of the bamboo forests. The numerous places where trees have been burned down, which are also found in the sections entirely inhabited by the aborigines, are overgrown with stiff, tall reed plants, Imperata and Miscanthus which because of their dense growth prevent the growth of trees at least for the near future. It is well known that bamboo trees grow to their full height within one year. Since it has many uses, bamboo often takes the place of timber; for that reason the Chinese exploit the forests around their settlements since for their purposes bamboo alone is sufficient.

3h Hofmann--629 [2] N-3 (1909) 1912 Formosans
116, 361

On my return I stayed for some time in Tainan, the southern capital. This is still one of the most important cities on the island because of its nearness to the shallow Amping Harbor, although it is likely that Takao, with the increase in trade, will assume a greater importance.

35: Collingwood--135 D-2 (1866) 1867 Formosans
116, 131, 133, 361

"On the 13th June, 1866, I visited Sano Bay, on the east coast of Formosa, in H. M. S. Serpent, Commander Bullock, proceeding thither from the harbour of Kelung. The object of this visit was chiefly the verification of some supposed dangers in the harbour, which is spacious and not difficult of approach, and, although little frequented, is of importance as the only available harbour upon the whole east coast of the island. Our visit acquired additional interest from the fact that there was believed to be a village in the bay, occupied by the aborigines of the island, whom we were anxious to meet with. We found four villages in the bay: the first and smallest upon the northern side was a mere hamlet of Chinese fishermen, consisting of half-a-dozen cottages upon the hill-side, their boats drawn up on the beach in front. Passing by this, we proceeded up the harbour, and anchored near a sandy beach, beyond which we could see some roofs of houses. All the rest of the bay had a desolate and lifeless appearance, the lofty hills sweeping down to the water's edge, generally densely wooded, and presenting an aspect of wildness, which accorded well with our belief that they were inhabited by the still savage aborigines of Formosa."

37: Steere--317-318 S-3 (1873-74?) 1875 Formosans
116, 361

"Formosa, though it has been settled by the Chinese within the last two hundred years, possesses some seven or eight walled cities, among them Taiwanfu, the nominal capital, Pitao, Kagee, and Changwha. Though of such modern date, they are built after the old Chinese model, which is probably very much that of the walls of ancient Troy, and they are intended to be defended by archers. There is no provision for attack or de-[318]fense with cannon. The walls of Taiwanfu are said to be seven miles in circumference; they are from twenty to twenty-five feet in height, and the same in thickness. They are faced with brick and stone, but are probably earth in the interior. Taiwanfu is built upon the sight of the old Dutch colony, and there are still remains of a small fort standing in the middle of the city, beside the ruins of the large fort called Zelandia, which was built to protect the harbor below. The present population of Taiwanfu, with the uncertainty that seems always to apply to Chinese cities, is estimated to contain all the way from thirty to sixty thousand people."

37: Steere--319-320 S-3 (1873-74?) 1875 Formosans-1-3
116, 133, 361

"The first journey made was from Taiwanfu north following General Legendre's track to Kagee. From here we left his track on the left and turned toward the mountains. After one day's travel we entered the mountains by the bed of a stream, and then we traveled a day and a half through a mountainous country partly covered with timber, with here and there a Chinese village. This country seems to be a sort of neutral ground, and all were armed for the last six or eight miles before reaching the lake of Tsuisia. We passed through a wild country covered with timber, where there was said to be much danger from savages, and only large bands of armed men passed. We found a fresh water lake, surrounded by cultivated lands, and with three villages of Trin-whan. An old Chinaman, living upon a small island in the lake, owned most of the lands, and had begun the cultivation of tea. There was a very high and steep mountain at the distance of a few miles, directly to the east of the lake. The lake has several species of eels and of fish, the latter mostly of the Siluridal. From the lake, a day's march, most of the way through rough, mountainous country, brought us to the valley of Posia or Polisia. There were many beautiful tree ferns seen on this trip and camphor trees. The valley of Posia is six or seven miles in diameter, and is not all cultivated yet, as rice cannot be carried up such a distance to market, and the inhabitants only cultivate for their own use. There are several beautiful streams flowing through the valley, which, when they unite at the bottom, are well deserving the name of a river. The settlement of Posia seems to be very near the situation of a town on

Legendre's map called Ou-gitang. We inquired in vain for this town, and came to the conclusion that it was imaginary. Posia is surrounded on all sides by mountains that are covered with timber. We saw several species of oak growing here with a pine and a wild apple, which the Lek-whan gather and boil for eating. There is also much camphor-wood, but distance to market makes it impossible to use it as yet. From Posia we went a day and a half's journey almost due east up a roaring stream that forms part of the river at Posia. For the first ten or twelve miles the rock was mostly sandstone, and on the north side of the stream the timber was composed of dwarf pine and oak, with no undergrowth but coarse grass. On [320] the south side, the mountain, though just as steep, was covered with almost tropical vegetation, among which were tree ferns, wild plantains, rattans, etc. As we went farther up, the vegetation became more scanty on both sides. We found the savages cultivating the steep hill sides, the rock now being slate and quartz. At last we reached the water-shed, having followed the stream we were upon to its heads, while we could see the country descending on the east toward the Pacific. Most of the country here seemed to have been under cultivation at some time, and had grown up to a second growth of timber, twenty and thirty feet in height, of a species of alder, closely resembling the one called tag alder in the United States.

Upon our return to Posia we started out toward the coast with a large band of Lek-whans as guides and guard. We followed the river for the first day through a rough,

but rich and timbered region. At night we camped on the river, and near a fine valley, where there were still walls of houses and remains of ditches for irrigation, made by a body of Lek-whans, who settled there some twelve or fifteen years before. They were harassed so determinedly by the savages that they had to desert the settlement. Soon we broke out of the mountains, having left the river on the right. There were several guard-houses, with soldiers guarding the ravine we came down from inroads of savages. We hove here in sight of Changwha in the distance, and of the goat-plain, but we turned to the north and stopped at the Lek-whan town of Toasia. They have rich rice fields about here, and the country is very productive, but they are in debt to the Chinese. From Toasia, a day's journey took us to Laisia, part of the way being over a dry plain that had once been part of the great valley, but had been left high and dry by the streams cutting through to a lower level. Laisia lies in a beautiful valley among the hills and plateaus. There are two small villages, a few yards apart. On my journey toward Tamsni, I passed large quantities of camphor, most of it cut and lying on the ground, a short distance to the north of Laisia. The timber has been cut by the Chinese for the best part to be sawn into planks; the rest will lie until it is packed up and carried away to be distilled for the camphor. Between Laisia and Tamsni I passed many places fitted for the cultivation of tea. After reaching Tankiang, I followed General Legendre's track for the rest of the way."

42: Schetelig--386-387 T-2 (no date) 1868 Formosans
116, 135, 177, 361, 439

Kilung is a Chinese town with walls and gates. It is open to European commerce and is distinguished for the by no means inconsiderable beds of coal in the neighborhood and by the traces of a Spanish fort. For as, in the south near Taiwan-fu and in the north near Tamsui, quite substantial remains of Dutch strongholds are to be found, similarly the Spaniards, [387] during their brief period of settlement in the 17th century, seem to have made Kilung the chief point for their operations.

42: Schetelig--389 T-2 (no date) 1868 Formosans-1-2
116, 311, 361; 487

Starting from Manka, the point common to the three chief arms of the Tamsui River, I undertook a second expedition up the middle river to the interior. Chintamki, i.e., "the way to the indigo fields," is a small locality at the bend of this river arm where the river changes its southwesterly course for a north-northeasterly one. Up to this point the boats are forced through the rapids at the cost of some exertion, but then the river must be abandoned and the march to the interior must be undertaken on the roughest mountain paths, close to precipices and with the constant danger of plunging into the depths, into the swirling streams below. The traveler is richly compensated for all his labors and his dangerous slips by a delightful journey through the most remote cultural areas of Chinese colonization. On the highest mountain passes, at 2,000 feet and more, year in and year out the camphor trees and tree ferns are uprooted and, untiringly, Convulvulus edulis, the sweet potato, and the profitable indigo are planted; and although every summer terrific downfalls wash away the delicate plants from the very steep cliff walls, the industrious Chinese is not discouraged by the necessity of repeating his work.... It is clear at the first glance that there, along the upper course of the Tamsui River, the world of the primeval forest and the former haunts of the natives are disappearing more and more beneath the axe of the woodcutter. People who took the same path 5 or 6 years ago, in order to investigate the interior, still found primeval forest and natives living their undisturbed and unchanged lives in places where today

there are flourishing Chinese villages. The valley in which lies the village of Takau (this should not be confused with the port of the same name in the district of Fung-schan on the southwest coast), the terminus for our bearers and our assembly point, seems to have been taken in hand during the last few years only, for everywhere charred tree stumps may still be seen between the indigo plants. This valley is reached via a pass more than 2,000 feet high, and one is surprised by the sight of the upper course of the river tumbling and winding in the depths below, and also by the view of the mountain chains, uncountable as they stretch out to the south. Our aim was soon reached, namely to determine the situation of this upper valley and to survey and to measure the mountain ranges round about.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
ADL

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Table 3. Percentage Distribution of the Total Population in Communities by Size 1920-1952 */

Year	Under 20,000	20,000 30,000	30,000 40,000	40,000 100,000	100,000 or more	Others +
1920	75	11	5	3	4	1
1930	59	22	2	8	5	3
1940	36	34	7	8	12	2
1952	23	25	17	12	21	2

*/ Arranged from governmental reports of each census, as quoted in Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 255.

+/ Aborigines and boat dwellers.

45:Stanford U, S-4, 5 P56 AD1 Formosa
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575 of the death of parents. This was a kind of mutual insurance. The association for mutual financial aid, called "hui," was a kind of temporary credit union.

438 361 Set-up of Towns and Cities: Although the life of farmers was highly self-sufficient, they had to exchange some of their products for agricultural implements and other daily necessities. In response to this necessity towns sprang up in the midst of this agrarian society. As will be seen from a map, Formosa has a fairly even distribution of towns along the western plain. The longest distance between two towns or villages in the plains area is under 10 miles; a distance of 6 miles is most common. This means that each individual lives with 5 miles or less of some town or village, and in one day or less can walk to the village center and back home. In other words, even though he walks, every farmer can sell his products and buy his daily necessities at some town or village between sunrise and sunset. Among the small towns and villages there are larger towns, and among larger towns there is an occasional city as a local center. On the whole, there is a systematic distribution of cities, towns, and villages. Obviously this was the result of natural growth in an agrarian society. After the Japanese occupation there were newly developed mining towns, fishing ports, sugar plantation towns, railway and

45:Stanford U. S-4, 5 1956 AD1 Formosa-
~~AD1~~ AD1

361 communication centers, recreational towns
438 or satellite towns close to the large urban areas. Even so, the traditional agrarian town-city set-up is still much in evidence.

3. Associations in the City: Cities in
441 Formosa were mostly developed as the trading centers of agrarian society. Those cities with ports and trade with the mainland had attained a fair size. In 1897, two years after the Japanese occupation, the population of the biggest city in Formosa, Tainan, was 45,330. Its commerce and handicraft were differentiated, and largely organized into merchant guilds. During the Manchu rule there were in Formosa rice guilds, cloth guilds, sugar guilds, silk guilds, string guilds, paper guilds, drug guilds, timber guilds, hemp guilds, oil, needle and iron guilds, porcelain guilds, and tea guilds.[2] Usually the stores of each trade were concentrated in one street, and not infrequently the street was named from the trade. In Tainan there was a Rice Street, Oil-dealer Street, Bean-dealer Street, Fish-monger Street, Cloth Street, Silver-smith Street,

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2. Yoshio Higashi: Economic History of Taiwan, 1944, Taipei, p. 304.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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ing and practice. Japanese did many things to discourage free intercourse between the two groups, and raised exaggerated fears of animosity from the Taiwanese among their own kind.[17]

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The Japanese maintained high levels of living in Taiwan. Their wealth did not create the separation between the two groups, but helped to enlarge it. The opulence of Japanese was more than simply a matter of superior income (which the Taiwanese might have emulated); it was also founded on privilege.

For example, wherever possible they lived apart in special portions of each city. These sections were arranged so as to provide the facilities that they were in a position to command—Japanese shops, entertainment, and cleanliness, one of the greatest of all luxuries in Asia. Influential Japanese strove to put themselves in such surroundings, whereupon they allowed poorer sections to develop as Taiwanese residents could best afford. Owing to this combination of jealous care and neglect, the central districts of most cities were elaborately laid out with efficient street patterns and handsome landscapes—but with residential finery and modern public buildings concentrated in a few blocks and the indescribable slums that Asia often produces spread over the remainder.[18]

It is easy to see the nature of residential segregation in Taipei City, where it was carried farthest (see Fig. 20, based on 1935 census data). There were two large concentrations of Taiwanese, at the north and the southeast corners. These were the sites of the original pair of settlements that grew into the present city. The space in between had been gradually built up before 1895 as the seat of Manchu administration for the island. It was razed and replaced by the Japanese (following a destructive typhoon in 1912) to make way for new construction that they planned. The Japanese built this central area themselves, and therefore to their own design. It had a core in which almost none but Japanese eventually lived, surrounded by a

[17] One can say that these fears were exaggerated without implying that they were without foundation. By their repressive administration, Japanese invited widespread ill-will in the population. Much of this might have been allayed if they had not on the one hand advertised the benefits of their rule and, on the other, systematically cut off any opportunities for Taiwanese to compete with Japanese on equal footing. This ambivalent policy even undermined some of their foremost objectives by impeding their use of the local labor supply in the most effective ways for war production.

[18] The enforcement of health and sanitary regulations held the two groups in complete equality before the law. In looking back at the severity of these measures, Chinese have remembered them as instances of oppression by the Japanese. But by such means the authorities were able to avoid the unhealthful conditions usually associated with urban crowding in Asia. See Hsü Tze-wei (1946), p. 444 ff.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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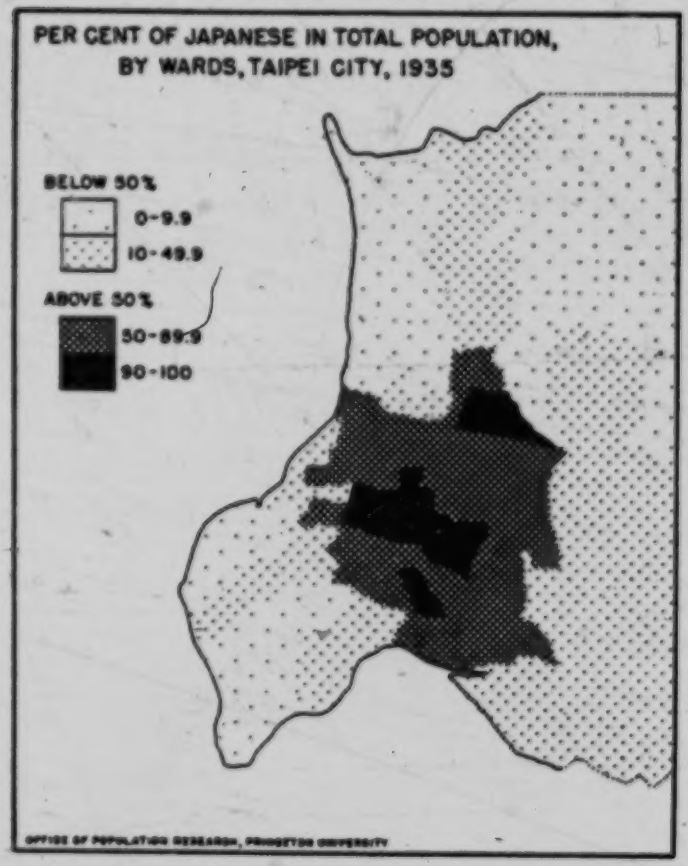

Fig. 20. Residential Segregation of Japanese in Taipei City.

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substantial area where Japanese residents predominated. Around the fringes of this modern district, other Japanese (reportedly those of lower income and social status[19]) lived more thinly mixed with Taiwanese. Almost one-half of the city's surface was taken up by poorer districts composed entirely of Taiwanese dwellings, shops, and open markets.

There is also another way to see how the separation of living quarters kept the two groups apart—in terms of persons rather than the space involved. Table 27 illustrates this aspect of segregation for

[19] OPNAV, Civil Affairs Handbook (1944), *Taihoku Province*, p. 133. A more comprehensive account of the growth of Taipei City, in relation to the surrounding region, is given in Ch'en Cheng-hsiang (1952).

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

TABLE 27

RESIDENTIAL SEGREGATION IN TAIPEI CITY, 1925 AND 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese in Each "Ward"

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Per Cent Japanese in Each Ward	1925		1935	
	Number	Per Cent of Total	Number	Per Cent of Total
		Taiwanese		
0– 9.9	94,551	73.4	109,309	62.5
10.0– 49.9	25,681	19.9	48,815	27.9
50.0– 89.9	7,964	6.2	16,508	9.4
90.0–100.0	606	0.5	384	0.2
Total Taiwanese	128,802	100.0	175,016	100.0
		Japanese		
0– 9.9	3,069	5.8	3,640	4.5
10.0– 49.9	11,462	21.5	18,173	22.2
50.0– 89.9	24,926	46.7	48,775	59.7
90.0–100.0	13,884	26.0	11,116	13.6
Total Japanese	53,341	100.0	81,704	100.0

Sources: *Census of 1925, Statistical Tables*, Table 2.
Census of 1935, Statistical Tables, Table 2.

Taipei City in 1925 and 1935. Here both Taiwanese and Japanese have been grouped according to the degree of concentration of Japanese in each "ward." While the non-Japanese wards held the bulk of Taiwanese, there was some considerable area of overlap where the two groups were relatively mixed. From the evidence of this table, many Japanese who were arriving in Taiwan were forced to go to residential areas that contained some Taiwanese residents. This is shown by the relative gain of Japanese in the sections that were not purely Japanese, but where Japanese residents were in the majority. With its members increasing, the Japanese community eventually had to mix more widely with Taiwanese, since the areas that were already more than 90 per cent Japanese could not absorb any newcomers. They moved into wards with only the "better element" of Taiwanese, however, and managed to keep this mixture to a minimum. The proportion of Japanese living in predominantly Taiwanese wards actually fell off very slightly.

From the Taiwanese side, moving into mixed sections was carried somewhat further. Taiwanese were beginning to spread into wards that were not purely Taiwanese, sections closer to the center of the

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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city which they had occupied together with Japanese. Because there were more of them, and because they had been more concentrated among their own kind before, the Taiwanese moving into these areas contributed more to the mixture than the Japanese. The data here do not signify that it was very extensive. But it makes some difference which of these two aspects of segregation we choose to use as a standard of comparison.

This trend in the segregation of urban residents was of some significance in the other cities during the years when they were growing rapidly, for the system was put under strain by the continuous arrival of new immigrants. On the whole, the Japanese were successful in housing most of their people in residential wards that were predominantly Japanese, and well-to-do Taiwanese were moderately successful in entering sections containing some Japanese, but not into the sections most prized by the Japanese.

For Japanese, no other city offered living quarters and facilities so exclusive as those of Taipei (see Table 28). In every one of these six other Municipalities they lived more widely intermixed with Taiwanese (though not necessarily at the same levels of comfort). Kao-

TABLE 28

RESIDENTIAL SEGREGATION IN SIX CITIES OF TAIWAN, 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese of Each Ward

Per Cent Japanese in Each Ward	*Chilung*	*Hsinchu*	*Taichung*	*Tainan*	*Chiayi*	*Kaohsiung*
			Taiwanese			
0– 9.9	56.6	68.5	52.7	50.0	58.2	56.1
10.0– 49.9	34.2	30.7	42.7	48.3	41.5	36.2
50.0– 89.9	8.9	0.7	4.5	1.7	0.3	7.7
90.0–100.0	0.3	0.1	0.1	0.0	0.0	0.0
Total Taiwanese	100.0	100.0	100.0	100.0	100.0	100.0
			Japanese			
0– 9.9	5.7	16.4	6.8	11.0	15.7	7.9
10.0– 49.9	35.6	54.3	53.0	69.9	80.0	38.6
50.0– 89.9	50.9	16.6	34.9	11.1	4.3	53.5
90.0–100.0	7.8	12.7	5.3	8.0	0.0	0.0
Total Japanese	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Census of 1935, Statistical Tables*, Table 2.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

hsiung and Chiayi had not a single ward with as high as 90 per cent of its population Japanese. For Taiwanese, on the other hand, Taipei consisted neither more nor less of mixed wards than the other cities. In all, at least nine-tenths of the Taiwanese population of every city stayed in districts in which less than a majority of the inhabitants were Japanese.

The Taiwanese in Cities

Of all Taiwanese, so few went to cities that one is prompted to ask whether there were not some special factors present restricting the size of this migration. The effects of such a selective process over many years should produce differences in the characteristics of persons living in cities and of those living outside.

Since few if any newcomers had an opportunity to take up agriculture in the cities, a prominent feature of cityward migration was a movement to new work. To the extent that it was, one would expect that the migrants were the types of persons who usually undertook new occupations in Taiwan—for example, men rather than women, primarily in the ages of young adulthood. If the migrant population had been limited to these categories, cities with large proportions of migrants in their populations must have had disproportionate numbers of young men as compared with the rest of the island. Such a tendency has characterized rapid urbanization elsewhere.

In addition, cities frequently offer opportunities for employment that are considered superior to those found in the countryside. This is especially true of many agrarian societies, where rural poverty sometimes reaches extremes that make the meanest of urban jobs seem attractive. Where such conditions exist, movement to cities very often serves to drain off large numbers of men in young working ages who have lost or overcome their attachment to farming.

In 1935, these effects of age and sex selection were hardly perceptible in Taiwan's urban population taken as a whole. The age composition of all their males combined was nearly the same as the rural population (Table 29). Surprisingly, urban females likewise had almost the same age structure as those outside of cities. Hence, there could have been no sweeping dislocation of persons of different age and sex groups as a result of urbanization in Taiwan.

There are special circumstances in which it is not hard to imagine some movement of single individuals in an agrarian society; this has

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

F 361 Taiwanese villages are laid out in three basic patterns. Probably the most common is the nucleated or compact type: the dwellings form a compact cluster which is surrounded by the arable land of the village. The second is linear, laid out along a riverbank or road, and the third, the least common, is the scattered settlement whose houses are spaced out over a larger area, which sometimes makes it difficult to determine the exact boundary of the village. Hsin Hsing, like most of the villages in the area, is a compact cluster of dwellings surrounded by farmlands. One can walk completely around the central cluster in about fifteen minutes.

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T [491] [312] The dwelling cluster is bounded on the southwest by the *hsien* dirt road which connects Lukang with the market town of Chi Hu (all of the villages in this immediate area lie on one or the other or both sides of this road) and on the northeast by an irrigation drainage stream which flows into the sea near Lukang. There are two villages quite close to Hsin Hsing. Lo Ts'e (now incorporated into Yung P'ing village) is along the road about three hundred yards to the northwest, and Ta Yu lies along the same road about eight hundred yards to the southwest. Like all the neighboring settlements, both are separated from Hsin Hsing by fields.

T 311 There are a few fields lying within the dwelling area itself. These are small, mainly garden plots, and are mostly on the outskirts rather than within the village. Hsin Hsing villagers own the fields across the road from the village as well as those between Hsin Hsing and the neighboring villages of Ta Yu and Lo Ts'e, but most of the fields operated by the villagers—either as owners or tenants—are usually not so conveniently located. Many lie to the west on the other side of the road and as much as two or three miles away. Some can be reached only by dirt roads and by narrow paths between the fields. The villagers ride their bicycles as far as they can and walk the rest of the way, often carrying heavy farm implements. A boy might go along leading or riding a water buffalo.

T [491] [487] [493] [231]

T 243 312 Village agriculture is focused primarily on wet-rice cultivation. Hsin Hsing village is located in one of the principal agricultural areas of the island, the long flat west-central coastal plain. With the Strait of Formosa to the west and the interior mountains to the east of the area, there is a natural flow of water from the mountains to the lower lands and finally to the sea. The usually plentiful water supply is harnessed by an intricate network of irrigation systems which consist of rivers, dams, pumping stations—both publicly and privately operated—and artificial waterways and ditches which eventually carry water into the maze of fields.

F 132 The area is subject to great seasonal variation in both temperature and precipitation. Although it lies in the semitropical zone—being

12: Garnot--19-20 G-3 (1884-85) 1894 Formosans
116, 342, 351, 362

Except for the important group of houses at Loan-Loan or Wang-Wang the dwellings in the region around Kelung are scattered here and there at the foot of the hills or in the groves composed of bamboo, banana or areca trees. Most of the houses are fairly neat and they are made of a bamboo framework that is covered with rice straw. The corner supports are made of several beams that were taken from the neighboring forest and planted securely in the ground. The skeleton is a bamboo wattling and the whole thing is solidly tied together with little cords and pegs of the same kind. A broad pent-roof runs around the dwelling and protects it both from the sun and the rain. Very few of these houses have windows and they are all equipped with movable doors which can be dropped at night. The floor is covered with a kind of concrete made of lime and sand.

The land around the dwelling is enclosed by a bamboo hedge [20] and it is an orchard as well as a vegetable garden; you see banana trees, arecas, oranges and lemons, then there are litchis and mangoes, sweet potatoes and the kind of taro that grows in swamps

15: U.S. Navy --22 [8] (no date) 1944 Formosans
116, 181, 175, 362, 563

"The Hakka Chinese people. The ancestors of the Hakka people came to the island from the hinterland of Fukien and Kwangtung provinces. They remain distinct from other Formosans in dialect, dress and some ways of village life. They were an audacious and bellicose people when they arrived; and in the southern part of the island particularly they had to push through earlier Chinese settlements along the coast to the marginal land beyond, between the settled Chinese and the aborigines who were gradually and forcefully being dispossessed. As a consequence, even today the Hakka settlements are among the foothills rather than on the plains. This sequence of immigration has caused the Hakka to intermarry more freely with the aborigines."

15: U.S. Navy--28 [8] (no date) 1944 Formosans
116, 342, 362

"Most urban houses have a narrow frontage in proportion to their depth--14, 16 or 18 feet are usual, with depths of the building ranging from 24, 30 to 36 feet. A court may intervene and a second or even a third building of the same proportions be added beyond intervening courts. Houses look much alike and since they abut upon one another, they present a tenement-like aspect. They are shabby and often quite unclean. In towns and cities the average building is two stories high. Sometimes the space above the street arcade is open, forming a balcony."

15: U.S. Navy--28 [9] (no date) 1944 Formosans
116, 362, 444, 592

"Middle and lower class people live at the rear of their shops, in the second court, if one exists. Since the same patriarchal habits exist in towns as in the countryside, a great concentration of people is found to be living within one dwelling. Single households may include forty or fifty members. As many as 153 persons have been observed to be living in one old foreign-style dwelling in Taihoku."

VS

146 and vegetables are produced in plentiful supply on Formosa. The diet of the people generally is
262 considered adequate in proteins, minerals, and vitamins, except B2, but the protein is poor in quality, only about 10 per cent of it being derived from animal sources. Fish furnishes about 50 per cent of all animal protein consumed on the island;[3] other principal sources are pork and poultry. Dairy products have a low place in the dietary habits of the people, except for infants whose mothers cannot provide breast-feeding.

B. Housing Conditions and Problems

• 362 Of the problems of food, clothing, and shelter, the latter still poses a serious problem, but the food and clothing problems have been fairly well met. The housing situation remains critical despite the assistance of the government and U. S. agencies in instituting various housing programs and improving housing conditions during the last few years. Much progress has been made in this area, and the day when every citizen occupies adequate housing may not be too far off.

Formosan dwellings may be divided into three main types. A typical good urban dwelling is built of reinforced concrete with kiln brick walls, new tile roof, and cement floors and is equipped with electric lights and running water. A typical good rural house has mudbrick walls, thatch roof, and dirt or cement floor, the water supply comes

3. Economic Co-operation Administration, Economic Development on Formosa 1951-52, Taipei, 1953, pp. 39-40.

45:Stanford U. S-4,5 1956 ADl Formosa ADl

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from a well or river, and the light from electricity or kerosene lamps. The third group of dwellings includes all kinds of improvised shacks and huts in urban areas and farm houses built of such cheap and inferior materials as wooden boards or bamboo for walls and corrugated iron or split bamboo for roofing. Houses in the first group may be new or old. Some of them, especially old ones, are built of mudbrick wall and brick or dirt floor. Their sources of water supply range from a municipal water system to a well, ditch, or stream. Electricity is used for lighting by nearly nine tenths of the urban households, and by a little more than one third of the rural homes. Construction of new power lines in rural areas is expected to increase the use of electric lighting in the future.[4] Of more immediate importance to home comfort is weather-tight roofing; some 60 per cent of Formosan houses are reported to have leaking roofs.[5]

Housing conditions during the Japanese occupation were adequate, but general sanitary conditions were not always satisfactory. The destruction of buildings and water supply systems during the war coupled with the recent increase of population, especially in urban areas, have created the post-war housing shortage. Rural people in search of employment and an increasing number of evacuees from the Mainland swarmed to the cities, where reconstruction of houses was slow and land values high. Some of the new arrivals usurped public thoroughfares or the shells of damaged

4. Arthur F. Raper and others, Urban and Industrial Taiwan--Crowded and Resourceful, Taipei, FOA and Nat'l Taiwan Univ., 1954, p.348.

5. Ibid., p. 346.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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362 buildings as sites for temporary huts and shacks. Lack of building material, adequate lighting and toilet facilities, and proper water supply created many crowded and unsanitary slum areas in large cities. This situation has been steadily meliorated in the last five years as Formosa's economic rehabilitation progressed and personal income rose. However, some shacks and huts, somewhat refurbished and assuming an air of permanence, are still found in the cities. Typical of them are the shelters on Chungua Road alongside the railroad in Taipei. They are built of old bricks, thin boards, corrugated iron, and bamboo. In some extreme cases, one room no bigger than 9 by 15 feet serves the living needs of as many as twenty people -- from cooking and dining to sleeping in shelves along the walls.[6] The congestion, poor lighting, inadequate ventilation, dampness, and smoke create the worst imaginable sanitary conditions.

362 648 To relieve the crowding and improve living conditions, several housing programs have been launched through the cooperation of the government, U. S. Aid agencies, and the dwellers concerned. In Keelung, where hundreds of dockworkers' families had lived in sheds and empty crates, 102 new houses were built in 1954 under the Keelung Harbor Docks' Self-Help Housing Program. The program was implemented technically and financially by the Mutual Security

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6. Mutual Security Mission to China, Foreign Operations Administration, Housing, (unpublished pamphlet), Taipei, 1954, p. 1.

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Mission to China (MSMC) in cooperation with the Dockworkers' Union and the Keelung Harbor Bureau. The occupants of the new housing contributed 60 days of unskilled labor for its construction, and are now making amortization payments of 15 per cent of their monthly family incomes, so that in less than ten years they will own the houses they now occupy. The houses are built of cinder-blocks and reinforced concrete, and each provides 288 square feet of living space partitioned into two bedrooms, a living room, kitchen, and toilet. The building cost of a house, including the installation of electricity and running water, is about US$400.[7] The Keelung idea has been extended to Kaohsiung Harbor dockers in the South, and to salt-field and mine workers. More than 295 houses were being built in late 1954 for those three groups of workers.

In the meantime, the MSMC is giving technical assistance and providing a long term loan at low interest to implement the work of the National Housing Program Working Group, currently the National Housing Committee (NHC) of the Chinese Government. The Committee administers the national housing program and undertakes such responsibilities as arranging long-term, low-interest loans for housing investment, promoting self-help building for which the government supplies equipment and technical information, and encouraging cooperative housing programs, etc. Under the auspices of the committee, a National Housing Exhibition featuring 52 selected, low-cost housing

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7. Ibid., p. 4.

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648 362 designs -- actually built -- was opened in October 1955 in Taipei.[8] The model houses are built of reinforced concrete, kiln brick wall, cement or brick floor, new style tile roof, and are equipped with electricity and running water. The houses range from four-to seven-room units. The best and most expensive type of design provides for a living room, three bedrooms, a kitchen, a dining room, and a bathroom equipped with flush-toilet -- rarely found in Formosan homes. It is believed that the self-help, low-cost housing program as well as the efforts of NHC will go a long way toward improving housing conditions in Formosa.

II. ENVIRONMENTAL SANITATION

A. General Sanitary Conditions

744 Climate and economic conditions are the main determinants of the living environment of the Formosan people. Although sanitation is being constantly improved, it is still far from adequate and, with the housing situation, presents a most serious pr lem in the field of public health. The long summers, relatively warm weather throughout the year, and usually abundant rainfall, provide conditions favorable to the spread of communicable diseases. The rapid increase of population, especially in urban areas, unmatched by proportionate expansion of housing, public sanitation, and fresh water supply facilities has created such new problems as congestion in living quarters, lack of sufficient water, and shortage of public toilets. These conditions aggravate the previously existing situation of poor housing, drainage systems, and waste-disposal facilities.

8. Chung-yang Jih-pao [Central Daily News], Oct. 17, 1950.

B. Specific Conditions and Problems

744 Few homes in Formosa are equipped with modern facilities. Brick stoves burning charcoal are the most common medium for cooking and heating; oil and kerosene lamps provide most of the lighting. Smoke from both these sources is a polluting agent within and outside the home, particularly in the rural areas. According to a recent study, 15 per cent of urban homes and 40 per cent of rural homes are not equipped with electric lighting, to say nothing of other electrical facilities.[9] Drinking water is piped into only about 30 per cent of urban houses and less than 15 per cent of rural dwellings; about one-third of urban households and two-thirds of rural homes obtain water for drinking and cooking from wells; and the rest of the households get their water from irrigation ditches, streams, and springs.[10] Towns under 20,000 population generally do not have a system for piping water into homes.[11] Some wells have pumps, but most are open to pollution by dirt, insects, and the runoff of surface water. Flush-type toilets are rare, only about 1 per cent of urban dwellings have such a facility; the majority of households use inside or outside privies, periodically emptied of night-soil for disposal as fertilizer.

744 362 Sewer systems in towns and cities are networks of open drains designed to carry storm runoff and waste water from domestic and industrial sources. The brick or cement gutters, from one to four feet deep, are generally located between the street and the sidewalk. Occasional cross drains lead into

9. A.F.Raper and others, op.cit., p. 348.
10. Ibid., p. 349.
11. [next page]

45:Stanford U. S-4, 5 1956 AD 1 Formosa
AD1

744 trunk lines, which empty into open canals. Most
362 urban centers have a system of high-level canals bringing in fresh water, and another network of low-level canals carrying away waste water. However, it is a common sight to see children swimming and women washing clothes or vegetables in low-level canals. Often garbage, night-soil, and other refuse are dumped into the fresh-water canals. Some municipal authorities are now considering elimination of open sewage systems with all their disadvantages, but the enormity of the job and financial difficulties preclude any immediate fulfillment of such plans. For instance, the municipality of Taipei is contemplating the construction of an underground drainage system costing hundreds of millions of Formosan dollars and requiring more than ten years to complete.[12]

744 The scarcity of chemical fertilizers and the
514 average farmer's lack of financial resources necessitates the use of all organic refuse materials from human and animal sources to enrich the soil. The consumption of raw vegetables fertilized by unprocessed night soil is a primary cause of the spread of intestinal diseases. In addition the use of night soil presents problems of collection and disposal. In cities, human excrement from one or more households is often stored in water-tight vaults. The contents are periodically emptied by

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11. E. A. Turner, "Environmental Sanitary Conditions in Taiwan," Chinese American Economic Cooperation, Volume II, No. 2, Feb. 1953, pp. 51-65.

12. Central Daily News, Jan. 11, 1955.

Kelung is a city of 10,000 inhabitants that is squeezed between the roadstead and the mountain, but it resembles all Chinese cities in that it is simply an agglomeration of houses built of wood, brick and mud. The narrow fronts are carved and painted in various colors and they are crowded together in dark alleys which are paved with broad granite blocks. The upper floors project over the street ... until they touch in some places and they make it difficult to obtain any fresh air. Wooden bridges connect the various sections that were built on the little islands dotting the estuary.

15: U.S. Navy--28-29 (no date) 1944 Formosans
116, 346, 363, 499, 177.33 Japanese
636.33

"In many villages, especially the elongated type built between rivers and irrigation canals, the temples of the patron saints are constructed at corners or bends in the main streets, making them visible from some distance. These have proved a great obstacle in the construction of new streets for motor-[29]ized traffic. Public opinion strongly opposes drastic changes.

The Japanese have not always been considerate of popular sentiment in clearing lands adjacent to some Japanese enterprise. In road-building, Formosan cemeteries have frequently been disturbed and the owners of burial plots forced to move graves to land of little economic use. Many temples and large mansions obstructing government projects have been torn away with little effort to explain or to compensate."

15: U.S. Navy--29 [3] (no date) 1944 Formosans
116, 347, 363

"City streets are paved with asphalt. Shady, cool arcades provide shelter in all weather for pedestrians and displays of shop goods. Although they darken the interiors of buildings, they serve a useful purpose in all seasons."

10: Schumacher--223 [5] T-1 (ca. 1896) 1898 Formosans
116, 164, 361, 364

The origin, spread, and finally the endemic occurrence of illnesses are favored among the Chinese of Formosa by the layout of their towns, villages and dwellings. Nearly all the settlements have grown up in depressions which could be fed but not drained. It is true that sewers are found in all large settlements; they receive dirty water but there is no outlet for it. The water is left to evaporate and naturally infects the air. The sewers are deep ditches occupying the entire width of the narrow alleys; they are lined with tiles or planks. Add to that the fact that the Chinese are not very much concerned with bodily cleanliness, that individuals are not segrêgated in any way from a large group of people, that there is continued contact even at the time of contagious epidemics, and that they do not receive any medical attention, and then it becomes obvious that the origin of many illnesses should not simply be attributed to the climate of the island.

15: U.S. Navy--29 [4] (no date) 1944 Formosans
116, 364, 651, 656, 177.65 Japanese
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"The Japanese have enforced rigorously a system of household registration. At the door of each dwelling there is displayed a plaque bearing the name of the head of the house. Near it are pertinent receipts or certifications received from the police which testify to registration at the nearest police station, house-inspection and approval, vaccinations or innoculations required of all members of the household, certain tax receipts, and such other data which the police may require from time to time to be displayed in a public and easily checked place. In the cities small insignia or notices indicate the public utilities available in each house."

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364 long-handled dippers into wooden buckets and carried to collectors' carts for transportation to reservoirs outside the city. There the night soil is sterilized before being distributed to rural areas. In the countryside, human excrement is usually taken directly from the privies and applied to the soil without processing.

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364 Refuse of all kinds is extensively utilized. Private or municipal collectors of refuse carefully sort waste material to salvage and resell as much of it as possible. Organic waste is used for composting fertilizer; paper, rags, glass, and metals are sold for scrap. While waiting for disposal, the compost piles and junk heaps provide breeding places for disease, rats, and insects. Other breeding places for diseases and their carriers are provided by waste accumulation in the streets and back yards of cities; the number of workers engaged in the collection and disposal of night soil and refuse is insufficient for prompt waste disposal. In Taipei, for instance, while the population was doubling in the 1950-54 period, the number of night-soil collectors [13] increased only from 410 to 428. However, under the cooperative efforts of the American MSMC, the JCRR, and government agencies, more efficient and sanitary methods for the collection and disposal of waste materials are being adopted.

744 The problem of sanitation is complicated by public ignorance concerning it. Although the people

13. The Central Daily News, Jan. 21, 1955.

31: Hofmann--603 N-3 (1909) 1912 Formosans
116, 366, 543, 657, 177.65 Japanese
636.65

During my stay of one week in the capital and the neighboring regions, I was greatly impressed by the energy with which the Japanese had stimulated the culture of Taihoku. There were extensive government buildings, broad streets, water pipes, schools, barracks, hospitals, reformatories, railroads, telegraph and telephone connections; everything, in short, that is considered representative of western culture. Everywhere there are signs of Japanese patience, energy, and initiative which form a striking contrast to the confusion and negligence of the Chinese regime. There is a museum in Taihoku which is well worth seeing, with an extensive collection of the abundant fauna and flora of this island; it is because of the copious vegetation that Formosa for so many centuries has been the cynosure of all those nations who sought to expand their boundaries. There is also a botanical garden where a large number of useful and interesting plants has been systematically arranged and it is calculated to impress any visitor to the tropics. There is one hotel in Taihoku which, judged even by European standards, is excellent; it offers all the comforts of a tropical hotel.

15: U.S. Navy --24 [3] (no date) 1944 Formosans
116, 166, 369, 464, 177.36 Japanese
636.36

"The industrial centers at Keelung, Shinchiku, Takao and Karenko have attracted many voluntarily. The better paid technical and supervisory personnel are Japanese, but the common labor is Formosan-Chinese drawn from local rural communities. There is evidence that the creation of a number of new air establishments has necessitated the development of servicing communities near them, either at the fields' borders or in nearby villages. The development of a town at Toshien, just north of Takao, is the most important example of a 'war town' on the west coast. Karenko's new industries and the hinterland development of villages on a Japanese pattern and with Japanese names are examples of a more permanent new development."

15: U.S. Navy--28 [10] (no date) 1944 Formosans
116, 592, 596, 369

"Frequently husbands leave their wives and children under the patriarchal roof in the country while they spend the week in towns at some places of business or trade. The wives and older children help care for the farm. Many city households are dependent upon relatives in the country for much of their foodstuff, and there is constant going back and forth."

15: U.S. Navy--29 (no date) 1944 Formosans
116, 361, 369, 177.36 Japanese
636.36

"Many city or town planning ordinances are in effect in Taiwan. The Japanese have drawn up overall schemes for the modernization of urban life everywhere, but these have gone into effect only in the larger settlements. Hence a sharp contrast is presented between the excellence of some city arrangements and the extreme primitiveness of nearby settlements."

15: U.S. Navy--32 [4] (no date) 1944 Formosans
116, 177, 467, 369

"No contact appears to have existed between peasant and labor groups. Actually they were in conflict with each other on a number of issues. Peasant unions were closely tied up with the Japanese peasant unions, which had a strong Marxist element motivating them. The urban organizations--the Taiwan Minshuto and various trade unions--accepted the principles of Sun Yat-Sen of China, but were not connected with any organization outside of Taiwan."

162 In Formosa, there are 105 males to every 100 females.[9] In 1940 when the population was more permanently settled, the ratio[10] was 102 to 100 females. The many male immigrants who came in after the war probably account for the present sex ratio.

C. Urban and Rural Population

•369 167 Urbanization has increased rapidly in the past few decades. In 1920, four per cent of the population lived in cities of more than 100,000 inhabitants; in 1952, the number in such cities had increased to 21 per cent. Economic development in the last years of Japanese control and in the current postwar years, and the influx of Mainland people in the late 1940's and early 1950's, have contributed to growth in urban population. The preponderance of agricultural population has become less pronounced, and the high degree of ethnic and cultural homogeneity has been diminishing.

The majority of young people come to the cities with the hope of finding jobs; immigrants from the Mainland are mostly non-farmers and therefore flock to the cities; and most wives follow their husbands to the cities.

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9. China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], Vol. III, Taipei, 1954, p. 78.

10. Provincial Government of Taiwan, Results of the Seventh Population Census of Taiwan, 1940, Taipei, 1953, p. 40.

596 369 Rural households retain many of the features of the traditional family. They are often made up of three or four generations with a goodly sprinkling of kinsmen, adopted children, and others. However, among the one hundred households which were the subjects of a survey conducted by the Joint Commission on Rural Reconstruction, 58 were termed nuclear families and included 48 per cent of the total population surveyed. The other 42 households were three- and four-generation households, and included the remaining 52 per cent.[10]

562 178 The influence of the West has greatly improved the position of women in Formosan society. Women today have equal elective franchise and the right of inheritance. They have not only become clerks and manual workers but also have entered the professions and have taken a role in politics. The Chinese Constitution stipulates that the number of women delegates to the National Assembly, as well as the number of women members of the Legislative and Control Yuan, shall be determined by law. The Electoral Law fixes the percentage at ten, and at present there are 60 women of a total

10. A. F. Raper, Rural Taiwan - Problem and Promise, Taipei, Joint Commission on Rural Reconstruction, 1953, p. 208.

A. The Rural Family

596 369 563

The patriarchal, extended family common to the Mainland is the pattern of the family for the majority of people on Formosa. In rural communities, the father and sons work in the fields, the mother and the wives of married sons look after the hogs, fowl, and cattle and do the work of the household. Daughters care for the younger children, help in the preparation of meals, and wash the clothes. Boys and girls attend school until twelve years' of age; schooling continues after that age only if the child is talented and the family is able to afford tuition and the loss of the child's labor at home. Generally speaking, women of Fukienese descent are not given as many laborious duties as the Hakka women, who raise hogs, cattle, and fowl, and tend vegetable plots even in non-farming communities. Fukien children are more apt to prepare for city jobs than to continue work on the farms.

Since World War II, farm rents have been reduced and farmers are encouraged to farm more intensively in order to secure larger yields. As a result, women now do more farm-work than before. It is reported that women in Chihu are responsible for at least

369 40 per cent of the district's agricultural
596 production; in 1937, they accounted for only
563 17 per cent of the total yield.[1]

The aborigines in the mountainous regions of Formosa make a living from slash-and-burn agriculture and hunting. Some of the aboriginal tribes (the Bunun, the Tsou, the Paiwan, and the Yami) follow the patriarchal, extended family pattern. Others (the Atayal and Saisett) have a nuclear family organization -- each member of the family fulfills a definite role fixed by tribal custom. Aborigine women ordinarily do more farm work than Chinese women. Until recently few children from native tribes attended school, and until recently few aborigines ventured outside their tribal regions.

B. The Urban Family

369 The population of Formosa has been
161 increasing rapidly. The rate of increase is greatest in the urban areas. Each of Formosa's four largest cities -- Taipei, Kaoshiung,

1. Arthur F. Raper, Rural Taiwan - Problem and Promise, Taipei, 1953, p. 120.

•369 Tainan, and Tiachung -- has more than
161 doubled in size since 1937.[2] The cities of Keelung, Hsinchu, and Hualien have grown almost as rapidly. The rapid increase in urban population is traceable, in part, to the number of young Formosans who have deserted the rural areas for further education and more profitable economic opportunities.

369 The patterns of living of the urban population differ in many ways from those of the rural population. The size of the average household is smaller. The houses themselves are small, overcrowded, and usually contain no more than two generations, parents and children. Crime in urban areas has increased substantially.[3] On the other hand, educational facilities in the cities have improved. The people of Formosa are becoming more aware of the importance of education. Urban families send their children to vocational schools or high schools whenever it is financially possible. During the past fifteen years, the rate of industrial expansion has been rapid, although not rapid enough to provide
000 work for the fast-growing population. The

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2. Arthur F. Raper, et. al., Urban and Industrial Taiwan - Crowded and Resourceful, Taipei, 1954, p. 2.

3. The number of urban crimes reported
(continued next page)

369 The
463 scarcity of employment has resulted in the increase in the number of "self-made" jobs, such as the keeping of small, temporary streetside shops and stands, peddling, "household industries" of various kinds, cart-pulling, and pedicab-operating. Marginal self-employment is the chief source of income for approximately one-fifth of the males 15-50 years of age in the seventeen areas surveyed in 1954 by the China Mission of the American Mutual Security Agency and a group from National Taiwan University. A large proportion of those marginally self-employed would shift to regular industrial jobs if such jobs became available.[4]

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464 Because of under-employment and the prevailing low wage-scale, women and children often take up various kinds of work in order to supplement family incomes. Many urban households augment their income by raising hogs or fowl. Overcrowding in urban areas, the increase in the number of peddlers, streetside stands, and the feeding of hogs and fowl in crowded districts create a very serious health and sanitation problem.

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3. (continued) today far exceeds the number reported under Japanese rule. See the section on Criminal Codes and Procedures in the chapter on Law and Order.

4. Raper, op. cit., p. 5.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

121 167 177 178 eastern part of the mainland to Taiwan had been going on for several hundred years, beginning in the 1600's and virtually ending about 1900 when it was almost completely stopped by the Japanese regime. Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 177 178 During the Japanese occupation of Taiwan, except for the period just before and during World War II when they attempted to Japanize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese population has been significant. The combination of relatively efficient government, orderliness of life, and public health measures, together with an extensive system of communications on a relatively small island has greatly facilitated rapid population increase on a stable land base and a rapidly increasing growth of urban centers.

[744] [20] [161] [369]

Out of these developments, the most significant changes for the rural population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and with this an increased spread of urban influences or at least their effects into the rural villages. These increasingly significant extensions

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
People's Republic of China AF18

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have taken the form of the villagers' increased involvement in the greater market economy, the necessary migration of more and more villagers to the expanding cities with their newly developing economic opportunities, and, of course, the increased impingement of the government on the rural areas.

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In this study of a peasant community, I will describe and analyze the manner in which the Taiwanese agricultural villager is being transformed from a peasant primarily involved in a basically subsistence type of agriculture to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. I will show how such developments are interrelated with and have increasingly effected certain changes in village social organization, community and kinship solidarity, and some of the general patterns of village life. However, we will also see that the cultural and social changes have been weighty in some areas of life and scant in others.

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These changes in the Taiwanese village are perhaps far less dramatic and less drastic than those which the Chinese Communists are now attempting to institute among the Chinese peasants on the mainland, where in the past social change was relatively slow due to its massive size, poor system of communications, and lack of an effective centralized government organization. In order to achieve a strong Communist state, the Chinese Communists are consciously attempting to accelerate the process of urbanization, breaking down the traditional large kinship-group oriented rural society and the provincialism of the entire Chinese population. They hold that a single-class Communist society can be achieved only through the total transformation of the agrarian population, dominated by a peasant mentality, into an agrarian proletariat with a national and social consciousness. The commune system has perhaps been one technique used to speed the urbanization process and to develop an "urban mentality" by transforming the thought processes of a large agrarian segment of the population through education, mass organizations, and group cooperation as well as by changing its standard of living. It is unfortunate that we are unable to observe this changing phenomenon on the mainland today, because we are undoubtedly missing much which would greatly contribute to our understanding of the process of change in such a complex society. There are, of course, qualitative and quantitative differences between the mainland and Taiwan, much as there are differences between various areas of the mainland. Nevertheless, by observing and analyzing the nature of culture change in Taiwan, we may not only be able to understand the changing Taiwanese situation but may also gain insights into the nature and development of Chinese culture and society generally and, perhaps also, by analogy derive

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1
People's Republic of China AF18

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some insights into what is now taking place on the Chinese mainland. For many of the changes now taking place both in Taiwan and on the mainland are primarily due to the same cause—the encroachment of urbanization on a traditionally agrarian culture, whether enforced by the Japanese, the Nationalist Chinese, or the Chinese Communists.

FIELD METHODS AND PROBLEMS

T 121

In the selection of a research site, I looked for a Taiwanese village with several attributes. These were that the inhabitants be of mainland origin, preferably descendants of early emigrants from the province of Fukien; that the village have agriculture as its primary means of livelihood; that it have a moderate-sized population, preferably between five hundred and one thousand inhabitants, to facilitate the achievement of familiarity with most of the people and with all aspects of village cultural life; that it be fairly traditional both culturally and socially and as typical as possible of the general villages in that area; and that housing be available inside the village for me, my wife, and our interpreter. It was also important that the village not be too near a major city, and yet not be geographically or culturally isolated from the main flow of Taiwanese life; it had to be identifiable as a definite community.

And, of course, it was important that the villagers be receptive to having a foreign observer move into the village.

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It is no easy task to search for a village in which to carry on research in an unfamiliar country. The island of Taiwan, which on the map appears to be minute, is actually 250 miles long from north to south and 90 miles wide; it has an area of 13.8 thousand square miles.

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At the start of my search, I talked with the staff of the Joint Commission on Rural Reconstruction (JCRR), a Chinese and American agency which plays an important role in rural development in Taiwan. They briefed me on the cultural and geographic areas of rural Taiwan, and we decided that the *hsien* (counties) of Chang-hua, Taichung, and Yun Lin (all on the west-central coastal plain of Taiwan) offered the best possibilities for a suitable village. The next step was to travel by jeep within this area with JCRR field agents to visit many different kinds of villages and make a final choice. The interpreter, whom I hired at that time to live and work with my wife and me in the village, was a companion on these excursions. (For a discussion of translation methods and the use of the interpreter in the field see Appendix 1.)

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During the time we were investigating the many villages, we also visited local Farmers' Associations and *hsiang* (district) public offices. We held many long discussions with local officials to get additional

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

THE HISTORY OF THE VILLAGE AND AREA

The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[3] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

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The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1951 (*Women te Lukang Chen*, 1951). The decrease took place despite the high rate of population growth in the rest of Taiwan.

175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

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The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the accent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1945, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1951b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

1:Gallin E-4,5 (1957-1958) 1966
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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tsu* villages were quite powerful and frequently the de facto govern-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

4:Grajdanzev--104 S-4 (no date) 1942 Formosans
116, 371, 387, 439

"Taiwan is a heavy importer of fertilizers, because its domestic industry supplies a very small part of its needs. In 1936, for example, of 147,600 tons of sulphate of ammonia consumed, only 13,059 tons were produced in Taiwan. But this offers a promising field for development because Taiwan is rich in cheap water power (1).

1. In 1937 two large Japanese companies organized Taiwan Kagaku Kogyo Kaisha (Taiwan Chemical Co.) with a capital of ¥10 million, for the production of sulphate of ammonia. It was planned to increase production in the future to 100,000 tons of sulphate of ammonia; but data on the progress of the company are not available and, judging by the imports, production has not advanced to plan. The plant of the company was to be near Sinchiku."

6: Kirchhoff--34 [2] U-4 (no date) 1895 Formosans
116, 372, 439

The coal from Ki-lung might bring in tremendous sums, in view of the steadily growing demand for coal in the South Seas steamer traffic, which at present must be met by coal coming from such distant parts. And, in fact, in Hongkong for example Formosan coal can be delivered at a price per ton of 20.2 marks, so that it is at times cheaper than Japanese and Australian coal, and almost only half the price of English coal. But unfortunately this coal is too bituminous, and therefore burns too quickly, emits a great deal of smoke and deposits much soot in the chimneys. So the Chinese of the mainland prefer their own anthracite, while the foreigners in the Chinese coastal regions are quite willing to burn Formosan coal in stoves in the rooms. In view of the cheapness of the latter, its future seems assured, particularly when it is mixed with slower burning coal that is free of bitumen.

9: Yamasaki--232 [6] N-5 (1896-1897) 1900 Formosans
116, 244, 264, 372

Also planted are various species of legumes and the peanut (Arachis hypogaea L.). Peanuts in part are eaten roasted, and in part are worked into cakes and made into oil, which is much used by the Chinese for cooking and illumination.

C. Salt

317 433 Salt, available in quantity, is not produced from rock salt but by the evaporation of sea water on the western seaboard. The fields are centered around the towns of Anping, Putai, and Peimen. About 5,000 hectares of land were used as salt fields in 1954; production amounted to 369,000 metric tons. Domestic markets require approximately 75,000 metric tons a year, thus leaving a sizable amount of salt for export.

III. ELECTRICITY

376 Formosa has a number of short, swift-flowing rivers which are estimated to possess a total gross hydroelectric potential of some 3,300,000 kilowatts. According to a report made by the Taiwan Power Company, approximately 12 per cent (378,000 kilowatts) of the gross potential had been developed as of 1955. Formosa's 377 375 estimated thermoelectric generating capacity is 142,550 kilowatts, giving the island, as of 1955, approximately a total generating capacity of 520,550 kilowatts. The peak load in that year is estimated to have been 360,000 kilowatts.

377 Only the Taiwan Power Company produces electric power for general distribution. Some government and private enterprises generate power for their own consumption; notable among these enterprises are the Taiwan Sugar Corporation, the Taiwan Pulp and Paper Corporation, the Taiwan Cement Corporation, and the Taiwan

POWER GENERATION */
(in million kilowatt-hours)

Year	Hydro	Thermal	Total
1950	978	66	1,044
1951	1,169	123	1,292
1952	1,203	179	1, 382
1953	1,467	97	1, 564
1954	1,565	240	1,805

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Year	Industrial	Non-industrial	Total
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1954	1, 077	326	1,403

*/ Taiwan Economic Data Book, Vol. 3, 1955.

375 377 Thermal power generation serves in an auxiliary capacity; hydroelectric plants furnish the bulk of power required. Industrial consumption has increased rapidly in recent years; non-industrial use has remained relatively stable. This may accounted for, in part, by the rapid expansion of the textile and chemical industries and, to a lesser extent, the increased production of metal, machinery, and food processing industries. Hydroelectric power is also available for irrigation. In 1954, the textile and chemical industries accounted for over 34 per cent of the total consumption of power on Formosa; in 1950, these industries required only a little more than 22 per cent. The gradual increase in the non-industrial consumption of power has been the result of the electrication of some rural areas.

In 1942, the Japanese then in control of the island made plans to link the two existing power generating systems. Surveys were completed, but the demands of war made necessary the postponement of the plan to channel power from the eastern system to the western system, where power was in greater demand. The two systems were linked in 1951 with the completion of a trans-island power transmission line.

In 1952, the Taiwan Power Company established a five-year plan for the expansion of power plants. It was contemplated that by 1957 an additional 302,850 kilowatts (a total of 633,850 kilowatts) would be available to meet

375 the increased needs of economy. Some seven
377 hydro stations and four thermal stations were to be built or expanded by 1957. By the end of 1954, four stations had been expanded, providing an additional 58,750 kilowatts. Listed below are those stations known to be under construction, together with their potential capacity.

4:Grajdanzev--7 [2] S-4 (no date) 1942 Formosans
116, 133, 376

"Because of topographical conditions, the rivers of Taiwan are short and swift, the longest being the Dakusui, 170 km. (105 miles) long, which is in the east and flows parallel to the coast. There are only five others longer than 100 km. As they descend rapidly from great heights to the plains, however, they are able to supply a huge amount of power for the production of electricity, an important factor in the prospective industrial development of Taiwan."

4:Grajdanzev--105-106 S-4 (no date) 1942 Formosans
116, 376, 457, 177.71 Japan
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"Cheap water power is an important asset to Taiwan in all plans for its industrial development. Prior to 1930 it was estimated that the twenty-three major streams can produce as much as 1,040,000 kw., but, according to Takahashi, recent estimates put the capacity at a much higher figure—about two million kw. Of this about 230,000 to 240,000 kw. was utilized in 1939. Development before 1933 was slow. In 1919 the capacity was 10,000 kw.; in 1933, about 40,000 kw. But in 1930-31 a project was worked out for the utilization of Jitsugetsutan (Lake Candidius), a lake in the mountains in the centre of the island located 726 m. above sea level. The project was elaborated chiefly for the purpose of creating an armament industry (1) but there was no money to finance it, so work on the

1. That the primary motives were military is definitely stated in Taiwan Jijo, 1939, p. 418, and Sekai nenkan, 1939, p. 177.

project stopped. Finally, money was found in the United States, where in July 1931 a loan of US $22,800,000 or ¥45,737,210 was arranged. In October 1931 work was resumed and in 1934 the project was completed. In July [106] 1937, a second project was finished at the same lake."

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377 Aluminum Corpoation, having a capacity of 71,300 kilowatts. The Taiwan Power Company has 35 generating stations -- 24 hydroelectric stations, with a capacity of 330,400 kilowatts; 4 thermoelectric stations, with a capacity of 59,500 kilowatts; and 6 small diesel generators, with a capacity of 2,050 kilowatts. All but two of the hydroelectric plants are without storage reservoirs and are dependent upon river-flow. The two hydroelectric plants at Sun-Moon Lake (Jitsugetsutan) have a storage reservoir, but production is sometimes curtailed, as when the reservoir was nearly emptied during a drought in the winter of 1950. The Jitsugetsutan system also includes a plant at Wan-ta, and accounts for over one-third of the total generating capacity on Formosa.

376 In order to meet the demands for additional
377 light and power, power-generating plants have been expanded to serve industry and private needs. Power generation and power consumption are shown in the tables below.

4:Grajdanzev--97 S-4 (no date) 1942 Formosans
116, 257, 377, 433, 473

"Our analysis has shown that in Taiwan only the electric power, chemical, and food industries are large-scale, and that among them the electric power and sugar industries tower far above the rest—in these the corporations would be huge even by the standards of industrially developed nations. We saw that in agriculture Taiwan is an island of contrasts—huge landholdings and poor 'independent' landowners and tenants. The same picture appears in industry and will become clearer on examination of some individual industries for which data are available. We saw that in Taiwan one should distinguish between the progress and prosperity of agriculture in general and of the agriculture of the small Chinese farmers. The same phenomenon appears in industry."

4:Grajdanzev--106 S-4 (no date) 1942 Formosans
116, 377, 473

"In February 1939 a large new station producing electricity from coal was put into action. There are now 158 private producers of electricity and 15 government stations on the island, but by far the most important producer is the Taiwan Denryoku Corporation, established in 1919, the capacity of whose stations is now 220,050 kw. Its paid-up capital is ¥45.8 million, its reserves, ¥15.1 million, and its debentures, ¥76.6 million. Its principal shareholders are the Taiwan government-general and Japan Life Insurance Company. Profits in the last few years have been seventeen per cent and it has paid seven per cent to its shareholders. The low rate of profits compared with other corporations is presumably to be explained by the fact that the company sells electricity to the armament plants, for example to the Nippon Aluminum Company, at a special reduced price of 0.5 sen per kwh. The same policy is pursued by Taiwan Denka Corporation, which sells electric current to a ferrosilicon plant at 0.6 sen per kwh. Another important company in this field is the Taiwan Dento Corporation, established in 1919, with paid-up capital of three million yen. It supplies electricity chiefly for domestic lighting and the capacity of its plant is 7,224 kw. Its rate of profit is about thirty per cent and it pays dividends of ten per cent (1).

1. Recent information from Taiwan (August 1940) tells of the merger of these companies, so that a huge monopolistic corporation will take their place."

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In 1952, the Taiwan Power Company established a five-year plan for the expansion of power plants. It was contemplated that by 1957 an additional 302,850 kilowatts (a total of 633,850 kilowatts) would be available to meet

375 the increased needs of economy. Some seven
377 hydro stations and four thermal stations were to be built or expanded by 1957. By the end of 1954, four stations had been expanded, providing an additional 58,750 kilowatts. Listed below are those stations known to be under construction, together with their potential capacity.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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ELECTRIC POWER PROJECTS */

	Potential Capacity	Scheduled for Completion
Pei-pu Steam St ation	40,000 Kw.	1955
T'ung-men Hydro Station	21,000	1955
Kaohsiung Steam Station	40,000	1955
T'ien-leng Hydro, 2nd Extension	26,500	1956
Kaohsiung Steam, 2nd Extension	40,000	1956
Wu-she Hydro Station	20,000	1957
Nan-shih Hydro Station	20,000	1957
Chu-k'eng Hydro Station	100,000	1957
Lung-chien Hydro Station	40,000	1957
Shih-men Hydro Station	120,000	1960
Total	467,500	

*/ Mutual Security Mission to China, Economic Development on Formosa: 1951-52, Taipei, 1953, p. 25; China News Press, China Annual 1953, Taipei, 1954, Vol. 2, pp. 68-69. China Annual 1954, Vol. 3, p. 54.

379 Formosa has not yet exploited the hydroelectric potential offered by its heavy annual rainfall and the steepness of its river gradients, and no sustained effort has been made to compensate for the varying water reserves available at different times of year, headwater erosion, the narrow valleys in which the rivers flow, and the silt and gravel which combined to reduce the efficiency of the streams as a source of power. For these reasons, the economic development of potential power sites is as important to Formosa as the implementation of flood control and irrigation programs.

Currently, the Taiwan Power Company has established a committee to investigate and plan the generation of power by atomic energy on Formosa.

IV. FOOD PROCESSING INDUSTRIES

A. The Production of Sugar

249 The history of the sugar industry in Formosa
433 goes back to 1349, when islanders "boiled sea
431 water to make salt and fermented molasses to produce liquor."[17] In 1650, when the Dutch were occupying Formosa, some 6,000 metric tons of sugar cane were produced each year. Of this amount, two-thirds were exported to Japan and marketed in lands as far away as Persia. Under the rule of Cheng Ch'eng-kung (Koxinga), who

17. China News Press, T'ai-wan Ching-chi Nien-pao, 1953 [Annual of Taiwan's Economy, 1953], Taipei, 1953, p. 45.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

supply of unoccupied land in Taiwan that could be drawn into cultivation, and so the needs of an expanding farming population and growing export demand had to be met by other means. The Japanese turned again to large investment to improve the effectiveness of the land that there was. The manner of constructing and upkeep of irrigation canals in Taiwan depended on mass labor. They were turned into an investment of labor, employed so as to produce an important form of capital equipment. The extent of irrigation more than kept pace with rural population growth while the Japanese were in control. Water for this purpose became indispensable in maintaining the output of farms. It was a hidden element in the improvement of rice and sugar yields, for the new varieties of seed that were developed were types that needed to be carefully irrigated.

Finally, the development of electric power was so closely related to the growth of Taiwan's newer industries that it should not be passed over without mention. Generation of electricity was one of the specialized heavy investments that formed the nucleus of the "industrial" progress after 1930. This is evident in a circumstantial way from the trends of capacity in generating power and the spread of factory employment (see Fig. 8). Factories in Taiwan came to depend on the cheap electricity that was developed at state instigation from water power. Judged from the size of their employment, the most important of the mechanized factories in the island were "food" (i.e., sugar) and metallurgical plants, which were the heaviest users of electricity.

As the next chapter will indicate, the Japanese broadened their objectives in Taiwan too late to put its human resources to best use in the new effort. Drawing the developed wealth of the island together into centralized control had turned out to be singularly advantageous. It had erected an entire structure of corporate organization from specialized financial services down to the coordinating of actual physical production of commodities. The Government-General had retained a close supervision over this structure, by licensing, regulation, and participation as a shareholder. As a program it quickly marshalled the production of Taiwan's farms into a profitable colonial enterprise.

When it came to pressing this development further, however, the Japanese made no real progress, for they had frustrated these aims in advance. Under agrarian conditions, industrial skills and experience in management are slower and more difficult to accumulate

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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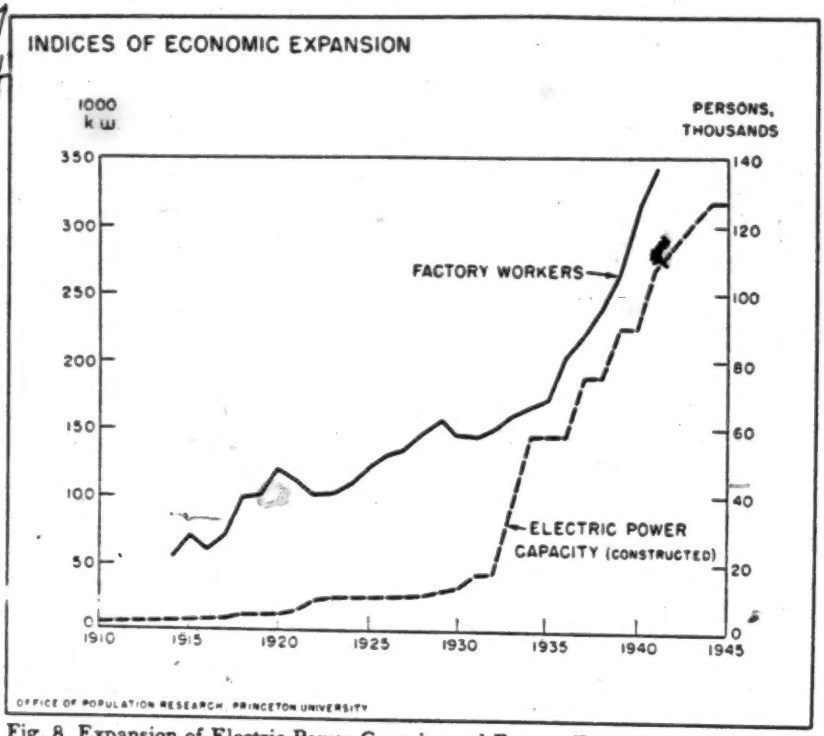

Fig. 8. Expansion of Electric Power Capacity and Factory Employment in Taiwan, 1910-1945.

471 than material forms of capital. Japanese in the past had never cul-
433 tivated an adequate fund of these among the Taiwanese. The same mechanisms which had served so well in channeling a large part of the total product each year toward desired uses had suppressed any opportunities for industrial employment that might attract Taiwanese who had administrative skills. What the Japanese themselves referred to as the "industrialization of Taiwan" was nothing but a corporate superstructure placed on an agrarian base. This was not capable of diffusing an industrial culture thoroughly among the general population, because it had been devised to prevent this very thing.

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tenants there has been a rent reform program, which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

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By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

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Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

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Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use.

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak.

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1952), cement (389,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures.

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 630,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–52, the world market price began to rise, and sugar production is gradually returning to its previous high levels.

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries.

A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government.

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes.

339 in 1954 was approximately 536,400 metric tons.
433 With the exception of gypsum, which must be imported, all the raw materials required for the manufacture of cement can be had locally. (According to production estimates for 1955, approximately 12,900 metric tons of gypsum are required in order to produce 500,000 metric tons of cement.)

D. Paper

289 Waste timber, from which pulp is made
433 for the manufacture of paper, is easily available in Formosa, and the paper manufacturing industry was extensively developed under Japanese rule. As of 1954, there were 40 paper mills in Formosa; the largest is the Taiwan Pulp and Paper Corporation. The corporation produced 12,900 metric tons of paper in 1954; all other mills combined produced a total of 14,620 metric tons.

E. Other Chemical Products

•381 The yearly production of other chemical
433 industries on Formosa are listed in the following table:

4:Grajdanzev--109 S-4 (no date) 1942 Formosans
116, 135, 315, 382, 177.31 Japan
636.31

"Since 1908 the Taiwan government-general and the Japanese navy have paid special attention to oil production in Taiwan, but up to now this branch of mining has been more productive of subsidies to oil producers than of oil itself. It was mentioned above that in 1936 the value of oil produced in Taiwan was ¥312,000 and that of gasoline, ¥456,000. However, in the 1937 budget of the government-general ¥1,005,000 was earmarked as subsidies for oil producers and prospectors. Daily production of oil in the last few years has been about 5,000 American gallons."

B. Alkali Products

385 433 The alkali industry, in support of various other chemical industries, has been expanding steadily since World War II. Caustic soda and soda ash are used in pulp-making, aluminum-making, soap-making, and glass-manufacturing. Chlorine is used for the production of bleaching powder, insecticides, and so on. Production of some alkali products are given in the table below.

ALKALI PRODUCTION *

	Caustic Soda	Soda Ash	Liquid Chlorine	Bleaching Powder
1952	8,526	609	1,286	1,526
1953	10,181	915	1,823	1,330
1954	14,487	1,163	2,667	1,787

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. Cement

339 433 Formosa's sole domestic source of cement, the Taiwain Cement Corporation, was established in 1946 when the government consolidated and reorganized three cement works and two cement-products plants formerly owned by Japanese concerns. In 1954, the management of the corporation was transferred to private ownership. The total productive capacity of the three plants -- in Kaohsiung, Suao, and Chutung -- was estimated at 670,000 metric tons a year; actual production

"With the exception of paper, mineral oil and soap, all the products mentioned here represent the processing of agricultural products or else fertilizers for agriculture. The alcohol is chiefly a by-product of the sugar industry. Formerly all alcohol produced in Taiwan came from molasses, but now part of it is produced directly from sugar cane. The new product—[104]absolute alcohol—is suitable for use as a motor fuel, but no data on its production have been published.

In 1937 the products of this industry were as follows:

	Value (1,000 yen)	Volume (tons)
Mineral oil	1,094	
Soap	941	
Vegetable oils	2,149	3,721 (1936)
Oil cakes	2,382	
Paper	2,165	
Bagasse*	626	
Mixed fertilizers	7,450	67,841 (1936)
Other fertilizers	1,808	
Perfumery and essences	1,211	
Charcoal	1,970	

* Cake for fodder made of the remains from sugar

cane after extraction of the sugar.

	Value (1,000 yen)	Volume (tons)
Refined camphor	1,346	
Alcohol	5,434	
Other products	5,076	
Total	33,652"	

116, 371, 387, 439

"Taiwan is a heavy importer of fertilizers, because its domestic industry supplies a very small part of its needs. In 1936, for example, of 147,600 tons of sulphate of ammonia consumed, only 13,059 tons were produced in Taiwan. But this offers a promising field for development because Taiwan is rich in cheap water power (1).

1. In 1937 two large Japanese companies organized Taiwan Kagaku Kogyo Kaisha (Taiwan Chemical Co.) with a capital of ¥10 million, for the production of sulphate of ammonia. It was planned to increase production in the future to 100,000 tons of sulphate of ammonia; but data on the progress of the company are not available and, judging by the imports, production has not advanced to plan. The plant of the company was to be near Sinchiku."

423 and owned by each farming family in Formosa
24 is 1.28 chia or 2.8 acres as compared with 215.3 acres owned by each farming family in the United States.[27] The small size of the farms limits the living standard and the purchasing power of Formosan farmers. Even the small parcel of land owned by the average farmer is threatened with further partition on account of the enormous rate of natural increase in population. The average size of farms on Formosa has decreased from nearly 2 chia (.5 acres) in 1937 to the present 1.3 chia. Unless industrialization of the island can divert members of the growing farming families to industrial enterprises, the size of farmland per family will be further reduced through inheritance and will become too small to maintain even a marginal subsistence. It will be indeed a serious situation. Furthermore, for lack of capital, and relying principally on human labor, the efficiency of Formosan farming is low, and the cost of production is
387 high. The soil of the western coastal plain is
24 alluvial, lacking sufficient humus to be fertile. Fertilizer is needed to increase its productivity.[28]

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27. Report of United States Bureau of the Census for 1950.

28. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop, whereas in Japan, the figure is 66 to 98 pounds.

387 The Chinese Nationalist Government with
241 American aid has made special effort to expand the production of fertilizer in the past five years[29] and make it available to the farmer through the Land Bank of Taiwan and the farmers' associations. The Kaohsiung Ammonium Sulfate Corporation reduced the selling price of fertilizer, from NT$3,100 to NT$2,800 per metric ton in June 1954 and then to NT$2,200 in August 1954. But the present production still falls short of the estimated annual requirement of 740,000 metric tons.[30]

241 At present, farm mechanization is in
407 its infancy. Little power is employed in agricultural production. Farm implements are crude and clumsy; they do not plow deeply and evenly, and so the distribution and the depth of the seeds sown are not uniform. The Sino-American Joint Commission on Rural Reconstruction is sponsoring many projects to

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29. Production was increased from 45,840 metric tons in 1949 to 168,491 metric tons in 1954.

30. The amount of fertilizer actually used in 1952 was 535,801 metric tons-- (732,600 short tons), JCRR General Report IV, Taipei, 1953, p. 55.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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V. CHEMICAL INDUSTRIES

A. Fertilizers

387 433 The importance of fertilizer for Formosa lies in the fact that so little of the island is suitable for agriculture that what arable land there is must be constantly enriched by chemical and natural means. The fertilizer industry is expanding, and in the next decades will offer employment to many and decrease the amount of fertilizer it is necessary to import to Formosa.

Experts attached to the Joint Commission on Rural Reconstruction have estimated that, according to Formosa's present soil and climatic conditions, the island has need of a minimum of 580,000 metric tons of chemical fertilizers each year. In order to secure optimum growth of crops, 1,000,000 metric tons of chemical fertilizers are needed annually. However, as of early 1955, the productive capacity of domestic plants was approximately 185,700 metric tons per year.[20] In order to expand production of fertilizers, the construction of four additional plants has begun, and when they are completed they will increase total capacity to over 383,000 metric tons per year. Further expansion is feasible, provided that sufficient investment capital is made available. Most of the

20. Industrial Development Commission, Fertilizer Taiwan, Taipei, 1955, pp. 4-6.

45:Stanford U. S-4, 5 1956 AD 1 Formosa

~~AD 1~~ AD/

38/ Raw materials necessary for the processing of
433 fertilizer are available on Formosa. The island has a relative abundance of limestone, coke, coal, pyrite, and serpentine; phosphate must be imported. However, the present expansion program will only provide two-thirds of the minimum fertilizer
38/ requirement of the island. The following table
433 compares the production and importation of chemi-
439 cal fertilizers.

PRODUCTION AND IMPORT OF CHEMICAL FERTILIZERS */

	Production	Importation
1937	31	413
1938	27	444
1939	34	356
1951	112	235
1952	150	403
1953	166	253
1954	168	359

*/ Industry of Free China, Vol. 2, November 1954, pp. 90-91, and Vol. 3, May 1955, pp. 56,70.

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use.

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The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes.

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433 figure for rice acreage registers an increase of 156 per cent over 1945, while the rice yield shows an increase of 221 per cent. There are also gains in sweet potatoes, wheat, sugar cane, tea, fruits, and other agricultural produce. Among the factors contributing to this growth are the fertilizer assistance program under ECA, incentive generated by the rent reduction program, irrigation and reclamation projects, and rural co-operative projects, health work, and improved-seed distribution sponsored by the Chinese-American Joint Committee of Rural Rehabilitation.[84]

Industry

439 The Nationalist policies toward industry may be reflected by a general description of the industrial situation in Taiwan. Prior to 1945, the island was tied to Japanese over-all economy. Its agrcultural productivity, for instance, was dependent on fertilizer imports from Japan. Other products, such as camphor and certain metal-bearing ores, were shipped to Japan for further processing. In recent years there has been a trend toward integration of industries. 387 The production of fertilizer, for example, has been stepped up from a 1945 low of 400 metric tons to an estimated 92,000 tons in 1951.[85] This is against an estimated 1951 demand of 340,000 metric tons in rice and sugar-cane fields 000 alone.[86] Since March 1948, a refining

ernment, *Report on Food Production** (Taipeh, 1949), pp. 33–41; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, pp. 383–402; *Taiwan Today*, cited note 11 *supra*, pp. 77–98.

[84] Raymond T. Moyer, "Economic Administration Program in Taiwan," address before the Chinese Association for the United Nations, March 17, 1951.

[85] *Taiwan Today*, cited note 11 *supra*, p. 108; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, p. 481 (1950 production was estimated to be 55,000 metric tons).

[86] *Taiwan Today*, p. [illegible]; also cf. *Taiwan*

[P. 219(A)]

[47] mills and 80 smaller mills scattered over the
256 island. Their combined productive capacity is
453 reported to be approximately 1,227 metric tons a day. If the mills were in operation only 250 days a year, their total capacity would be some 306,750 metric tons a year, far exceeding the estimated annual consumption requirement of 108,000 metric tons. The annual consumption requirement may have increased as the population increased in the past two years. The production goal for 1955 was set at 160,000 metric tons of flour, to be processed from 208,000 metric tons of imported wheat in addition to 8,000 metric tons of domestic wheat.

It should be noted that Formosa's production of flour is vitally dependent upon the importation of wheat. Delay or discontinuation of import would immediately affect local markets.

D. The Production of Edible Oil

388 Peanut oil and soybean oil are the most im-
453 portant types of edible oil produced in Formosa. The oils are used in domestic cooking. What remains after the oil has been extracted is used to feed animals or as fertilizer. Although enough peanuts are produced to meet domestic requirements, about one-third of the soybeans needed are imported. Approximately 500 producers of edible oil were reported in 1954. Most use cottage-type pressing mills, operated by human and animal labor. There are only 24 modern oil-pressing mills on the island. The production of peanut oil, peanut cake, soybean oil, and soybean cake is

shown in the following table:

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PRODUCTION OF EDIBLE OIL */
(in metric tons)

	Peanut oil	Peanut cake	Soybean oil	Soybean cake
1938	3,007	4,511	2,043	19,508
1939	2,525	3,788	2,410	19,520
1952	5,112	7,846	4,980	43,835
1953	5,900	8,850	9,339	68,506
1954	5,360	8,040	7,101	51,964

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

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OTHER CHEMICAL PRODUCTS */

	Unit	1953	1954
Alcohol			
DDT (100 per cent)	(kiloliter)	25,262	14,708
Camphor	(kilogram)	117,572	446,026
Soap	(kilogram)	263,906	181,043
Paint	(metric ton)	17,106	18,076
Printing Ink	(metric ton)	1,992	2,530
Active Carbon	(kilogram)	150,694	151,715
Matches	(1,200 boxes)	222,577	215,945
Toothpaste (tube)	(gross)	22,767	31,574

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

4:Grajdanzev--103 S-4 (no date) 1942 Formosans
116, 392, 439

"Machine and Vehicle Production in 1937 Consisted of These Items:

	(1,000 yen)
Agricultural machinery, including that for the sugar industry	730
Other machinery and apparatus	5,071
Vessels	730
Vehicles	405
Other products	1,656
Total	8,592

This production by no means satisfies the needs of industry and transport of the island, and the imports of machinery, vehicles and vessels are now valued at thirty to forty million yen a year."

4:Grajdanzev--190-191 S-4 (no date) 1942 Formosans
116, 392, 724, 177.39 Japan
636.39

"Any good [Military--analyst] base must also have a well developed industry, especially a metal industry. Taiwan's supply of munitions, tanks, airplanes comes from the industrial centers of Japan Proper. It is, of course, impossible to change this situation. However, the more can be made or repaired, or assembled in Taiwan, the better. It was shown above that in spite of the rapid growth of industry in the last years the metal and machine industry of the island is small in size. We have no data on the years 1939, 1940 and 1941 when industrialization of the island was declared to be one of the basic policies in the construction of the base for southern advance. Yet indirect data (changes in bank credits, movement of railway goods, imports of the island, etc.,) do not suggest any very rapid change. Undoubtedly some growth took place, and it was well-oriented, but there were many obstacles to the realization of the plans: shortage of metals and machinery; shortage of labor, in some cases due to the unwillingness of the military authorities to pay higher wages; difficulties in the public finances of Taiwan [191] Government-General in view of the several bad harvests of rice and extraordinarily low production of sugar. All this suggests that by 1941 the development of machine and metal industry has hardly made great progress since 1938."

C. Machinery Manufacturing

402 Formosa has a large number of machine shops, both large and small, capable of repairing, seeing to the maintenance of, and replacing small parts of various types of industrial equipment. The following items can be produced on the island: sugar refining equipment, simple chemical machinery, push-cars for railways, fishing boats, diesel enginees under 200 horsepower, low pressure boilers, textile machine parts, bicycle parts, small motors, transformers, light bulbs, electric fans, dry cell batteries, and so on.

D. Shipbuilding and Ship Repairing

396 Formosa has four government-owned and 32 privately owned shipyards, among which two of the government-owned concerns -- the Taiwan Shipbuilding Corporation and the Taiwan Machinery Manufacturing Corporation, are by far the largest. Their combined production accounts for nearly 90 per cent of the production of the island's shipyards. In most instances, these shipyards build and repair small, diesel-powered wooden craft. For example, in 1954 the Taiwan Shipbuilding Corporation produced one 30-ton landing craft, two 100-ton bull trawlers, and one 400-ton oil barge, and another two 100-ton bull trawlers were nearing completion.

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241 improve the designs of local farm implements --
409 the plow, the hoe, the sickle and the rice thresher; it is also introducing the use of hand-operated semi-automatic sprayers and rotary dusters. A demonstration of mechanized farming was made on an abandoned pineapple farm in Laopei. It was found that, with deep sub-soiling and deep plowing by a tractor, the cost of production can be reduced from 35 to 40 per cent. This clearly proves that land reform is but one step toward the amelioration of the economy of the farming population in Formosa. In order to raise the standard of living of the farmer, when the arable area is limited and the average holding is small, the per unit and per capita yield must be increased. To enhance a program of productive efficiency, which would include the application of greater amounts of fertilizer, the mechanization of the farms, and other improvements of agricultural techniques, the farmer himself must learn these modern methods in order to increase the value of the land he holds.

241 the postwar years. These goals can be
433 attained without the expansion of present planted acreage and are more optimistic than the goals contemplated for 1956 in the Formosan Four-Year Plan.[9]

If the per unit yield can be increased and additional land is made productive, there is no reason why Formosa cannot substantially expand its yearly production. Rice is now planted on approximately 780,000 hectares of land; upon the completion of Shihmen dam and reservoir, it will be possible to grow rice on 835,000 hectares. If the yield per hectare is 2,500 kilograms, the total yield will be 2,100,000 metric tons, enough to feed 14 million people.[10]

IV. FARM MECHANIZATION

241 As in most undeveloped countries,
407 agriculture in Formosa is conducted on a primitive basis. The average farmer has only

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9. The Four-Year Plan, begun in 1952, is designed to bring about the economic independence of Formosa by increased production in agriculture and industry.

10. The Central Daily News, July 1, 1955.

(continued next page)

35: Collingwood--135-136 D-2 (1866) 1867 Formosans
116, 411, 609

"Sundry warlike-looking personages, armed with matchlocks, had turned out to meet the suspicious-looking strangers; but seeing us walking unarmed and amicably among the citizens, they fired their weapons harmlessly in the air for effect. They allowed us to examine their matchlocks, which we were told were manufactured at Amoy; and their ammu-[136]nition, consisting of very coarse powder, with a finer grain for the priming, and bullets—some round, some oblong, some rectangular."

596 Brothers were not bound to each other
593 with the same strength each felt for the father. The degree of cohesion was determined by their social and economic circumstances. When it was necessary to protect the family from an enemy without, brothers were considered as close as one's limbs.[5] If there were differences in occupations and economic interests, a division of the family after the death of the father was inevitable. Then each son formed a nuclear or joint family for himself, and brothers became mere neighbors. But such instances were rare. Many factors bound together the nuclear units, making the typical family grouping extended and inclusive.

596 The social function of the extended family
411 was as a unit for self-protection against possible attack by aborigines, bandits, enemy clans, and criminals. For defense against so many enemies, village and clan members united, but the extended family was the basic defense unit. In well-to-do families there were stores of rifles, spears, and other weapons. Even today, gun loopholes can be found in the outer walls of some old houses.[6]

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5. Yamanaka, loc, cit.
6. Ibid.

10: Schumacher--226 [3] T-1 (ca. 1896) 1898 Formosans
116, 171, 174, 412

Several of the objects which I brought down from the mountains were thought to be old Chinese things even by some of the Chinese priests. I would not let the Chinese lie to me under any circumstances and asked them for proof of their statements, and they showed me pictures of objects on old temple decorations which showed definite similarity with my originals in spite of the fact that they had been strongly affected by the weather. I am referring to bamboo rakes, a wooden sprinkler which can be used simultaneously on two rows of plants in the field, and a device for lifting a primitive lamp of clay.

Is it not possible that the inhabitants of the mountains have, in the course of time, forgotten the things that keep them from being stamped as completely Chinese in the same manner as they adopted the elements which they have in common with the Chinese? In short, why would it not be possible that these inhabitants of the mountains be Chinese who have emigrated from the Chinese mainland and come to Formosa, where they found a new homeland and settled in the fresh air of the mountains.

4:Grajdanzev--72 S-4 (no date) 1942 Formosans
116, 127, 421

"In many cases it has been shown that the Taiwan official statistics are not entirely satisfactory. But the problems which we shall now discuss, important though they are, are given much less attention in the available official sources. These questions are: how many farmers own their land and how many rent it; how is the land distributed among the landowners and among the cultivators."

4:Grajdanzev--75 S-4 (no date) 1942 Formosans
116, 162, 178, 421, 651

"According to official statistics the number of payers of the agricultural land tax increased from 2,099,000 on January 1, 1938, to 2,112,000 on January 1, 1939—an increase of 13,000. How can this increase be explained when the number of families engaged in agriculture fell by 2,900? We must therefore conclude, either that official statistics are inaccurate, or that a rapid proletarization of the agricultural population is going on. It may be—although this is only a hypothesis—that the official statistics do not include sub-tenants, a very numerous class in Taiwan. But whatever the cause, the statistics give a distorted picture of land relations on the island."

4:Grajdanzev--75-76. S-4 (no date) 1942 Formosans
116, 311, 421, 427, 565

"Let us now turn to the investigation of the problem of tenancy. Its economic importance lies in the fact that (1) a large portion of the farmer's income is paid out for rent on land, and (2) the farmer is less interested in preserving the fertility of the land and in making improvements, because the land does not belong to him and may be taken from him at or even before the expiry of the lease. From the social point of view the phenomenon of tenancy is important in that it often creates an idle class of landlords or rich farmer-owners and a class of poverty-stricken tenants. The widespread existence of tenancy makes average figures for the agricultural population meaningless because on the extreme there are rich landlords and on the other poor tenants. In order to be able to judge more or less correctly the importance of tenancy we should know: (1) the number of farmer-owners, part-owners (i.e. those who own some land, but are compelled to rent additional acreage), and tenants; (2) the area which is farmed and the amount owned of that farmed by each of these groups; (3) the division of each of these groups into at least three [76] sub-groups—large, medium, and small—in order to see whether each of these groups is uniform since, for example, the tenant who rents one ko and the tenant who rents 50 ko belong to quite different groups; (4) the conditions of the rent. The available statistics for Taiwan throw light on but few of these elements."

4:Grajdanzev--69-70 S-4 (no date) 1942 Formosans
116, 231, 492, 427, 422

"Official sources say that there is about one animal per farming family. (1) But this

1. Taiwan Jijo, p. 478.

is inadequate. According to the official statistics for 1937, the number of farming families was 427,397. If we take this figure (it was mentioned above that the actual number of families should be larger) for 1938, then only 0.76 animal was available for each family, if only farmers had cows [70] and buffaloes. This figure includes calves, is also an average figure, and it will be shown later that the wealth of the farmers, at least as expressed in land, is not concentrated around the average. The important conclusion which follows is that at least half the farmers in Taiwan have no draft animals, but are compelled either to work without them or to hire them from the richer farmers. Those who are acquainted with rural life know that dependence on one's neighbour for plough animals is likely to create very serious problems."

"(1) A special investigation made by a government committee in 1923 estimated the cultivable area in Taiwan at 940,000 ko (900,300 hectares or 2,234,000 acres); another committee in 1929 estimated this area at 930,000 ko (893,700 hectares). (1) The area

1. Quoted by Takahashi, op. cit., p. 94.

cultivated at present is about 850,000 hectares or 23.8 per cent of the total area of the island, which is 3,576,000 hectares. If the estimates of the committees are [44] correct, then the cultivated area of Taiwan is approaching its maximum and only about 40,000 to 50,000 hectares remain to be turned into fields. We do not know what criteria the committees used in their investigations, but there are reasons to believe that their estimates are too low. Almost half of the total area of the island is territory of the aborigines, where fields are almost non-existent. It is true that this territory is mountainous and the cultivable area cannot be great, yet it should be considerably greater than 40,000 to 50,000 hectares. However, it is clear that the greater portion of cultivable land is already under the plough, so that the emphasis should be placed on other methods of increasing agricultural output.

This disparity between the growth of population and the growth of cultivated area has brought a sharp increase in land values. In 1914 one ko of good paddy land in the central

part of Taiwan province cost on the average ¥331; in 1925, ¥700; in 1937, ¥2,000. (2)

2. Ibid., p. 158.

Of course, the depreciation of the yen, the increase of yields and other factors also played a part in this increase, but the pressure of increasing population was probably also an important element."

4:Grajdanzev--61 S-4 (no date) 1942 Formosans
116, 249, 423, 471, 177.47 Japan
636.47

"The old type of sugar cooperatives dominating the industry before 1895 disappeared with the advent of capitalistic forms of enterprise in Taiwan. Production of sugar is now carried on in modern mills which are the property of the Japanese sugar companies possessing tremendous amounts of capital (several hundred million yen). Step by step these companies acquired a huge area of cultivated land——from 63.2 thousand ko in 1925 this area increased to 93.2 thousand ko in 1935. The latter figure amounts to more than ten per cent of the cultivated area of the island, but in the regions where sugar cane is cultivated the companies own more than twenty per cent of the area under cultivation (1).

1. Actually their influence is greater than these figures suggest because they rent about 20,000 ko of land.

However, it would be a mistake to think that this huge area is used by the manufacturers for sugar cane plantations. They plant only about 18,000 to 25,000 thousand ko with cane, while all other sugar cane is bought by them from the small farmers, i.e. about three-quarters of the total sugar cane production is supplied by 127,000 to 130,000 farmers, each planting on the average only half a ko."

"The division of families occupied in agriculture into owners, part-owners and tenants may be seen from the following table: (1)

1. Here and in the following tables the official figures of families occupied in agriculture are used, though, as was pointed out, they are probably underestimates. The statistics of landowners in Taiwan should be more or less correct because the land is surveyed and change of title involves a complicated procedure. The statistics may be incomplete only as regards tenants and agricultural workers (which they omit completely), and if one takes these into consideration one comes to the conclusion that official statistics probably give a brighter picture than is justified.

Division of Agricultural Families in Taiwan
(thousands)

	1932	1933	1935	1937	1938
Owners	132.2	129.4	132.1	131.1	130.2
Part-owners	119.3	121.7	128.4	134.8	135.6
Tenants (2)	152.4	155.0	159.4	161.5	158.7
Total	403.9	406.1	419.9	427.4	424.5

Footnote (2) on next page.

Division of Agricultural Families in Taiwan [Cont.]
(thousands)

2. Those who have read Japanese Rule in Formosa by Yosaburo Takekoshi may be astonished to discover that there are tenants in Taiwan. Takekoshi wrote in 1905 '. . . The tenants [in Taiwan, after the reform by the Japanese administration] came to enjoy the absolute ownership of the land they or their ancestors have been farming for three centuries. Such a change certainly amounted to a social revolution. Most of the revolutions recorded in history required sacrifices, but the present one was entirely bloodless. This change has given the tenant absolute ownership, thus insuring securing of property. . . . ' (p 132). But what Takekoshi described as a social revolution, was actually only a very modest reform: the government abolished the rights of the taiso--owners who had only doubtful title to land. This reform made transfer of real estate more secure and paved the way for Japanese penetration.

As percentages of total

Owners	32.7	31.9	31.4	30.7	30.7
Part-owners	29.6	29.9	30.6	31.5	31.9
Tenants	37.7	38.2	38.0	37.8	37.4
Total	100	100	100	100	100

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-3
116, 114, 178, 423, 427, 177.42 Japan
636.42

Source: Takumu Tokei, 1938.

[77] As this table shows, about forty per cent of all farmers in Taiwan own no land at all and must rent it from landlords and farmer-owners; about thirty per cent have plots so small that they are compelled to rent land, and barely thirty per cent of the farmers till only their own land. These figures are striking. Taiwan does not know rich tenants of the British type. Those who rent land are mostly poor farmers, but even those who cultivate their own land, are not all rich. As to the relative changes, there is a noticeable fall in the percentage of owners in six years--from 32.7 per cent in 1932 to 30.7 per cent in 1938. For the same period the percentage of tenants is the almost the same (37.7 and 37.4 per cent respectively), while the percentage of part-owners rose from 29.6 per cent to 31.9 per cent. It would seem that the farmer-owners are gradually losing their position and sinking to the level of tenants, but a six-year period is not a sufficiently long time to ascertain definitely whether such a trend exists.

However, it is not only the number of owners and tenants which is important, but also the area which they respectively till. Statistics of area are divided into only two categories—owned and rented.

Area Owned and Rented in Taiwan in 1932
(1,000 ko)

	Dry fields		Paddy		Total	
	Area	%	Area	%	Area	%
Owned	230.2	60.0	132.2	33.3	362.4	46.5
Rented	153.8	40.0	264.0	66.7	417.8	53.5
Total	384.0	100	396.2	100	780.2	100

Source: Nogyo Nenkan, 1939-40, p. 641.

In 1932 the area cultivated by owners constituted 46.5 per cent, the area rented by tenants 53.5 per cent. But it is important to emphasize that owners cultivated chiefly dry land while the tenants cultivated paddy. Paddy brings much higher yields than dry fields; in 1937 the average yield of rice per ko of paddy was about 14 koku while that per ko of dry land was only 7.8 koku, and, further, many paddy fields [78] produce two crops a year. In other words, one ko of paddy yields, on the average, more than twice as much as one of dry land, so that the tenants produce about sixty-five to seventy per cent of the total crop of Taiwan on rented land, and the owners not more than thirty-five to thirty per cent."

4:Grajdanzev--87-88 S-4 (no date) 1942 Formosans
116, 167, 313, 423, 659, 177.31 Japan
636.31

"When the Japanese occupied the island, the new administration immediately became interested in its forest resources. One part of forests was in the possession of the Chinese farmers, but the other, more important one was the area of the aborigines. The Chinese were required to register the documents of ownership of forest lands, and since in most cases they had no such documents—their possession and use of forests being based on [88] custom—this device enlarged the government forest reserves (1). It has

1. This is described in Section 3, Ch. 11, p. 1 of T. Yanaihara, Teikoku Shugishita no Taiwan, pp. 23-26.

already been mentioned that in order to use the forests, formerly occupied by the aborigines, the government began to settle the latter by force in the plains. It is said that the settlement of one family of aborigines on the plains cost only ¥70, and this may be compared with the ¥1,000 or more which are spent on the settlement of a Japanese family. Many hundred thousands of ko of forest were acquired in this way."

31: Hofmann--630-631 N-3 (1909) 1912 Formosans
116, 342, 423, 556

In Tainan I stayed in an old house which belonged to a member of the Chinese nobility; there I was able to observe the luxury with which the Chinese surround themselves. Many of the Chinese have accumulated considerable wealth on Formosa; there are several millionaires among them who had remained after the conquest of the island, while others fled to the mainland with all their possessions. In contrast to the Japanese, who throughout their history have looked down upon capitalists and traders, who even despise merchants and today still do not always accept them socially, the Chinese are all motivated by a desire for profit. The pioneers among them took large areas of the most fertile land from the natives; these were leased and subleased to later immigrants. Thus when the Japanese took possession of Formosa they encountered a complicated system of land ownership and tenure which yielded great profits to some individuals. In the management of real estate problems, [631] which resulted in the large-scale exploitation of tenants and subtenants, the new regime has constantly taken the side of the exploited and it has succeeded in bringing order into the system as a whole. There is still a wide field of activity for the Chinese capitalists, however, since they apply only to their compatriots for credit, never to the Japanese.

42: Schetelig--390-391 T-2 (no date) 1868 Formosans-1-2
116, 423, 556, 565

Formosa was not colonized by the government. The Chinese were, and are, too practical not to know the drawbacks of state interference in colonization in all its extent, and both on the mainland and here in Formosa [391] they have taken good care not to transfer the center of gravity of the Empire to the outside. Consequently... northern and western Formosa must be looked on as a colony of squatters who, however, in the course of the years, have received titles and documents from the mandarins for the land which they had often acquired by the sword. All this was done by means of contracts and compromise, and so it comes about that today, in the midst of a population already numbering millions, and who immigrated comparatively recently, we find a number of old families who, having lived here for centuries, have developed a power that far exceeds that of the Imperial officials, due to the great forces that the possession of land has always put at their disposal. But it is clear that these various parties lend each other support in view of the chaotic condition of a population that has come together from the most varied provinces of the Empire, and in view of the need of exploiting the camphor forests in their own interests both against the Europeans outside the country and the mountain-dwelling natives within. The rich and independent settler of long standing supported the mandarin in maintaining and extending Imperial rights, at least insofar as he himself was not included in them, and on the other hand the mandarin has always been intelligent enough to respect the traditional rights of such an independent leader,

exacting no transport tax for his merchandise and not even hampering him in his destructive war against the extensive camphor woods, although otherwise every infringement of the law concerning the sacredness of the camphor monopoly is looked on as a kind of high treason directed against the Crown.

471 they had to rely on themselves. Usually rich
425 and influential people received land grants from the government. Then they hired farmers, supplied them with capital, and organized self-protection forces against bandit and aborigine raids. In return, the owner received rent from the cultivators. Legally he was the proprietor and landlord. When a cultivator was assigned a large patch of land, he could rent some parts of it out to other cultivators, and thus in a sense he also became a landlord. In this case there were two proprietors for the same patch of land. This is the origin of primary and secondary ownership of land in Formosa. The original proprietor held the first title, the second proprietor held the second title to the land. The cultivator paid rent to the second proprietor, and the second proprietor paid rent to the first proprietor. The first proprietor, as the nominal owner of the land, paid the land tax to the government. Sometimes with the connivance of officials, an influential man could get the first title to certain land without any investment and collect the rent.

423 This complicated system of land ownership resembled somewhat the Oberhoheit and Unterhoheit of medieval Germany, and the landlords' control of the self-protection forces tended toward a kind of feudal system. Moreover, this system made the transfer of

423 ownership and the collection of taxes difficult. For this reason in the later years of the Manchu rule, Liu Ming-Ch'uan, an able and far-sighted governor, tried to abolish it. Meeting with stiff opposition from the landlords, his plan was doomed to failure. Liu's project however, was finally carried out by the Japanese government. Between 1898 and 1905 a land survey was completed. In 1903 the existing first titles were confirmed, and further establishment of them was prohibited. In the following year the system of double titles was abolished, and the holders of first titles were compensated by a total sum of 3.78 million yen in bonds. After this all the holders of secondary land titles were recognized as the sole owners and thus the embryonic feudal system was abolished.

3. Relation between Landlord and Tenant

427 The relation between landlord and tenant was generally analogous to that between father and son, and the son was expected to obey the father. Besides paying high rent for the land, tenants presented their landlords with chickens and the like at festival seasons, and were expected to work for the landlord when he requested their help. Though tenants were not serfs, their status was obviously much lower than that of the landlord. This situation continued to the 1920s. The social movement of the Taiwan Cultural Association awakened

427 the social consciousness of the farmer, and Farmers' Association encouraged the farmers to oppose their landlords. Hitherto tenancy had been based mainly on oral contract, and, even where there were written contracts, the terms of tenancy were ambituous. To mitigate the situation, the Japanese administration sponsored Landlord-Tenant Associations, and proposed various measures for improvement in the land tenancy system. The Landlord-Tenant Associations recommended written contracts and the extension of the terms of tenancy. But unwilling to give up their privileges the landlords resisted these recommendations. However, the tenant farmers were aroused by the agitations of the reform movement; many of them abandoned the custom of bringing their seasonal presents to the landlord.

423 Shortly after the restoration of Formosa to China, a rigorous land reform program
427 was begun. Under this program, all farm leases are required to be in writing according to a form promulgated by the Taiwan Provincial Government. The obligations and responsibilities of both the landowner and the tenants are definitely specified. As a result, the tenants may deal with landlords on equal terms, and democratic relationships are established.
466 Simultaneously, the relations between the employer and the employee in industrial establishments underwent similar changes.

642 The Chinese Constitution provides that the people be given the right to existence, the right to work, and the right to own property.[20] The right of existence implies that the people shall be guaranteed a minimum standard of living. As to the right of work, the state shall provide opportunity of employment to the people who are capable of work, commensurate with their capacity and ability, so that they may render their services to the community and support themselves.[21] The state shall accord special protection to working women and children who work (Article 153) and shall give assistance and relief to the aged, the infirm, the disabled, and the victims of natural calamities. To promote social welfare, the state shall put into operation a Social Insurance System (Article 155).

651 403 642 No one shall be arbitrarily deprived of his property. However, privately owned land and other property are liable to taxation. If any land has an increase in value, through neither the exertion of labor nor the employment of capital, the state shall levy thereon an increment tax, the proceeds of which shall be used for public welfare.[22] The government

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20. Ibid., Article 15.
21. Ibid., Article 152.
22. Ibid., Article 143.

642 may regulate the distribution of land in the
651 interests of the tiller-owner and tenant-
423 cultivators and may limit the amount of land ownership.[23]

642 Under the Chinese Constitution, any
694 citizen has the right to present petitions to file complaints, or to institute legal proceedings. The Law of Petition was promulgated on December 18, 1954. It provides that a person has the right to voice his opinion concerning the policy of the government on matters of public interest to the representative agency or a competent authority, but the petition must be in written form and must not interfere with the exercise of judicial functions.[24] Any citizen may file a complaint against a wrongful decision on the part of a government body. The prescribed procedure is for the injured party to bring his complaint to a higher government body such as the provincial government, if the case is caused by an administrative act on the part of a hsien or a municipal government.

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23. Ibid., These provisions are inserted in accordance with the equalization of land ownership, one of the basic policies of Dr. Sun Yat-sen.

24. Law of Petition, 1954, Articles 2-6.

Annex "A," Subparagraph 3a",
Economic Background

LAND REFORM

I. LAND TENURE BEFORE REFORM

●423 162 For many years the most crucial problem confronting Formosa, as is the case with most countries on the continent of Asia, has been that of too many farmers and not enough land. There has been an enormous growth of population in the past half-century. For lack of industrial development, over 51.93 per cent of the total population in Formosa is engaged in farming.[1] The agricultural [161] population grew[2] from 3,318,235 in 1944 to 4,381,816 in 1953. Only 24.7 per cent of the land in Formosa is arable.[3] As is always the

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1. Taiwan Agricultural Yearbook, 1954 Edition, compiled by the Provincial Department of Agriculture and Forestry, Taipei, October 1954, p. 1.

2. Ibid., p. 25.

3. Ibid., p. 8. The total area of Taiwan Province, including the Pescadores and adjacent small islands, is 3,707,658 chia (or 35,961 square kilometers) and the total area of public and private cultivated land is 903,273 chia (or 8,082 square kilometers) in 1953. (Chia is the unit of measurement of land on Formosa; one chia is equal to .9699 hectare or 2.3968 acres.)

423 162 case in heavily populated countries with limited land, very little land is offered for sale. The majority of the farmers are tenants. When the population grows larger the competition becomes keener. Consequently, the landlords are able to impose high rentals and other harsh terms. As time goes on, the landlords grow progressively richer and the tenants progessively poorer. The general poverty from which the poor peasants are unable to lift themselves is the primary cause of social unrest. Before the land reform programs were launched at the end of 1948, the distribution of tenure among the agricultural population in Formosa was as tabulated below.[4]

	Number of Farm Families	Percentage
Owner-cultivators	211,649	35
Part-owners	154,460	26
Tenants	231,224	39
Total	597,333	100

4. Ibid., p. 24.

423 The foregoing tabulation shows that
162 tenants and part-tenants who own no land, or only part of the land they till, constituted 65 per cent of the farm population, and only 35 per cent were independent farmers. The scarcity of land coupled with inequitable distribution led to the continued exploitation of the tenant farmer by the landlord.

427 Prior to 1949 the land rental averaged 50 per cent of the total yield per annum; in some cases more. In Taichung and Hsinchu there were instances where the tenants paid to the landlords 70 per cent of their annual harvest. In addition to the high rental, the tenants often were required to pay the landlord a large rent deposit. Then there was uncertainty of tenure. In most cases there was no written lease. Even when there was a written contract, the period of lease generally covered only one to two years, or was not definitely stated. This left the landlord free to terminate the lease at will. Since the dispossessed tenant was not entitled to any compensation, the resulting hardship could be easily imagined. The need for reform was evidently urgent.

II. LAND REFORM

423 Land reform for the sake of social justice was advocated by Dr. Sun Yat-sen,

423 founder of the Republic of China, in his San-min Chu-i.[5] He called it the Land-to-the-Tiller Policy. It had been tried out in the provinces of Szechwan, Kwangsi, and Kweichow after World War II and met with some degree of success; but the reform program was interrupted by the Communist uprising. When Gen. Chen Cheng became the governor of Formosa in December 1948, he undertook with great zeal and determination to carry out the much-needed land reform in the insular provinces.

423 185 With the aid of the Sino-American Joint Commission on Rural Reconstruction (JCRR), a detailed program of land reform was mapped out. The program was to be carried out in three successive stages, namely, reduction of farm rent in 1949, sale of public farm lands in 1951, and redistribution of private lands in 1953.

A. Rent Reduction

423 429 On April 14, 1949, the Taiwan Provincial Government promulgated a set of regulations

5. San-min Chu-i [The Three Principles of the People], Taipei, China Cultural Service, reprinted 1953, p. 187.

423 407 governing the lease of private farm land in the province, which limited farm rent to 37.5 per cent of the annual yield of the main crop. The new law provides that if the rent originally agreed upon exceeds this percentage, it must be reduced accordingly. If it is less than 37.5 per cent, it must not be increased. It represents a substantial reduction from the customary 50 to 60 per cent that most tenants had been paying. Moreover, "the total annual yield" does not mean the actual annual yield on the farm; it refers to the standard amount of yield fixed on the basis of the productivity grade of the land at the time of lease. A standard amount was determined by the Rent Reduction Committee in each locality to conform with current conditions. As long as the lease remains in force, this standard amount is not subject to change. As a result of the reform, not only the customary amount of rent is reduced, but the increased production from the land resulting from the tenants' extra efforts (such as the increasing use of fertilizers, improvement in farming practice, etc.) is fully enjoyed by the tenant themselves; the basis for rent calcualtion is fixed and not subject to change.[6]

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6. T'ang Hui-sun, "Steps in the Implementation of Land Reform in Taiwan," in Land Reform in Free China, published by Free China Review, Taipei, May 1, 1953, pp. 8-9.

423 In case of crop failure, the tenant
427 farmer may request the Farm Tenancy Committee of the village, township, or district office to investigate the extent of loss and decide on measures for the reduction of rent. Should the total yield be less than 30 per cent of the normal yield, the entire rent payment shall be remitted.[7]

To guarantee the security of tenure it is further provided that all lease contracts between the landlord and the tenant must be written and registered with the government. The Farm Rent Reduction Act of 1951 specifies that the period for which farm land is leased shall not be shorter than six years. If the period originally agreed upon is longer than six years, it shall remain unchanged.[8] At the expiration of the lease, the right of the landlord to take back his own land is subject to many restrictions.[9] Even if the land is offered for sale, the tenant has the right to continue using the land during his tenure. In other words, the landlord may transfer his right of ownership, but not the right of use.

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7. See Article II, Farm Rent Reduction to 37.5% Act, promulgated by the Chinese National Government on June 7, 1951.
8. Ibid., Article V.
9. Ibid., Article XIX.

423 The benefits of the rent-reduction program
427 are noticeable in the improvement of the
511 tenant farmers' living conditions. The saving in rent payments, amounting 25-30 per cent of their gross income, can now be used to buy new clothing for their families, to send their children to school, to repair their houses, or to purchase farm land. They also work harder
423 because any inc reace in production accrues to
433 them. This factor contributed to the substantial annual increase of rice production from 1949 to 1954.

Production of Unhulled Rice*

Year	Metric Tons
1949	1,215,000
1950	1,421,000
1951	1,485,000
1952	1,570,000
1953	1,642,000
1954	1,695,000

* Taiwan Economic Data Book, compiled by FAO Mission to China, Part II, Vol. III, March 1955, Taipei, p. 5. The average production of rice perhectare increased from 1,624 kilograms in 1949 to 2,183 kilograms in 1954. Central Daily News, Oct. 22, 1955, p. 3.

423 425 427 Another effect of the rent reduction is the steady decline in the price of land cultivated by tenant farmers, because the reduction of rent has lessened the landlords' interest in making investments in land and stimulated their desire to sell it. At the same time, the increase of farm income has enabled some tenant farmers to buy land. According to the statistics of the enforcement of the Rent Limitation Program compiled by the Provincial Land Bureau, 66,328 tenant families bought 35,522 chia (85,139 acres) during the five-year period[10] from 1949 to 1953.

B. Sale of Public Lands

423 The reduction of rent relieves the tenant farmer of his excessive financial burden, but it does not satisfy his wish to own the land he tills. The ultimate object of land reform is to help the tenant to realize his cherished dream of owning the land he and his forefathers have tilled for decades.

Over 20 per cent (181,490 chia or 434,900 acres) of the total arable lands[11] in Formosa belonged to the government. They

10. T'ang Hui-sun, op. cit., p. 64.

11. Total area of farmland in Formosa in 1949 was 891,689 chia, or 1,137,200 acres, and public land amounted to 181,490 chia, or 434,000 acres.

423 had been the property of the Japanese colonial government and included large areas owned by Japanese industrial enterprises. When the island was retroceded to China, all the lands formerly owned by Japanese nationals were expropriated by the Chinese Nationalist Government.

In May 1951 the Nationalist Government decided to sell public lands to farmers as the initial step in the implementation of the land-to-the-tiller policy. Prior to the sale, 60 per cent had been leased to tenants at a low rent, generally 25 per cent of the annual yield. The measures for the sale of public farmland for the creation of owner-farmers in Taiwan were approved by the Executive Yuan on May 30, 1951. Approximately 90,000 chia (216,000 acres) of public lands were offered for sale. Of the public lands retained for public use, the largest part was retained by the Taiwan Sugar Corporation for the growing of sugar cane, and the remainder was kept by various government departments and schools for their own specific uses.[12]

The public lands offered for sale were sold mostly to the original tenant farmers. The

12. T'ang Hui-sun, op. cit., p. 67.

•423 price was fixed at 2.5 times the value of the annual main crop,[13] and was to be paid off in ten annual equal installments, each of which was not to exceed, including the land tax, 37.5 per cent of the value of the total annual main crop yield of the land purchased.[14] As the land value was appraised at 2.5 times the total annual main crop, each of the ten yearly installments would be 25 per cent of the total main crop yield, or the equivalent of the annual rent which the farmer had been paying as lessee before he made the purchase. So the transfer of ownership from the state to the tenant farmer was accomplished without increasing in the least the financial burden of the farmer.

The public lands were offered for sale in five groups from 1951 to 1953. A total of 63,000 chia (151,000 acres) or nearly 70 per cent of the total area designated for sale, was purchased by 77,211 families. The remaining 30 per cent of public lands were struck off the official list for sale because they were found to be too poor in fertility or lacked irrigation facilities for proper cultivation by

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13. Article VIII of the Measures for the Sale of Public Farmland for the Creation of Owner-Farmers in Taiwan.

14. Ibid., Article IX.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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423 private individuals.

C. Redistribution of Private Lands

As a basic preparation for the final consummation of the land-reform program -- the redistribution of the private lands -- a general landownership classification was undertaken by the Taiwan Provincial Government with the technical assistance of the Sino-American Joint Commission on Rural Reconstruction. "A total of 4,039,685 Land-Record Cards, involving 3,972,112 plots of registered land, of 1,046,892 Landownership Cards involving 829,864 families of landowners, and of 1,574,846 Joint Ownership Cards, involving 1,480,227 plots of land was compiled."[15] From the new Land-Record Cards new cadastral statistics were compiled to serve as a basis in mapping out projects for the redistribution of farmland. This gigantic undertaking was completed in June 1952. Mr. Worf I. Ladejinsky, the American expert on land problems who had planned the postwar land reform in Japan, was invited to Formosa for consultations. On July 24, 1952, in order to give the proposed program an added impetus, the Kuomintang passed a resolution to the effect

15. T'ang Hui-sun, op. cit., p. 100.

423 that a land-to-the-tiller program shall be enforced in Taiwan beginning from January, 1953; all Kuomintang members in responsible government positions shall regard this as the central task for the year, and all activities of the Kuomintang shall be effectively co-ordinated therewith.

The Land-to-the-Tiller Act was drafted by the Provincial Government on August 13, 1952, approved by the Executive Yuan on November 12, and enacted into law by the Legislative Yuan on January 20, 1953. Its main provisions are: (a) All tenant-cultivated land exceeding 3 chia (7.19 acres) of medium grade paddy field or 6 chia (14.38 acres) of medium-grade dry land[16] shall be purchased by the govenment for resale to the tenant farmers.[17]

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16. Farm lands in Formosa are classified into 26 grades according to their productivity. Lands from the 7th to the 12th grade are considered medium grade. If the acreage of land under self-cultivation already exceeds the retention limit, no portion of the tenanted land shall be retained by the landlord.

17. Article 10 of the Land-to-the-Tiller Act.

423 (b) The price of the land to be purchased by the government shall be calculated at two and a half times the total amount of its annual main crop yield, and the purchase price of the land shall be paid 70 per cent in land bonds redeemable in kind and 30 per cent in government enterprise stocks.[18] (c) Farm land purchased by the government shall be resold to the present tiller. The resale price shall be the same as the purchase price, plus 4 per cent interest, payable also in kind in ten equal annual installments.[19] The amount of land a tenant farmer may purchase is restricted by the same rule that applies to owner-cultivators. (d) The annual aggregate burden to be borne by the tenant-purchasers, namely, the annual installments of the purchase price, the interest, the land tax, surtax, water charge, and household tax, shall not exceed that presently borne by a tenant under the 37.5 per cent rent limitation program. (e) In case of crop failure due to natural causes, the tenant-purchaser may be permitted to defer the payment of the installment of that particular year. A 30 per cent postponement will be allowed in case the crop failure is less than 30 per cent; 50 per cent in case of crop failure

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18. Ibid., Articles XIV and XVI.
19. Ibid., Article XIX and XX.

less than 40 per cent; and 100 per cent postponement if the crop failure is over 50 per cent.[20]

Land Bonds in rice and sweet potatoes were issued by the Taiwan Provincial Government to pay for 70 per cent of the value of land to be acquired by the government for resale. Rice and sweet potato are the two principal farm products on Formosa, rice being raised in paddy fields and sweet potatoes on dry land. Rice Bonds are used to pay for the paddy fields and Sweet Potato Bonds to pay for dry land. It was estimated that 179,000 chia (429,000 acres) or 70 per cent of the tenanted land should be purchased by the government under the Land-to-the-Tiller Act, and so Land Bonds equivalent to 1,260,000 metric tons of rice and 440,000 metric tons of sweet potatoes was issued. The amortization of principal and the payment of interest are entrusted to the Taiwan Land Bank. The principal and interest of Rice Bonds are paid in rice, while those of Sweet Potato Bonds are paid in cash by conversion at the market price at the time of maturity of the installment.[21] Based on commodities, the value of Land Bonds is not subject to fluctuation

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20. Ibid., Article XXVI.
21. Ibid., Article XI.

due to changes in the value of the currency. The other 30 per cent of the purchase price is paid by the transfer of the stocks of government-owned enterprises. The stocks of the Taiwan Cement Company, the Taiwan Paper and Pulp Corporation, the Taiwan Agriculture and Forestry Corporation, and the Taiwan Industrial and Mining Corporation were to be transferred to the landowners as part payment for land purchased.

The Land-to-the-Tiller Program was launched on February 1, 1953. A limit of one year was set for its completion. By the end of 1953, a total of 143,568 chia (344,104 acres) had been purchased by the government from 104,049 landlords and resold to 195,823 tenants and part-tenants. A total of Land Bonds equivalent to 889,123 metric tons of rice and 315,476 metric tons of sweet potatoes were actually issued. The Taiwan Cement Company, the Taiwan Paper and Pulp Corporation, and several plants belonging to the Agricultural and Forestry Corporation and to the Industrial and Mining Corporation have been sold to the landlords. The total value of government industrial stocks paid to landowners as

45:Stanford U. S-4 ,5 1956 AD1 Formosa
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423 662 compensation amounts to NT$659,774,640.[22]

D. Urban Land Reform

423 In addition to the reform program for rural land, the Chinese Nationalist Government on August 26, 1954, issued regulations governing the equalization of urban land ownership. The aim of the new law is to curtail speculation by preventing the concentration of ownership and to tax the unearned profit from the rising price of urban land. The main features of the law are restriction of the acreage of land an individual or a body corporate may possess, and the levy of progressive taxes over the value of the land and its increment.

Under the new law a private landowner may not own more than one-tenth of a hectare

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22. This cash equivalent is obtained by converting the 30 per cent payment in rice and sweet potatoes according to the average market price of these two items in December 1952. To prevent the concentration of the stock of any one enterprise in the hands of large landowners, it is provided in the Rules Governing the Transfer of Public Enterprises to Public Ownership that the 30 per cent compensation to landlords would be paid seventy per cent with the government stocks of the Cement Corporation and the Paper and Pulp Corporation, and thirty per cent with those of two other corporations.

423 (0.248 acre) of urban land. Any excess portion should be sold in two years, after which period the hsien or municipal government could expropriate it at the assessed value. The area of urban land devoted to industrial use shall be determined according to the requirement in each case.[23]

423 As to taxation, the higher the price of
651 the land, the heavier will be the tax. The minimum is 1.5 per cent and maximu, 6.5 per cent. The land value increment tax is levied at the time of any transfer of ownership or at the completion of a ten-year period. Any increase of value from previous transfer shall be taxed progressively from 30 per cent to 100 per cent.[24]

423 It is estimated that 10,000 hectares (24,700 acres) of urban land throughout the province will be affected by the new regulations.[25] The steady growth of population, better communication facilities, and more prosperous industry and commerce have caused a great
[455] advance in land price. Urban land has become the object of speculation. The need for reform of urban land is as evident as the need for reform

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23. Article XXXIV and XXXV, Regulations Governing the Equalization of Urban Land Ownership.

24. Ibid., Articles XX and XXI.

25. United Nations, Economic Survey of Asia and the Far East, 1954, Bangkok, Feb. 1955, p. 89.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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•423 of farm land. The provincial authorities have already assessed the value of land in various cities and towns, and the registration of architectural improvements has been completed. It is reported that the new measures will be enforced in June 1956.

III. ASSESSING THE REFORM PROGRAM

The results of the land reform program in Formosa are shown in the statistics tabulated below.

45:Stanford U, S-4, 5 1956 ADI Formosa
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Land Tenure 1949-53*
(One chia = 2.3968 acres)

Year	Owner-Cultivated Land	Tenanted Land	Land Retained For Public Use	Total
1949	450,224 (50.5%)	366,934 (41.1%)	74,531 (8.4%)	853,564
1950	458,359 (51.1%)	364,746 (40.6%)	74,531 (8.3%)	891,689
1951	492,255 (54.6%)	334,189 (37.1%)	74,531 (8.3%)	897,636
1952	517,059 (57.2%)	311,683 (34.5%)	74,531 (8.3%)	900,975
1953	681,346 (75.4%)	147,396 (16.3%)	74,531 (8.3%)	903,273

* T'ang Hui-sun, Land Reform in China (previously cited), pp. 14 and 18.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Land Purchase by Tenant-Farmers 1949-53*

	Area (in chia)#	Number of New Owner-Farmers
Direct from owners	35,522	66,328
Public Land	63,000	121,953
Under Land-to-the-Tiller Act	143,568	194,823
Total	242,090	383,104x

* Land Reform in Free China, p. 18.

\# One chia = 2.3968 acres.

x This figure is not exact, because a tenant-farmer who has purchased two lots of land is counted twice. A commissioner of JCRR, Mr. William H. Pippin, recently announced that the number of new owner-farmers is 320,000 (Central Daily News, Taipei, October 22, 1955).

45:Stanford U. S-4, 5 1956 ADI Formosa
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Farm Land Before and After the Implementation of Land Reform*
(in chia)#

Public Land

	1949	1953
Retained by public bodies for their own use	74,531 (41.1%)	74,531 (41.1%)
Leased to tenants	106,959 (58.9%)	43,959 (24.2%)
Sold to farmers	- -	63,000 (34.7%)
Total	181,490	181,490

Private Land

	Dec. 1949	June 1952	Dec. 1953
Owner-cultivated	372,964 (55.5%)	418,503 (61.4%)	577,717 (84.8%)
Private-tenanted	299,395 (44.5%)	262,651 (38.6%)	103,437 (15.2%)
Total	672,359	681,154	681,154

* From Statistics compiled by the Provincial Land Bureau and Agricultural Yearbook, 1953 edition.

\# One chia = 2.3968 acres

423 From these summaries we can assume
423 that the land reform program not only has succeeded in doing away with the exorbitant rental that the Formosan tenants were obliged to pay, but has succeeded in changing 383,104 tenant-farmers to owner-farmers. In five years the area of tenanted land has been reduced from 41.1 per cent to 16.3 per cent of the total farm land. Land reform is certainly the most noticeable achievement of the Chinese Nationalist Government since the island reverted to its control.

The measures of land reform in Formosa are both moderate and equitable, and have been well supported by the general public, although some complaint and opposition did arise from the landlords who had been deprived of the opportunity to exploit their tenants and who had been forced to sell their surplus land to the government. But the interests of the landlords have not been altogether neglected. They are reasonably compensated, and to guard against the loss by possible inflation, they are repaid yearly with commodities, not with currency. Part of their compensation is paid with industrial stocks, thus turning capital investment from agricultural into industrial channels. They fare better than the large Japanese landowners. The Japanese Land Reform Act of 1946 was imposed by the Allied occupation forces. The landlords were paid with government bonds, the value of which

423 427 was entirely wiped out by subsequent devaluation of the currency. The Formosan landlord should be especially contented, when he ponders the lot of his brothers on the Mainland. In sharp contrast with the moderate measures in Formosa, the Communists liquidate the landlords, confiscate their land, and make collective serfs of the peasants. The effect of the land reform in Formosa is expected to be more far-reaching than the economic betterment of the peasant class; it is an important asset of the Nationalist Government in anticipation of the liberation of the China Mainland.

423 241 In connection with the successful redistribution of land in Formosa, it should be added, however, that we must not assume the economic problems of the Formosan farmers who comprise 52 per cent of the total population have been completely solved. First of all, the average size of the farm is too small for economic sufficiency, for 47 per cent of farmer families own less than 0.5 chia (1.2 acres) of farm land, 70 per cent own less than one chia (2.4 acres) and 93 per cent less than three chia (7.2 acres).[26] The average

26. From Statistics on Landownership Classification in Taiwan China, 1952, compiled by Provincial Land Bureau, Taipei, June 1952.

423 and owned by each farming family in Formosa
241 is 1.28 chia or 2.8 acres as compared with 215.3 acres owned by each farming family in the United States.[27] The small size of the farms limits the living standard and the purchasing power of Formosan farmers. Even the small parcel of land owned by the average farmer is threatened with further partition on account of the enormous rate of natural increase in population. The average size of farms on Formosa has decreased from nearly 2 chia (.5 acres) in 1937 to the present 1.3 chia. Unless industrialization of the island can divert members of the growing farming families to industrial enterprises, the size of farmland per family will be further reduced through inheritance and will become too small to maintain even a marginal subsistence. It will be indeed a serious situation. Furthermore, for lack of capital, and relying principally on human labor, the efficiency of Formosan farming is low, and the cost of production is
387 high. The soil of the western coastal plain is
241 alluvial, lacking sufficient humus to be fertile. Fertilizer is needed to increase its productivity.[28]

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27. Report of United States Bureau of the Census for 1950.

28. The application of fertilizer to riceland in Formosa averages 50 pounds per acre per crop, whereas in Japan, the figure is 66 to 98 pounds.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER III

Economic Activities and Social Change

THE activities, interests, and aspirations of the Japanese community in Taiwan were things that existed apart from the indigenous population. These elements were never effectively communicated to the Taiwanese—partly through a design to withhold them, and partly through reluctance among the people of Taiwan to accept them. Consequently the conduct of Japanese residents is not of much help in understanding the accustomed modes of life among the island's people. It is the latter problem that has the more interest for demography, and makes it essential to consider the background of social order in Taiwan and the changes under colonial rule. 178

The Early Agrarian Order in Taiwan

The importance of agricultural pursuits in imposing a predominantly agrarian character on a society is not a thing that can be precisely measured. Short of perfect exactitude, a great deal can be learned with lesser devices, by describing the cultural setting of agriculture in Taiwan, and pointing out how it influenced the participation by Taiwanese in the island's economy. The basis of this setting lay in the conditions that prevailed before Taiwan became a colony of Japan. 167 241 511

By the mid-19th century, the lowland region of Taiwan was rapidly becoming fully settled. Piracy, which had made Taiwan a scourge to sea traffic along the China coast, gradually subsided into sedentary agriculture. Most of the Chinese population was already supporting itself by farming and the marketing of farm products. Since 1700 immigration had brought in a steady stream of Chinese from the mainland. In spite of sporadic prohibitions, hundreds of thousands of peasant farmers came to seek refuge from rural poverty in South China. Once arrived, they often reverted to this same condition, by reaching unfavorable terms with some of their countrymen already entrenched there as land speculators.

Poverty tended to reproduce itself among those who reached Taiwan, though there was also great wealth open to the few who rose from cultivation to commerce. Each settled family held an advantage over newcomers. This superior position placed new migrants in 167 563 423

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

167 some competition for the more desirable lands near the coast. In order to maintain their accustomed manner of farming, many were 563 forced to move inland, where they gradually dispossessed aborigines and the earlier Hakka settlers and pushed eventually to the foothills 423 of the interior. These many-sided conflicts of interest gave rise to land tenures more complicated than those usually found in China. The result was a set of property customs that was to become confused and encumbering in later years.[1]

With agrarian land tenures, however, it is all too easy to mistake form for substance. The system of land tenures in Taiwan gained several features that are distinctive to itself, arising to incorporate new parties into an old system—the aborigines who first occupied the area, and Chinese who acquired land titles to profit from the arrival of immigrants. But, since these landed property relationships are of little interest to us from an antiquarian point of view, their lasting effects are more important: they contributed to a form of village organization that survived through the entire Japanese occupation down to the present.

(3) The flow of migrants is remarkable in that it populated Taiwan, with little variation over the years, closely after the model of the South China coastal area.[2] The resemblance to the mainland went beyond forms of settlement and land utilization. Politically, under Manchu control the island was supposed to be assimilated into the administration of the rest of China. It was governed as a regular political division—first as a prefecture of Fukien and later as a province itself—by officials appointed directly from Peking.

177 Taiwan inevitably presented special problems of control. In the first place, it could be separated from easy communication with the continent; eventually it grew almost as accessible to the Western powers as to Peking. The device most relied upon to tie the area to China was a weak one. The authorities tried, futilely, to isolate it from all external contact. From time to time, they went as far as to restrict the entry of Chinese from across the Straits, though even this had little success.

[1] See Ch'en Cheng-hsiang (1950), pp. 41-43, and Kawada, Shiro (1928).

[2] The instances of alleged "radical transformation" of land tenures (Kawada, Shiro [December 1928], p. 88) were primarily fiscal measures to reassert the central government's share in revenues from the land. Such reforms often are superficial from the standpoint of village organization. By way of illustration, one of the early official acts of the Japanese in Taiwan was to sweep away a whole section of these archaic land titles. While these reforms cleared the way to regulate rural areas from outside, they scarcely made an impression on property relations within the villages.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

this nominal government policy existed within Taiwan's rural villages. The bulk of the population was made up of peasant farmers and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands.

The rural population led a settled existence. Taiwan being a small area, travel between places was not uncommon, but it was rare for families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island.

Local stability fostered local solidarities. The inconvenience of communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6]

Property institutions helped to buttress the stability in these small communities. In Taiwan, as in China, land ownership was the only durable form that substantial wealth could take. It was durable

[5] Takekoshi, Yosaburo (1907), pp. 252 and 269-270.

[6] The turbulent history of Taiwan has been carelessly represented as one of indiscriminate civil disorder, its early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

423 556 631 against climate and short-term deterioration in use, against destruction through violence, and against decline in the income that it produced. Since the farming population was increasing within a fairly definite area, it had additional value in speculation. Land was also relatively safe against confiscation by the government; not only could its ownership be hidden from casual inspection, but the government itself depended on the obligations owed to landlords by tenants to uphold its authority. Under agrarian conditions of farming on a small scale it is impossible to cultivate large holdings of land under a single management. Hence, the only way to amass large wealth is to become a landlord—beyond some point, necessarily an absentee landlord. In early Taiwan, considerable concentration of landholdings was reported. Ownership tended to gravitate into the control of large and powerful families, whose influence was the only recourse of government officials in asserting their rule.[7]

565 426 427 On the economic side, this concentration of wealth was not given a chance to develop into industrial-type investment. The landed gentry, often landed on considerable scale, were the only group of persons who had access to sufficient income to become capitalists.[8] Practically, however, it proved more secure and profitable to let out their lands to tenant farmers. When they branched out into different enterprises, it was as an adjunct to their status as gentry. In South Taiwan, for example,

> ". . . sugar was manufactured from the cane grown upon the owners' plantations, or from that brought from elsewhere. The cane was grown by the tenants, or by those who through being heavily indebted to the landowner stood in the same relation as retainers . . . under it [this system] the master of the sugar factory secures a threefold profit.
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> 1. As landlord, he claims from his tenants from 15 per cent. to 20 per cent. of the cane as rent.

[7] One might suspect that, as in China, members of these families *were* the officials at lower levels of administration. But there is no direct evidence on this point, aside from frequent references to the fact that *clan* solidarity, imported to Taiwan by the migrants from South China, was one of the few bases for organizing any kind of joint action by Taiwanese on a large scale.

[8] The government was unable to fill such a role itself for reasons already noted. Officials, who were not permanent fixtures in Taiwan, confined their acquisitive energies to foreign commerce, where returns were quicker and they did not need to make long-term commitments. For example, it is significant that the government almost never operated its own monopolies, but let them out to many private agents and taxed the products as they were exported.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

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1:Gallin E-4,5 (1957-1958) 1966
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ists brought a change in regime to Taiwan. This is known as the "Restoration." At the outset the Taiwanese people welcomed the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been killed in the war in Southeast Asia. The other villagers from Hsin Hsing who had surrendered or been taken as prisoners while working in Japanese labor groups were returned to Taiwan in ships. The return of these men to the land was followed by a general population increase, and in the Hsin Hsing area this quickly aggravated the problem of land scarcity; tenancy became a greater problem than ever before. Families could neither buy nor rent enough land to support themselves adequately, and, in addition, the war period had brought about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

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After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

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LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

1:Gallin E-4,5 (1957-1958) 1966
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Formosa AD1 •
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Changing Land Tenure and Its Effect on Community Organization

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The traditional (Ch'ing) land tenure system in Taiwan has undergone a number of modifications over the years. Each was instituted with the advent of a new regime, and marked the inception of major changes in other aspects of rural life. As we have seen, the colonial administration policies of the Japanese were instrumental in producing the first significant involvement of the Taiwanese peasant in the market economy. Nevertheless, it was not until the restoration of Chinese rule, when the population growth began to exert noticeable pressures and the Nationalist Chinese sponsored the Land Reform Program, that major changes took place in the economy which reached directly into most of the areas of Taiwanese rural life.

The system of land tenure in Taiwan has always been a controlling factor in the lives of the agricultural population, and to understand Taiwanese life fully it is necessary to understand the land tenure system and its history. From the late nineteenth century onwards the rural villagers suffered the results of the concentration of landownership into too few hands. This situation culminated finally in the Land Reform Program of 1949–1953, which, for the first time, secured the Taiwanese tenants' rights to the land they tilled through firm rental contracts, reductions in rent, and the Land-to-the-Tiller Program.

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Putting untilled land under cultivation became a great concern of the government at the time of the Manchu conquest of Taiwan in 1683, according to T'ang (1954:23–27). Under the Manchu (Ch'ing) dynasty, any person applying for rights to occupy uncultivated land was considered the owner as long as he kept his acres under proper cultivation. Not surprisingly, this program led to a situation in which people with enough capital, "a relatively small number of great families" (Ginsburg, 1953:32), obtained rights to large amounts of land

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1
Taiwan AD6

and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:53; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

1:Gallin E-4,5 (1957-1958) 1966
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Taiwan AD6
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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tsu* villages were quite powerful and frequently the de facto govern-

36: Rowe S-4 (no date) 1955 AF1 China AF1
Form. Osa. AD1,

was that the Taiwanese were accustomed to the peace and order of a country under a foreign tyranny, and could not, at first, understand the "lack of uniformity" and "the complexities" of democratic rule (thanks to the Japanese, on the other hand, they had no illusions about or yearnings after Communism). Finally, the men who governed Taiwan immediately after the retrocession gave every evidence of being more interested in increasing their power and lining their pockets than in providing good management. When, therefore, the Nationalist government moved to Taiwan in 1949, it found that it had taken on numerous grave local problems in addition to those it had brought with it from the mainland.

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Political Reform

The Kuomintang, the leading political party, prepared itself to deal with these problems by putting itself through a reorganization. Its younger, more liberal leaders were, to this end, appointed to a Central Reform Committee, the main task of which was to strengthen and tighten party organization and eliminate corrupt elements, opportunists, and bureaucratic politicians. On 1 September 1950, the Nationalist government was ready to announce a new political program. Its objectives were to

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> encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; to establish a democratic industrial system in which the workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprise; to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; to carry out local self-government and to protect civil rights.

Local self-government and land reform were the fields in which the government brought about the most spectacular changes. It first removed all the social barriers and segregation measures that had been created and maintained by the Japanese. The native Taiwanese were no longer barred from institutions of higher learning, or from the worthwhile positions in commerce and politics. They were encouraged to participate in local self-government, and to think for themselves. By 6 May 1951, 21 mayors and magistrates in 16 counties and 5 municipalities had been elected to their respective offices by popular vote. There are now 6304 village and *li* (comparable to urban wards) assemblies, in which the Taiwanese are learning the art of self-government. Representing them in town and district assemblies are 8024 village and *li* delegates. On the county and municipal levels, there are about 541 popularly elected councilmen. Of an estimated 2,650,000 qualified men and women voters, some 2,416,072 are registered. In keeping with the government's policy of economy, the total number of government employees was reduced in June, 1950 to 81,000. The percentage of indigenous citizens in the government service rose to 65.46 percent.

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There has also been a marked change in the importance and responsibility of the posts held by Taiwanese. In the category of first class officials, indigenous personnel have increased from 0.92 percent under Japanese rule to 17.45 percent in the present government. In the category of second class officials, indigenous personnel rose from 1.29 percent to 25 percent.

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Land Reform

The other outstanding reform accomplished by the government has been the carrying out of a new land reform program, which has greatly benefited the lot of the farmers, who are no less than 60 percent of the population. For the 70 percent of the farmers who are

36: Rowe S-4 (no date) 1955 AF1 China AF1
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tenants there has been a rent reform program which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

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By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

C F 652

Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

C F [377] [249] 433

Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

565 time of inheritance, so the contrast between the rich and the poor was not striking. In effect, except for the political and ethnic class lines between the ruling Japanese and the ruled Formosans, social stratification was not clearly marked during the Japanese rule.

After the restoration of Formosa to China in 1945, political and ethnic class lines disappeared with the abolition of the colonial system. With the implementation of the Land-to-the-Tiller policy, inequality in land proprietorship was greatly reduced. When the China Mainland was lost to the Communists in 1949, tycoons transferred their capital to other parts of the world, so that there are no extremely wealthy people in Formosa. New industrial development after the restoration may cause economic differentiation in the future, but for the time being, social stratification is not a serious problem in Formosa. This is the general outline. Some specific topics will be considered on the following section.

2. Primary and Secondary Ownership of Land

471 Until the early years of the Manchu rule
•425 the land in the southern part of the island was agriculturally exploited under the protection of the government. When people began to farm the northern and middle part of the island,

471 they had to rely on themselves. Usually rich
425 and influential people received land grants from the government. Then they hired farmers, supplied them with capital, and organized self-protection forces against bandit and aborigine raids. In return, the owner received rent from the cultivators. Legally he was the proprietor and landlord. When a cultivator was assigned a large patch of land, he could rent some parts of it out to other cultivators, and thus in a sense he also became a landlord. In this case there were two proprietors for the same patch of land. This is the origin of primary and secondary ownership of land in Formosa. The original proprietor held the first title, the second proprietor held the second title to the land. The cultivator paid rent to the second proprietor, and the second proprietor paid rent to the first proprietor. The first proprietor, as the nominal owner of the land, paid the land tax to the government. Sometimes with the connivance of officials, an influential man could get the first title to certain land without any investment and collect the rent.

423 This complicated system of land ownership resembled somewhat the Oberhoheit and Unterhoheit of medieval Germany, and the landlords' control of the self-protection forces tended toward a kind of feudal system. Moreover, this system made the transfer of

423 Another effect of the rent reduction is
425 the steady decline in the price of land cultivated
427 by tenant farmers, because the reduction of rent has lessened the landlords' interest in making investments in land and stimulated their desire to sell it. At the same time, the increase of farm income has enabled some tenant farmers to buy land. According to the statistics of the enforcement of the Rent Limitation Program compiled by the Provincial Land Bureau, 66,328 tenant families bought 35,522 chia (85,139 acres) during the five-year period[10] from 1949 to 1953.

B. Sale of Public Lands

423 The reduction of rent relieves the tenant farmer of his excessive financial burden, but it does not satisfy his wish to own the land he tills. The ultimate object of land reform is to help the tenant to realize his cherished dream of owning the land he and his forefathers have tilled for decades.

Over 20 per cent (181,490 chia or 434,900 acres) of the total arable lands[11] in Formosa belonged to the government. They

10. T'ang Hui-sun, op. cit., p. 64.

11. Total area of farmland in Formosa in 1949 was 891,689 chia, or 1,137,200 acres, and public land amounted to 181,490 chia, or 434,000 acres.

4:Grajdanzev--126-128 S-4 (no date) 1942 Formosans
116, 426, 453, 656, 177.42 Japan
636.42

"Another bank whose loans are far above deposits is Nippon Kangyo Bank, or the Japanese Bank for the Encouragement of Business. Actually this bank is a mortgage institution and [128] is in the forefront of the organizations which extend Japanese control over real property in Taiwan."

"The money which the banks and credit cooperatives collect is lent to the business men and farmers, and here one finds a great difference in the position of the big firms and the small farmers or artisans. The banks serve chiefly Japanese firms, and their credit requirements differ little from those in Japan. Small business men secure their credit in urban credit societies which sometimes charge as much as thirteen per cent and usually ten per cent, while rural credit societies usually charge twelve per cent and in the worst cases seventeen per cent. (1) But both urban and rural credit societies grant

1. These rates are taken from Sangyo kumiai nenkan, 1938, Tokyo. K. Takahashi asserts that the usual rate for mortgages on real property is 15 per cent, op. cit. p. 601).

such credit only on good security, so that the demand of many farmers for credit remains unsatisfied and they are compelled to apply for loans to private individuals who charge twenty to twenty-five per cent, and as Takahashi remarks, cases where more than twenty-five per cent is charged are not rare.

This brief survey is sufficient to show that the modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay.

4:Grajdanzev--130 S-4 (no date) 1942 Formosans-2
116, 426, 453, 563, 477

The importance of this fact cannot be overemphasized. The Chinese enterprises are unable to compete with the Japanese, not so much because the Chinese are 'unable to organize corporations' on account of their 'national characteristics,' [rationalizations given by Takahashi for the domination of industry by the Japanese see pages 112-113 in category 116--analyst] but because their financing costs them two to five times as much as it does the Japanese enterprises."

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

423 against climate and short-term deterioration in use, against destruction through violence, and against decline in the income that it produced. Since the farming population was increasing within a fairly definite area, it had additional value in speculation. Land was also relatively safe against confiscation by the government; not only could its ownership be hidden from casual inspection, but the government itself depended on the obligations owed to landlords by tenants to uphold its authority. Under agrarian conditions of farming on a small scale it is impossible to cultivate large holdings of land under a single management. Hence, the only way to amass large wealth is to become a landlord—beyond some point, necessarily an absentee landlord. In early Taiwan, considerable concentration of landholdings was reported. Ownership tended to gravitate into the control of large and powerful families, whose influence was the only recourse of government officials in asserting their rule.[7]

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565 On the economic side, this concentration of wealth was not given a chance to develop into industrial-type investment. The landed gentry, often landed on considerable scale, were the only group of persons who had access to sufficient income to become capitalists.[8] Practically, however, it proved more secure and profitable to let out their lands to tenant farmers. When they branched out into different enterprises, it was as an adjunct to their status as gentry. In South Taiwan, for example,

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> ". . . sugar was manufactured from the cane grown upon the owners' plantations, or from that brought from elsewhere. The cane was grown by the tenants, or by those who through being heavily indebted to the landowner stood in the same relation as retainers . . . under it [this system] the master of the sugar factory secures a threefold profit.
>
> 1. As landlord, he claims from his tenants from 15 per cent. to 20 per cent. of the cane as rent.

[7] One might suspect that, as in China, members of these families *were* the officials at lower levels of administration. But there is no direct evidence on this point, aside from frequent references to the fact that *clan* solidarity, imported to Taiwan by the migrants from South China, was one of the few bases for organizing any kind of joint action by Taiwanese on a large scale.

[8] The government was unable to fill such a role itself for reasons already noted. Officials, who were not permanent fixtures in Taiwan, confined their acquisitive energies to foreign commerce, where returns were quicker and they did not need to make long-term commitments. For example, it is significant that the government almost never operated its own monopolies, but let them out to many private agents and taxed the products as they were exported.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

2. As capitalist, he secures 14 per cent. to 24 per cent. interest on all the money he may have loaned to his tenant. 565
3. In order to cover the running expenses of the sugar factory he, as master, appropriates half the cane brought in by his tenants. 426 427

"These vast profits leave very little for the poor tenants, who have therefore no means of improving the soil, but fall deeper into debt, until at length they become mere slaves of the sugar factor. This system has proved the greatest hindrance to the growth of the business."[9]

Establishment of Japanese Authority

Japan's objectives in enlarging its Empire required a more energetic administration. With the background of past failures, it is understandable that the Japanese who first arrived in Taiwan met difficulty in trying to impose this kind of rule. It quickly became evident that neither profit nor political dominion was assured to them without some extraordinary measures. 177 631

Japanese first installed themselves in economic life exactly where outsiders had done so in the past—at the periphery of traditional marketing and property relations. They remained most active, as we have seen, outside the realm of agriculture proper. Through their steps in gaining access to the old agrarian institutions, we can now begin to see how far these changes impinged on agriculture itself. The Japanese did not proceed by sheer force, nor simply in a form of "economic penetration." The control was made effective by wedding the two channels—business and government—and by manipulating the pre-existing situation from a few vantage points at the outside. To make a success of this endeavor, the Japanese found it expedient to leave much of this rural social structure almost intact, and turn its basic features to their own account.

Histories of Taiwan over this period usually emphasize only the opposition to the new government that was overt and armed. But it was not by military conquest that the Japanese eventually secured the lowland area of the island. The military aspect was over quickly. Organized resistance collapsed by the end of 1895. Within a year or so after formally taking possession, Japanese became aware that direct attempts to alter the old rural state of affairs were too costly and slow, and were ineffectual against guerrilla bands that had wide-

[9] Takekoshi, Yosaburo (1907), p. 243.

4:Grajdanzev--62 S-4 (no date) 1942 Formosans
116, 241, 477, 427

"More than 110,000 ko of land are under control of the companies which for the most part they lease to the tenants. As will be shown later there is strong competition between tenants in Taiwan, and if the company does not supply the tenant with land, he may be ruined. He must therefore get land from the company and raise sugar cane on the conditions dictated by it."

4:Grajdanzev--69-70 S-4. (no date) 1942 Formosans
116, 231, 492, 427, 422

"Official sources say that there is about one animal per farming family. (1) But this

1. Taiwan Jijo, p. 478.

is inadequate. According to the official statistics for 1937, the number of farming families was 427,397. If we take this figure (it was mentioned above that the actual number of families should be larger) for 1938, then only 0.76 animal was available for each family, if only farmers had cows [70] and buffaloes. This figure includes calves, is also an average figure, and it will be shown later that the wealth of the farmers, at least as expressed in land, is not concentrated around the average. The important conclusion which follows is that at least half the farmers in Taiwan have no draft animals, but are compelled either to work without them or to hire them from the richer farmers. Those who are acquainted with rural life know that dependence on one's neighbour for plough animals is likely to create very serious problems."

4:Grajdanzev--75-76 S-4 (no date) 1942 Formosans
116, 311, 421, 427, 565

"Let us now turn to the investigation of the problem of tenancy. Its economic importance lies in the fact that (1) a large portion of the farmer's income is paid out for rent on land, and (2) the farmer is less interested in preserving the fertility of the land and in making improvements, because the land does not belong to him and may be taken from him at or even before the expiry of the lease. From the social point of view the phenomenon of tenancy is important in that it often creates an idle class of landlords or rich farmer-owners and a class of poverty-stricken tenants. The widespread existence of tenancy makes average figures for the agricultural population meaningless because on the extreme there are rich landlords and on the other poor tenants. In order to be able to judge more or less correctly the importance of tenancy we should know: (1) the number of farmer-owners, part-owners (i.e. those who own some land, but are compelled to rent additional acreage), and tenants; (2) the area which is farmed and the amount owned of that farmed by each of these groups; (3) the division of each of these groups into at least three [76] sub-groups—large, medium, and small—in order to see whether each of these groups is uniform since, for example, the tenant who rents one ko and the tenant who rents 50 ko belong to quite different groups; (4) the conditions of the rent. The available statistics for Taiwan throw light on but few of these elements."

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-1-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

"The division of families occupied in agriculture into owners, part-owners and tenants may be seen from the following table: (1)

1. Here and in the following tables the official figures of families occupied in agriculture are used, though, as was pointed out, they are probably underestimates. The statistics of landowners in Taiwan should be more or less correct because the land is surveyed and change of title involves a complicated procedure. The statistics may be incomplete only as regards tenants and agricultural workers (which they omit completely), and if one takes these into consideration one comes to the conclusion that official statistics probably give a brighter picture than is justified.

Division of Agricultural Families in Taiwan
(thousands)

	1932	1933	1935	1937	1938
Owners	132.2	129.4	132.1	131.1	130.2
Part-owners	119.3	121.7	128.4	134.8	135.6
Tenants (2)	152.4	155.0	159.4	161.5	158.7
Total	403.9	406.1	419.9	427.4	424.5

Footnote (2) on next page.

Division of Agricultural Families in Taiwan [Cont.]
(thousands)

2. Those who have read Japanese Rule in Formosa by Yosaburo Takekoshi may be astonished to discover that there are tenants in Taiwan. Takekoshi wrote in 1905 '. . . The tenants [in Taiwan, after the reform by the Japanese administration] came to enjoy the absolute ownership of the land they or their ancestors have been farming for three centuries. Such a change certainly amounted to a social revolution. Most of the revolutions recorded in history required sacrifices, but the present one was entirely bloodless. This change has given the tenant absolute ownership, thus insuring securing of property. . . . ' (p 132). But what Takekoshi described as a social revolution, was actually only a very modest reform: the government abolished the rights of the taiso--owners who had only doubtful title to land. This reform made transfer of real estate more secure and paved the way for Japanese penetration.

As percentages of total

Owners	32.7	31.9	31.4	30.7	30.7
Part-owners	29.6	29.9	30.6	31.5	31.9
Tenants	37.7	38.2	38.0	37.8	37.4
Total	100	100	100	100	100

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-3
116, 114, 178, 423, 427, 177.42 Japan
636.42

Source: Takumu Tokei, 1938.

[77] As this table shows, about forty per cent of all farmers in Taiwan own no land at all and must rent it from landlords and farmer-owners; about thirty per cent have plots so small that they are compelled to rent land, and barely thirty per cent of the farmers till only their own land. These figures are striking. Taiwan does not know rich tenants of the British type. Those who rent land are mostly poor farmers, but even those who cultivate their own land, are not all rich. As to the relative changes, there is a noticeable fall in the percentage of owners in six years--from 32.7 per cent in 1932 to 30.7 per cent in 1938. For the same period the percentage of tenants is the almost the same (37.7 and 37.4 per cent respectively), while the percentage of part-owners rose from 29.6 per cent to 31.9 per cent. It would seem that the farmer-owners are gradually losing their position and sinking to the level of tenants, but a six-year period is not a sufficiently long time to ascertain definitely whether such a trend exists.

However, it is not only the number of owners and tenants which is important, but also the area which they respectively till. Statistics of area are divided into only two categories—owned and rented.

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

Area Owned and Rented in Taiwan in 1932
(1,000 ko)

	Dry fields		Paddy		Total	
	Area	%	Area	%	Area	%
Owned	230.2	60.0	132.2	33.3	362.4	46.5
Rented	153.8	40.0	264.0	66.7	417.8	53.5
Total	384.0	100	396.2	100	780.2	100

Source: Nogyo Nenkan, 1939-40, p. 641.

In 1932 the area cultivated by owners constituted 46.5 per cent, the area rented by tenants 53.5 per cent. But it is important to emphasize that owners cultivated chiefly dry land while the tenants cultivated paddy. Paddy brings much higher yields than dry fields; in 1937 the average yield of rice per ko of paddy was about 14 koku while that per ko of dry land was only 7.8 koku, and, further, many paddy fields [78] produce two crops a year. In other words, one ko of paddy yields, on the average, more than twice as much as one of dry land, so that the tenants produce about sixty-five to seventy per cent of the total crop of Taiwan on rented land, and the owners not more than thirty-five to thirty per cent."

4:Grajdanzev--78-79 S-4 (no date) 1942 Formosans-1-3
116, 178, 427, 565

"As to the distribution of land between landowners by size of holdings, we have figures for 1930 and partial figures for 1932. We shall divide the farmers into four groups: (1) landowners with holdings of less than half a ko (less than 1.2 acre); (2) landowners with holdings of half a ko to one ko; (3) landowners with holdings of one ko to five ko; (4) those with holdings above five ko (above 11.9 acres).

Distribution of Landowners by Size of Holdings, 1930

Size of landholdings (ko)	0-0.49	0.5-0.99	1.0-4.99	5.0 and over	Total
Number (1,000)	172.9	86.7	122.4	23.1	405.1*
Percentage	42.7	21.4	30.2	5.7	100.0
Area (1,000 ko)	41.0	62.5	258.6	359.2	721.3
Percentage	5.7	8.7	35.8	49.8	100.0
Average area per holding (ko)	0.42	0.72	2.1	15.5	1.78

* It is important to note that the number of owners as given here is considerably greater than the number shown in more recent statistics. For 1932 the earlier figure was 340,674, whereas the current statistics (Takumu Tokei, 1938, published in 1940) give the number of owners and part-owners for 1932 as only 251,300; this is another indication of our point that the current official statistics probably understate the number of those occupied in agriculture.

Source: Ibid.

We see from this table that 42.7 per cent of the owners are decidedly small owners: their average holding is only 0.24 ko or less than 0.6 acre. They cannot exist on such a strip of land but must rent some land from rich landowners. In other words, almost half of the landowners are such in name only; they have enough land only for a house, a yard, and a kitchen-garden. Another 21.4 per cent of the owners are in a better position but not much better. Thus 64.1 per cent of the total number of landowners in Taiwan in 1930 had on the average less than 2.4 acres each. At the other end of the social scale, 5.7 per cent of the landowners owned 49.8 per cent of land, [79] or one-half of the total cultivated area. We may go farther and say that 126 persons (or corporations), 0.05 per cent of the total number of landowners possessed 94,072 ko—or 13.1 per cent of the total cultivated area. (1) Only thirty per cent of the owners are in the middle category. As regards

1. These figures are probably now out of date. In Kabushiki Kaisha Nenkan, 1940, five sugar companies and one canning company are listed as owning 81,634 ko of land in Taiwan.

the distribution of land among owners, Taiwan is a country of contrasts. Rich owners, although outnumbered eleven times to one by small owners, had nine times as much land. Thus on the average a rich owner had one hundred times more land than one in the first

two groups. This is extremely important for it shows that the farmers in Taiwan are divided into groups of unequal economic strength with extremes prevailing, so that the situation of the masses of the agricultural population is less satisfactory than the average figures calculated above would suggest. The Japanese government has not solved this question in Japan proper and it has not solved it during forty-five years of its administration in Taiwan."

"The situation in the latter [80] country as regards land distribution is worse now than it was several decades ago and the large holdings are growing.

Distribution of Farmers and Land Tilled and by Size of Farms, 1930

Size of farms cultivated (ko)	Less than 0.5	0.5-0.99	1.0-1.99	2.0-4.99	5 and over	Total
Number of farmers(1,000)	128.0	96.9	100.4	78.9	19.0	423.2*
Per cent	30.3	22.9	23.7	18.6	4.5	100.0
Area of land tilled (1,000ko)	33.7	69.7	143.2	236.1	208.6	601.3
Per cent	4.9	10.1	20.7	34.2	30.1	100.0
Average for groups (ko per farmer)	0.26	0.72	1.43	2.99	11.0	1.63
Average in acres per farmer	0.62	1.71	3.39	7.11	26.15	3.87

*In Nogyo nenkan, 1940, from which we quote, the total is 433,300 but this appears to be a misprint. Even so, it is less than the total should be because, as was shown in the preceding table, there were in the same year 405,181 owners and the number

of tenants was not less than 150,000. In other words this investigation evidently covered only a part of the cultivators. This is proved by the figures of the area of land cultivated.

Source: Ibid."

"The figures given above refer to landownership. But the owners of small plots may increase their holdings by renting land. Some economists see the chief advantage of tenancy in the fact that it permits a capable farmer to get as much land as he is able to utilize. We give above the statistics of the size of the farms as actually operated in 1930 [See p. 79, category 116--analyst].

The picture is about the same as that of ownership. More than 30 per cent of the farmers till on the average less than 0.5 ko each (0.62 acres); 53 per cent till on the average less than one ko (less than 1.71 acre) and 77 per cent of the farmers till less than 2 ko (less than 3.39 acres). But 4.5 per cent tilled 30 per cent of the total area, while 579 farmers (or corporations) tilled 66,410 ko. There are therefore a considerable number of very large plantations in Taiwan, chiefly of sugar cane, bananas, pineapples, and tea. These are figures for 1930 and it is quite possible that even then the investigation did not cover all farmers. (1)

1. An indirect proof of this is that a similar investigation made in 1932 covered 340,000 farming families as compared with 405,000 in 1930.

Since 1930 the plantation area has increased sharply, so that the picture should be by now even less favorable. We have no statistics of land ownership by nationalities, but it is well known that all, or almost all, plantations belong to big Japanese companies.

4:Grajdanzev--80 S-4 (no date) 1942 Formosans-2
116, 241, 311, 427, 565

However, it is clear that among Chinese farmers too, there is a sharp division in respect to landownership—there are wealthy Chinese owners, who though few in number, are very important by virtue of the power they wield."

"The tenancy contract in Taiwan, as it was a few years ago, had the following features: (1) (1) It was a short-term contract—for the most part for one year only and cases were

1. For a more detailed description see K. Takahashi Gendai Taiwan Keizairon, pp. 293-303.

frequent where the landlords broke the contract before its expiry. It is possible for them to do this because the tenants are more numerous, there is stiff competition among them, and they cling to the plots which they are able to secure. There have [81] been cases when the term was six years and even ten years (opening of new land or reclaimed land), but these were exceptional. (2) It was almost exclusively an oral contract and in case of conflict the landlords were more successful than the tenants in securing their own interpretation of it. (3) The landlord usually received security from the tenant in money or in kind, amounting to from forty to sixty per cent of the rent, deposited with the owner at the time the contract is made. No interest is paid on this amount. This deposit represents a heavy additional burden on the tenants, who, as a rule, have no cash and are compelled to borrow the money at high interest rates while they themselves do not receive any interest on it. In many cases this results in sub-tenancy—a rich farmer renting land and sub-letting it to poor tenants.

Through the efforts of the government these general features were somewhat changed. The government policy was as follows: (I) the term of tenancy should be five to six years or more; (2) if, after the expiry of the contract, the contracting parties do not denounce the contract within six months, it must be regarded as automatically renewed; (3) in time of crop failure the rent is to be reduced by mutual agreement; (4) in case of arrears (without a justifiable reason) or misuse of soil, the contract may be voided by the landowner; (5) no transfer of land by the tenant can be made without agreement and approval by the landowner; (6) changes in the form of the plot and other changes influencing the productive capacity of the land must be approved by the landowner; (7) if improvements are approved by the landowner, he must bear the expenses of the improvements fully or in part; (8) no contract may be declared void before expiry without sufficient reasons; otherwise compensation must be paid; (9) disputes are to be settled by special arbitration committees.

It is unwise to attach too much importance to these government efforts, however good their purpose may be. True, in 1935 sixty-eight per cent of all area leased was leased under written contracts, while in 1938-39 the percentage had risen to 76.6 per cent. Arbitration committees are established, as well [82] as societies of landowners and tenants, the purpose of which is to bring social peace to the relations between the landowners and tenants as well as to effect a change in the ideology of the farmers. Money

grants from the government-general are made to aid these societies and officials appointed to direct them. But all this does not touch the core of the problem. The problem of tenancy is not to secure the tenant in his lease for one year, or how to distribute the costs of improvements, as this touches chiefly the misuse of power by the landlord. With a secure contract for three or five years, the tenant must still pay the rent, and he has no assurance that the lease will be extended after expiry of the contract. The policy states that in case of crop failure the rent should be reduced by mutual agreement, but in Taiwan it used to be customary for the farmer to pay the rent whether the crop failed or not, and there is no guarantee that this custom will not form the basis of the 'mutual agreement'. In this agreement there is no equality between the opposing parties. The same should be said about the arbitration committees--everything depends upon the degree of influence of the landowners in these committees."

4:Grajdanzev--82-83 S-4 (no date) 1942 Formosans
116, 243, 427

"Nothing appears in the formulated [government--analyst] policy concerning the decrease of rent. According to an investigation by the government-general in 1927, rent amounts to about 27 to 29 per cent of the crop from dry fields, 43 to 45 per cent from paddy when one crop is taken each year, and 49.3 per cent in case of two crops. The low figure for dry fields is more than suspicious, for if the figures of the investigation are correct, the tenant cultivating the dry land is in a better position than the tenant of paddy with two crops.

Comparison of the Position of Tenants on the Best Lands in Taiwan, 1927.

Average figures	Dry field (yen)	Paddy with two crops (yen)
Value of crop (per ko)	366.4	517.7
Rent	100.5	255.7
Balance	265.9	262.0

It is well known that the amount of labor required to till one [83] ko of paddy with two crops is several times greater than the amount of labor necessary to cultivate one ko of dry field, and it is strange that the tenant of the dry land is at the end of the year in a better position than the tenant of the paddy."

4:Grajdanzev--83 S-4 (no date) 1942 Formosans
116, 171, 427

"Rent is paid chiefly in kind, though payment in cash is spreading. Where two crops are raised, a proportion of 7:3 is usual, i.e. the tenant pays seventy per cent of the rent from the first crop and thirty from the second. Rents in Taiwan are somewhat lower than in Japan, and Takahashi attributes this to the greater investments in the form of land improvements in Japan as compared with Taiwan."

4:Grajdanzev--83 [2] S-4 (no date) 1942 Formosans
116, 241, 361, 427

"Let us now consider the economy of the tenant. We saw that the tenants and semi-tenants make up about sixty-nine per cent of all the agricultural families. From the table on page 79 it appears that seventy-seven per cent of the farmers (the first three groups) cultivate on the average 0.75 ko each. These two groups should coincide approximately."

4:Grajdanzev--83-84 S-4 (no date) 1942 Formosans
116, 241, 427, 511, 556

"We have no recent figures of tenancy conditions but, according to an investigation made in 1927, the position of the average farmer-tenant appeared as follows (on land of average quality in paddy with two crops a year):

	yen
Value of crop from 0.75 ko	325
Rent	160
Balance	165

Thus his reward for his and his family's labor for the whole year was ¥165, minus the expenses of production apart from labor. From this sum house taxes, indirect taxes, etc. must be paid. This income of ¥165 may be compared with the income of a landowner who had 15.5 ko (the average for the upper group of landowners) and leased all this land to tenants. His yearly income would be ¥2,480.

These conditions may not exist now, since the above figures refer to 1927. Official sources do not give new figures, but a few calculations show that the situation has not greatly changed. As has been shown, the proportion of tenants to the total number of farmers has increased since that time, so [84] that competition among them must be stiffer, and there is no reason to expect that rents are lower. The value of two crops of rice from 0.75 ko of paddy in 1937 averaged ¥515 but prices general in 1937 were at least thirty per cent higher than in 1927. All this suggests conditions of poverty among the tenants and the position of even the majority of so-called owners may be not much better."

8: Chen--441 N-3 (no date) 1951 Formosans
427

"According to the 'Survey on Farm Rent Economy' published in 1947 by the Formosa government, the average rent for paddy fields is about 48 per cent of the value of the products; that for dry fields is 33 per cent."

423 ownership and the collection of taxes difficult. For this reason in the later years of the Manchu rule, Liu Ming-Ch'uan, an able and far-sighted governor, tried to abolish it. Meeting with stiff opposition from the landlords, his plan was doomed to failure. Liu's project however, was finally carried out by the Japanese government. Between 1898 and 1905 a land survey was completed. In 1903 the existing first titles were confirmed, and further establishment of them was prohibited. In the following year the system of double titles was abolished, and the holders of first titles were compensated by a total sum of 3.78 million yen in bonds. After this all the holders of secondary land titles were recognized as the sole owners and thus the embryonic feudal system was abolished.

3. Relation between Landlord and Tenant

• 427 The relation between landlord and tenant was generally analogous to that between father and son, and the son was expected to obey the father. Besides paying high rent for the land, tenants presented their landlords with chickens and the like at festival seasons, and were expected to work for the landlord when he requested their help. Though tenants were not serfs, their status was obviously much lower than that of the landlord. This situation continued to the 1920s. The social movement of the Taiwan Cultural Association awakened

427 the social consciousness of the farmer, and Farmers' Association encouraged the farmers to oppose their landlords. Hitherto tenancy had been based mainly on oral contract, and, even where there were written contracts, the terms of tenancy were ambituous. To mitigate the situation, the Japanese administration sponsored Landlord-Tenant Associations, and proposed various measures for improvement in the land tenancy system. The Landlord-Tenant Associations recommended written contracts and the extension of the terms of tenancy. But unwilling to give up their privileges the landlords resisted these recommendations. However, the tenant farmers were aroused by the agitations of the reform movement; many of them abandoned the custom of bringing their seasonal presents to the landlord.

423 Shortly after the restoration of Formosa
to China, a rigorous land reform program
427 was begun. Under this program, all farm leases are required to be in writing according to a form promulgated by the Taiwan Provincial Government. The obligations and responsibilities of both the landowner and the tenants are definitely specified. As a result, the tenants may deal with landlords on equal terms, and democratic relationships are established.
466 Simultaneously, the relations between the employer and the employee in industrial establishments underwent similar changes.

668 the remaining left wing of the association split again into the communistic and the social-democratic groups, and the latter was expelled from the association. The moderate Taiwan People's Party again split into the conservative rich landlord group and the more radical middle class group. The former group organized the Taiwan League for Local Self-Government in 1929, and in the meeting of the party in 1930, was expelled by the more radical group. But at the same time, the party was disbanded by the colonial government. Thus, by 1930, among the Formosans, there were (1) a communistic group, (2) a social-democratic group, (3) a more radical middle-class group, and (4) a conservative landlord group.

474 2. Farmer's Associations: The influence of
427 this movement could not fail to reach the farmers. In 1924 a dispute arose between
668 sugar cane farmers and a sugar corporation.
671 Under the leadership of a local doctor, the dispute was settled in favor of the farmers. This encouraged the farmers, and in next year the Association of Sugar Cane Farmers was organized. Some farmers had reclaimed government-owned land without permission. This was denounced as illegal, and in 1926 nearly four thousand hectares of this kind of land were distributed to 370 Japanese retired officials. This provided impetus for farmers

474 to unite and fight. Moreover, farmers were
under the heavy yoke of the landlord, and
• 427 most of landlords were local people. On
Formosa, 53 per cent of the farm land
668 was tenant land, and tenants had to pay about
671 half of their harvest to the landlord as rent.
Moreover, the tenant farmer has various
other obligations toward the landlord. This
situation was unbearable even to the most
subservient tenants, and they often submitted
complaints against landlords to legal arbitration.
Under the threefold pressure of the sugar
corporation, retired Japanese officials and
landlords, the farmers were always ready
to rebel at the slightest provocation. The
sparks kindled in 1924 spread and many
farmers's association were organized. It
is interesting to note that the name of the
association thus organized was not the
"association for agriculture," but the
"farmer's association." In 1926 these local
associations were united into the Taiwan
Farmers' Association. Campaigns against
the landlord under the direction of the associa-
tion rapidly increased. There were 5 such cases
of disputes in 1924, 4 cases in 1925, 15 cases
in 1926, in 1927 the number jumped to
431 cases (2,127 persons involved) and in
1928 dropped back to 134 cases (3, 149 persons
involved) in 1928. The magnitude of the
dissatisfaction stimulated the Japanese to
action and suppression was begun in 1929.
With the Japanese invasion of Manchuria in 1931

474 ruthless means of suppression were adopted
in the name of internal consolidation. The
• 427 cases of farmers opposing landlords dropped
sharply to 23 cases in 1929, 28 cases in
668 1930, and 16 cases in 1931. However, the
671 influence of the movement on Formosan
society, especially on social relations between
landlords and tenants was undeniable. The
government sponsored landlord-tenants
associations after 1924 were a means to
mitigate the tense situation of the time.

467 3. Labor Unions: The new social currents
also reached factory workers. Labor unions for
various trades were organized, and in 1927,
29 local unions were federated into the
Taiwan Federation of Workers Unions. At
the end of the year participating units
increased to 65, and the number of members
amounted to 7,861. In 1928 the League of
Taiwan Mechanical Workers was organized
under separate leadership. Several strikes
were directed by the leagues. Both the
farmers associations and the worker's unions
received co-operation from associations and
unions in Japan. Generally speaking, because
of the backwardness of Formosan industry
at that time, the activity of labor unions was
not as conspicuous as that of the farmers.
The activity of the union also faded out under
the pressure of government suppression in
1929 and 1931. In 1932 almost all labor
leaders were arrested, and in 1937, the year

423 162 The foregoing tabulation shows that tenants and part-tenants who own no land, or only part of the land they till, constituted 65 per cent of the farm population, and only 35 per cent were independent farmers. The scarcity of land coupled with inequitable distribution led to the continued exploitation of the tenant farmer by the landlord.

• 427 Prior to 1949 the land rental averaged 50 per cent of the total yield per annum; in some cases more. In Taichung and Hsinchu there were instances where the tenants paid to the landlords 70 per cent of their annual harvest. In addition to the high rental, the tenants often were required to pay the landlord a large rent deposit. Then there was uncertainty of tenure. In most cases there was no written lease. Even when there was a written contract, the period of lease generally covered only one to two years, or was not definitely stated. This left the landlord free to terminate the lease at will. Since the dispossessed tenant was not entitled to any compensation, the resulting hardship could be easily imagined. The need for reform was evidently urgent.

II. LAND REFORM

423 Land reform for the sake of social justice was advocated by Dr. Sun Yat-sen,

423 founder of the Republic of China, in his San-min Chu-i.[5] He called it the Land-to-the-Tiller Policy. It had been tried out in the provinces of Szechwan, Kwangsi, and Kweichow after World War II and met with some degree of success; but the reform program was interrupted by the Communist uprising. When Gen. Chen Cheng became the governor of Formosa in December 1948, he undertook with great zeal and determination to carry out the much-needed land reform in the insular provinces.

423 185 With the aid of the Sino-American Joint Commission on Rural Reconstruction (JCRR), a detailed program of land reform was mapped out. The program was to be carried out in three successive stages, namely, reduction of farm rent in 1949, sale of public farm lands in 1951, and redistribution of private lands in 1953.

A. Rent Reduction

423 429 On April 14, 1949, the Taiwan Provincial Government promulgated a set of regulations

5. San-min Chu-i [The Three Principles of the People], Taipei, China Cultural Service, reprinted 1953, p. 187.

423 407 governing the lease of private farm land in the province, which limited farm rent to 37.5 per cent of the annual yield of the main crop. The new law provides that if the rent originally agreed upon exceeds this percentage, it must be reduced accordingly. If it is less than 37.5 per cent, it must not be increased. It represents a substantial reduction from the customary 50 to 60 per cent that most tenants had been paying. Moreover, "the total annual yield" does not mean the actual annual yield on the farm; it refers to the standard amount of yield fixed on the basis of the productivity grade of the land at the time of lease. A standard amount was determined by the Rent Reduction Committee in each locality to conform with current conditions. As long as the lease remains in force, this standard amount is not subject to change. As a result of the reform, not only the customary amount of rent is reduced, but the increased production from the land resulting from the tenants' extra efforts (such as the increasing use of fertilizers, improvement in farming practice, etc.) is fully enjoyed by the tenant themselves; the basis for rent calcualtion is fixed and not subject to change.[6]

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6. T'ang Hui-sun, "Steps in the Implementation of Land Reform in Taiwan," in Land Reform in Free China, published by Free China Review, Taipei, May 1, 1953, pp. 8-9.

403 In case of crop failure, the tenant
429 farmer may request the Farm Tenancy Committee of the village, township, or district office to investigate the extent of loss and decide on measures for the reduction of rent. Should the total yield be less than 30 per cent of the normal yield, the entire rent payment shall be remitted.[7]

To guarantee the security of tenure it is further provided that all lease contracts between the landlord and the tenant must be written and registered with the government. The Farm Rent Reduction Act of 1951 specifies that the period for which farm land is leased shall not be shorter than six years. If the period originally agreed upon is longer than six years, it shall remain unchanged.[8] At the expiration of the lease, the right of the landlord to take back his own land is subject to many restrictions.[9] Even if the land is offered for sale, the tenant has the right to continue using the land during his tenure. In other words, the landlord may transfer his right of ownership, but not the right of use.

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7. See Article II, Farm Rent Reduction to 37.5% Act, promulgated by the Chinese National Government on June 7, 1951.
8. Ibid., Article V.
9. Ibid., Article XIX.

423 The benefits of the rent-reduction program
● 427 are noticeable in the improvement of the
511 tenant farmers' living conditions. The saving in rent payments, amounting 25-30 per cent of their gross income, can now be used to buy new clothing for their families, to send their children to school, to repair their houses, or to purchase farm land. They also work harder
423 because any inc reace in production accrues to
433 them. This factor contributed to the substantial annual increase of rice production from 1949 to 1954.

Production of Unhulled Rice*

Year	Metric Tons
1949	1,215,000
1950	1,421,000
1951	1,485,000
1952	1,570,000
1953	1,642,000
1954	1,695,000

* Taiwan Economic Data Book, compiled by FAO Mission to China, Part II, Vol. III, March 1955, Taipei, p. 5. The average production of rice perhectare increased from 1,624 kilograms in 1949 to 2,183 kilograms in 1954. Central Daily News, Oct. 22, 1955, p. 3.

423 425 427 Another effect of the rent reduction is the steady decline in the price of land cultivated by tenant farmers, because the reduction of rent has lessened the landlords' interest in making investments in land and stimulated their desire to sell it. At the same time, the increase of farm income has enabled some tenant farmers to buy land. According to the statistics of the enforcement of the Rent Limitation Program compiled by the Provincial Land Bureau, 66,328 tenant families bought 35,522 chia (85,139 acres) during the five-year period[10] from 1949 to 1953.

B. Sale of Public Lands

423 The reduction of rent relieves the tenant farmer of his excessive financial burden, but it does not satisfy his wish to own the land he tills. The ultimate object of land reform is to help the tenant to realize his cherished dream of owning the land he and his forefathers have tilled for decades.

Over 20 per cent (181,490 chia or 434,900 acres) of the total arable lands[11] in Formosa belonged to the government. They

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10. T'ang Hui-sun, op. cit., p. 64.

11. Total area of farmland in Formosa in 1949 was 891,689 chia, or 1,137,200 acres, and public land amounted to 181,490 chia, or 434,000 acres.

423 From these summaries we can assume
● 427 that the land reform program not only has succeeded in doing away with the exorbitant rental that the Formosan tenants were obliged to pay, but has succeeded in changing 383,104 tenant-farmers to owner-farmers. In five years the area of tenanted land has been reduced from 41.1 per cent to 16.3 per cent of the total farm land. Land reform is certainly the most noticeable achievement of the Chinese Nationalist Government since the island reverted to its control.

The measures of land reform in Formosa are both moderate and equitable, and have been well supported by the general public, although some complaint and opposition did arise from the landlords who had been deprived of the opportunity to exploit their tenants and who had been forced to sell their surplus land to the government. But the interests of the landlords have not been altogether neglected. They are reasonably compensated, and to guard against the loss by possible inflation, they are repaid yearly with commodities, not with currency. Part of their compensation is paid with industrial stocks, thus turning capital investment from agricultural into industrial channels. They fare better than the large Japanese landowners. The Japanese Land Reform Act of 1946 was imposed by the Allied occupation forces. The landlords were paid with government bonds, the value of which

423 was entirely wiped out by subsequent devaluation
427 of the currency. The Formosan landlord should be especially contented, when he ponders the lot of his brothers on the Mainland. In sharp contrast with the moderate measures in Formosa, the Communists liquidate the landlords, confiscate their land, and make collective serfs of the peasants. The effect of the land reform in Formosa is expected to be more far-reaching than the economic betterment of the peasant class; it is an important asset of the Nationalist Government in anticipation of the liberation of the China Mainland.

423 In connection with the successful
241 redistribution of land in Formosa, it should be added, however, that we must not assume the economic problems of the Formosan farmers who comprise 52 per cent of the total population have been completely solved. First of all, the average size of the farm is too small for economic sufficiency, for 47 per cent of farmer families own less than 0.5 chia (1.2 acres) of farm land, 70 per cent own less than one chia (2.4 acres) and 93 per cent less than three chia (7.2 acres).[26] The average

26. From Statistics on Landownership Classification in Taiwan China, 1952, compiled by Provincial Land Bureau, Taipei, June 1952.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

CHAPTER II

"Economic Development" in Taiwan

648 RULING TAIWAN was a task that the Japanese approached with high hopes. Because their goals were ambitious, the problems were more 433 formidable than they might have been with a more modest and conventional colonial program. Their officials in Taiwan were the first overseas administrators in the Empire, and felt a responsibility to make the colony appear worth while at home.[1] Whatever their wider aims, their strongest aspirations for the island expressed themselves in energetic economic policies—policies pursued with such determination that they profoundly altered many aspects of Taiwan's economic life. In the course of their administration, Japanese nationals came to look upon enhanced production with a two-fold purpose: to secure profits for certain individuals and groups, and to promote the self-sufficiency and military strength of the Empire.

Here we shall examine the techniques of their economic program, survey its operation, and endeavor to make some appraisal of the accomplishments. A closer view of its significance for the everyday affairs of the population is reserved for the next chapters.

241 The situation that the Japanese first encountered in Taiwan was one of long-established tradition, in which a small amount of inno- 433 vation could go a long way. Agriculture was the main source of livelihood for practically all Taiwanese. The particular manner in which farming is organized in Taiwan tends, as it does in most of the Far East, to shield it from the intrusions of the modern world. Under the Manchu regime the Chinese inhabitants of Taiwan had developed farming along the familiar lines of their forebears on the China coast. Farms existed on a local village scale and were operated [65] for local subsistence. Most of any exportable surplus of production was removed from the villages in the form of taxes or rent. What was [427] left became absorbed in the costs of civil disturbance, misgovernment, and expansion of settlement, rather than going toward broadening commercial or other opportunities of the cultivators themselves. 433 Whatever may bring about such a situation, it is one that tends to

[1] Most of the later Japanese publications about Taiwan's future also stressed the island's potentialities as a base for southward expansion of the Empire. The grandeur of these proposals suggests that some of them may have been invented in search of favor for their authors more than in serious expectancy of being carried out.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

423 against climate and short-term deterioration in use, against destruction through violence, and against decline in the income that it pro-
556 duced. Since the farming population was increasing within a fairly
631 definite area, it had additional value in speculation. Land was also relatively safe against confiscation by the government; not only could its ownership be hidden from casual inspection, but the government itself depended on the obligations owed to landlords by tenants to uphold its authority. Under agrarian conditions of farming on a small scale it is impossible to cultivate large holdings of land under a single management. Hence, the only way to amass large wealth is to become a landlord—beyond some point, necessarily an absentee landlord. In early Taiwan, considerable concentration of landholdings was reported. Ownership tended to gravitate into the control of large and powerful families, whose influence was the only recourse of government officials in asserting their rule.[7]

565 On the economic side, this concentration of wealth was not given a chance to develop into industrial-type investment. The landed
426 gentry, often landed on considerable scale, were the only group of
427 persons who had access to sufficient income to become capitalists.[8] Practically, however, it proved more secure and profitable to let out their lands to tenant farmers. When they branched out into different enterprises, it was as an adjunct to their status as gentry. In South Taiwan, for example,

> ". . . sugar was manufactured from the cane grown upon the owners' plantations, or from that brought from elsewhere. The cane was grown by the tenants, or by those who through being heavily indebted to the landowner stood in the same relation as retainers . . . under it [this system] the master of the sugar factory secures a threefold profit.
>
> 1. As landlord, he claims from his tenants from 15 per cent. to 20 per cent. of the cane as rent.

[7] One might suspect that, as in China, members of these families *were* the officials at lower levels of administration. But there is no direct evidence on this point, aside from frequent references to the fact that *clan* solidarity, imported to Taiwan by the migrants from South China, was one of the few bases for organizing any kind of joint action by Taiwanese on a large scale.

[8] The government was unable to fill such a role itself for reasons already noted. Officials, who were not permanent fixtures in Taiwan, confined their acquisitive energies to foreign commerce, where returns were quicker and they did not need to make long-term commitments. For example, it is significant that the government almost never operated its own monopolies, but let them out to many private agents and taxed the products as they were exported.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

2. As capitalist, he secures 14 per cent. to 24 per cent. interest on all the money he may have loaned to his tenant. 565 426
3. In order to cover the running expenses of the sugar factory he, as master, appropriates half the cane brought in by his tenants. 427

"These vast profits leave very little for the poor tenants, who have therefore no means of improving the soil, but fall deeper into debt, until at length they become mere slaves of the sugar factor. This system has proved the greatest hindrance to the growth of the business."[9]

Establishment of Japanese Authority

Japan's objectives in enlarging its Empire required a more energetic administration. With the background of past failures, it is understandable that the Japanese who first arrived in Taiwan met difficulty in trying to impose this kind of rule. It quickly became evident that neither profit nor political dominion was assured to them without some extraordinary measures. 177 631

Japanese first installed themselves in economic life exactly where outsiders had done so in the past—at the periphery of traditional marketing and property relations. They remained most active, as we have seen, outside the realm of agriculture proper. Through their steps in gaining access to the old agrarian institutions, we can now begin to see how far these changes impinged on agriculture itself. The Japanese did not proceed by sheer force, nor simply in a form of "economic penetration." The control was made effective by wedding the two channels—business and government—and by manipulating the pre-existing situation from a few vantage points at the outside. To make a success of this endeavor, the Japanese found it expedient to leave much of this rural social structure almost intact, and turn its basic features to their own account.

Histories of Taiwan over this period usually emphasize only the opposition to the new government that was overt and armed. But it was not by military conquest that the Japanese eventually secured the lowland area of the island. The military aspect was over quickly. Organized resistance collapsed by the end of 1895. Within a year or so after formally taking possession, Japanese became aware that direct attempts to alter the old rural state of affairs were too costly and slow, and were ineffectual against guerrilla bands that had wide-

[9] Takekoshi, Yosaburo (1907), p. 243.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1
Taiwan AD6

and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:53; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

F 175 241 423
F 175 161 423 427 554
F 175 177 648 423 427
F 175 648 427
Tn 175 427 161
Tn 423 427
F [423] [427]

36: Rowe S-4 (no date) 1955 AF1 China AF1
Form. osa AD1

was that the Taiwanese were accustomed to the peace and order of a country under a foreign tyranny, and could not, at first, understand the "lack of uniformity" and "the complexities" of democratic rule (thanks to the Japanese, on the other hand, they had no illusions about or yearnings after Communism). Finally, the men who governed Taiwan immediately after the retrocession gave every evidence of being more interested in increasing their power and lining their pockets than in providing good management. When, therefore, the Nationalist government moved to Taiwan in 1949, it found that it had taken on numerous grave local problems in addition to those it had brought with it from the mainland.

CF 177 CF [661] CF 642

Political Reform

The Kuomintang, the leading political party, prepared itself to deal with these problems by putting itself through a reorganization. Its younger, more liberal leaders were, to this end, appointed to a Central Reform Committee, the main task of which was to strengthen and tighten party organization and eliminate corrupt elements, opportunists, and bureaucratic politicians. On 1 September 1950, the Nationalist government was ready to announce a new political program. Its objectives were to

CF [665]

> encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; to establish a democratic industrial system in which the workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprise; to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; to carry out local self-government and to protect civil rights.

CF

Local self-government and land reform were the fields in which the government brought about the most spectacular changes. It first removed all the social barriers and segregation measures that had been created and maintained by the Japanese. The native Taiwanese were no longer barred from institutions of higher learning, or from the worthwhile positions in commerce and politics. They were encouraged to participate in local self-government, and to think for themselves. By 6 May 1951, 21 mayors and magistrates in 16 counties and 5 municipalities had been elected to their respective offices by popular vote. There are now 6304 village and *li* (comparable to urban wards) assemblies, in which the Taiwanese are learning the art of self-government. Representing them in town and district assemblies are 8024 village and *li* delegates. On the county and municipal levels, there are about 541 popularly elected councilmen. Of an estimated 2,650,000 qualified men and women voters, some 2,416,072 are registered. In keeping with the government's policy of economy, the total number of government employees was reduced in June, 1950 to 81,000. The percentage of indigenous citizens in the government service rose to 65.46 percent.

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There has also been a marked change in the importance and responsibility of the posts held by Taiwanese. In the category of first class officials, indigenous personnel have increased from 0.92 percent under Japanese rule to 17.45 percent in the present government. In the category of second class officials, indigenous personnel rose from 1.29 percent to 25 percent.

CF

Land Reform

The other outstanding reform accomplished by the government has been the carrying out of a new land reform program, which has greatly benefited the lot of the farmers, who are no less than 60 percent of the population. For the 70 percent of the farmers who are

423 427

C F 423 427

tenants there has been a rent reform program, which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

C F 241 654

By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

C F 652

Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

C F [377] [249] 433

Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

AF1 China
FORMOSA AD1

652 Thus far, the provincial budgets have been balanced in recent years. How long the improved financial outlook will continue depends on a number of factors. Undue strain on provincial resources has been avoided by using assets brought over from the mainland and by selling government properties. Indirect benefits derived from the Economic Co-operation Administration program, which for the fiscal year 1951 amount to approximately US$40,000,000, help to arrest the inflationary trend of commodities.[29]

Living Conditions

511 In the absence of comprehensive statistics establishing the trends of per capita income in Taiwan,[30] the Nationalist policy of improving the people's livelihood may be reflected by the measures which have been taken regarding agriculture, industry, food, and other government-operated productive services.

Agriculture

[162] 427 Farming population in Taiwan is estimated to be around 3,800,000. Of this number, 70 per cent are under contract as tenant farmers. Prior to the enforcement of the rent reduction program in April 1949, which set a maximum rental ceiling of 37.5 per cent, the average rental ranged from 46 to 62.5 per cent of the total yield.

In administering the rent reduction program, the provincial authorities fix a standard yield per *chia* (less than 2.5

[29] "Economic Administration Program in Taiwan," an address by Raymond T. Moyer, chief, ECA, China Mission, before the Chinese Association for the United Nations, March 17, 1951.

[30] Premier Chen Cheng states that per capita income in Taiwan has risen 30 per cent since the termination of Japanese rule (Broadcast of the Voice of Free China, Taipeh, May 12, 1951). Also estimated income in Taiwan for 1950 is NT$1,276,000,000 and for 1951

[P. 218 (A)]

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD 1

427 acres) as a measuring stick for rental calculation. It varies with the fertility of land in different sections of Taiwan. To prepare the farmers for the acceptance of the program, 9,937 persons were sent to the rural areas in 1949 to acquaint them with the operational details. They were followed by 1,257 trained persons who helped farmers to readjust their rental contracts. By November 1949, 306,473 families were given "37.5-contracts" in conformity with the program. Finally, 26 provincial inspectors toured the island to check the results. 434 The income of the tenant farmers was estimated to have registered an average gain of 30 per cent, ranging from 0.9 per cent to as high as 70 per cent in comparison with the pre-reform period.[31]

653 Pertinent to rural rehabilitation are the public works being done in dike repair and construction, irrigation, and land reclamation. Briefly, from 1947 to 1950, some 10,983 meters of new dikes were built, in addition to 65,288 meters repaired. Since 1946 a yearly average of 9,972 hectares of land has been brought under irrigation, in comparison to an average of 9,428 hectares under the Japanese.[32]

433 A review of statistics also shows varying degrees of gains in agricultural production.[33] For instance, for 1950 the

NT$1,432,000,000 (*Taiwan Today*, cited note 11 *supra*, pp. 59–61).

[31] For statistical data on the rent reduction program, see Land Bureau, Taiwan Provincial Government, *37.5 Rent Reduction Program** (Taipeh, 1949), pp. 1, 19, 34; *Taiwan Today*, cited note 11 *supra*, p. 90; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, p. 383; Vol. 1, p. 25.

[32] *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 227–28, also for comprehensive data, pp. 227–43. For a general descriptive and statistical presentation of the subject, see Taiwan Provincial Government, *Water Conservancy and Irrigation**, Taipeh, 1949; also *Reclamation of Waste-land**, Taipeh, 1949.

[33] For detailed statistical data on agricultural production, see Taiwan Provincial Gov-

[P. 218 (B)]

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA A-D1

625 wine, tobacco, and salt in violation of government monopoly, and violations of the 37.5 rent reduction program.

Conclusions

643 In describing the Nationalist government policies, 1949–51, the writer has sought to ascertain their nature and contents by recounting a chain of events which set the political pattern in contemporary Taiwan and by a survey of what has taken place since. From them may be drawn the following tentative conclusions:

1. Generalissimo Chiang Kai-shek and his supporters have been exercising a dominant role in National Government policies, 1949–51.

665 2. While there are three known political parties active in national politics in Taiwan, the Kuomintang, as presently constituted, is the ruling party.

631 3. The political framework in Taiwan may be described as one of over-all political control by the Nationalist government, centralized management by the provincial government, and local self-government, still in its preliminary stage, at the municipal and county levels.

652 4. The National Taiwan currency has exhibited a degree of stability which compares favorably with that in most postwar countries having suffered from war devastation.

5. Nationalist government assets and reserve, sale of government properties, and ECA assistance are contributing factors in balancing the provincial budgets in recent years.

427 6. The 37.5 rent reduction program has contributed towards rural well-being, along with the projects sponsored by the Joint Committee on Rural Rehabilitation.

433 7. There has been an upward trend in agricultural and industrial produc-

[p. 222 (B)]

596 Marital customs among the tribesmen seem to indicate that their groupings include both nuclear and extended families. Bunun, Paiwan, and Yami tribes have nuclear families, and each son after marriage establishes his own household.

Aboriginal families are patriarchal, with the exception of those of the Paiwan and Ami tribes. The latter families are perpetuated through the female line; a man marries into the bride's family in both tribes and the newlyweds establish separate households after marriage.

562 428 The position of women in Ami and Paiwan tribes is superior to that of the men. Men have no rights of inheritance and have no say in the management of property in these tribes, although they represent their families at public meetings and in other social contacts. Women are sole heads of the family in matters which concern the family and its relatives. In other tribes, an inheritance is equally divided among the sons or goes to the eldest son who is the heir. When there are no sons in the family in the Bunun tribe, the family line is terminated, and the family property is given to the closest male relative. An interesting aspect of inheritance in the Ami tribe is that the youngest daughter remains at home to inherit the family property as well as to perpetuate the family line.

4: Grajdanzev--44 S-4 (no date) 1942 Formosans
116, 161, 433, 464, 471

"Two thousand yen per ko (2.4 acres) is an apalling [sic] price where the daily wages of a worker are about one yen per day, and it prevents the landless from having a chance to become owners of land. However, the phrase 'population pressure' is not used here in the Malthusian sense. The question is not one of food--the island produces twice as much as the islanders consume--but of employment. Openings in industry are few; independent industrial enterprise is almost impossible because a plant worth a few hundred or thousand yen cannot compete with a modern factory. The only occupation left is that of the farmer--a customary occupation for the majority of the islanders. The rise in land values is a symptom of the growing difficulty of finding employment, and not of a growing scarcity of food."

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-1-3
116, 171, 241, 454, 433, 177.24 Japan
636.24

"(3) Increased agricultural production may also be achieved by raising yields per unit of area. Below we give a comparison of yields in Taiwan and in Japan, and in the case of sugar cane, the area of which in Japan is too small, a comparison with Hawaii and the Netherlands Indies, where conditions are similar to those in Taiwan, while groundnut production in Taiwan is compared to that of Kwantung.

Crop Yields In Quintals Per Hectare in Taiwan and Other Countries.

		1928-32 average	1933-37 average	1937
Wheat	Taiwan	8.7	9.7	10.7
	Japan	17.7	19.1	19.1
Barley	Taiwan	6.4	8.0	7.4
	Japan	19.9	20.6	20.9
Maize	Taiwan	11.3	10.8	11.6
	Japan	14.1	14.7	16.7
Rice	Taiwan	22.2	25.1	26.1
	Japan	35.0	36.8	38.6
Sugar cane	Taiwan	684.4	654.4* Four-year average 1933-36.	...
	N. E. I.	1,308.0	1,374* Four-year average 1933-36.	...
	Hawaii	1,349.4	1,515* Four-year average 1933-36.	...

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-2
116, 171, 241, 454, 433, 177.24 Japan
636.24

		1928-32 average	1933-37 average	1937
Soya beans	Taiwan	5.6	5.7	6.2
	Japan	10.0	10.0	11.2
Groundnuts	Taiwan	16.2	17.1	18.4
	Kwantung	19.0	20.7	...
Sesamum	Taiwan	3.5	3.9	4.2
	Japan	7.3	7.5	7.5

The yields per hectare of the most important plants in Taiwan's economy are therefore thirty to fifty per cent less than in Japan, or, in the case of sugar, in Hawaii or the Netherlands East Indies, and yet all available sources mention the fertility of the soil in Taiwan, while climatic conditions are at least as good as in Japan or the Netherlands Indies.

The explanation lies in the primitive methods of Taiwan [47] agriculture, including the slight use of fertilizers. Judging by the cultivated area and the number of farmers, the island should have at least 300,000 to 400,000 ploughs, but in 1929 (1) almost all (except

1. The last data available, Nogyo nenkan, p. 642.

18,315 'improved' ploughs for deeper ploughing and 614 of the European type) were of the

primitive Chinese pattern. While in Japan proper an average of ¥170 to ¥180 per hectare is spent each year on commercial and home-prepared fertilizers, in Taiwan less than half that sum is spent for this purpose. These two examples—ploughs and fertilizers—for which quantitative data are available show clearly that Taiwan farming is under-capitalized, especially when we consider that the farmer is obliged to pay ¥2,000 per ko for good land.

This does not of course mean that there is no improvement in the agriculture of Taiwan. The government devotes much effort to increasing the productivity of the farms and the farmers are eager to respond. Yields are now higher than they were twenty years ago, as one may see from the tables given later in this chapter. But progress is slow. It is doubtful whether yields in Japan in 1895—the time of the annexation of the island—were higher than in Taiwan, whereas now they are considerably greater and relatively Taiwan is lagging further and further behind."

4: Grajdanzev--47-48 S-4 (no date) 1942 Formosans
116, 433, 435, 177.43, Japan
636.43

"Furthermore, as will be shown later, the results of the improvements which did take place brought most profit to landowners, traders and the Japanese administration. This may appear to be contradicted by the fact that the gross value of agricultural production in Taiwan for the last five years increased from ¥237.9 million in 1933 to ¥413.7 million in 1937 (seventy-four per cent), and if later data were available they would certainly be still higher. Unfortunately, we do not have at our disposal an index of agricultural prices in Taiwan (1). However, we do know that the average price of [48]

1. The general index of wholesale prices in Taihoku had increased, compared with 1933, by 33 per cent in 1937 and 58 per cent in 1938. Taiwan Jijo, 1939 pp. 606, 607.

rice for the same period rose from ¥14.98 per koku to ¥22.74, or by fifty-two per cent, and rice makes up about half of the gross value of agricultural production in Taiwan. In the same years population increased by only thirteen per cent. By deflating prices to the level of 1933 and dividing by an index of population, we find some evidence that production per capita was less in real value in 1937 than in 1933. How generally this is true is difficult to say because of the paucity and unreliable character of the data. But one thing is clear: no rapid rise in the per capita value of agricultural production has taken place in the last few years."

4: Grajdanzev--48 S-4 (no date) 1942 Formosans
116, 241, 433

"Before we examine the progress that has been made in the production of the most important crops, let us try to evaluate their relative importance in the agriculture of Taiwan. The following table [See following slips, page 49 for table--analyst] gives their gross value for several years (1). It would, of course, be much better to have net

1. Only those products are given, the gross value of which is now over one million yen.

values, i.e. the gross value minus cost of materials, used in production, but these are not available.

This table reveals that Taiwan is an island of two main crops--rice, which accounts for more than half the gross value, and sugar cane."

4:Grajdanzev--49-51 S-4 (no date) 1942 Formosans-1-5
116, 241, 433

"Gross Value of Agricultural Production in Taiwan
(Million yen)

	1921	1933	1935	1936	1937	1938
Rice	88.7	124.9	197.2	214.0	208.8	237.9
Sugar cane	38.9	29.0	55.2	54.4	64.3	78.2
Sweet potatoes	15.9	20.5	25.4	38.3	27.9	29.5
Bananas	5.9	5.7	6.6	6.8	8.1	10.0
Pineapples	.4	2.0	2.6	3.1	3.1	4.0
Groundnuts	1.9	2.3	3.5	3.9	4.1	3.9
Jute	.5	.8	1.8	1.4	1.5	2.5
Tea	4.0	3.9	6.4	7.4	10.3	9.2
Tobacco	1.0	.9	1.2	1.6	2.1	2.6
Cassava	...	...	...	...	1.4	1.2
Other cereals, beans, vegetables, fruits	12.5	15.7	20.1	11.4	27.2	26.3
Animal products	31.6	32.2	41.0	46.0	49.2	54.9
Total	201.3	237.9	361.0	388.3	413.7	460.2
As percentages of total						
Rice	44.1	52.5	54.6	55.1	50.5	51.7
Sugar cane	19.3	12.2	15.3	14.0	15.5	17.0
Sweet potatoes	7.9	8.6	7.0	9.9	6.7	6.4

4:Grajdanzev--49-51 S-4 (no date) 1942 Formosans-2
116, 241, 433

As percentages of total	1921	1933	1935	1936	1937	1938
Bananas	2.9	2.4	1.8	1.8	2.0	2.2
Pineapples	.2	.8	.7	.8	0.8	0.9
Groundnuts	.9	1.0	1.0	1.0	1.0	0.8
Jute	.3	.3	.5	.3	0.4	0.5
Tea	2.0	1.6	1.8	1.9	2.5	2.0
Tobacco	.5	.4	.3	.4	0.5	0.6
Cassava	...	...	...	...	0.3	0.3
Other cereals, etc.	6.2	6.6	5.6	2.9	7.9	5.7
Animal products	15.7	13.6	11.4	11.9	11.9	11.9
Total	100	100	100	100	100	100

[50]

Crop Area In Taiwan
(1,000 ko)

	1921	1933	1935	1936	1937	1938
Rice	510.8	694.4	699.7	702.7	678.1	644.8
Sugar cane	119.9	84.3	121.6	128.3	124.6	134.2
Sweet potatoes	124.5	138.1	142.5	144.5	143.3	138.7
Bananas	6.1	19.2	22.8	24.2	24.1	23.9
Pineapples	1.3	6.6	7.0	8.0	8.9	8.9
Groundnuts	24.4	30.7	31.5	31.7	32.4	32.1

Crop Area In Taiwan [Cont.]
(1,000 ko)

	1921	1933	1935	1936	1937	1938
Jute	2.1	3.0	7.2	5.5	5.2	8.6
Tea	39.1	45.8	42.6	43.0	43.5	43.4
Tobacco	1.4	.8	1.1	1.3	1.5	1.7
All others	190.4	134.1	102.7	109.4	154.2	179.7
Total*	1,020 †	1,159 †	1,176	1,200	1,216	1,216

* Since the figures of total crop area are not available, the total was calculated in the following way: to the total cultivated area is added the double-crop area of paddy fields for each year. The line 'others' was secured by subtraction from the total.

Source: Nogyo nenkan, 1939-40, pp. 640, 647-652; for 1938, Takumu tokei.

† Approximate figures.

As percentages of total

	1921	1933	1935	1936	1937	1938
Rice	50.2	60.0	59.4	58.5	55.8	53.0
Sugar cane	11.7	7.3	10.3	10.7	10.2	11.0
Sweet potatoes	12.2	11.9	12.1	12.0	11.8	11.4
Bananas	.6	1.7	1.9	2.0	2.0	2.0
Pineapples	.1	.6	.6	.7	.7	.7
Groundnuts	2.4	2.6	2.7	2.6	2.7	2.7
Jute	.2	.3	.6	.5	.4	.7
Tea	3.8	4.0	3.6	3.7	3.6	3.6
Tobacco	.1	.1	.1	.1	.1	.1
All others	18.7	11.5	8.7	9.1	12.7	14.8
Total	100	100	100	100	100	100

[51] Rice occupies a predominant position in this table also—from fifty to sixty per cent of the crop area is under rice—but here second place is occupied by sweet potatoes, while sugar cane is third. Then, in order of importance, come tea, groundnuts, bananas, pineapples, jute, and tobacco. It would be a mistake to conclude by comparing percentages of value and of area in the last two tables that rice, for example, is less profitable to cultivate in Taiwan than sugar cane, because in 1937 rice occupied 55.8 per cent of the

area and brought only 51.8 per cent in value, while for sugar cane the corresponding percentages were 10.2 and 16.0. Even if one ignores the cost of labor, one must take into consideration the following circumstances: the growth-cycle of sugar cane is eighteen months in Taiwan, while on more than half the area under rice two crops are taken yearly; sugar cane demands a greater amount of fertilizer, which must be purchased. These considerations suggest that the unwillingness on the part of the farmers to plant more sugar cane for sugar companies is probably due not only to the conservatism of the farmer, but is based on sound judgement. Again, the fact that the area under sweet potatoes is 11.8 per cent while the value is 6.9 per cent cannot be taken as proof that sweet potato culture is less profitable to the farmer than sugar cane. They are now consumed largely on the farm, and if the farmers were to reduce the existing acreage of sweet potatoes, their price would be quite different from what it is now."

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-1-2
116, 249, 433, 458, 654, 177.24 Japan
636.24

"There can be no doubt as to the importance of sugar cane cultivation and of the sugar industry in Taiwan and the degree of success achieved by the Japanese government and Chinese cultivators.

However, a close examination of the table [See page 59, category 116--analyst] reveals some interesting features. It was pointed out how much effort was expended by the officials on the improvement of sugar cane culture. But in spite of all the efforts of the government and of the experimental stations the yield per ko did not show any signs of improvement during the first fifteen years. If the development was as steady as is officially described, why then was the increase of production up to 1921 taking place exclusively as a result of the increase in the planted area?

Further, the increase in sugar production may also come through the increase of sugar content in the juice of the sugar cane. It is interesting to note that in this respect too, little, if any, improvement is noticed up to 1922, but that after that year the sugar content rose from 9.5 per cent in 1922 to 13.2 per cent in 1935 and in this year was considerably higher than in Java or Cuba (12.3 and 11.6 per cent respectively). Finally, the table shows that after the peak of production (and area) was reached in 1917-18, production fell, then rose slowly up to 1928-29, fell sharply by almost thirty per cent and then began to rise again.

The explanation of these fluctuations is that the Taiwan sugar industry (and, as a consequence, also the cultivation of sugar cane) passed through several crises of the most severe character. 'Overproduction' is a word familiar to this industry, and to the planters also. Of course, it must be emphasized that this 'overproduction' is of a special character, because the consumption of sugar in Japan is relatively low and, though physically the demand of the population for sugar [61] is not satisfied, there is insufficient purchasing power available to buy it.

All this is very important for the problem in hand. The government's efforts were probably as great from 1900 to 1922 as afterward, subsidies were given more lavishly than later on, but the results in the first twenty years were rather meagre. In other words, the development was due not so much to the government's and the manufacturers' efforts as to some other factors inherent in the development of the economy of Taiwan and Japan."

4:Grajdanzev--67-68 S-4 (no date) 1942 Formosans
116, 248, 433, 656, 177.24 Japan
636.24

"As will be seen, cotton does not occupy an important place in Taiwan's economy. But it does play an important part in Japanese imperial policy. As was mentioned, the Japanese authorities did not spare efforts to encourage the production of sugar cane and rice in Taiwan, not because it was in the interests of the island, but because it benefited Japan proper. Since 1927 the sugar industry has suffered from overproduction and in 1935-36 another spectre appeared on the Japanese horizon--the overproduction of rice. A discussion began as to how the production of rice in Taiwan might be limited. A rice monopoly was suggested and was later applied, but for a somewhat different purpose. Instead of rice, the authorities proposed to encourage the production of textile fibers and oilseeds in Taiwan and, partly owing to the shortage of foreign exchange in time of war, more attention was given to cotton than to anything else. A plan was worked out for the production of 100 million kin of cotton at the end of the ten-year period beginning with 1937, on an area of 100,000 ko, i.e. more than ten per cent of the cultivated area of the island. The first year's crop (according to the Japan Year Book, 1939-40 [68] is estimated at about 6 million kin, or, already six per cent of the goal. We do not know on what the data of the Japan Year Book are based, but in Taiwan Jijo, published in December 1939, the plan provided for an area of only 50,000 ko in 1946 and the production of only 35 million kin. According to the same source, there were 4,800 ko under cotton in 1938 and the crop was 1,816,983 kin--as one may see, very far from 6 million kin. The average yield was 2.26 quintals per hectare--a low figure for a region of intensive agriculture."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages may be considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

4:Grajdanzev--85 [2] S-4 (no date) 1942 Formosans
116, 226, 228, 433

"The growth of fishing and of other occupations connected with it, such as the gathering of sea weeds, manufacturing of fish cakes etc., may be seen in the following table [see table on page 86--analyst]."

"In order to see what place industry occupies in the life of Taiwan and what its size is by comparison with Japan, we give below the gross value of production of industry as compared with other branches of Taiwan's economy. We give figures only since 1914 because, as has already been pointed out, data for previous years are of doubtful value. To give but one example, the official sources put the total value of industrial production (1) in 1907 at only ¥273,128; but however primitive this industry may have been it is hardly

1. Sugar and tea industries excluded.

possible that on an island with a population of three millions the gross value of industrial production should be so small.

Thus the value of industrial products increased from ¥45.7 million yen in 1914 to ¥374.9 million in 1937 and at the same time the proportion in industry rose from thirty-four per cent to forty-four per cent of the total. This rise in value is, however, to a considerable degree illusory, reflecting only the rise in prices (the index of wholesale prices in 1937 was almost double that of 1914), but this factor alone could not account for an eight-fold increase. Again, the part of industry, as compared, for example, with agriculture, is exaggerated here because, for farmers, who buy very little from outside, the net value of production approaches seventy and may be as high as eighty per cent of gross value, while in industry the net value, i.e. the value created in industry itself, is

very often only half the gross value of production. This suggests that even now agriculture is responsible for about two-thirds of the [91] total value product. But the fact remains that the value of industrial production has increased greatly, that its part in total production of the island has grown, and that the tendency is for industry's share to grow at the expense of agriculture."

4:Grajdanzev--91 S-4 (no date) 1942 Formosans
116, 433

"Gross Value of Production in Taiwan
million yen

	1914	1919	1921	1929	1933	1935	1936	1937
Agriculture	80.5	252.4	201.3	301.9	237.9	361.0	388.3	403.0
Fishing	3.1	8.9	9.6	21.0	15.9	19.4	21.6	21.4
Forestry	0.6	9.5	10.7	13.9	10.5	12.7	15.1	16.7
Industry	45.7	130.0	130.9	246.8	209.6	264.9	310.0	374.9
Mining	4.5	10.3	10.3	14.8	15.2	22.8	28.7	36.2
Total	134.4	412.0	362.8	598.4	489.1	680.8	763.7	852.2
				Percentages of total				
Agriculture	60.0	61.3	55.5	50.4	48.6	53.0	50.8	47.2
Fishing	2.3	2.2	2.6	3.5	3.3	2.9	2.8	2.5
Forestry	0.4	2.3	3.0	2.3	2.2	1.9	2.0	2.0
Industry	34.0	31.5	36.1	41.3	42.8	38.9	40.6	44.0
Mining	3.3	2.7	2.8	2.5	3.1	3.3	3.8	4.3
Total	100	100	100	100	100	100	100	100

Source: Nogyo nenkan."

"Having established the absolute size of industrial production of Taiwan, let us now compare it with gross value of industrial production of Korea and Japan and reduce it to a per capita basis.

This table shows that in 1937 and 1938 per capita industrial production in Taiwan was only one-fourth as large as that of [92] Japan, but was higher than in Korea. If we compare 1929 and 1937 we see that the difference between Taiwan and Japan was smaller in the former year than now, both absolutely and relatively, so that in spite of all talk of the industrialization of Taiwan, the difference between Japan and Taiwan in this respect is increasing. (1)

1. In An Inquiry into National Income of Japan, published by the Research Division of the Japan Economic Federation in 1939, we read on page 90; 'The rates at which production has increased in the Dependencies have been greater than those which have been the case with Japan proper. This fact suggests the youth of industry in the Dependencies.' But, the following comparison shows that the conclusion in the text is correct and that the rates of growth at least in Taiwan are not greater than in Japan proper (based on the absolute figures taken from the Inquiry).

Gross Value of Industrial Production in Japan, Korea and Taiwan, 1929 and 1937 (2)

	Total gross value (million yen)			Per capital [sic] (yen)		
	1929	1937	1938	1929	1937	1938
Taiwan	263.8	360.1	386.4*	58	64	67
Korea	280.5†	927.3	...	14	41	...
Japan	7,716.8	16,412.5	19,667.2	122.5	230	272

Sources: Dainippon teikoku nenkan and Takumu tokei.
*Approximate, because data for machine industry is not abailable.
†1930, no figures are available for earlier dates.

2. These figures for Taiwan differ slightly from those given in the previous table above (taken from Nogyo nenkan), but they are comparable with those of Japan and Korea.

4:Grajdanzev--91-92 S-4 (no date) 1942 Formosans-3

116, 171, 433

Comparison of Rates of Growth
(1930 = 100)

	Industrial production alone	Total production
Japan, 1937	255	229
Taiwan, 1937	194	170 "

"Let us now analyze the composition of Taiwan's industry.

Development of Taiwan's Industry by Branches

Gross value of production (million yen)

	1929	1931	1935	1936	1937	1938
Textiles	3.0	2.1	3.6	4.4	5.0	...
Metals	5.2	4.9	8.8	10.9	12.0	20.9
Machinery	5.3	5.1	6.7	7.7	8.0	...
Ceramics	9.4	6.8	8.8	9.5	8.8	10.0
Chemical	23.1	13.3	27.2	28.5	33.7	39.7
Lumber	8.8	6.5	9.3	10.7	5.5*	6.5
Printing, binding	3.6	3.3	4.4	4.9	5.0	6.8
Foodstuffs	190.1	152.4	212.6	221.5	261.3	251.6†
Others	15.3	10.6	12.1	14.5	20.8	22.2
Total	263.8	205.0	293.5	312.6	360.1*	

* The fall in value of lumber production is probably due to the change in nomenclature. In Kokusei gurafu, May 1940, the value of lumber production for 1937 is given as 11.8 million yen and total production as 374.9 million yen.

† For the sake of comparison 'reclaimed tea' is excluded.

Sources: Dainippon Teikoku nenkan; for 1938, Takunu tokei.

[93] As Percentages of Total

Textile	1.1	1.0	1.2	1.4	1.4
Metal	2.0	2.4	2.9	3.5	3.3
Machinery	2.0	2.5	2.3	2.5	2.2
Ceramics	3.5	3.3	2.9	3.0	2.5
Chemical	8.8	6.5	9.3	9.1	9.4
Lumber	3.4	3.2	3.2	3.4	1.5*
Printing	1.4	1.6	1.5	1.6	1.4
Food	72.1	74.3	72.6	70.9	72.5†
Others	5.7	5.2	4.1	4.6	5.8
Total	100.0	100.0	100.0	100.0	100.0

* The fall in value of lumber production is probably due to the change in nomenclature. In Kokusei gurafu, May 1940, the value of lumber production for 1937 is given as 11.8 million yen and total production as 374.9 million yen

† For the sake of comparison 'reclaimed tea' is excluded.

Sources: Dainippon Teikoku nenkan; for 1938, Takumu tokei."

4:Grajdanzev--93 S-4 (no date) 1942 Formosans
116, 241, 255, 257, 433

"Thus the predominant position in Taiwan's industry—from seventy-one to seventy-four per cent of the total—is occupied by the food industry. The latter consists chiefly of the production of sugar from sugar cane, and, to a lesser degree, of the canning of pineapples. In other words, Taiwan industry is closely connected with its agriculture and is largely the transformation of agricultural products into forms suitable for consumption or for storage and transportation. All other industries show little signs of growth. Ceramics and 'other industries' were at the same level in 1937 as they were in 1929, the lumber, textile, metal and machine industries show an increase, but in absolute amounts this increase is small, and only the chemical industry is of any importance, producing about nine per cent of the gross value."

"This predominance of the food industry, or, in other words, of the processing of agricultural products, may also be illustrated by the following figures of workers by industries in Taiwan for 1937 covering enterprises with five and more workers, (1) or with a prime-

1. Government enterprises are excluded.

mover. [94]

	Absolute figures	Per cent of total
Textile	3,951	4.5
Metals	2,884	3.3
Machinery	4,214	4.8
Ceramics	10,528	12.1
Chemical	4,988	5.7
Lumber	2,674	3.1
Printing	3,027	3.5
Food industry	48,615	55.7
Other	6,363	7.3
Total	87,244	100.0

Source: Dainippon teikoku nenkan, 1939.

4:Grajdanzev--93-94 S-4 (no date) 1942 Formosans-2
116, 171, 433, 463

"The total number of workers in 1937 was only 87,244, while in Japan in the same year it was 2,936,512, or 34 times as many, though the population of the latter in the same year was only 12.7 times as great as Taiwan's. The number of workers in the food industry made up 55.7 per cent of the total, a smaller proportion than that based on the gross value of production, while the proportion of ceramics in the total was unexpectedly high (12.1 per cent) and that of the chemical industry only 5.7 per cent. The divergence may be explained (1) by special conditions in the industries concerned (e.g. the relation between gross value and net value is different in different industries); (2) by the prominence of modern or of primitive types of industrial enterprises—those in ceramics, printing, bookbinding and the lumber industry, for example, are chiefly small enterprises without machinery where productivity per worker is small; but in the food industry as will be shown later on, and in the chemical industry new and efficient enterprises predominate; (3) by the monopolistic position in the market of certain industries, which permits them to exploit the consumers."

4:Grajdanzev--97 S-4 (no date) 1942 Formosans
116, 257, 377, 433, 473

"Our analysis has shown that in Taiwan only the electric power, chemical, and food industries are large-scale, and that among them the electric power and sugar industries tower far above the rest—in these the corporations would be huge even by the standards of industrially developed nations. We saw that in agriculture Taiwan is an island of contrasts—huge landholdings and poor 'independent' landowners and tenants. The same picture appears in industry and will become clearer on examination of some individual industries for which data are available. We saw that in Taiwan one should distinguish between the progress and prosperity of agriculture in general and of the agriculture of the small Chinese farmers. The same phenomenon appears in industry."

4:Grajdanzev--97-98 S-4 (no date) 1942 Formosans
116. 255. 257. 433

"As was shown above, the food industry occupies a dominant [98] position in the industry of Taiwan. Its composition is as follows: Sugar makes up seventy-seven per cent of the gross value product of the food industry, molasses and candy four per cent, canned pineapples five per cent, and tea five per cent. As will be seen, production of these is concentrated in a few companies.

Gross Value of Production of the Industry,
(1,000 yen)

Sugar	202,240	Fishery products	2,172
Tea	13,452	Soft drinks	1,639
Canned pineapples	12,197	Starch	1,561
Molasses	6,389	Ice	1,496
Flour	6,013	Miso*	789
Candy	5,315	Other foods	5,562
Soya	2,427	Total	261,252"

*Bean paste used as a food.

"Production of sugar in modern mills is concentrated in the hands of nine Japanese corporations, [99] and of these, six produce ninety-seven per cent of all the sugar produced in modern mills and ninety-five per cent of all that produced in Taiwan. In the table on page 100 information is given concerning each of these six largest corporations. Unfortunately this information is not complete. These corporations are closely connected with many other enterprises in Taiwan and also have enterprises in the Pacific Islands under Japanese mandate, in Java and in other southern colonies (1). Many of these enterprises have nothing to do with sugar. But even so, the information given is interesting because it does throw some light on their activities. The paid-up capital and reserves of three of these corporations is about ¥100 million each. The amount of reserves is explained by the remarkable rate of profit which they receive—34 to 40 per cent is 'normal' for them. A lower rate of profit, as in the case of Ensuiko Seito Corporation (20.2 per cent) may be explained by the fact that the corporation has recently doubled its capital, investing it in new enterprises which do not yet bring profit. Thus the rate of profit in the sugar industry is extraordinarily high for all companies. It was shown above that the farmers did not receive any benefits either from the increase of the sugar

1. They also have refineries in Japan proper. Sugar produced in Taiwan is not refined there.

content of the cane, nor from the increase of protection; it now becomes clear that these benefits fell to the manufacturers, for only in this way were these huge profits possible (2).

2. But a certain part of these profits is the result of higher prices paid by the Japanese population for the benefit of these companies, protected by the tariff wall."

4:Grajdanzev--99-101 S-4 (no date) 1942 Formosans
116, 433, 455

"The value of sugar cane produced in the island in 1937 was officially estimated at ¥55 million, while the value of sugar produced in the same year was estimated at ¥202 million.

The high profits led periodically to feverish activity, investments in new and very often highly speculative fields, followed by over-production, a fall of prices, reduction of area under sugar cane, reduction of the price paid for cane and attempts to market the surplus abroad at lower prices, chiefly in the Chinese market. This speculative activity brought on a tremendous financial crisis in 1927 with the collapse of the Suzuki [p. 100 contains a table on sugar corporations; see category 116--analyst] [101] firm, and the speculative activity at the present time, based on expectations of continued war and demand for armaments, may bring even more violent repercussions (1).

1. Toyo keizai, November 9, 1940, reports a sharp fall in production of sugar in 1940-41 and in the profits of the sugar companies."

4:Grajdanzev--100 (no date) 1942 Formosan
116. 257. 433. 473. 477

INFORMATION CONCERNING THE SIX LARGEST SUGAR CORPORATIONS OF TAIWAN 1939

	Taiwan Seito	*Dainippon Seito*	*Meiji Seito*	*Fukuda Seito*	*Teikoku Seito*	*Showa Seito*
Established	1901	1896	1908	1908	1910	1927
Paid-up cap. (1,000 yen)	41,080	56,332	45,000	36,938	22,050	11,250
Reserves (1,000 yen)	47,138	23,093	41,500	3,430*	8,081	1,112(1937)
Principal shareholders:	The Emperor of Japan	Toyama-Seimei*	Daichi-Seimei*	Shinei-Sangyo	Yamaguchi	not published
	Mitsui bussan	Meiji-Seimei		Meiji-Seimei†	Nippon-Seimei†	
	Nakoku chokin Bank	Tokyo-Seimei			Meiji-Seimei	
	Mitsubishi-Shanghai	Kaijo-Seimei			Yasuda Bank	
		Nippon-Seimei				
		Yasuda				
Landholdings in Taiwan (ko)	46,630	17,900	13,569	...	3,274	...
Sugar production in 1937/38 (1,000 tons)	256.7	238.6	176.9	150.4	70.6	42.6
Production of molasses, 1936/37 (1,000 tons)	52.4	47.9	33.5	29.5	11.6	...
Other interests	65.7 km. of railways	1,000 km. of railways	118 km. of railways	Alcohol	30 km. of railways	...
	Alcohol	Alcohol	Alcohol	Pulp	Roads	Alcohol
	Refineries in Japan	Etc., etc.	Refineries	Railways	Alcohol	Forestry
	Etc., etc.		Rubber	Agriculture	Etc., etc.	Colonization
			Pulp	Mining		Etc., etc.
			Etc., etc.	Lumber		
				etc., etc.		
Rate of profit (%)	44.65	34.5	40.0	20.2	22.0	20.7
Dividend rate (%)	12	12	12	8	10	10

* Beside its own capital the company report mentions ¥40.6 million of borrowings.
† *Seimei* (life) are life insurance companies.
Sources: 1. *Kabushiki kaisha nenkan*, 1940; 2. *Toyo keizai, Kabushiki kaisha nenkan*, 1939; 3. Kono, R., *Seito kontsuerun*, 1938.

4:Grajdanzev--101 S-4 (no date) 1942 Formosans
116, 433, 458, 477

"All this is mentioned here [see previous paragraphs--analyst] in order to remind readers that the development of Taiwan's sugar industry, as well as of industry in general, was not smooth and uninterrupted, but passed through booms, crises, depressions—phenomena well known from the history of other countries. Taiwan can now produce much more sugar than it actually does produce (as a comparison of figures for 1933 and 1939 indicates), but the small domestic market, combined with a desire to reap high monopoly profits, keeps production far below the level of capacity, while entrance into the international market for the protected Taiwan sugar is not easy. The manufacturers are organized into a cartel which regulates prices and production in order to avoid cut-throat competition and maintain monopoly profits."

"With the exception of paper, mineral oil and soap, all the products mentioned here represent the processing of agricultural products or else fertilizers for agriculture. The alcohol is chiefly a by-product of the sugar industry. Formerly all alcohol produced in Taiwan came from molasses, but now part of it is produced directly from sugar cane. The new product—[104]absolute alcohol—is suitable for use as a motor fuel, but no data on its production have been published.

In 1937 the products of this industry were as follows:

	Value (1,000 yen)	Volume (tons)
Mineral oil	1,094	
Soap	941	
Vegetable oils	2,149	3,721 (1936)
Oil cakes	2,382	
Paper	2,165	
Bagasse*	626	
Mixed fertilizers	7,450	67,841 (1936)
Other fertilizers	1,808	
Perfumery and essences	1,211	
Charcoal	1,970	

* Cake for fodder made of the remains from sugar

cane after extraction of the sugar.

	Value (1,000 yen)	Volume (tons)
Refined camphor	1,346	
Alcohol	5,434	
Other products	5,076	
Total	33,652"	

4:Grajdanzev--105 S-4 (no date) 1942 Formosans
116, 28, 433

"This group is made up of following gross values of Products for 1937: (1,000 yen)

Gold and silver paper	630	Needlework	2,360
Bamboo products	1,992	Hats	2,705
Straw goods	663	Other goods	5,209
Leather goods	1,576	Total	15,906 "
Sisal and hemp products	771		

"The relative importance of mining products produced in 1936 may be seen in the following table:

Metals or minerals	Value of output (1,000 yen)	Per cent of total	Volume
Gold	4,224	14.7	
Gold-silver-copper ores	5,881	20.5	
Placer gold	160	0.6	
Gold ores	2,078	7.2	
Total gold and gold ores	12,343	43.0	41,608 oz. (1936) 50,000 (1937)*
Silver	17	0.1	
Copper	470	1.6	2,299 tons (1934) 4,000 (1936)*
Coal	11,365	39.6	1,744,000 (1937)
Sulphur	87	0.3	1,071 tons (1935)
Phosphorites	1	—	
Petroleum	312	1.1	1,780 thous. gall. (1935)

* Approximate figures

4:Grajdanzev--106-107 S-4 (no date) 1942 Formosans
116, 316, 433, 454, 177.31 Japan
636.31

"Mining occupies a relatively unimportant position in Taiwan. In 1936, the last year for which data are available, the gross value of mineral products was Y28,727,000, less than ten per cent of the value of industrial production and less than one per cent of total production. But as regards the capital invested, the attention given by the government to oil and, recently, to gold, and the subsidies lavished on actual and potential producers of oil, it occupies quite a prominent position. The caiptal of the mining industry at the end of 1937 was Y46,635,000 (1). There were twenty-four companies, [107] but, just

1. It is not clear whether this is subscribed or paid-up capital, or whether this sum includes reserves and other investments.

as in other fields, three companies dominated the field; Taiyo Kogyo, Taiwan Kogyo, and Keelung Tanko (coal), (2) each having capital of over Y5,000,000.

2. The paid-up capital of this corporation is Y7 million and out of 140,000 shares 43,473 are in the hands of Mitsui Kosan and 41,656 in the hands of Mitsui Bussan."

4:Grajdanzev--85 S-4 (no date) 1942 Formosans
116, 221, 226, 433, 471, 177.22 Japan
636.22

"Fishing, which did not demand an elaborate equipment, was an important auxiliary occupation for the Chinese farmers, especially in slack seasons. The sea around Taiwan is rich in fish and the Chinese are expert fishermen. It is natural, then, that fishing has become an important element in the economy of the coastal farmers. But at the time of their conquest of Taiwan the Japanese were not interested in the fisheries because at that time the seas around Japan proper and near Kamchatka had not been sufficiently utilized. Petty regulations, the taxing of fishermen, and other measures brought a decline in this ancient Chinese occupation and only recently, when the Japanese felt a need for more fisheries, and when their huge corporations with their mechanized equipment turned to the South, did the government become interested in fishing. The results were the same as in all other spheres of the economic life of Taiwan: Japanese fishing grew at the expense of Chinese."

Metals or minerals	Value of output (1,000 yen)	Per cent of total	Volume
Natural gasoline	456	1.6	1,480 thous. gall. (1935)
Carbon black	292	1.0	1,237 tons (1935)
Others	3,384	11.7	
Total	28,727	100.0	

As shown in this table, gold and coal make up about eighty-three per cent of the total value, and are thus of paramount importance. No explanation is available of the group 'others', [108] representing 11.7 per cent of the total. In 1935 this group made up only about four per cent and the sudden leap to 11.7 per cent is difficult to explain."

"Actual production of coal reached its maximum in 1927, when 1,850,000 tons were produced. After that a decline set in, the lowest point occurring in 1932 (1,355,000 tons). With the general revival, production rose to 1,550,000 tons in 1935 and in 1937 to 1,744,000 tons. However, the low development of industry and the poverty of the population combine to [109] make the marketing problem difficult. Production capacity is considerably larger than actual production, and as may be seen from the following table, the market for coal is chiefly outside Taiwan.

Consumers of Taiwan's Coal 1932-34

	Quantity (1,000 tons)	% of total
Industry	399.7	27.6
Railways	150.5	10.4
Homes	48.8	3.4
Shipping	498.8	34.4
Exports	330.0	22.8
Other	21.3	1.4
Total	1,449.1	100.0

Source: Taiwan ginko chosa kacho, quoted by K. Takahashi.

Thus only slightly more than forty per cent of the output is consumed in the island

itself. Taiwan is capable of producing more coal than it does now, but the limiting factor is the smallness of the domestic market."

4:Grajdanzev--149 [21 S-4 (no date) 1942 Formosans
116, 433, 439, 177.24 Japan
636.24

"In 1939 about 81 percent of Taiwan's exports consisted of agricultural raw materials and products manufactured from them such as sugar, tea, and tobacco. In fact the island is practically an agricultural appendage of the Japanese economy."

10: Schumacher--225 [11] T-1 (ca. 1896) 1898 Formosans 116, 433

An English company offered the Japanese only 16 million Mark for the camphor monopoly exclusive of the high export duties; in reality the export value of the camphor forests, according to findings of the Chinese custom authorities, amounts to an export value of 1,200,000 Mark annually or represents a capital value of 25 million Mark.

15: U.S. Navy--27 [9] (no date) 1944 Formosans
116, 241, 433, 434, 177.43 Japanese
636.43

"Food is plentiful, but is subject to requisition by the Army. The farming population is able to raise a substantial amount of the food it consumes, but the Japanese frequently order the restriction of plots planted to these crops in order that more space may be devoted to a crop (castor oil beans for instance) required by the military. In 1940 the official daily ration of rice permitted to farmers in Taihoku Province was only 0.60-0.75 pounds, or 2-2 1/2 go per person. This is well below the usual consumption and has been the cause of bitter discontent and resistance."

42: Schetelig--392-393 T-2 (no date) 1868 Formosans
116, 135, 314, 433

Among the products of the country I mention those of special interest for Europeans; coal, camphor and sulphur, for indigo and hemp are sent to the Chinese market only. No great quantities of sulphur are found, but more could be obtained nevertheless by the improvement of the methods used. Camphor alone makes a treasure chamber of the island of Formosa. It is known that the Laurus camphora is found only in Japan and Formosa, and there only in some districts. Since only trees of a particular age can be used for obtaining the valuable resin, and since every time, unfortunately, the whole tree with trunk and branches is thrown into the subliming pot, one can foresee a time when camphor will go up in price in geometric progression [393] and when finally production will become so small that not even Germany alone can be provided with it. This matter of camphor production seems to me to be of no means inconsiderable economic importance...

186 642 of local affairs, since governments on the local level as provided by the Chinese Constitution exercise only those powers delegated to them by the central government. There is also the complaint, though not necessarily substantiated by fact, that the "elected Formosans often held office in name only and that Kuomintang men appointed under them held the real power."[15] To remedy such complaints and to make the Formosans more enthusiastic about self-government, two measures may be desirable: (a) extension of the powers of the Provincial Assembly, and (b) selection of personnel for top provincial posts, including that of the governor, by popular suffrage.

642 433 To gain more support from Formosans, the Nationalist government must also seek to improve further their economic well-being. Although the general industrial level has risen forty per cent above the Japanese peak year of 1941, neither in agriculture nor in industry have the gains kept pace with the increasing population. The per capita production is still below that of the Japanese period. Moreover, the rising cost of living has made the economic life of the island unstable. With American aid, the Nationalist Government has been trying to step up the industrial production of the island, but the prospect of arresting inflation is not very bright.

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15. Preston Schoyer, "Present Conditions on the Island," The Reporter, Vol. 12, March 10, 1955, p. 18.

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433 For the main cause of inflation is the huge deficit in the national budget, which is strainted by nearly one million men in the armed forces.

701 The upkeep of such a huge military force accounts for the most crucial question raised by political observers: are the Formosan people willingly supporting the military program of the government? Contrary to speculation, the answer is affirmative. Foreign visitors are practically unanimous in stating the lack of interest among the Formosans in the liberation of the Mainland. This is true although such sentiment has not been openly expressed as the result of the rigid government control of all media of public expression. Nevertheless, another facet of the question, the need of a strong military force to defend the island, has never been debated. The farmer in Formosa now owns the land he cultivates, however small the acreage, and enjoys the fruits of his own labor. He certainly does not cherish the propsect of being chained to a collective farm, and laboring under the whip of political cadres. The industrial developments of recent years have provided opportunities for an increasing number of people and given rise to a new business and industrial class. The Formosans are both resourceful and industrious. They will be loath to see their prosperous land overrun by Communism, suffer deprivations similar to those found on the Mainland. It is quite certain that Formosans will resist Communist aggression, and that they will defend the offshore islands too. The best evidence of the unequivocal support of the Formosans to the government is the response of young Formosans

45:Stanford U. S-4, 5 1956 AD1 Formosa
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648 Under the Japanese from 1895 to 1945, the economy of Formosa was geared entirely to that of the colonial power. The island was developed as a major source of foodstuffs to feed the rapidly growing population of Japan. All possible arable land was brought under cultivation. The production of rice [433] more than doubled between 1905 and 1935; the sugar crop tripled between 1910 and 1940.[4] Great strides were made in modernizing communications and transportation throughout the island, including the construction of a network of railways and roads. After 1937, 648 178 439 some effort was directed toward the industrialization of the island. Factories were built, electric power developed, highways and railways improved, and harbors enlarged. A number of large plants were established to use the raw materials of Southeast Asia in the production of semi-finished goods to supply Japanese industry. The chief emphasis was on metals and chemicals. No attempt was made to achieve industrial self-sufficiency on the island. Fertilizer and textiles, two of the most important industrial products in an agrarian economy were totally neglected.

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4. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 24.

648 or severely damaged by Allied bombing during
727 World War II. Further depreciation and deterioration of Japanese installations were caused during and immediately after the war by typhoons and floods coupled with lack of maintenance and repair. Even the railway system, the principal means of freight and passenger transportation, was capable of handling only a fraction of the freight and passenger demand. "Rails were worn thin, one-third of the cross ties were rotten, rolling stock was seriously depleted or in need of complete overhaul."[7] The war and
727 the repatriation of Japanese nationals after-
433 ward also caused disruption of rural services in credit collection, processing, and marketing of farm produce. Due to a scarcity of imported fertilizers, production of the two principal cash crops, sugar and rice, dwindled considerably. The production of rice fell from 1,100,000 metric tons in 1943 to 600,000 metric tons in 1945 and sugar production dropped from 1,022,000 metric tons in 1942-43

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7. "Economic Progress on Formosa" Chinese-American Economic Co-operation, pub. by Mutual Security Agency Mission to China, Taipei, Vol. 1, No. 2., Feb. 1952, p. 12.

727 to 86,000 metric tons in 1945-46. The
433 Formosan farmer was faced with the "worst prospect in living memory," as one observer remarked.[8]

434 In spite of the seriousness of economic
178 conditions on Formosa, the Chinese government was able to make only limited progress in reconstruction following the restoration of the island to Chinese control. For one thing, the Nationalist Government was involved in a costly war with the Communists and faced with a huge rehabilitation program on the Mainland. Furthermore, without a surplus of exportable goods, China could not obtain the foreign exchange necessary to re-equip the damaged plants and restore agricultural production on Formosa. The island's economy continued to deteriorate until 1949, when Mainland China was overrun by the Communists and the National Government was withdrawn to Formosa.

458 The sudden influx of over one million
185 mainlanders and half a million soldiers further strained the resources of the island. Inflation was running wild and food was short. However, the removal of the national government to Formosa was not without benefit to the island.

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8. H. Maclear Bates, Report from Formosa, New York, Dutton, 1952, p. 117.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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648 improved crop seeds and animal breeds, and large quantities of insecticides for the control of crop diseases. Help has also been given in expanding and improving irrigation and flood control systems and in promoting soil conservation and reforestation. Through the establishment of health stations and improvement of hospital facilities, JCRR assists government agencies in eradicating malaria, controlling tuberculosis, and improving rural health in general.[11] The practical benefits of JCRR activities to the farm households are widespread and evident, and the above-mentioned improvements have been accomplished with relatively little money.

648 433 With American aid, substantial progress in economic reconstruction has been achieved in the past five years. Industrial production at the end of 1954 exceeded the peak production under the Japanese by 50 per cent.[12] Electric power has been doubled. Textiles, which were practically non-existent before the war, are now actually overproduced. Rice production in Formosa has been increased

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11. Chinese American Joint Commission on Rural Reconstruction, General Report IV, Taipei, 1954, p. 3.

12. For details, see chapter on Industry.

both in yield per acre and in total amount, so there is at present not only a sufficient supply to feed the increased population, but also a substantial amount for export.

United States aid appropriations for China from 1951 to 1954 was as follows:

1951	US$ 98,034,000
1952	81,479,000
1953	105,503,000
1954	111,821,000
	US$ 396,837,000

In fiscal year 1955, the allotment totaled US$102,000,000, distributed among the following programs:[13]

Military program	US$ 37,000,000
Commodity aid	34,000,000
Industrial construction	28,000,000
Technical assistance	3,000,000
	US$ 102,000,000

From the disorganized and demoralized condition of Formosa in 1949, the joint Chinese

13. As reported by Martin Wong, Secretary-general of the Council for U.S. Aid on Aug. 12, 1955.

178 and American efforts have effected tremendous
648 change. However, in spite of steady gains,
433 the economy of Formosa has not achieved complete stability. Industrial and agricultural production is higher than before the war, but because of the tremendous increase in population, per capita production is still below the pre-war level. The Nationalist Government has been able to meet yearly budgetary deficits only by relying on American aid and resorting to the printing press. Forty per cent of the annual imports into Formosa are financed by United States aid. Inflation is steadily mounting. The economic situation would be very grave without United States assiatance.

185 On the avowed basis that "a nation's
433 progress and prosperity cannot be a gift from others, but must be sought through production and reconstruction,"[14] the Nationalist Government formulated a four-year plan for economic reconstruction in 1953. The plan aims at developing the island's economy production to a self-sufficient level. By the time the plan is fully implemented, the government intends that Formosa, without

14. Report of Premier Chen Cheng (now Vice-President) before the National Assembly, March 4, 1954.

185 foreign aid, will be able to provide its people
433 with the goods and services necessary for a satisfactory standard of living and yield sufficient revenue to support needed public services, including defense. The general co-ordination and review of the plan is the responsibility of the Economic Stabilization Board (ESB), established in July 1, 1953 within the Executive Yuan.

The Four-Year Economic Development Plan, is divided into two parts -- agricultural and industrial. The agricultural plan is directed at increasing the production of rice, sugar, pineapple, tea, peanuts, and soybean as a means of increasing exports and reducing imports. Since agriculture in Formosa is comparatively well developed,[15] the aim of the Four-Year Plan is to expand farm production 20 per cent by 1957.

The major emphasis of the Four-Year Plan is on industrial development, and top priority is given to the production of power and fertilizer. The following goals have been announced[16] for expanding the output of major products on completion of the plan in 1956 (production in 1952 equals 100):

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15. Practically all arable land is now in use. The possibility of enlarging the cultivated area depends largely on expanded irrigation.

16. Industrial Development Commission of the Economic Stabilization Board, The Four-year Economic Development Plan, Taiwan, Taipei, 1955, pp. 4, 7.

Item	1956 Index	Item	1956 Index
Rice	118	Coal	131
Sugar, white	138	Canned pineapple	217
Sugar, brown	181	Flour	2,060
Wheat	126	Cotton yarn	171
Peanuts, unhulled	150	Cotton cloth	122
Soybean	187	Paper	162
Tea	122	Soda ash	1,830
Pineapple	129	Phosphate	159
Fish	139	Cement	141
Timber	124	Shipbuilding	436
Poultry	122	Power	174

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433 According to the report of the Industrial Development Commission of the Economic Stabilization Board, "annual production goals as set out in the Plan have generally been realized. In some instances, such as canned pineapple and textile production, actual production has been greater than planned."[17] A new Four-Year Plan is being drawn up to cover the period 1947-1960. These development plans indicate the determination of the Chinese government to put the economy of Formosa on a more solid basis. At the end of these two four-year plans the government envisions that, despite the heavy strain of military requirements, the national budget will be balanced; inflation will be halted; there will be enough export to balance foreign exchange payments; and the economic development will be great enough to take care of the rapidly growing population.

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17. Ibid., p. 8.

423 The benefits of the rent-reduction program
427 are noticeable in the improvement of the
511 tenant farmers' living conditions. The saving in rent payments, amounting 25-30 per cent of their gross income, can now be used to buy new clothing for their families, to send their children to school, to repair their houses, or to purchase farm land. They also work harder
423 because any inc reace in production accrues to
433 them. This factor contributed to the substantial annual increase of rice production from 1949 to 1954.

Production of Unhulled Rice*

Year	Metric Tons
1949	1,215,000
1950	1,421,000
1951	1,485,000
1952	1,570,000
1953	1,642,000
1954	1,695,000

* Taiwan Economic Data Book, compiled by FAO Mission to China, Part II, Vol. III, March 1955, Taipei, p. 5. The average production of rice perhectare increased from 1,624 kilograms in 1949 to 2,183 kilograms in 1954. Central Daily News, Oct. 22, 1955, p. 3.

Table 1. Crop Production, 1902-1939*

	Arable Land (1,000 ko)	Rice (1,000 koku)	Sugar Cane (million kin)	Sweet Potatoes (million kin)
1902	451	2,821	1.1	501
1925	780	6,443	8.8	1,909
1939	886	9,152	21.4	2,132

* Taiwan keizai nenpo, 1941 [Taiwan Economic Annual, 1941], Tokyo, Taiwan keizai nenpo kankohai, 1941, Appendix. One ko = one chia; one ko = 0.961 hectare. Koku is a Japanese measure of volume. One koku of brown rice weighs approximately 188 kilograms. One kin (Taiwan catty) = 1.31 pounds, or 0.597 kilogram.

II. ARABLE LAND

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The amount of arable land available for agricultural production was more than doubled during the period of Japanese rule. With improved production techniques and methods of irrigation, there was a twentyfold increase in sugar cane, a fourfold increase in sweet potatoes, and a threefold increase in rice production. The production of pineapple increased over a hundred times.

By 1936, Japan turned its efforts toward the development of industry on Formosa. This was due, in part, to wartime needs as well as to the fact that the development of available arable land had reached its limit. Yet agricultural production under the Japanese set a record that required more than five years' effort after World War II to surpass.

Today, it is generally believed that Formosa has exhausted the possibilities of its arable land. However, if better fertilizer, improved seed, new farming techniques, and adequate pest control are introduced, it

[433] 311 would seem possible for the island to produce more food to meet the needs of an increasing population. It is also possible that irrigation projects, now in the planning stage or but recently begun, may increase the amount of irrigated land available.

Table 2. Cultivated Land*
(1,000 hectares)

	Paddy Fields	Others	Total
1945	504.7	311.3	816.0
1949	528.1	336.8	864.9
1953	533.3	339.4	872.7

* Taiwan Provincial Government, Taiwan Agricultural Yearbook, 1954, Taipei, 1954, p. 20.

Steep and rugged mountains cover the major portion of Formosa. The island's total land area has been estimated at 3,596,000 hectares, of which only 24 per cent is considered suitable for agricultural purposes. For the past eighteen years, the

241 rice, one or two crops of sweet potatoes, peanuts, wheat, or flax are planted, the number depending upon the time necessary for the harvest. The fertility of the soil is heavily taxed by the practice of multiple-cropping, and the intensive use of fertilizer is necessary. Ch'en Cheng-hsiang places the index of multiple-cropping at about 160 per cent -- the ratio of crop area to cultivated area.[6]

III. FARM PRODUCTIVITY

241 432 The productivity of Formosan farmland seems to depend upon the intensity of cultivation. It has been reported that the average yield per chia of both first and second

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6. Ch'en Cheng-hsiang, T'ai-wan T'u-ti Li-yung [Land Utilization in Taiwan], Taipei, National Taiwan University and Joint Commission on Rural Reconstruction, 1950, pp. 95-96. The per cent quoted is an average for the period 1938-42. The index may be slightly higher in recent years as the land is utilized to greater advantage and the practice of multiple-cropping is used to increase production.

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(Table 3 faces p. 536.)

Table 3. Selected Crops - Yield Per Hectare*
(in kilograms)

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	Prewar Peak Years	1945	1949	1950	1951	1952	1953	1954
Rice	2,242 (1938)	1,273	1,624	1,845	1,882	1,998	2,109	2,183
Sweet Potatoes	12,734 (1937)	8,650	9,172	9,443	8,737	8,953	9,576	10,459
Sugar Cane	78,860 (1939)	38,628	50,606	48,064	45,237	49,003	74,136	
Wheat	628 (1941)	296	720	1,042	1,058	1,139	1,058	1,403
Crude Tea	375 (1917)	61	283	279	294	305	305	291
Soybean	520 (1922)	264	594	618	577	602	617	683
Jute	667 (1939)	326	797	766	894	1,242	787	

* Taiwan Agricultural Yearbook 1954, Taipei, 1954, pp. 1-81. Yields for the prewar peak years are calculated by the author from the same source. The 1954 figure are from China News Press, China Annual 1954, Taipei, 1954, Vol. 3, pp. 6-7.

(facing p. 536)

241 rice crops tends to decrease as the size of
433 the farm increases.[7] The smaller the farm, the more intensive the cultivation, the higher the yield. Productivity also varies according to the fertility of the land and the efficiency of the cultivation.

241 As a rule, farmers on the island do not regard farming as a source of profit but as a means of insuring the subsistence of their families.[8] Those who make their livelihood by growing rice will continue to grow rice even when other crops seem to offer a greater margin of profit. To them, rice is their sole security, and they use rice to pay their taxes, to barter for other commodities, and to feed their families. Rice becomes "money in the bank."

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7. The chia is a local measure of land area = 2.4 acres.

8. Bank of Taiwan, Economic Research Department, T'ai-wan Yin-hang Chi-k'an [Bank of Taiwan Quarterly], Vol. 5, No. 4, March 1953, Taipei, pp. 1-27.

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The yield per unit area of various crops has been increasing steadily since 1945. However, the highest yields in the postwar years are lower than the highest yields in the prewar period. Any number of reasons has been advanced to explain this failure to regain prewar productivity. Less chemical fertilizer is available at present. Lack of funds has postponed extensive development of arable land. The percentage of spoilage each year is high because storage facilities are inadequate Serious losses have been caused by insects and blight. When these problems are solved, according to the Joint Commission on Rural Reconstruction, the yield per hectare can be increased, as follows:

	Feasible Goals (kg. /hectare)
Rice	2,500
Sweet Potatoes	13,000
Peanuts	1,000
Sugar	10,000
Crude Tea	500
Bananas	12,000
Pineapples	14,000

These goals represents increases in per hectare yield of amount varying between 10 and 50 per cent of highest yields achieved in

241 the postwar years. These goals can be
483 attained without the expansion of present planted acreage and are more optimistic than the goals contemplated for 1956 in the Formosan Four-Year Plan.[9]

If the per unit yield can be increased and additional land is made productive, there is no reason why Formosa cannot substantially expand its yearly production. Rice is now planted on approximately 780,000 hectares of land; upon the completion of Shihmen dam and reservoir, it will be possible to grow rice on 835,000 hectares. If the yield per hectare is 2,500 kilograms, the total yield will be 2,100,000 metric tons, enough to feed 14 million people.[10]

IV. FARM MECHANIZATION

241 As in most undeveloped countries,
407 agriculture in Formosa is conducted on a primitive basis. The average farmer has only

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9. The Four-Year Plan, begun in 1952, is designed to bring about the economic independence of Formosa by increased production in agriculture and industry.

10. The Central Daily News, July 1, 1955.

(continued next page)

241 his strong back and a few simple implements.
407 If he is fortunate, he owns a water buffalo. The Taiwan Sugar Corporation owns 500 tractors, but this is the only large-scale use of farm machinery on the island. Mechanization would help to increase farm yields, but many difficulties are presented by the small size of the fields and the many natural obstacles to any plan which calls for the co-operative use of farm machinery. Moreover, private ownership of tractors or other modern farm implements is prohibitively expensive, and the farmer has no experience in repair and maintenance of such machines. On the other hand, water buffaloes are of value to the farmer as a source of fertilizer, meat, and hides.[11] Additional study is necessary to determine whether extensive mechanization of agriculture would be economical for Formosa.

V. DOMESTIC CONSUMPTION

241 Formosa, as a rule, has produced
438 sufficient agricultural products to meet the

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10. (continued) The Shihmen dam and reservoir will increase the irrigated land in Formosa by approximately 55,000 hectares.

11. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 38.

241 433 demands of domestic consumption. Surplus rice is exported each year, and the supply of vegetables is considered adequate. Meat is expensive, and the ability to buy meat 262 determines socio-economic position in Formosan society. Data on dietary habits, 146 433 caloric requirements, and so forth are not available, probably because extensive surveys have never been conducted on the island. There is no way of ascertaining basic food requirements to maintain a desirable nutritional level.

433 The Provincial Food Bureau has estimated the per capita rice requirement for civilians to be 143.4 kilograms, and for the military, 308 kilograms. (These figures do not provide for surplus storage, waste, spoilage, or seeds.) Rice requirements for the next ten years may be estimated as indicated in Table 4. Note that the size of the military force on Formosa is assumed to remain constant (600,000).

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Table 4. Rice Requirements for 1955-56*
(in 1,000 metric tons)

Year	Estimated Population (1,000)	Civilian Rice Requirements	Military Rice Requirements	Total Requirements
1955	10,400	1,405.3	184.8	1,590.1
1956	10,712	1,450.1	184.8	1,634.9
1957	11,033	1,496.1	184.8	1,680.9
1958	11,364	1,543.6	184.8	1,728.4
1959	11,705	1,592.4	184.8	1,777.2
1960	12,056	1,642.8	184.8	1,827.6
1961	12,418	1,694.7	184.8	1,879.5
1962	12,790	1,748.1	184.8	1,932.9
1963	13,174	1,803.1	184.8	1,987.9
1964	13,569	1,859.8	184.8	2,034.6
1965	13,976	1,918.2	184.8	2,103.0

* The estimated population for 1955 is based on the study of population in this handbook. Population for subsequent years is calculated on the assumption that annual increase will be approximately 3 per cent.

The civilian population is each year's population minus a constant armed forces of 600,000 men. Per capita rice consumption is assumed to be 143.4 kg. a year. Military per capita rice consumption is 308 kg. a year. These per capita estimates are based on statistics furnished by the Provincial Food Bureau.

433 Since Formosa produces as much as 1,700,000 metric tons of rice each year, there is no reason why the island cannot maintain its present surplus until 1958, provided that nothing affects productivity. After 1958, there will be a shortage of rice, unless productivity is increased. If per hectare yield should be increased to 2,500 kilograms per year, and planted acreage expanded to 835,000 hectares, as has been projected in the Four-Year Plan, Formosa's annual rice supply will be sufficient for domestic consumption until 1965.

VI. MAJOR CROPS

The most important food crops produced on Formosa are rice and sweet potatoes. These two crops in 1953 accounted for approximately 60 per cent of total production (rice, 52.8 per cent; sweet potatoes, 7.2 per cent). Of special crops, sugar cane accounted for 13 per cent, vegetables, 3.2 per cent, peanuts, 1.8 per cent, crude tea, 1.5 per cent, tobacco, 1.2 per cent; and bananas, 0.8 per cent.[12]

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12. Taiwan Agricultural Yearbook 1954, Taipei, 1954, pp. 30-31.

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The raising of hogs is Formosa's third most profitable endeavor, only surpassed by the annual crops of rice and sugar cane. Pork and fish are the major sources of protein in the diet of the islanders. The annual production of various agricultural produce is presented in Tables 5, 6 7, and 8.

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Table 5. Food Production*
(in 1,000 metric tons)

	Rice	Sweet Potatoes	Soybeans	Peanuts	Wheat
1937	1,319	1,770	6	32	1
1938	1,402	1,726	6	28	1
1939	1,307	1,279	4	28	6
1940	1,129	1,512	3	29	4
1941	1,199	1,693	3	22	7
1942	1,171	1,556	3	13	6
1943	1,126	1,406	3	10	2
1944	1,068	1,521	5	12	2
1945	639	1,165	2	12	1
1946	894	1,331	4	37	1
1947	999	1,783	10	47	4
1948	1,068	2,003	12	53	6
1949	1,215	2,166	12	53	10
1950	1,421	2,201	13	57	19
1951	1,485	2,021	13	61	15

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1952	1,570	2,090	15	60	17
1953	1,642	2,277	17	60	14
1954	1,695	2,324	17	67	15
1955	1,633	2,290	24	70	19

* Data for the years 1937-53, from Foreign Operations Administration Mission to China, Taiwan Economic Data Book, Part II, Volume III, Taipei, 1955; for 1954, from Industrial Development Commission, Industry of Free China, Vol. 3, No. 4, April 1955, Taipei; for 1955 from the Central Daily News, February 3, 1956.

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Table 6. Commercial Production*

	Sugar Cane	Tea	Citronella	Jute
	(in 1,000 metric tons)			
1937	8,563	13	-#	9
1938	9,061	13	-*	14
1939	12,822	14	-*	15
1940	9,977	12	273	11
1941	8,392	12	174	7
1942	10,250	12	319	11
1943	10,092	8	201	7
1944	8,468	4	35	4
1945	4,159	1	29	2
1946	1,007	3	12	1
1947	796	7	61	3
1948	3,116	8	213	11
1949	6,194	10	380	9
1950	5,861	10	762	7
1951	3,585	10	1,274	11

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1952	4,801	12	2,561	20
1953	8,394	12	2,527	5
1954	6,130	13	-	12
1955	-	14	-	19

* Data for 1937-53, Taiwan Economic Data Book, Part II, Volume III; for 1954, Industry of Free China, Vol. III, No. 4, March 1955; for 1955, the Central Daily News, February 3, 1956.

\# February 3, 1956 not available.

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Table 7. Production of Fruit*

	Pineapple	Banana	Citrus
	(in 1,000 metric tons)		
1937	108	219	33
1938	116	202	36
1939	146	182	35
1940	129	169	32
1941	130	191	39
1942	116	196	34
1943	94	142	29
1944	43	65	21
1945	18	32	17
1946	17	53	20
1947	40	124	25
1948	39	110	28
1949	43	98	27
1950	46	117	28
1951	52	100	27

45:Stanford U. S-4, 5 1956 ADI Formosa
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1952	63	107	28
1953	68	96	29
1954	62	109	31
1955	64	90	33

* Data for 1937-53, from Taiwan Economic Data Book, Part II, Volume III; for 1954, from Industry of Free China, Vol. III, No. 4 April 1955; for 1955 from the Central Daily News, February 3, 1956.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 8 follows p. 550.)

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Table 8. Production of Livestock*
(in 1,000)

	Hogs	Cattle	Chickens	Ducks
1937	1,849	358	7,073	1,958
1938	1,827	325	7,095	2,023
1939	1,653	325	6,680	1,931
1940	1,205	300	-#	-
1941	1,158	309	-	-
1942	1,358	312	-	-
1943	1,257	325	4,548	1,896
1944	862	331	3,837	1,358
1945	578	291	3,998	1,136
1946	768	280	4,555	1,647
1947	1,006	298	5,199	2,247
1948	1,167	310	4,525	1,985
1949	1,362	357	4,909	2,217
1950	1,620	365	5,143	2,547
1951	2,262	375	5,387	2,991
1952	2,613	383	5,595	2,912
1953	2,820	390	6,188	3,183

* Data on hogs and cattle are from Taiwan Economic Data Book, Part II, Vol. III; on chickens and ducks 1937-39, from Taiwan Keizai nenpo 1943 [Taiwan Economic Annual 1943]; for 1948-53, from Taiwan Agricultural Yearbooks.

\# Not available.

[table 8 follows p. 550]

A. Production of Rice

433 The production of rice has increased steadily in the postwar years; production in 1950 exceeded the 1938 production level peak achieved by the Japanese. However, because relatively less fertilizer is available for use, the per hectare yield of Formosan fields has not reached the record yield of 2.242 kilograms achieved under Japanese rule. Rice exports have been sacrificed to meet the domestic requirements of the swelling population of the island. In 1938, nearly 50 per cent of the 1.4 million metric tons of rice produced was exported; in 1954, only 36,000 metric tons of rice were available for export in spite of the fact that nearly 1.7 million metric tons were produced in that year. Such a drastic decrease in rice export has affected the dollar reserves of the Formosan people and made it difficult for the country to import the industrial goods necessary for continued economic development.[13]

243 Rice and sugar cane, the two most 244 valuable crops, compete for use of land

13. Industrial Development Commission, Industry of Free China, Vol. 3, No. 6, June 1955, p. 80 .

C. Production of Sugar Cane

249 648 433 Sugar cane is the raw material for Formosa's sugar industry. Postwar increase in production is all the more remarkable since in the years before the war the Japanese did all they could to exploit the potentialities of sugar cane production to meet the sugar requirements of Japan proper.

Sugar cane is usually planted in the summe June to September. About a year and a half are required before the cane is ready for harvest. Under the International Sugar Agreement concluded in London in 1953, Formosa is permitted to export 600,000 metric tons of sugar annually. Government policy has been adapted to meet this quota and allow for domestic consumption. Land once used for sugar cane is now being used to produce other products.

D. Production of Wheat

243 433 Wheat produced on Formosa accounts for less than one per cent of the total value of the island's farm production. For this reason it has been generally believed that Formosa lacks the conditions suitable for

243 optimum wheat production. Postwar research
433 has proved that wheat can be grown between rice crops in the regions centering on Taichung, Changhua, and Tainan, and the amount of land given to wheat production has been increasing gradually.

E. Production of Tea

245 About 90 per cent of the tea produced
433 on Formosa is exported to American and European markets. The production of tea and its planted acreage has been more or less constant since 1880. Commercial growing of tea began about 1865, and there are three major groups -- Paochung, Oolong, and black -- which are most successfully grown on the island.

VII. FORESTRY

313 Forests cover about 64 per cent of
433 the total area of Formosa because abundant rainfall is favorable to the growth of trees. The island's forests furnish all domestic lumber and prevent erosion in mountainous areas. Forestry products accounted for approximately three per cent of the total value of all goods produced in 1953. The total timber reserve, as of 1954, was estimated

313 at approximately 202,258,000 cubic meters.[14]
433 Broadleaved trees account for about 65 per cent of this reserve; the remainder is made up of coniferous trees. Only 4.3 per cent of the reserve is privately owned; about 90 per cent ~~is owned~~ by the government, which maintains complete control of the island's forestry. It is estimated that about 1,000,000 cubic meters of timber may be cut annually without impairing the total reserve. Production of timber in 1953 was estimated at 515,000 cubic meters; in 1954, at 546,000 cubic meters. Government policy has been to cut less than 50 per cent of available timber, and the government's reforestation program assures that an area equivalent to the timberland cut is replanted each year.[15]

VIII. FISHERIES

228 There are four main categories of
433 fisheries on Formosa -- deep sea, inshore,

14. Ibid., No. 3, March 1955, p. 104.
15. Ibid., p. 106.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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coastal, and fish culture. Coastal fishing is most important, since it furnishes more than 50 per cent of the fish catch every year and serves as a source of income for over 140,000 fishermen -- approximately 61 per cent of the population who earn their living in the various fishing industries.[16]

Fishing has become an increasingly valuable part of the island's economy (see Table 9). More efficient methods have been introduced, there are a greater number of powered fishing vessels available today, and a large area is under culture. However, annual production still falls short of the minimum per capita consumption requirements, estimated to be approximately 42 grams per day. Only in the year 1954, when production was approximately 152,500 metric tons, was the minimum requirement reached. Further increases are necessary, for the optimum per capita consumption is estimated to be as high as 84 grams per day. Neither coastal fishing nor fish culture can be increased substantially. The Formosan government must find means to encourage deep-sea and inshore fishing.

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16. China Annual 1954, Vol. 3, p. 86.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table 9 follows p. 556.)

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Table 9. Production of Fish*
(in 1,000 metric tons)

	Total	Ocean Fish Catch			
		Deep Sea Fisheries		Coastal fisheries	Fish culture
		Government	Private		
1936	93.0	26.0		52.0	15.0
1937	94.0	30.0		48.0	16.0
1938	90.0	34.0		39.0	17.0
1939	98.0	40.0		43.0	15.0
1940	119.0	57.0		52.0	10.0
1941	85.0	28.0		45.0	12.0
1942	68.0	21.0		33.0	14.0
1943	47.0	5.0		32.0	10.0
1944	23.0	1.0		16.0	6.0
1945	17.0	#		12.0	5.0
1946	51.0	2.6	0.4	38.0	10.0
1947	62.0	3.0	-	44.0	15.0
1948	83.0	2.7	4.3	51.0	25.0
1949	80.0	2.9	2.1	52.0	23.0
1950	84.0	6.1	5.9	47.0	25.0
1951	104.0	10.4	5.6	63.0	25.0
1952	122.0	10.9	6.1	74.0	31.0
1953	130.6	14.6	9.6	67.9	38.6
1954	152.5	14.5	12.5	83.9	41.6

* FOA Mutual Security Mission to China, Taiwan Economic Data Book, Part II, Vol. 3, Taipei, 1955.

Not available.

[table 9 follows p. 556]

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Table 1. Index of Industrial Production in Formosa*
1941 = 100%

Industries	1937	1941	1946	1950	1952	1954
Power	56	100	46	101	134	175
Transportation	61	100	79	138	168	223
Chemical	84	100	33	136	162	267
Fertilizer	85	100	19	185	537	582
Food Processing	106	100	20	77	82	109
Metal & Machinery	49	100	29	52	66	108
Mining	75	100	34	56	87	85
Textiles	67	100	21	286	684	1,270
Timber	58	100	24	70	96	115
All Industries	79	100	32	84	111	152
Population (Millions)	5.6	6.2	6.7	8.9	9.5	10.1
Per Capita Production in All Industries	88	100	30	63	75	93

* Economic Data Book, Part II, Vol. III, prepared by FOA Mission to China, March 1955. The peak year under the Japanese was 1941.

45: Stanford U. S-4,5 1956 AD1 Formosa AD1

(Table 2 follows p. 564.)

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Table 2. Industrial Output of Formosa in 1945, 1952, 1953, 1954 as Compared with the Record Production Under the Japanese

Commodities (with unit)	Peak Year Under Japanese	1945	1952	1953	1954
Sugar (1,000 MT)	1,374 (1949)	86 (1946)	520	883	701
Flour (MT)	13,000 (1934)	3,879 (1946)	16,476	69,163	136,944
Fertilizer:					
a) Calcium cyanide (MT)	12,647 (1941)	-	69,070	73,145	71,747
b) Calcium super phosphate (MT)	25,449 (1943)	400	62,064	69,145	78,049
Laundry soap (MT)	5,115 (1939)	-	17,164	16,128	17,166
Cement (1,000 MT)	303 (1944)	78	445	519	536
Paper (MT)	25,547 (1940)	2,552	22,150	26,912	33,792
Cotton yarn [x] (bales)	-	825	74,831	107,464	127,012
Cotton cloth (1,000 yards)	4,296 (1940)	1,111	89,293	152,435	180,098
Canned pineapple (1,000 cases)	1,641 (1938)	20	428	569	779
Gasoline [y] (Kl.)	6,778 (1939)	1,066	86,316	108,943	136,266
Electricity [z] (Kw.)	178 (1944)	80	232	271	317
Coal (1,000 MT)	2,854 (1944)	880	2,286	2,392	2,117
Sulphur (MT)	1,381 (1937)	35	5,081	3,478	5,067

* Figures from Economic Data Book, Vol. III, prepared by FOA Mission to China, Part II, March 1955.

\# Fertilizers: (a) calcium cyanamide, manufactured as nitrolime; and (b) calcium superphosphate.

x One bale of cotton yarn weighs 400 pounds.

y One kiloliter is equivalent to 26.417 gallons.

z Actual peak load.

[table 2 follows p. 564]

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The increase from 1950 to 1953 was, for the most part, in private industries, manufacturing consumer articles, including textiles, soap, rubber goods, paints, matches, drugs, aluminum wares, bicycles, electric fans, and sewing machines. Among these, textiles, soap, and rubber goods have increased production most rapidly. Producing only 12 per cent of the textiles consumed locally in 1935, Formosa is now in a position now only to meet the expanding requirement of a growing population, but also to provide a substantial amount of cotton cloth for export. Except for automobile tires, nearly all the rubber goods needed on the island are manufactured locally. In 1939, the year of record soap production under the Japanese, 214,830 cases (5,115 metric tons) of laundry soap were produced. Today there are one government and ninety-three private producers, and the total production capacity of laundry soap is 125,000 cases (2,500 metric tons) per month.[9]

The rapid growth of private industries is attributed to the following factors:

1. Formosa has many basic raw materials, coal, salt, limestone, sulphur, ceramic clay,

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9. Economic Data Book, Part II, Vol. III, preopared by FOA Mission to China, Taipei, March 1955, p. 99.

[433] timber, and is also rich in oil and a favorable climate.
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2. It has abundant power and good means of communication.

3. A great deal of dismantled equipment has been imported from the Mainland.

4. As a result of the massexodus from the Mainland, Formosa has many trained personnel

5. Labor supply with experience of mechanical operations is plentiful.

472 It should be noted, however, that 90 per
471 cent of the private factories are of very small size, operated by a single owner. More than half have less than 5 hired workers, one-sixth from 6 to 10, and a fifth from 11 to 30 workers. Ninety-five per cent have capital of less than NT $50,000 (US $3,000). Twenty-six per cent depend entirely on manual labor, 67 per cent use a motor under 15 horsepower, and only 7 per cent use motors of 15 horsepower or more.[10] On the other hand, the government

10. Arthur F. Raper and others, Urban and Industrial Taiwan, Crowded and Resourceful, published by FOA/MSM to China and National Taiwan University, Taipei, 1954, pp. 122-23.

45:Stanford U, S-4, 5 1956 AD1 Formosa
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Table 4. Approximate Percentage Distribution of Value of Major Industrial Products from Government and from Private Factories, Enterprises, and Mines on Formosa, 1953*

Type of Production	Government Enterprises	Private Enterprises	Total Value of Industrial Production
Percentage distribution of value of all industrial production	65%	35%	100%
Sugar and by-products	98	2	18
Transportation	86	14	13
Textiles	37	63	10
Mining	15	85	7
Alcoholic beverages and tobacco	100	-	6
Metal Products	16	84	6
Edible oil	3	97	6
Timber	52	48	6
Petroleum products	100	-	5

45:Stanford U. S-4, 5 1956 AD1 Formosa
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(continued)

Rubber goods	6	94	4
Electric power	100	-	4
Fertilizer	100	-	4
Machinery	24	76	3
Cement	100	-	2
Paper	61	39	2
Chemicals	82	18	1
Canned pineapples	62	38	1
Salt production	100	-	#
All others	53	47	2

* Raper and others, ibid., p. 118.
\# Less than 1 per cent.

45:Stanford U. S-4, 5 1956 AD I Formosa
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II. MINERAL RESOURCES [16]

135 Although many of the mountainous areas in Formosa have not been fully explored, the island does not appear to be rich in mineral resources nor are those that are known available 328 in quantity. Formosa does produce coal, some 316 gold, copper, petroleum, salt pyrite, and 317 sulphur. Some coal and salt is exported. All of the other minerals are for domestic consumption. Smaller quantities of mercury, manganese, asbestos, mica, and gypsum are also produced. Bauxite, necessary for the aluminum industry, and gypsum, used in cement production, are imported, since they are not found in sufficient quantities on the island. 316 The production of the various mining industries 433 in 1953 and 1954 is given below.

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16. Statistical information in this section, unless otherwise specified, is in large part from Taiwan Economic Data Book, Vol. 3, Taipei, 1955, by Foreign Operations Administration, MIssion to China.

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PRODUCTION OF MINING INDUSTRIES 1953-54 */

	1953	1954
Coal (1,000 metric tons)	2,393	2,100
Crude petroleum (kiloliters)	2,830	5,571
Natural gas (1,000 cubic meters)	30,925	28,962
Sulphur (1,000 metric tons)	3	6
Pyrite (1,000 metric tons)	23	25
Gold (kilograms)	772	670
Silver (kilograms)	651	624
Copper (1,000 metric tons)	13	10
Salt (1,000 metric tons)	162	369
Gypsum (1,000 metric tons)	6	3
Mica (1,000 metric tons)	24	20

*/ China Annual 1954, Vol. 3, p. 48.

135 Estimated reserves of selected minerals are given in the following table. It would appear, from this brief survey, that Formosa possesses limited mineral resources and few of the mineral requirements of modern industry.

C. Salt

317 433 Salt, available in quantity, is not produced from rock salt but by the evaporation of sea water on the western seaboard. The fields are centered around the towns of Anping, Putai, and Peimen. About 5,000 hectares of land were used as salt fields in 1954; production amounted to 369,000 metric tons. Domestic markets require approximately 75,000 metric tons a year, thus leaving a sizable amount of salt for export.

III. ELECTRICITY

376 Formosa has a number of short, swift-flowing rivers which are estimated to possess a total gross hydroelectric potential of some 3,300,000 kilowatts. According to a report made by the Taiwan Power Company, approximately 12 per cent (378,000 kilowatts) of the gross potential had been developed as of 1955. Formosa's estimated thermoelectric generating capacity is 142,550 kilowatts, giving the island, as of 1955, approximately a total generating capacity of 520,550 kilowatts. The peak load in that year is estimated to have been 360,000 kilowatts.

377 375

377 Only the Taiwan Power Company produces electric power for general distribution. Some government and private enterprises generate power for their own consumption; notable among these enterprises are the Taiwan Sugar Corporation, the Taiwan Pulp and Paper Corporation, the Taiwan Cement Corporation, and the Taiwan

379 Formosa has not yet exploited the hydroelectric potential offered by its heavy annual rainfall and the steepness of its river gradients, and no sustained effort has been made to compensate for the varying water reserves available at different times of year, headwater erosion, the narrow valleys in which the rivers flow, and the silt and gravel which combined to reduce the efficiency of the streams as a source of power. For these reasons, the economic development of potential power sites is as important to Formosa as the implementation of flood control and irrigation programs.

Currently, the Taiwan Power Company has established a committee to investigate and plan the generation of power by atomic energy on Formosa.

IV. FOOD PROCESSING INDUSTRIES

A. The Production of Sugar

249 The history of the sugar industry in Formosa
433 goes back to 1349, when islanders "boiled sea
431 water to make salt and fermented molasses to produce liquor."[17] In 1650, when the Dutch were occupying Formosa, some 6,000 metric tons of sugar cane were produced each year. Of this amount, two-thirds were exported to Japan and marketed in lands as far away as Persia. Under the rule of Cheng Ch'eng-kung (Koxinga), who

17. China News Press, T'ai-wan Ching-chi Nien-pao, 1953 [Annual of Taiwan's Economy, 1953], Taipei, 1953, p. 45.

249 defeated the Dutch, annual production rose to
•433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills cam under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
257 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brow Sugar Association produce brown sugar for domest use and foreign export.

257 The milling capacity of the 26 mills controlle
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is abou 12 per cent. These mills operate an average of 150

433 257 days a year. The Taiwan Brown Sugar Association's member mills produce only 50,000 metric tons a year, representing approximately 10 per cent to 14.5 per cent of the sugar cane processed.

Since Formosa is only allowed to export 600,000 metric tons of sugar each year, according to the terms of the International Sugar Agreement, recent efforts have been directed toward modernization of plant facilities. The level of production has been reduced, and today Formosa processes only enough sugar to meet the demands of domestic consumption and the export quota.[18] Statistics on the production of sugar and sugar by-products are given in the table below:

PRODUCTION OF SUGAR AND SUGAR BY-PRODUCTS */
(in 1,000 metric tons)

	Sugar	Brown Sugar	Molasses	Yeast (1,000 kgs.)
1937	987	20	189	48
1938	967	24	206	119
1939	1,374	45	324	152
1952	520	11	143	61
1953	883	19	212	279
1954	701	13	185	638

*/ Taiwan Economic Data Book, Vol. 3, Part II, 1955.

18. Local consumption requirements for 1955 may be estimated at 108,800 metric tons, according to the consumption pattern established during 1932-41. During this period per capita consumption of sugar averaged 10.46 kilograms a year.

B. The Production of Canned Pineapple

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433 The Japanese encouraged the growth and canning of pineapples for export during their rule of Formosa. In 1938, Formosa was the third largest producer of canned pineapple, surpassed only by Hawaii and British Malaya. Since World War II, shortage of tinplate have caused a decrease in Formosa's pineapple production. The crops have been small, Formosa has lot many of its foreign markets, and tinplate for canning is at a premium. Efforts have been made to solve these problems, and production since 1951 has been on the increase.

PRODUCTION OF CANNED PINEAPPLE */
(in 1,000 case lots)

Year	Production
1938	1,674
1939	1,390
1950	226
1951	361
1952	427
1953	370
1954	780

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. The Production of Flour

256
433 It has been estimated that, as of 1953, Formosa required 108,000 metric tons of flour in order to meet civilian and military requirements.[19] Demand for flour has greatly increased as the result of the influx of refugees from the China Mainland, most of whom choose flour in preference to rice as the main staple of their diet. At present the island can produce only about 17,000 metric tons of wheat. Of this amount, and apparently far short of the island's requirements, only about 10,000 metric tons is available to be milled as flour; the remainder is utilized in brewing, for seed, and so forth. Natural conditions are believed to limit Formosa's optimum wheat production to 30,000 metric tons a year, and in consequence the island has found it necessary to import either flour or wheat. It was believed that the importation of wheat for domestic milling was most economical, in view of foreign exchange. The Foreign Operations Administration has been of aid in the importation of wheat and its distribution to local mills. As a result, the number of flour mills in Taiwan has increased in recent years, to the point where the milling capacity exceeds the requirements of the island.

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433 The provincial government owns two flour mills, and there are 33 relatively large private

19. James E. Auburn, "Taiwan Wheat and Wheat Flour Requirements," Chinese-American Economic Co-operation, Taipei, Mutual Security Mission to China, Vol. 1, No. 12, pp. 25-30.

[47] mills and 80 smaller mills scattered over the
256 island. Their combined productive capacity is
433 reported to be approximately 1,227 metric tons a day. If the mills were in operation only 250 days a year, their total capacity would be some 306,750 metric tons a year, far exceeding the estimated annual consumption requirement of 108,000 metric tons. The annual consumption requirement may have increased as the population increased in the past two years. The production goal for 1955 was set at 160,000 metric tons of flour, to be processed from 208,000 metric tons of imported wheat in addition to 8,000 metric tons of domestic wheat.

It should be noted that Formosa's production of flour is vitally dependent upon the importation of wheat. Delay or discontinuation of import would immediately affect local markets.

D. The Production of Edible Oil

388 Peanut oil and soybean oil are the most im-
453 portant types of edible oil produced in Formosa. The oils are used in domestic cooking. What remains after the oil has been extracted is used to feed animals or as fertilizer. Although enough peanuts are produced to meet domestic requirements, about one-third of the soybeans needed are imported. Approximately 500 producers of edible oil were reported in 1954. Most use cottage-type pressing mills, operated by human and animal labor. There are only 24 modern oil-pressing mills on the island. The production of peanut oil, peanut cake, soybean oil, and soybean cake is

45:Stanford U. S-4, 5 1956 AD 1 Formosa

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shown in the following table:

PRODUCTION OF EDIBLE OIL */
(in metric tons)

	Peanut oil	Peanut cake	Soybean oil	Soybean cake
1938	3,007	4,511	2,043	19,508
1939	2,525	3,788	2,410	19,520
1952	5,112	7,846	4,980	43,835
1953	5,900	8,850	9,339	68,506
1954	5,360	8,040	7,101	51,964

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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V. CHEMICAL INDUSTRIES

A. Fertilizers

387 433 The importance of fertilizer for Formosa lies in the fact that so little of the island is suitable for agriculture that what arable land there is must be constantly enriched by chemical and natural means. The fertilizer industry is expanding, and in the next decades will offer employment to many and decrease the amount of fertilizer it is necessary to import to Formosa.

Experts attached to the Joint Commission on Rural Reconstruction have estimated that, according to Formosa's present soil and climatic conditions, the island has need of a minimum of 580,000 metric tons of chemical fertilizers each year. In order to secure optimum growth of crops, 1,000,000 metric tons of chemical fertilizers are needed annually. However, as of early 1955, the productive capacity of domestic plants was approximately 185,700 metric tons per year.[20] In order to expand production of fertilizers, the construction of four additional plants has begun, and when they are completed they will increase total capacity to over 383,000 metric tons per year. Further expansion is feasible, provided that sufficient investment capital is made available. Most of the

20. Industrial Development Commission, Fertilizer Taiwan, Taipei, 1955, pp. 4-6.

45:Stanford U. S-4, 5 1956 AD 1 Formosa

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38 Raw materials necessary for the processing of
433 fertilizer are available on Formosa. The island has a relative abundance of limestone, coke, coal, pyrite, and serpentine; phosphate must be imported. However, the present expansion program will only provide two-thirds of the minimum fertilizer
38 requirement of the island. The following table
433 compares the production and importation of chemi-
437 cal fertilizers.

PRODUCTION AND IMPORT OF CHEMICAL FERTILIZERS */

	Production	Importation
1937	31	413
1938	27	444
1939	34	356
1951	112	235
1952	150	403
1953	166	253
1954	168	359

*/ Industry of Free China, Vol. 2, November 1954, pp. 90-91, and Vol. 3, May 1955, pp. 56,70.

B. Alkali Products

385 The alkali industry, in support of various
433 other chemical industries, has been expanding steadily since World War II. Caustic soda and soda ash are used in pulp-making, aluminum-making, soap-making, and glass-manufacturing. Chlorine is used for the production of bleaching powder, insecticides, and so on. Production of some alkali products are given in the table below.

ALKALI PRODUCTION *

	Caustic Soda	Soda Ash	Liquid Chlorine	Bleaching Powder
1952	8,526	609	1,286	1,526
1953	10,181	915	1,823	1,330
1954	14,487	1,163	2,667	1,787

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

C. Cement

339 Formosa's sole domestic source of cement,
433 the Taiwain Cement Corporation, was established in 1946 when the government consolidated and reorganized three cement works and two cement-products plants formerly owned by Japanese concerns. In 1954, the management of the corporation was transferred to private ownership. The total productive capacity of the three plants -- in Kaohsiung, Suao, and Chutung -- was estimated at 670,000 metric tons a year; actual production

339 in 1954 was approximately 536,400 metric tons.
433 With the exception of gypsum, which must be imported, all the raw materials required for the manufacture of cement can be had locally. (According to production estimates for 1955, approximately 12,900 metric tons of gypsum are requir in order to produce 500,000 metric tons of cement.)

D. Paper

289 Waste timber, from which pulp is made
433 for the manufacture of paper, is easily available in Formosa, and the paper manufacturing indust was extensively developed under Japanese rule. As of 1954, there were 40 paper mills in Formos the largest is the Taiwan Pulp and Paper Corpor tion. The corporation produced 12,900 metric tons of paper in 1954; all other mills combined produced a total of 14,620 metric tons.

E. Other Chemical Products

381 The yearly production of other chemical
433 industries on Formosa are listed in the following table:

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OTHER CHEMICAL PRODUCTS */

	Unit	1953	1954
Alcohol			
DDT (100 per cent)	(kiloliter)	25,262	14,708
Camphor	(kilogram)	117,572	446,026
Soap	(kilogram)	263,906	181,043
Paint	(metric ton)	17,106	18,076
Printing Ink	(metric ton)	1,992	2,530
Active Carbon	(kilogram)	150,694	151,715
Matches	(1,200 boxes)	222,577	215,945
Toothpaste (tube)	(gross)	22,767	31,574

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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VI. TEXTILE INDUSTRY

288 Among the major industries in Formosa,
433 the textile industry has shown the greatest expansion since World War II. (The production of fertilizer and the production of light and power have expanded only slightly less rapidly.) The textile industry was one of those major industries to which the government gave special encouragement after the war.

During the Japanese occupation of the island, approximately 10-20 per cent of the island's textile requirements were supplied by domestic mills during the period 1920-42. However, the major portion of the production was gunny sacks. Consumers' textiles were imported from Japan.

In 1945, when the island was restored to China, there were only 14,652 serviceable spindles and 1,693 power looms, of which only 8,268 spindles and 428 looms were in operation. As of 1954, there were 18,844 spindles and 11,288 power looms installed in 14 spinning mills and 269 weaving mills. In addition, there were approximatel 200 hand-operated looms owned by some 100 small, privately owned mills. There were also 7 worsted mills, with 10,304 woolen and worsted yarn spindles and 208 looms. Production capacity as well as actual production far exceeded consumption requirements. In 1954, worsted mills cut production by 50 per cent, and as of September 1954, of the total of 252 privately operated weaving mills, 9 were closed, 77

288 suspended operations, and the remaining 166
433 mills reduced their work-day to eight hours.

248 The textile industry in Formosa was
433 established on the assumption that a sufficient amount of raw cotton could be imported to furnish the material for the production of cotton yarn and cotton cloth. Now efforts are being made to satisfy this demand through domestic production of cotton, and the initial experiment -- transplanting Texas cotton to Formosa -- has been pronounced a success. It is doubtful, however, that in the near future Formosa can supply her total raw cotton requirements. In 1954, raw materials imported for the textile industry cost the island approximately US$20,000,000, and it is believed that this import rate will continue if Formosa's enormous textile industry continues operation at its present level.[21] The following table gives the textile production of Formosa since 1951.

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21. T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 12, No. 1, July 1954, p. 71.

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TEXTILE PRODUCTION */

	Cotton Yarn (Bale)	Cotton Cloth (1,000 yards)	Woolen cloth (1,000 yards)	Gunny sacks (per 1,000)
1951	39,567	61,836	442	5,240
1952	74,831	89,293	556	6,593
1953	107,464	152,435	1,228	8,407
1954	127,012	180,098	1,491	9,087

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

VII. METALLURGY AND METALWORKING

A. Aluminum

325 433 The Japanese, in the second phase of their economic development of Formosa, constructed aluminum plants at Kaohsiung and Hualien in order to take advantage of the abundant power available in the island. The Kaohsiung plant then had an annual capacity of 20,000 metric tons of aluminum ingot. (The Bayer process was utilized for ore separation.) During World War II, the plants were badly damaged. Following the war, the Kaohsiung plant was rebuilt, and what remained of the Hualien plant was sold to a fertilizer manufacturing company.

Formosa's only producer of aluminum ingot, the Taiwan Aluminum Corporation, has a productive capacity of approximately 8,000 metric tons of ingot and 4,000 tons of sheet aluminum at the Kaohsiung plant. Aluminum goods, such as home appliances, kitchen utensils, and quartermaster supplies for the military, are produced by 77 small privately owned companies and one government-owned company.

Of the raw materials needed for the production of aluminum, bauxite is imported from Bintam Island, Malaya, and petroleum coke is imported from the United States.

B. Steel and Iron

327 433 The island of Formosa produces little iron ore. Production of pig iron, derived from

327 imported iron ore, amounted to 8,6000 metric
433 tons in 1954; reclaimed pig iron, derived from scrap iron, amounted to 8,672 metric tons in the same year. The island has the facilities to produce 13,000 metric tons of pig iron and 15,290 metric tons of reclaimed pig iron annually. Small iron and steel plants (foundries, blast furnaces, rolling mills, electric furnaces) are located in Kaohsiung, Taipei, Patu, Tainan, Kangshan, Sungshan, Hualien, and Keelung.

325 Production of basic metals is given below:
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PRODUCTION OF BASIC METALS */

(in metric tons)

	Aluminum ingot	Pig iron	Reclaimed pig iron
1948	2,509	9,221	3,284
1949	1,317	1,559	4,275
1950	1,764	78	5,600
1951	2,984	733	5,385
1952	3,856	620	6,415
1953	4,915	3,927	6,929
1954	7,131	8,591	8,772

*/ Taiwan Economic Data Book, Part II, Vol. 3, 1955.

177 Polynesian peoples inhabited Taiwan for centuries, and perhaps for millenia, unable to develop any effective political organization but sufficiently warlike to prevent the infiltration of peasants from the Mainland. In the sixteenth century the Portuguese came to the Ilha Formosa but did little more than give it the name. The Dutch, who ruled from 1624 to 1661, reported an immigration of Chinese sufficiently strong to be troublesome. This was a period of crisis in China, for the Manchus had replaced the Ming Dynasty in the North and were pushing southward. The exodus of Ming civilians and soldiers across the narrow waters to Taiwan increased until there was a sufficient concentration of strength to capture the Dutch fortresses. In 1683 Taiwan became a district of Fukien Province, a tiny segment of the great Empire of the Manchus.

161 177 The patterns of demographic and economic development that made modern Taiwan evolved in the two centuries of Manchu suzerainty. Population growth was appreciable as immigrants from the crowded provinces of Fukien and Kwantung re-enforced the natural increase of the earlier settlers. By the latter part of the nineteenth century, when Japan had awakened from Seclusion and was ascertaining the areas available for Empire, Taiwan was considered a prize worth acquiring. Three million Chinese peasants were occupied in the production of rice, sugar, camphor, oilcake and other tropical products. "Incidents" occurred, war ensued and the Treaty of Shimonoseki gave Taiwan to the Japanese in 1895.

ECONOMIC DEVELOPMENT

177 433 The economic development of Taiwan required the expansion of health and sanitary facilities that would permit the residence of Japanese and guarantee the expansion of a cheap and docile labor force to produce the agricultural surpluses that were the goal of conquest. The achievement of military and, ultimately, civilian control necessitated roads and transport facilities. These were built before products were available for movement to the coast and shipment to Japan. The cultivated area was expanded, great irrigation systems built, techniques improved, more efficient varieties of rice and sugar developed and fertilizers introduced. Numerous agricultural experiment stations insured the necessary research, while hundreds of Japanese men in the field supervised the productive process from the initial preparation of the soil to the final processing and marketing. The Chinese had

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,600 physicians were registered as engaged in private practice or public service. There were about 600 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per [illegible] in this 35-year period and virtually all 161 241 177

matrix could easily have reduced death rates to 12 or 15 per 1,000 total population and, if birth rates had remained at 45, shot the rate of natural increase from 2.5 per cent per year to 3.0 per cent or more. 165 563

THE BIRTH RATE

Neither the extension of cultivation, the increase of yields nor the health and medical activities in Taiwan produced any major changes in the familial patterns of the peasants. The recorded birth rate of the Chinese remained above 40. There were some slight evidences of a lower birth rate in the more prosperous and urbanized provinces, but the social and occupational groups that might have adopted the modern individual and familial values, rather than the traditional Eastern values, were few in numbers. 163

The growth implicit in the maintenance of fertility at the level that existed in Taiwan during the last decade of Empire was indeed rapid. The gross reproduction rate for the entire population was over 3.2 and the net rate over 2.0.

It is obvious that no population dependent on agriculture and inhabiting a limited and already densely settled area could reproduce indefinitely at the rate implicit in these figures. Potential growth was more rapid than the actual growth of the thirties, though, for any social and economic changes that would improve levels of living and contribute ultimately toward a reduction in fertility would produce immediate and more rapid declines in the death rate.

THE PROSPECTS: PREWAR JAPANESE VIEW

The balance between the people and the land in prewar Taiwan may have appeared precarious to the Western student but the Japanese foresaw many decades of further expansion before the Malthusian pressures of the people on the food supply would limit either population growth or exportable surpluses. Rice production had increased from 2.1 million koku in 1900 to 4.9 million in 1923 and 9.7 million in 1940. In the latter year the export surplus amounted to five million koku. By 1950 rice production would amount to 12.8 million koku and the quantity available for export to Japan Proper would increase by almost a million koku. 433 241 439

The Japanese also realized that Asian hegemony implied a destiny beyond the agrarian for the once subject peoples and that Japan's own demographic

433 241 439 resources would have to be supplemented by the integration of Taiwanese and Koreans into the industrial nexus of Empire.

THE CONTEMPORARY PROSPECTS

178 727 Today the plans of the Japanese for the further development of Taiwan are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

177 198 The political travesty of the Chinese liberation of the Chinese population of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

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CHAPTER II

"Economic Development" in Taiwan

648 RULING TAIWAN was a task that the Japanese approached with high
433 hopes. Because their goals were ambitious, the problems were more formidable than they might have been with a more modest and conventional colonial program. Their officials in Taiwan were the first overseas administrators in the Empire, and felt a responsibility to make the colony appear worth while at home.[1] Whatever their wider aims, their strongest aspirations for the island expressed themselves in energetic economic policies—policies pursued with such determination that they profoundly altered many aspects of Taiwan's economic life. In the course of their administration, Japanese nationals came to look upon enhanced production with a two-fold purpose: to secure profits for certain individuals and groups, and to promote the self-sufficiency and military strength of the Empire.

Here we shall examine the techniques of their economic program, survey its operation, and endeavor to make some appraisal of the accomplishments. A closer view of its significance for the everyday affairs of the population is reserved for the next chapters.

241 The situation that the Japanese first encountered in Taiwan was
433 one of long-established tradition, in which a small amount of innovation could go a long way. Agriculture was the main source of livelihood for practically all Taiwanese. The particular manner in which farming is organized in Taiwan tends, as it does in most of the Far East, to shield it from the intrusions of the modern world. Under the Manchu regime the Chinese inhabitants of Taiwan had developed farming along the familiar lines of their forebears on the China coast. Farms existed on a local village scale and were operated
[651] for local subsistence. Most of any exportable surplus of production was removed from the villages in the form of taxes or rent. What was
[427] left became absorbed in the costs of civil disturbance, misgovernment, and expansion of settlement, rather than going toward broadening commercial or other opportunities of the cultivators themselves.
433 Whatever may bring about such a situation, it is one that tends to

[1] Most of the later Japanese publications about Taiwan's future also stressed the island's potentialities as a base for southward expansion of the Empire. The grandeur of these proposals suggests that some of them may have been invented in search of favor for their authors more than in serious expectancy of being carried out.

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discourage innovation in agricultural technique, and to keep at low levels the output per person working in agriculture. An economy in this condition requires important modifications when "economic development" is desired. Farming must be made more productive, and radical progress is necessary in other pursuits. Barring some curtailment of consumption, such a change always implies expanding production faster than what is immediately consumed. 433

One of the keys to the Japanese colonial program in Taiwan, and to its demographic consequences, was how they set out to induce this saving. They chose the course of concentrating the additions to income from production in a few corporate business structures, instead of relying on the savings of individuals in Taiwan. Presumably this has been a goal in the management of most colonies, since indigenous sources have rarely been relied upon for large-scale investments. Its corollary—policies to suppress gains in individual native incomes—has been the chief source of hostility against colonial powers. But while most other nations have had only moderate luck in pursuing this objective, with the Japanese it was an outstanding success. 471 433 439

They took care that the formation of capital proceeded rapidly and from internal savings alone. Even in Japan, which in some respects is closely comparable, the whole pattern and purpose were different. While the Japanese were leading their own economy toward self-sufficiency in manufactured commodities, economic change in Taiwan was being contrived with a still surer hand to move in an opposite direction, toward complementarity with Japan. The output of the island was gradually shaped so as to furnish a net contribution of agricultural and semi-processed food and related commodities every year to Japan. These were items which Japanese felt to be essential for their more ambitious plans at home, and which for various reasons they wished to avoid purchasing outside Japan in ordinary world markets.

All the while, they mounted an impressive program of building up physical equipment in the island itself. Thus earnings were being reinvested on a large scale at the same time that they were also being drained off at a considerable pace by exports to Japan. This feat had to be accomplished in only one way—by raising the output of the island sharply while not greatly changing the levels of consumption for the population at large.[3] In this respect the Japanese managed

[3] The alternative—of gains by depressing popular consumption—should probably be ruled out. It cannot be conclusively demonstrated either that levels of living rose or

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471 the process of capital formation in Taiwan in basically the same way as at home, by prodding the economy at critical points with innova-
433 tions and developing special social policies to divert the gains from consumption to investment. The success of domestic saving in Tai-
439 wan is simply accentuated by the steady flow of commodity shipments to Japan, whereby Taiwan as an enterprise did more than pay its own way.

This success is best summed up in the yearly figures of trade with the outside world. From 1909 on, with the sole exception of 1913, there was an export balance every year in the value of Taiwan's external trade. Most of its entire trade was carried on with Japan—over 90 per cent after 1930 if Manchuria and Korea are included.[3] Related to the total value of exports, the balance amounted to a steady share of about 30 to 40 per cent of all exports to Japan, 25 to 30 per cent of all exports to the entire world, that were not paid for in the form of imports of commodities (see Table 4). It is not proper to infer from these figures that Taiwan occupied a "favorable" position, since apparently the balance was merely carried on the books of a few companies with home offices in Japan. This being the case, such figures probably even understate the amounts taken out.[4]

The Role of Government Policy

648 By implication, the foregoing account reveals that colonial rule
471 yielded quick and gratifying results in Taiwan. These were not

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that they fell for Taiwanese. It does seem certain that on the average they must have risen somewhat, but that they did not move very far one way or the other. Undoubtedly some Taiwanese who took part in the new developments became richer, and many who did not became poorer. Agricultural output per farmer definitely increased, as the next chapter will show. There are figures (see Ch'en Cheng-hsiang, 1950, p. 151) that suggest a slight falling off of rice consumption per person, but they must be computed in a way that weakens their reliability. However, the large additions to Taiwan's economy under the Japanese were the new productive facilities, fixed equipment and market organization, which it is the purpose of this chapter to document. There is no way of showing how these improvements were shared by the Taiwanese, though we know that the Japanese took steps to keep the major shares to themselves.

[3] It is fairer to consolidate the "Yen Bloc" as a whole in computing these balances. To some extent imports from Manchuria and Korea were used to offset the account with Japan; this combined account shows a smaller balance than the account with Japan alone in most years. Separate data for Manchuria were not available in preparing Table 4. Aside from their monetary value on a balance sheet, the articles imported from Manchuria and Korea had a special importance, for they consisted mainly of fertilizers that were indispensable to Taiwanese agriculture.

[4] Grajdanzev (1942), p. 157, claims that the export balance cannot be materially reduced by taking account of hidden items; many of these, such as cash remittances to Japan, would actually increase it.

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648 achieved through the efforts of private individuals in a free investment market. The Government-General of Taiwan was given a free
471 hand by Tokyo in most internal affairs, and displayed great interest and vigor in regulating all areas of business activity that it could effectively control. A large part in the formation of capital in Taiwan can be attributed to official steps deliberately adopted with this end in view.

471 On the one hand, these measures consisted of widespread rationalizations in agriculture and large investments providing technical
654 economies to individual farmers; on the other, there were various devices to centralize the heavy investments in large blocs and thereby keep control over the entire venture. The former consisted mainly of improvements that could be initiated and carried out by Japanese without full participation by Taiwanese, and the latter of ways to guide the process and garner the returns. The one served to raise the average productivity of working Taiwanese without depending on them for inception; the other to avoid dissipating the earnings of the colonial enterprise as higher incomes among the Taiwanese, by confining them in the charge of a few Japanese.[5]

Although the Japanese treated their domestic agriculture in much the same way, they made use of their own farmers' earnings in furthering the growth of industry. The fiscal role of rural Taiwan corresponded to that of rural Japan, but in Japan the several lines developed together and were complementary. Fewer opportunities of this nature were exploited in Taiwan, for the complementarities were all external. This is shown in the other side of the picture of trade with Japan—that of imports and their composition. More than half of the value of imports from Japan during later years represented items that were clearly for current consumption.[6] There was surely nothing like the emphasis on heavy capital goods among the remainder that is found in the imports of Japan itself.[7]

Problems of Pacification

471 This study is concerned as much with broader aspects of organiza-
433 tion in economic life as with the economic activities themselves. Thus

[5] One of the organizational devices for diverting this income away from consumption was, as in Japan, to make it flow into corporate rather than individual hands, where its disposition was more easily regulated.

[6] I.e., articles such as food, clothing, paper, beverages, textiles, manufactured consumer commodities, and the like. One suspects that a large part of these went to maintain the comforts of the Japanese living in Taiwan.

[7] For example, see Reubens, Edwin P. (1950), pp. 109-112.

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it is pertinent to examine the stages by which the Japanese spread 471
their influence over business affairs. Before the Japanese occupation, 433
Taiwan was a busy farm area producing chiefly rice and other foodstuffs for itself and neighboring countries. It still held virgin lands that yielded well to the cultivation of Chinese farmers, and was known among Mainland Chinese as one of the few places where fortunes could be made or lost quickly. It was known elsewhere for other features not unrelated to these—foreigners established some renown for the island's production of marketable crops like tea and camphor, as well as for its beautiful scenery and adventure. Some early Taiwanese had always enjoyed years of prosperity, subject to the vicissitudes of weather,[8] warfare among powerful families or with the aborigines, and to the unpredictable greed of officials.

Although agriculture was the mainstay of livelihood, there were the subsidiary pursuits commonly found from place to place in China. Additional opportunities arose in connection with commerce, which was the most flourishing sphere of enterprise. The export trade in the few products shipped abroad was the only spot affected by foreign influence. A small number of Western traders had stayed in Taiwan, arranging for the sale and delivery of the island's produce to the outside world, but the scope of their business operations was limited to buying and shipping. Even tea-growing, which an Englishman had begun, was left entirely to the local population and Chinese middlemen, up to the stage of packing and sending the tea abroad.

The settled portion of the island, often down to the actual appearance of its villages, was a close replica of conditions on the mainland of South China, 100 miles away. The Manchu government adopted policies calculated to restrict rather than encourage any growth or diversification of economic activities. It abhorred the prospect of having the profits of any sponsored enterprise go to foreign merchants, and suffered an incapacity for such sponsorship inherent in its organization.[9] Observers of the period saw little likelihood of change.

Hence Taiwan when the Japanese acquired it was already a gran- 471
ary ready to function as a going concern, but with some impediments 433
to being operated as such. In contrast to both China and Japan, it 648

[8] These hazards were many and frequent. Lack of systematic attention to irrigation had placed farmers at the mercy of floods, local droughts and destructive hurricanes, and severe earthquakes were common.

[9] This aspect of early political and business affairs in Taiwan is described at great length in Davidson, James W. (1903), Chs. 14, 15, and 17.

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471 was a newly settled land whose surface still showed little strain of intensive clearing and cultivation, and whose manifest possibilities 433 for wider exploitation in agriculture and other lines had scarcely 648 been tapped. Merely imposing public order and effective political administration could hardly have failed to ensure general prosperity, and the Occidental community at the time contemplated the experiment with great interest.

The new authorities did not leave much room for doubt about their intentions for the economy. Even while engaged in some dissension and maneuver for power between their own civil and military officers, they quickly set about constructing railroads as a state enterprise, reinstituting an official monopoly of camphor (amounting to a world monopoly since Taiwan with Japan was the sole important world producer), nurturing one large company for practical research and experiment in sugar production, reviving the former domestic monopoly of salt, and executing a complete and accurate land survey—Taiwan's first—in order to regulate some of the discordant relations of tenancy among farmers and landlords.

Most of the administrative changes were based on a notorious need for reform of pre-existing practices. But all of these reforms were two-edged. Besides regularizing commercial practices and "correcting abuses," the official monopolies and export associations slowly made it impossible for foreign concerns to remain in operation. The revenues from key lines of business soon became centralized in either the Government-General or corporations explicitly controlled by it. Those relations began to appear between state and business that determined the future course of the fields involved. The land survey [651] furnished a basis for levying a stiff land tax which brought forth a gratifying and dependable flow of revenue into the public treasury and helped to finance later development schemes.

648 If the overall design of economic expansion had been fixed in the minds of influential Japanese even before they took possession of Taiwan, and to some extent this seems likely, its timetable was not. They did not foresee, for example, that almost ten years of costly and arduous military campaign would be needed to subdue the aborigines and thousands of Taiwanese in the lowlands and foothills who had reverted to banditry. And it became apparent only after many Japanese lives had been forfeited to sickness that this "pacification" of the island had to be accompanied by full-fledged warfare against disease and a general sanitation program, in order that enough

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"ECONOMIC DEVELOPMENT" IN TAIWAN

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The most efficient view of total changes in the island's economy is by reference to its statistics of trade. As indicated above (Table 4) 1 Japan succeeded in securing practically all of Taiwan's external trade to itself, if exports to Korea are counted. During the 1930's even traffic with China, just across the Straits, was almost eliminated.

Compared with a wide range of other Far Eastern countries, Taiwan under the Japanese came to hold a surprisingly high rank in the value of trade per person. At its peak shortly before 1940, the total per capita value of its trade was well above even that of Japan (see Table 5). Since this rank was attained under peculiar conditions,

TABLE 5
ESTIMATED PER CAPITA VALUE OF FOREIGN TRADE OF FAR EASTERN COUNTRIES CIRCA 1939*
(Expressed in U.S. Dollar Equivalents)

Country	*Year*	*Imports*	*Exports*	*Total*
New Zealand	1939	109	127	236
British Malaya	1939	61	72	133
Australia	1938–39	67	64	131
TAIWAN	1937	16	23	39
Korea	1939	15	11	26
Japan Proper	1939	10	13	23
Philippine Islands	1939	8	10	18
Burma	1938–39	5	12	17
Netherlands East Indies	1939	4	6	10
Thailand	1938–39	4	5	9
French Indo-China	1937	3	4	7
China	1939	0.85	0.25	1

* As reproduced in OPNAV, Civil Affairs Handbook. *Taiwan—Economic Supplement* (1944), p. 73.
Source: Far Eastern Unit, Bureau of Foreign and Domestic Commerce, U.S. Department of Commerce.

however, it does not mark Taiwan as an especially "advanced" area (in the sense of supporting bountiful levels of living) except by reference to the Japanese residents in the island.

Taiwan's position in trade with the outside world was created by 241 heavy and increasing exports of a few products, mainly crops sent 433 abroad in only slightly processed state. Compared with what took place in Taiwan's business and financial communities, there was remarkably little shift in the composition of its agricultural output

1 [p. 21 - Analyst]

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(see Fig. 4). Together sugar and rice never lost their dominant position in the value of all crops produced. Despite some greater emphasis on finished sugar as a source of alcohol, the cane harvests gained very little in value over rice, even when the expansion of manufactures after 1935 would seem to have made this likely. In these terms sweet potatoes, which were always prominent in the Taiwanese diet, kept nearly a constant share of the total.

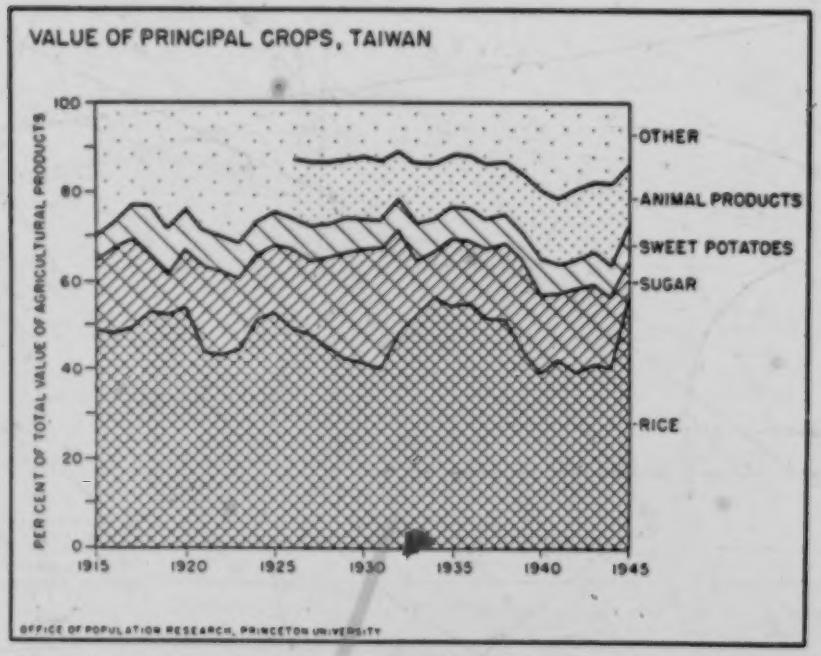

Fig. 4. Composition of the Gross Value of Total Agricultural Production, Principal Crops of Taiwan, 1915-1945.

Japanese promoted certain specialty crops, such as bananas and pineapples. These never occupied a large share in the total output of agriculture, but they more than kept pace with trends in the major crops (accounting for some of the change in the proportion of "other" products in Fig. 4). Together with tea, these crops made use of land not suitable for rice or sugar, and became important supplements to the total agricultural output. The Japanese encouraged such products by providing assured markets and technical supervision in their cultivation, and built canneries to process pineapples for export.

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"ECONOMIC DEVELOPMENT" IN TAIWAN

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The various staple and other crops that made up the bulk of Taiwan's agriculture eventually became distributed in a stable spatial pattern over the island. Sugar predominated over a large area in the Southwest, where it displaced rice in most of the land within the major public irrigation system. Tea in the North, and other specialty crops in the center, occupied some of the inland and foothill sections.[20] But it is important to note that rice culture, particularly in small paddy fields, overlapped with all other crops that were raised on the broad plain of Taiwan, and the labor-intensive and traditional farming practices associated with it have continued to be spread throughout Taiwanese agriculture down to the present.[21]

The exports of staple crops would not have risen as they did unless the yields of crops did the same. Gains in rice yields from the land did not come at once. They followed almost 20 years of painstaking experiment, starting in 1906, to find a strain of seed that could thrive under conditions in Taiwan. Almost no improvement was made until the so-called *horai* variety was successfully adapted from Japan. Following its introduction the average yields per hectare for all varieties gradually rose as much as one-fourth, primarily by growth of the area devoted to *horai* rice and the special techniques used in its cultivation. Neither the *horai* nor the native strains were greatly improved in yield thereafter; in fact, it appears that *horai* declined slightly from its high performance at the start as it spread to land less favorable than the experimental farms where it was first grown (see Table 6).

Systematic irrigation was one of the measures that raised the yields of land. Between 1930 and 1936 a few projects were carried out, by the government and by private companies, to introduce controlled amounts of water into lands that previously had been cultivated as dry fields. To illustrate approximately the trend of these events, Fig. 5 shows the changes in the area of land in paddy cultivation and that in dry fields. (Paddy land does not correspond exactly with the land that is irrigated on a large scale, for there were many paddy fields not included in these projects.) Since the total area cultivated was increased over these years, it is possible that the irrigation projects brought some land into cultivation that was formerly idle. More, however, was merely converted from dry to wet cultivation (see Fig. 5).

[20] See Ch'en Cheng-hsiang, *Atlas* (1950), Fig. 16c.
[21] *Ibid.*, Fig. 70.

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TABLE 6

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IMPROVEMENT IN THE YIELDS OF RICE IN TAIWAN, 1916 TO 1945
Average Yields of Different Strains in Each Year,
First and Second Crops Combined
(Hectoliters of Rice per Hectare)*

Years	*All Rice*	*Horai Rice*	*Other Strains*	*Per Cent of Rice Land Devoted to Horai*
1916-20	17.8	—	20.1	—
1921-25	19.3	28.5	19.3	4.6
1926-30	20.9	22.7	20.4	19.9
1931-35	23.0	27.2	21.3	33.7
1936-40	25.5	28.2	23.2	47.3
1941-45	21.6	22.7	19.7	59.8

* Crop statistics in Taiwan were not kept in metric units. Figures in the *Statistical Summary of Taiwan* were all converted before publication.
Source: *Statistical Summary*, Table 203.

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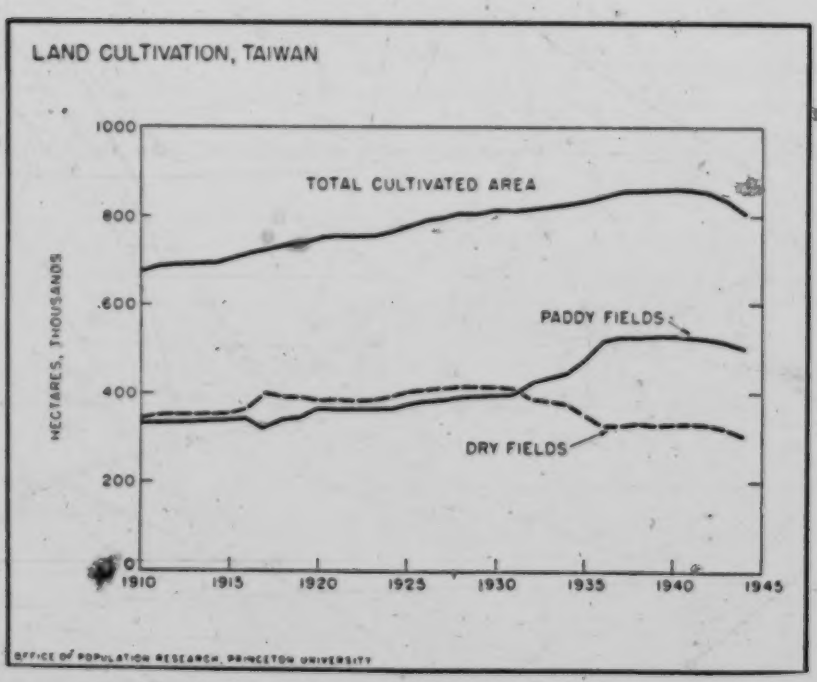

Fig. 5. Area of Cultivated Land, Taiwan, 1910-1944.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

Land that was improved in this manner not only yielded more at each harvest: over a third of the paddy land yielded more than one harvest each year. Under schemes for rotation and inter-cropping devised by the Japanese, it was not unusual to take three separate harvests from many of these fields in a year. 241 433

The labor of preparing the land, of weeding, and of harvesting was not saved by these changes. They may have involved some net additions—irrigation became a more complicated process in some cases, and the aqueducts for transporting the water required special maintenance. Japanese were aware that the soil could not be farmed more intensively without losing some of its fertility, and encouraged the use of commercial fertilizers, much of which they required to be prepared on the island. The remainder comprised the largest single category of Taiwan's capital imports, greater in value than the iron and steel and machinery which are sometimes identified with the needs of agrarian countries. Importing fertilizers for sale in Taiwan proved to be a profitable line of business; it was reported to be firmly in the hands of a few large Japanese concerns, a fact which should occasion no surprise. It was shortage of fertilizers that brought on declines in average yields of crops after 1940 (see Table 6, above). [427] [471]

The shift in official plans for Taiwan after 1930 leads one to look for some indication of results in the composition of Taiwan's products. The search is not very rewarding. In terms of gross value of product, agriculture did not lose its place as the foremost line of production until 1940 and later. Then it exchanged ranks with "Industry"—because farm produce fell off momentarily rather than because of any sharp rise in manufacturing (see Table 7).[32] The steady but slow decline in the share of agricultural production in earlier years had indicated a tendency to submit more of the agricultural produce to processing before it left the island, and not a shift from farming to manufacturing. 433

It is when the category of "industrial" production is examined in detail that some of the more recent trends emerge. In Table 8, evidently industry in Taiwan had always been centered around food products. Until the mid-'thirties these had amounted to three-quarters of the value of all manufactures. Only from then on did the effects of new economic goals begin to appear. The largest advances were made in some of the fields that had been smallest, espe-

[32] The sharp rise in the numbers of Table 7 was largely a matter of currency inflation.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

"ECONOMIC DEVELOPMENT" IN TAIWAN

TABLE 7

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GROSS RECORDED VALUE OF ALL PRINCIPAL TYPES OF PRODUCTION, 1915-1942

(Yearly Average for Each Period)

Years	Total	Agriculture	Mining	Fishing and Forestry	Industry
A. Millions of Yen:					
1915-19	262.7	144.5	7.2	9.1	101.9
1920-24	411.5	207.0	12.0	23.0	169.5
1925-29	559.0	293.6	16.8	31.8	216.8
1930-34	525.5	255.8	15.5	26.5	227.7
1935-39	901.0	432.9	39.6	41.5	387.0
1940-42	1388.4	576.4	62.8	91.8	657.4
B. Percentages of Total:					
1915-19	100.0	55.0	2.8	3.4	38.8
1920-24	100.0	50.3	2.9	5.6	41.2
1925-29	100.0	52.5	3.0	5.7	38.8
1930-34	100.0	48.7	3.0	5.0	43.3
1935-39	100.0	48.0	4.4	4.6	43.0
1940-42	100.0	41.5	4.5	6.6	47.4

Source: *Statistical Summary*, Tables 225-229.

TABLE 8

GROSS VALUE OF PRODUCTION RECORDED FOR "INDUSTRY" IN TAIWAN, BY LINE OF PRODUCT, 1921-1942

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(Yearly Average for Each Period)

Years	Total	Textiles	Metal Products	Machinery & Equip.	Misc.*	Chemical Products	Food Products
A. Millions of Yen:							
1921-24	165	3	3	4	20	13	122
1925-29	217	3	4	5	32	20	153
1930-34	228	3	6	5	29	18	167
1935-39	387	6	17	12	45	38	269
1940-42	664	11	46	30	91	80	406
B. Percentages of Total:							
1921-24	100.0	1.7	1.9	2.1	11.9	7.9	74.6
1925-29	100.0	1.5	2.0	2.2	14.7	9.3	70.3
1930-34	100.0	1.1	2.5	2.3	12.9	7.8	73.3
1935-39	100.0	1.5	4.5	3.1	11.6	9.9	69.4
1940-42	100.0	1.7	7.0	4.5	13.7	12.1	61.0

* Includes Printing, Wood Products, Ceramics, and Other.
Source: *Statistical Summary*, Table 269 and Table 270.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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cially in chemical and metal manufacturing; their expansion did not have an appreciable effect in the production of all the island.

In other words, in spite of its expansion, industrial production had only begun to make headway in relation to agricultural output. Before 1940, manufactured commodities were still subordinate to Taiwan's farm products (and did not amount to much beyond processed sugar). Afterwards the Japanese did not have enough time to marshal the island's resources effectively in industry. We know this was not because they failed to make an effort—it was because they started too late.

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Certain types of heavy investment had received their close attention ever since earlier years. Railway construction, for example, was pushed forward with enthusiasm from the very first. The time schedule of progress in expanding the public railroads was far ahead of their actual utilization (see Fig. 6). This was an investment which

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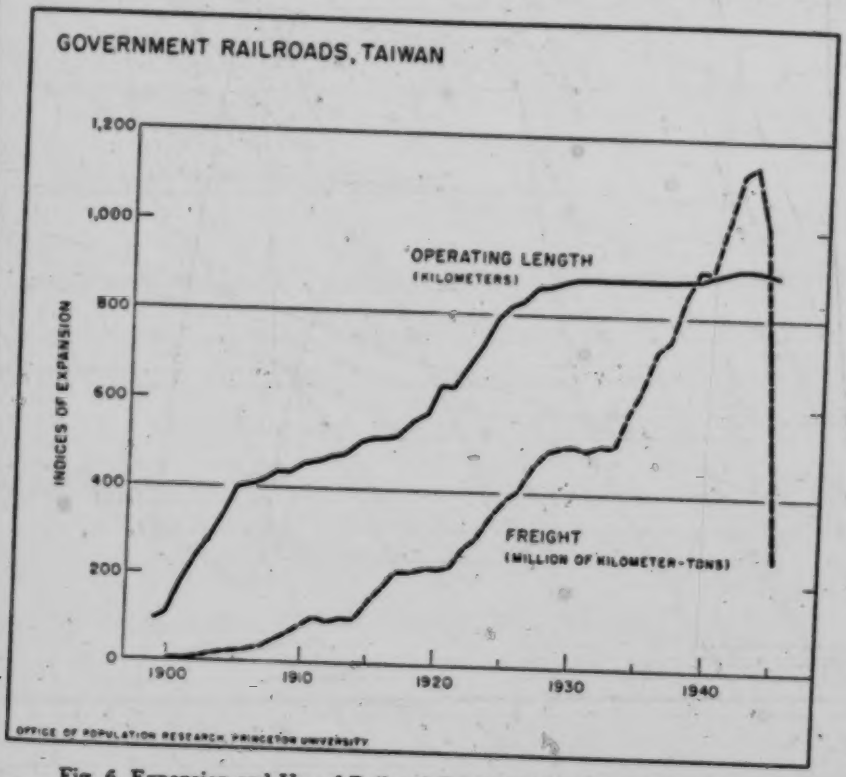

Fig. 6. Expansion and Use of Railroad Facilities in Taiwan, 1900-1945.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

supply of unoccupied land in Taiwan that could be drawn into cultivation, and so the needs of an expanding farming population and growing export demand had to be met by other means. The Japanese turned again to large investment to improve the effectiveness of the land that there was. The manner of constructing and upkeep of irrigation canals in Taiwan depended on mass labor. They were turned into an investment of labor, employed so as to produce an important form of capital equipment. The extent of irrigation more than kept pace with rural population growth while the Japanese were in control. Water for this purpose became indispensable in maintaining the output of farms. It was a hidden element in the improvement of rice and sugar yields, for the new varieties of seed that were developed were types that needed to be carefully irrigated.

Finally, the development of electric power was so closely related to the growth of Taiwan's newer industries that it should not be passed over without mention. Generation of electricity was one of the specialized heavy investments that formed the nucleus of the "industrial" progress after 1930. This is evident in a circumstantial way from the trends of capacity in generating power and the spread of factory employment (see Fig. 8). Factories in Taiwan came to depend on the cheap electricity that was developed at state instigation from water power. Judged from the size of their employment, the most important of the mechanized factories in the island were "food" (i.e., sugar) and metallurgical plants, which were the heaviest users of electricity.

As the next chapter will indicate, the Japanese broadened their objectives in Taiwan too late to put its human resources to best use in the new effort. Drawing the developed wealth of the island together into centralized control had turned out to be singularly advantageous. It had erected an entire structure of corporate organization from specialized financial services down to the coordinating of actual physical production of commodities. The Government-General had retained a close supervision over this structure, by licensing, regulation, and participation as a shareholder. As a program it quickly marshalled the production of Taiwan's farms into a profitable colonial enterprise.

When it came to pressing this development further, however, the Japanese made no real progress, for they had frustrated these aims in advance. Under agrarian conditions, industrial skills and experience in management are slower and more difficult to accumulate

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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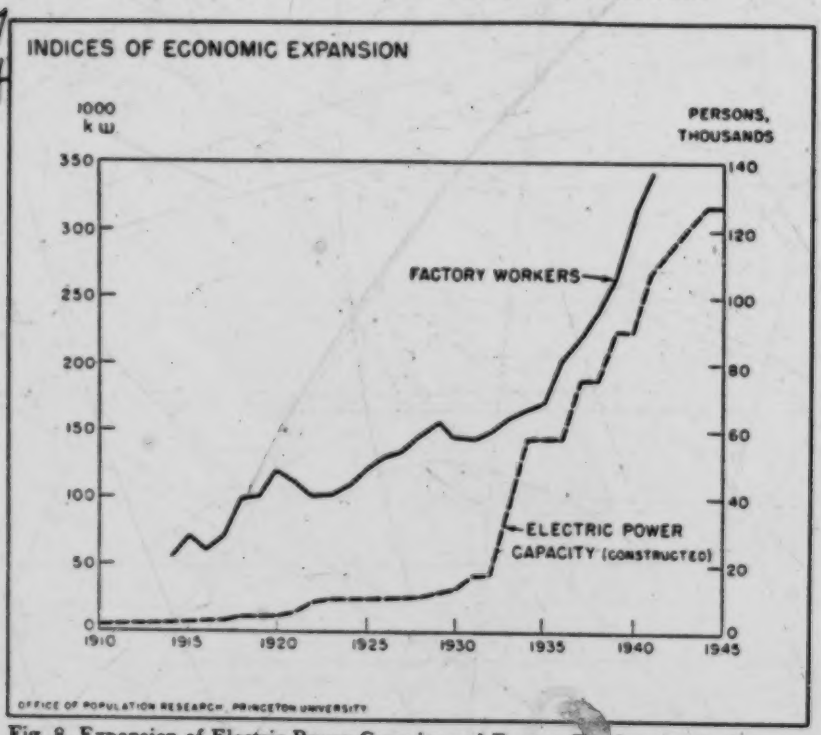

Fig. 8. Expansion of Electric Power Capacity and Factory Employment in Taiwan, 1910-1945.

471 than material forms of capital. Japanese in the past had never cul-
433 tivated an adequate fund of these among the Taiwanese. The same mechanisms which had served so well in channeling a large part of the total product each year toward desired uses had suppressed any opportunities for industrial employment that might attract Taiwanese who had administrative skills. What the Japanese themselves referred to as the "industrialization of Taiwan" was nothing but a corporate superstructure placed on an agrarian base. This was not capable of diffusing an industrial culture thoroughly among the general population, because it had been devised to prevent this very thing.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

241 year.[16] Double cropping fields not only uses land more intensively, but does the same for labor by spreading the intervals of greatest effort over a longer part of the year[17] (see Table 10).

TABLE 10

LABOR REQUIREMENTS FOR RICE CULTIVATION IN TAIWAN

Average Man-Hours Worked for One *Chia* of Rice*

Type of Work	*First Crop*		*Second Crop*	
	Man	*Man with Animal*	*Man*	*Man with Animal*
Seed Bed	6.3	0.8	1.9	1.4
Preparing Land	22.6	18.1	15.1	11.9
Transplanting	11.1	0.1	10.1	0.1
Fertilizing	7.1	0.9	4.0	0.1
Weeding	29.6	0.4	23.9	0.2
Irrigating	9.6	0.0	6.8	0.0
Pest & Disease Control	1.0	0.0	1.6	0.0
Making Windbreaks	0.1	0.0	1.8	0.0
Harvesting & Threshing	25.9	0.2	27.5	0.5
Total	113.2	20.5	92.7	13.1†

* Women's time was counted as 60-70 per cent of that of men, children's as 30 per cent. Figures represent averages from 36 farms, having a mean size of 1.6 *chia*. (1 *chia* = .96992 hectare) Table has no date.

† Published total does not check with sum of column.

Source: Mendiola, N. B. (1949), p. 72.

• 433 The data drawn upon thus far give no indication as to whether harder work and better techniques meant higher yields to farmers 241 as well as to land. Fig. 9 helps in a rough way to settle the question. The number of farmers increased relatively more than the land area devoted to farms. It follows that the average gains in crop yields per person fell short of the gains in the yield of land. Fig. 9 also shows crudely the trends in the productivity of farmers, taking into account the major crops of Taiwan. They were unmistakably upward until

[16] If small-scale household farms are subject to two or three peak periods of work each year, shortages of labor tend to appear seasonally. When the seasons coincide for all or many farms, the shortages become general and cannot be met by hiring workers, since other available manpower is also in great demand. To maintain a household large enough to cope satisfactorily with this problem, the goal cherished by most peasant families is usually to bear the burden of supporting members who may not be fully occupied for the rest of the year.

[17] The net effect of double-cropping may even be to *increase* the amount of labor that goes into a given amount of output. However, some of the steps required to produce two crops where only one had been grown before are labor saving, i.e., involve the use of capital. The question of precise trends is too complicated to deal with here in these terms.

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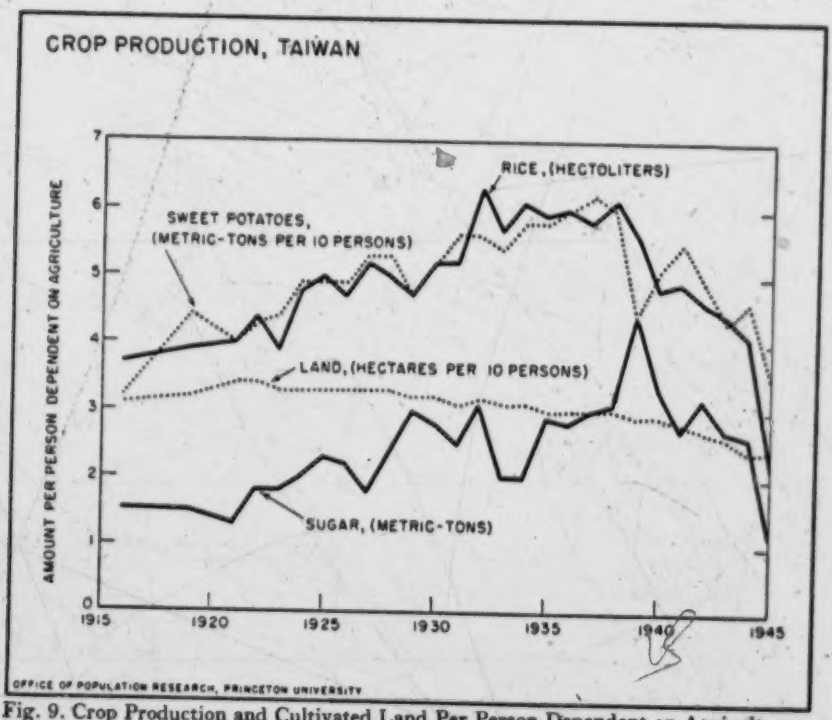

Fig. 9. Crop Production and Cultivated Land Per Person Dependent on Agriculture, Taiwan, 1916-1945.

the time of the war. But, considering the steady rise in the population dependent on agriculture, it is clear that the increased effectiveness of land use (discussed in Chapter II) did not owe so much to their colonial program as the Japanese themselves liked to believe. In part, it was merely a matter of more people working on the land.

Fig. 9 is based only on rice, sugar and sweet potatoes, and makes no allowance for the spread of some other crops during the late 1930's. In actual volume of crops produced, the product per person in agriculture therefore must have risen slightly more than the data imply. Diversification of this sort was of small benefit to most Taiwanese. Specialty crops like bananas and pineapples held a significance for the economy as a whole (they were export crops) greater than for individual farmers. Pineapples, for example, were grown entirely in plantations, and not by peasants as supplemental crops.

Trends in rice and sugar output were the trends for the rural economy as a whole; sweet potatoes are worthy of note because they

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

433 241 have always supplied a large part of the Taiwanese diet. How well these three basic crops represent the whole of Taiwanese agriculture may be seen from their share in the total recorded value of farm produce (see Fig. 4).[18]

241 621 The spatial arrangement of crops discussed in the previous chapter has an important bearing on the question of persistence in organization of agriculture. Rice fields were found throughout the flat lowland area, overlapping in every civil division with the other types of farming. In its import for the nature of the rural society, this fact overshadows most effects of diversification and rationalization of farming. The types of social system that can give rise to paddy cultivation of rice seem to be uncommonly well equipped to resist change. They are centered around settled family relationships that provide for uninterrupted use of suitable fields over many generations. This is the case throughout most of the paddy-rice areas of Asia, where these conditions resemble what is to be found in Taiwan.[19] Hence, from this stability within farming itself, one should not expect to find that its social setting was greatly different as a result of Japanese occupation.

Changes in Pattern of Employment

463 Farming is so important to Taiwan that it has first been treated separately, with very little reference to its place among other activities. By viewing it in relation to the pursuits of the entire working population, we can take into account the nature of alternative opportunities outside of agriculture.

There would not be much point in looking for possibilities of non-agricultural employment if the economy could not have supported a larger proportion of people in other activities. This is where many agrarian countries have felt the effect of poverty to stand in the way of their industrial progress. From the start of its modern era, Taiwan's peculiar status as a food exporter suggests that food supply was no barrier. Since that time, special diligence in the matter made land and human effort more effective in producing crops. Advancing both of these aspects of productivity implied that at least some movement of people to pursuits outside of agriculture was economically feasible.

[18] These trends, of course, indicate nothing about "well-being" of farmers, since large capital charges (for irrigation, fertilizer, and government administration) were being made against farm incomes.

[19] See Taeuber, Irene B. (1947), pp. 21-43.

36: Rowe S-4 (no date) 1955 AF1 China AF1
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C F 423 427

tenants there has been a rent reform program, which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

C F 241 654

By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

C F 652

Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

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Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use.

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak.

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1952), cement (389,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures.

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 630,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–52, the world market price began to rise, and sugar production is gradually returning to its previous high levels.

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries.

A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government.

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertilizer and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertilizer increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyze the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1943. p. 201.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

rates of birth and death were more and more equalized. The difference between the highest and the lowest birth rate among different localities was 13.4 per 1,000 in 1906, but had fallen to 8.5 per 1,000 in 1935; the difference between the highest and the lowest death rate among different localities was 32.6 per 1,000 in 1906, but it was only 8.9 per 1,000 in 1935 (see Table 4, cf. 1: p. 169).

Table 4: The Highest and the Lowest Birth Rate, the Highest and the Lowest Death Rate of Different Prefectures of Taiwan in Selected Years (Rate: per 1,000 population)

		1906		1935				1906		1935	
Birth Rate		Whole Province	39.3	Whole Province	45.2	Death Rate		Whole Province	34.0	Whole Province	20.5
	The Highest	Nanto Prefecture	47.7	Tainan Prefecture	48.1		The Higheat	Chiai Prefecture	52.9	Taitung Prefecture	24.4
	The Lowest	Yansuika Prefecture	34.3	Taipei Prefecture	39.6		The Lowest	Hsinchu Prefecture	20.3	Penghu Prefecture	15.5
	Differece		13.4		8.5		Difference		32.6		8.9

Source: 10:1906, 1935.

13. *Agriculture and Industry*

To get primary agricultural products and processed agricultural products, especially rice and sugar, which Japan needed urgently, was one of the main policies of Japan in Taiwan. The colonial government had spent much of time and money for the promotion of the production of rice and sugar. They made various kinds of surveys, researches, and experiments, used the system of police and pao-chia for enforcement, and as a result, the outputs of rice and sugar had increased tremendously.

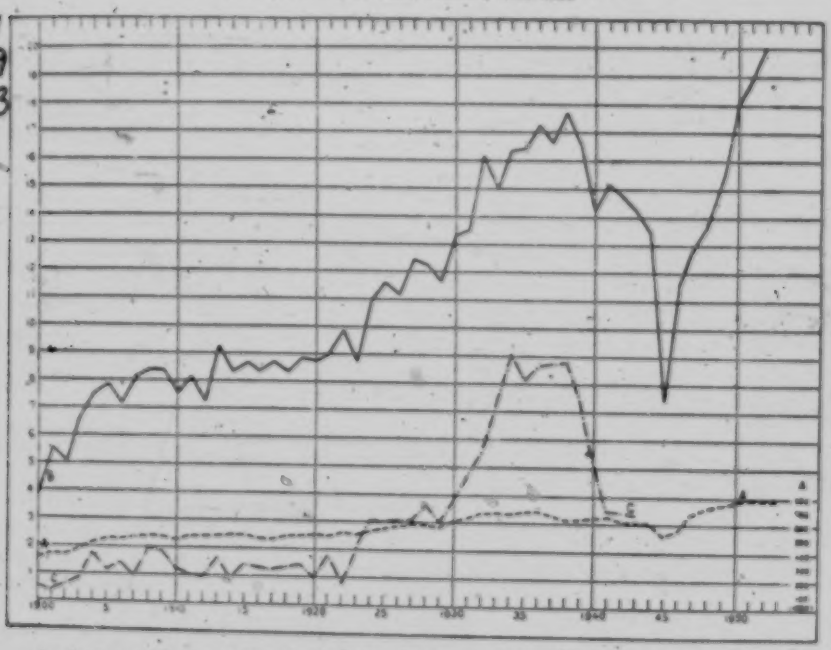
Among the various types of production in Taiwan, agriculture and manufacturing were the two main types, and the proportion occupied by forestry, fishery, and mining was rather small. In 1912, the value of the total output of all types of production amounted to 146,374 thousand yen. Among these, the proportion of agriculture was 63%, manufacturing was 32%, and the total of three other types (forestry, fishery, and mining) was only 5%. By 1942, manufacturing had developed fairly well, its production value had exceeded that of agriculture. The value of the total output of all types of production in 1942 was 1,515,627 thousand yen. Agriculture's share of this was 42%, manufacturing was 46%, and the total of three other types was 12%. Agriculture and manufacturing, the two main types of production, were again represented by rice and sugar respectively. The proportion of the value of rice to the total value of agricultural products was 59% in 1912, and 39% in 1942. The proportion of the value of sugar to the total value of manufactured products was 79% in 1912 and 42% in 1942. Considering these facts, it seems not unproper to take rice and sugar as representative of Taiwan production.

From figure 6 we can see, that in comparision with the increase of acreage of cultivation (line A), the increase in the output of rice (line B) was tremendously high.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Productivity was raised by improvements in various aspects. The rapid increase in the output of rice from the 1920's was the result of the adoption of a new strain (Ponlai rice). By the 1930's, the production of rice in Taiwan was so large as to be twice its local demand, and the surplus rice was exported to Japan. Though the price of Taiwan rice was controlled by the Japanese government and the profit of trade in rice was mainly monopolized by big Japanese traders, the increase of production did have some benefits for Taiwanese, and no doubt, this contributed to the lowering of the death rate after 1920.

Fig. 6 Acreage of Cultivation, Amount of Production and Exportation of Rice, Taiwan, 1900-1953



A: Acreage of Cultivation (unit: 1,000 ha) B: Amount of Production (unit: 1,000,000 hectoliter)
C: Amount of Net Export (unit: 1,000,000 hectoliter)
Source, 1900-1948, from the Rice of Taiwan, 1949, Taipei.
1949-1952, from Taiwan Agricultural Yearbook, 1952, Taipei.

The condition of sugar was a little different from that of rice. The profit in sugar manufacturing was exclusively monopolized by the Japanese enterprisers. But it is undeniable that, in respect to the improvement of agricultural techniques and the raising of productivity, substantial effects were obtained.

As pointed out by W. S. Thompson, "underfeeding weakens the individual and renders him less resistant to disease, whether it be of the degenerative or of the germ

48: Chen E-4 (no date) 1955 ADl Formosa ADl

type. When we find death rates regularly mounting to 30 or 40 per 1,000 we may be reasonably certain that undernourishment is one of the factors at work" (15: p. 50). Another author has remarked: "a survey based upon prewar conditions showed that half of the population of the world was then subsisting on an average daily consumption of less than 2,250 calories per capita, and that among these peoples the crude death rate averaged 30 or more per 1,000 population around 1930. On the other hand, only one fifth of the world's population was favored with an average daily per capita intake of 2,875 or more calories, and the countries containing these peoples had an average crude death rate as low as 12 per 1,000 around 1930" (28: pp. 62–64). From this data it is safe to conclude with W. S. Thompson that, "increased productivity is and always has been the absolute prerequisite for any substantial lowering of the death rate" (16: p. 70). In the period of 41 years between 1902 and 1942 the total population of Taiwan increased about 1.2 times, but the production of rice increased 1.9 times and sugar increased 19 times (Table 5). The increase of production far out ran the increase of population. No doubt, this was the basis for the decline of the death rate and the growth of population.

Table 5: The Increase in Production of Rice and Sugar and the Increase of Population in Taiwan in Selected Years, Actual Number and Index

	Output		Population	Index					
	Rice (1,000 Hectoliter)	Sugar (Metric Ton)	(1,000)	Rice		Sugar		Population	
1902	5,090	54,522	2,907	100.0		100.0		100.0	
1906	7,158	76,433	3,081	140.7	100.0	140.2	100.0	106.0	100.0
1912	7,300	175,587	3,354	143.4	102.0	322.1	229.7	115.4	108.9
1922	9,822	352,655	3,822	193.0	137.2	646.8	461.4	131.5	124.1
1932	16,144	989,050	4,843	317.2	225.5	1,814.0	1,294.0	166.6	157.2
1942	14,789	1,101,752	6,330	290.6	206.6	2,020.8	1,441.5	217.8	205.5

Source: Rice, 14: Table 303; Sugar, Taiwan Sugar Statistics; Population, 1902, 13; 1906–1942, 14: Table 64.

Besides the increase in productivity, all kinds of public works and establishments have a significant effect on the stability of life and the lowering of the death rate. Though we cannot stop drought, flood, or other calamities, we can mitigate the damage of these calamities by forestation and the regulation of water courses. Even the ill effects already suffered can be much lowered by public assistance and other systems of social work. The influenza of 1918–19 took over half a million lives in the U.S. and 15 million lives in India. The population of the U.S. at that time was around 100 million, so the death rate from influenza was about 5 per 1,000. The population of India at the same time was around 300 million, so the death rate of influenza was about 50 per 1,000 (17: p. 226; 15: p. 219). Why was the number of victims of influenza 10 times higher in India than in the U.S.? No doubt, the differences in the degree of

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD1

427 acres) as a measuring stick for rental calculation. It varies with the fertility of land in different sections of Taiwan. To prepare the farmers for the acceptance of the program, 9,937 persons were sent to the rural areas in 1949 to acquaint them with the operational details. They were followed by 1,257 trained persons who helped farmers to readjust their rental contracts. By November 1949, 306,473 families were given "37.5-contracts" in conformity with the program. Finally, 26 provincial inspectors toured the island to check the results. 434 The income of the tenant farmers was estimated to have registered an average gain of 30 per cent, ranging from 0.9 per cent to as high as 70 per cent in comparison with the pre-reform period.[31]

653 Pertinent to rural rehabilitation are the public works being done in dike repair and construction, irrigation, and land reclamation. Briefly, from 1947 to 1950, some 10,983 meters of new dikes were built, in addition to 65,288 meters repaired. Since 1946 a yearly average of 9,072 hectares of land has been brought under irrigation, in comparison to an average of 9,428 hectares under the Japanese.[32]

433 A review of statistics also shows varying degrees of gains in agricultural production.[33] For instance, for 1950 the

NT$1,432,000,000 (*Taiwan Today*, cited note 11 *supra*, pp. 59–61).

[31] For statistical data on the rent reduction program, see Land Bureau, Taiwan Provincial Government, *37.5 Rent Reduction Program** (Taipeh, 1949), pp. 1, 19, 34; *Taiwan Today*, cited note 11 *supra*, p. 90; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, p. 383; Vol. 1, p. 25.

[32] *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 227–28, also for comprehensive data, pp. 227–43. For a general descriptive and statistical presentation of the subject, see Taiwan Provincial Government, *Water Conservancy and Irrigation**, Taipeh, 1949; also *Reclamation of Waste-land**, Taipeh, 1949.

[33] For detailed statistical data on agricultural production, see Taiwan Provincial Gov-

[P. 218 (B)]

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD1

433 figure for rice acreage registers an increase of 156 per cent over 1945, while the rice yield shows an increase of 221 per cent. There are also gains in sweet potatoes, wheat, sugar cane, tea, fruits, and other agricultural produce. Among the factors contributing to this growth are the fertilizer assistance program under ECA, incentive generated by the rent reduction program, irrigation and reclamation projects, and rural co-operative projects, health work, and improved-seed distribution sponsored by the Chinese-American Joint Committee of Rural Rehabilitation.[34]

Industry

439 The Nationalist policies toward industry may be reflected by a general description of the industrial situation in Taiwan. Prior to 1945, the island was tied to Japanese over-all economy. Its agrcultural productivity, for instance, was dependent on fertilizer imports from Japan. Other products, such as camphor and certain metal-bearing ores, were shipped to Japan for further processing. In recent years there has been a trend toward integration of industries.
387 The production of fertilizer, for example, has been stepped up from a 1945 low of 400 metric tons to an estimated 92,000 tons in 1951.[35] This is against an estimated 1951 demand of 340,000 metric tons in rice and sugar-cane fields
000 alone.[36] Since March 1948, a refining

ernment, *Report on Food Production** (Taipeh, 1949), pp. 33–41; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, pp. 383–402; *Taiwan Today*, cited note 11 *supra*, pp. 77–98.

[34] Raymond T. Moyer, "Economic Administration Program in Taiwan," address before the Chinese Association for the United Nations, March 17, 1951.

[35] *Taiwan Today*, cited note 11 *supra*, p. 108; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, p. 481 (1950 production was estimated to be 55,000 metric tons).

[36] *Taiwan Today*, p. 107; also cf. *Taiwan*

[P.219(A)]

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD1

625 wine, tobacco, and salt in violation of government monopoly, and violations of the 37.5 rent reduction program.

Conclusions

643 In describing the Nationalist government policies, 1949–51, the writer has sought to ascertain their nature and contents by recounting a chain of events which set the political pattern in contemporary Taiwan and by a survey of what has taken place since. From them may be drawn the following tentative conclusions:

1. Generalissimo Chiang Kai-shek and his supporters have been exercising a dominant role in National Government policies, 1949–51.

665 2. While there are three known political parties active in national politics in Taiwan, the Kuomintang, as presently constituted, is the ruling party.

631 3. The political framework in Taiwan may be described as one of over-all political control by the Nationalist government, centralized management by the provincial government, and local self-government, still in its preliminary stage, at the municipal and county levels.

652 4. The National Taiwan currency has exhibited a degree of stability which compares favorably with that in most postwar countries having suffered from war devastation.

5. Nationalist government assets and reserve, sale of government properties, and ECA assistance are contributing factors in balancing the provincial budgets in recent years.

427 6. The 37.5 rent reduction program has contributed towards rural well-being, along with the projects sponsored by the Joint Committee on Rural Rehabilitation.

433 7. There has been an upward trend in agricultural and industrial produc-

[p. 222 (B)]

433 tion, the latter being evident mostly in government-owned enterprises.

000 8. Schools on all levels have shown a gain in enrollment.

9. At this distance, it is impractical to evaluate the Nationalist political leadership as presently represented in Taiwan. Nor is it possible to ascertain the extent of its ability either in inspiring hope, faith, and confidence among the people or in initiating a democratic political atmosphere which "loves freedom, encourages independent thinking, and tolerates those whose views are dif-

[p. 223 (A)]

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-1-5
116, 434, 565, 651, 177.65 Japan
636.65

"Taxes may be of different types--some falling chiefly on the rich, whose ability to pay is, of course, greater than that of the average farmer. We do not have necessary information for a detailed analysis of how the tax burden is distributed between these two groups, but what is available gives clear indications. We have divided the taxes into two groups: (a) taxes on the recipients of large incomes; (b) taxes on the masses.

Taxation and Net Monopoly Receipts in 1,000 Yen

A. Taxes on the recipients of high incomes:

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Income Tax	3,873	5,285	9,538	13,024	12,395
Tax on capital		5	189	352	855
Mining Tax	200	203	291	353	327
Special profit tax	1,016	1,575	2,761	4,979	2,444
Tax on distribution of dividends		335	425	394	850
Inheritance tax			105	279	305
Total	5,089	7,403	13,309	19,381	17,176

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-2
116, 434, 565, 651, 177.65 Japan
636.65

B. Taxes on the masses of the population:

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Land tax	7,492	7,742	7,938	8,342	8,342
House tax					1,312
Business tax a)			2,931	3,290	2,726
Tax on sugar	3,320	3,461	4,050	6,702	5,215
Tax on alcohol b)	3,698	3,845	2,913	169	100
Taxes on other commodities	2	177	275	393	826
Customs duties and other duties connected with them	2,611	3,326	2,574	1,846	1,817
Stamp duty	5,107	7,271	7,220	7,653	5,926
Monopolies, net receipts	24,555	28,968	29,652	32,845	32,568
Net profits from text-book sales c)	103	29	75	74	24

[135]

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Profit on weights and measures d)	179	209	206	331	341
Fines and confiscations e)	1,091	529	224	362	224
Tax on railway fares				205	202
Admission ticket tax				116	124
Tax on construction					152
Amusement tax					188
Other taxes	731 f)	1,213 f)	1,200 f)	164	907
Total	48,889	56,770	59,258	62,492	60,994
The same as percentages of total					
Group A.	9.4	11.5	18.3	23.6	22.0
	90.6	88.5	81.7	76.4	78.0

a) We include business taxes in this group because it is legitimate to suppose that they are shifted by the business men to the population.

b) The fall of receipts from the tax on alcohol in the last two years is due to the introduction of a state alcohol monopoly.

c) Formally this is not a tax, but a surplus remaining after deduction of expenditures on printing of textbooks from receipts. However, state profits derived from the sale of textbooks to school pupils hardly can be considered otherwise than a tax.

d) As in the preceding item this represents a surplus from a form of fiscal monopoly.

e) Formally fines and confiscations are not taxes. But their regularity (they are foreseen in the budget) and their amounts show they are not 'casual' receipts. They fall, mainly, on the Chinese population.

f) Chiefly receipts from the taxation of surplus issues of Bank of Taiwan notes.

From this table it may be seen that about 80 to 90 percent of the taxes fall on the masses of the population and only 10 to 20 percent on the wealthier groups. The percentage of taxes contributed by the well-to-do rose from 9.4 in 1935 to 22.0 in 1939, but it would be a mistake to suppose that this implies a change of policy: the exigencies of wartime and the already oppressive burden of taxes on the masses make it more and more difficult to increase that burden. Under these conditions, heavier taxation of the rich is a necessity, but the government prefers to borrow from them, not to tax them: the loans amounted to six million yen in 1939 and are expected to amount to 17 million yen in 1941.

The actual tax-burden on the masses as compared with the wealthy is considerably

greater if we include provincial and [136] local taxes. We have no data on the exact distribution of local taxes, but provincial taxes can be measured. Provincial taxes are surtaxes, calculated as a percentage of the corresponding government-general taxes. Their rates are as follows:

Surtax on income tax	18%	of income tax
Surtax on land tax	90-100%	of land tax
Surtax on business tax	70-80%	of business tax
Surtax on house tax	120-150%	of house tax

These rates show that surtax on income tax (which falls chiefly on the recipients of high incomes) is only 18%, while surtaxes on taxes falling on the masses of population range from 70 to 150%."

4:Grajdanzev--155 S-4 (no date) 1942 Formosans
116, 434, 556, 177.43 Japan
636.43

"The amount of profits collected [by the Japanese--analyst] may be calculated more or less precisely. We know that the exports from Taiwan are greater than the imports into the island and there can be only one explanation: considerable real wealth is transferred from Taiwan to Japan each year, wealth which represents the profits and savings of the Japanese in Taiwan."

15: U. S. Navy --27 [8] (no date) 1944 Formosans
116, 434, 511, 556

"The restrictions and rationing of food, clothing and fuel which have gone into effect throughout the empire, are felt more keenly by the Japanese because of their higher standard of living. A number of essential articles were unobtainable or only occasionally obtainable late in 1940 at Taihoku."

15: U.S. Navy--27 [9] (no date) 1944 Formosans
116, 241, 433, 434, 177.43 Japanese
636.43

"Food is plentiful, but is subject to requisition by the Army. The farming population is able to raise a substantial amount of the food it consumes, but the Japanese frequently order the restriction of plots planted to these crops in order that more space may be devoted to a crop (castor oil beans for instance) required by the military. In 1940 the official daily ration of rice permitted to farmers in Taihoku Province was only 0.60-0.75 pounds, or 2-2 1/2 go per person. This is well below the usual consumption and has been the cause of bitter discontent and resistance."

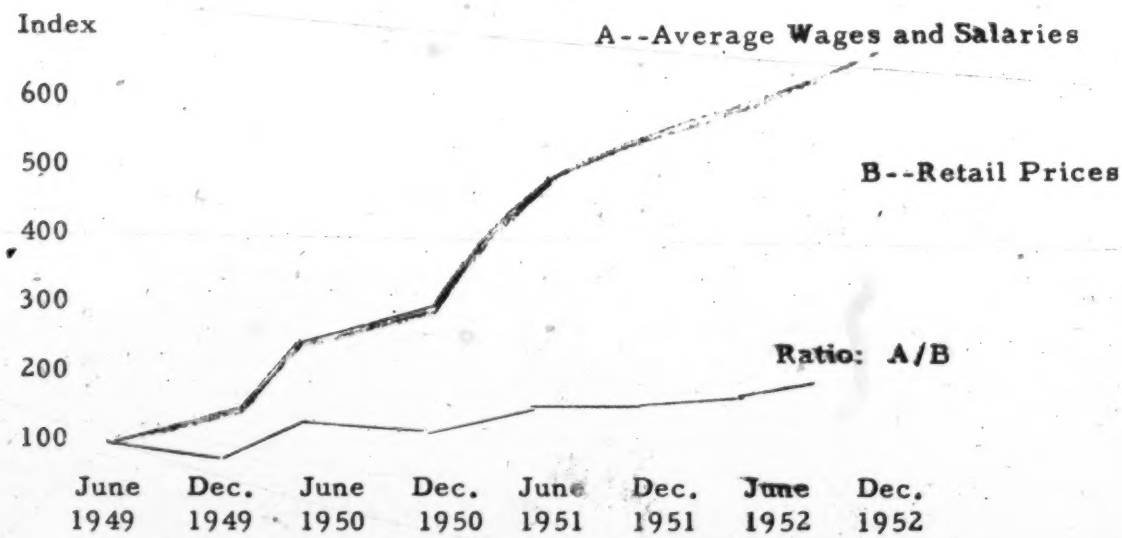
463 sell towels, shirts, soap, food, etc., at roadside stands. Household industries such as cake baking, handicrafts, etc., are also very common. Truck-hopping is an entirely new occupation in Formosa. The truck-hoppers are young and husky persons who hop on the moving trucks and start bargaining for unloading jobs as soon as the trucks reach their places of unloading.

IV. WAGE LEVELS AND WORKING CONDITIONS

465 434 The Wage Level. Government statistics shows improvement of the wage level in recent years. During the years 1949-52, the index of wages and salaries rose faster than the retail price index:

45:Stanford U, S-4, 5 1956 ADI Formosa
ADI

Trend of Wages and Retail Prices --1949-52
Indexes (June 1949 = 100)



Source: Plotted from Appendix II, The Structure of the Taiwan Economy by Taiwan Provincial Government

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434 The average income of 1,383 sample households in the month of June 1953 in urban areas was estimated at NT $585,[22] while that of the average laborer's household was estimated at NT $400. The estimated average gross income in 1952 and 1953 for the households surveyed may be seen in the following table:

YEARLY GROSS INCOME OF 1,383 HOUSEHOLDS (in NT $)

	1952	1953
Total Average	5,684	7,722
Employers	27,252	27,271
Self-employed	6,482	9,206
Laborers	3,826	5,148
Professionals	6,974	11,208
Civil Servants	4,203	9,174
All Others	5,481	7,128

* A. F. Raper and others, op. cit.

22. A. F. Raper and others, op. cit.; this amount is a little less than US $40 at the foreign exchange rate of NT $15.65 to US $1.

465 Roughly 85 per cent of the gross receipts of
•434 the laborers and self-employed are in cash, and 15 per cent in other allowances and payment in kind. For the civil servants, only about one-half is in cash. Payment in kind consists of rice, edible oil, salt, and charcoal. For instance, there is a monthly allowance of 66 pounds of rice to each laborer and each adult family member living with him, as well as one-half of that amount to each child under 10 years of age. The total rice allowance for each labor household, however, is restricted to 224 pounds per month.

511 The relatively low standard of living of the laborers is reflected by the pattern of household expenditures, of which food expenditure comprises the major portion. A breakdown of expenditures in 1952 for the 1,383 households surveyed is shown in the table below:

45:Stanford U. S-4, 51956 AD1 Formosa
~~AD1~~
AD1

727 to 86,000 metric tons in 1945-46. The
433 Formosan farmer was faced with the "worst prospect in living memory," as one observer remarked.[8]

434 In spite of the seriousness of economic
178 conditions on Formosa, the Chinese government was able to make only limited progress in reconstruction following the restoration of the island to Chinese control. For one thing, the Nationalist Government was involved in a costly war with the Communists and faced with a huge rehabilitation program on the Mainland. Furthermore, without a surplus of exportable goods, China could not obtain the foreign exchange necessary to re-equip the damaged plants and restore agricultural production on Formosa. The island's economy continued to deteriorate until 1949, when Mainland China was overrun by the Communists and the National Government was withdrawn to Formosa.

458 The sudden influx of over one million
185 mainlanders and half a million soldiers further strained the resources of the island. Inflation was running wild and food was short. However, the removal of the national government to Formosa was not without benefit to the island.

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8. H. Maclear Bates, Report from Formosa, New York, Dutton, 1952, p. 117.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

Annex "A," Subparagraph 3a,
Economic Background

AGRICULTURE

I. INTRODUCTION

241 162 431 Formosa's economy is predominantly agricultural. Household registration in 1950 indicates that of a gainfully employed male population of 2.1 million, roughly 57 per cent were farmers.[1] The Taiwan Agricultural Yearbook reports that about 52 per cent of the total population in 1953 were directly dependent on agriculture for a living.[2] Approximately 49 per cent of the total national income in 1951 was derived from agriculture.[3]

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1. George W. Barclay, A Report on Taiwan's Population, Princeton, Princeton University Press, 1954, p. 59.

2. Provincial Government of Taiwan, Taiwan Agricultural Yearbook, 1954, Taipei, 1954, p. 1.

3. Industrial Development Commission, Economic Stabilization Board, Industry of Free China, November 1954, Vol. 2, No. 5, Taipei, p. 7. Agriculture is defined to mean all productive activities involved in farming, livestock-raising, forestry, and fisheries.

[162]
241 The importance of agriculture to the national
434 economy is made more obvious by the fact that a large percentage of Formosan industries involve the processing and transporting of agricultural commodities. Agriculture products also provide an important source of foreign exchange for the island. In 1953, total
[139] exports amounted to approximately US$130,000,000, of which over 90 per cent was derived from the export of agricultural products.

241 The climate in Formosa is eminently suitable for agricultural production. The tropical and sub-tropical atmosphere and abundant rainfall in most parts of the island encourage the cultivation of rice, sweet potatoes, sugar cane, tea, bananas, and vegetables. Rice cultivation is carried on in all parts of the island; sugar cane, sweet potatoes, and peanut are grown in the central and southern sections; tea is cultivated in the northern districts.

648 During the Japanese occupation of
241/ Formosa, the policy of economic development was geared to the economic needs of the Japanese Empire. When a shortage of rice was felt in Japan, rice was produced in

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

Annex "A," Subparagraph 3e,
Economic Background

TRADE

I. DOMESTIC TRADE

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The most recent complete estimate of Formosa's national income reveals that, in 1951, domestic trade, including wholesaling and retailing, contributed a little more than 11 per cent to the gross national product.[1] This percentage, however, does not include production in terms of storage and transportation related to wholesaling and retailing. If this fact is taken into consideration, it would appear that domestic trade occupies a more important position in the formation of the national income than the statistical figure indicates. As of 1953, about 8.5 per cent of the total working population of 2.9 million were engaged in domestic trade.[2] Popular

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1. Industrial Development Commission, Industry of Free China, Vol. II, No. 5, Nov. 1954, p. 6. Many wholesaler may be engaged in foreign trade and other activities, but detailed classification is not available. Therefore the figure here is an approximate indication.

2. China News Press, China Annual 1954, Vol. 3, p. 77. For detailed breakdown, see the chapter on Population in this handbook.

438 belief has been, particularly in the postwar
434 years, that in Formosa more opportunities for money-making exist in trade and enterprise than in other fields.

A. Channels of Trade

438 The marketing system of Formosa is in
656 part free and in part controlled. Certain commodities are strictly in the hands of the government as far as production and distribution are concerned. Prices of some commodities
[435] are regulated and the movement of other commodities is controlled by the government. Some commodities are controlled in their production phase and some in their distribution phase. Since it is difficult to describe the marketing system in general terms, the process as it applies to a few typical commodities will be discussed.

Rice: To effect control on movements of rice, the Provincial Food Bureau has established seven food districts on the island - Taipei, Hsinchu, Taichung, Tainan, Kaohsiung, East Taiwan, and Penghu - designating each as either "surplus," "self-sufficient," or "deficient." Only the Taipei and Penghu districts are considered deficient areas. Taichung, Hsinchu, Kaohsiung, and Tianan are surplus districts. The regional movement of rice is determined at the discretion of the Provincial

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD 1

427 acres) as a measuring stick for rental calculation. It varies with the fertility of land in different sections of Taiwan. To prepare the farmers for the acceptance of the program, 9,937 persons were sent to the rural areas in 1949 to acquaint them with the operational details. They were followed by 1,257 trained persons who helped farmers to readjust their rental contracts. By November 1949, 306,473 families were given "37.5-contracts" in conformity with the program. Finally, 26 provincial inspectors toured the island to check the results. 434 The income of the tenant farmers was estimated to have registered an average ~~gain of 30 per cent,~~ ranging from 0.9 per cent to as high as 70 per cent in comparison with the pre-reform period.[31]

653 Pertinent to rural rehabilitation are the public works being done in dike repair and construction, irrigation, and land reclamation. Briefly, from 1947 to 1950, some 10,983 meters of new dikes were built, in addition to 65,288 meters repaired. Since 1946 a yearly average of 9,272 hectares of land has been brought under irrigation, in comparison to an average of 9,428 hectares under the Japanese.[32]

433 A review of statistics also shows varying degrees of gains in agricultural production.[33] For instance, for 1950 the

NT$1,432,000,000 (*Taiwan Today*, cited note 11 *supra*, pp. 59–61).

[31] For statistical data on the rent reduction program, see Land Bureau, Taiwan Provincial Government, *37.5 Rent Reduction Program** (Taipeh, 1949), pp. 1, 19, 34; *Taiwan Today*, cited note 11 *supra*, p. 90; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, p. 383; Vol. 1, p. 25.

[32] *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 227–28, also for comprehensive data, pp. 227–43. For a general descriptive and statistical presentation of the subject, see Taiwan Provincial Government, *Water Conservancy and Irrigation**, Taipeh, 1949; also *Reclamation of Waste-land**, Taipeh, 1949.

[33] For detailed statistical data on agricultural production, see Taiwan Provincial Gov-

[P. 218 (B)]

"(1) A special investigation made by a government committee in 1923 estimated the cultivable area in Taiwan at 940,000 ko (900,300 hectares or 2,234,000 acres); another committee in 1929 estimated this area at 930,000 ko (893,700 hectares). (1) The area

1. Quoted by Takahashi, op. cit., p. 94.

cultivated at present is about 850,000 hectares or 23.8 per cent of the total area of the island, which is 3,576,000 hectares. If the estimates of the committees are [44] correct, then the cultivated area of Taiwan is approaching its maximum and only about 40,000 to 50,000 hectares remain to be turned into fields. We do not know what criteria the committees used in their investigations, but there are reasons to believe that their estimates are too low. Almost half of the total area of the island is territory of the aborigines, where fields are almost non-existent. It is true that this territory is mountainous and the cultivable area cannot be great, yet it should be considerably greater than 40,000 to 50,000 hectares. However, it is clear that the greater portion of cultivable land is already under the plough, so that the emphasis should be placed on other methods of increasing agricultural output.

This disparity between the growth of population and the growth of cultivated area has brought a sharp increase in land values. In 1914 one ko of good paddy land in the central

part of Taiwan province cost on the average ¥331; in 1925, ¥700; in 1937, ¥2,000. (2)

2. Ibid., p. 158.

Of course, the depreciation of the yen, the increase of yields and other factors also played a part in this increase, but the pressure of increasing population was probably also an important element."

"Furthermore, as will be shown later, the results of the improvements which did take place brought most profit to landowners, traders and the Japanese administration. This may appear to be contradicted by the fact that the gross value of agricultural production in Taiwan for the last five years increased from ¥237.9 million in 1933 to ¥413.7 million in 1937 (seventy-four per cent), and if later data were available they would certainly be still higher. Unfortunately, we do not have at our disposal an index of agricultural prices in Taiwan (1). However, we do know that the average price of [48]

1. The general index of wholesale prices in Taihoku had increased, compared with 1933, by 33 per cent in 1937 and 58 per cent in 1938. Taiwan Jijo, 1939 pp. 606, 607.

rice for the same period rose from ¥14.98 per koku to ¥22.74, or by fifty-two per cent, and rice makes up about half of the gross value of agricultural production in Taiwan. In the same years population increased by only thirteen per cent. By deflating prices to the level of 1933 and dividing by an index of population, we find some evidence that production per capita was less in real value in 1937 than in 1933. How generally this is true is difficult to say because of the paucity and unreliable character of the data. But one thing is clear: no rapid rise in the per capita value of agricultural production has taken place in the last few years."

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464, 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

4:Grajdanzev--54-55 S-4 (no date) 1942 Formosans -1-2
116 243, 435, 655, 177.24 Japan
636.24

"Space does not permit us to analyse the rice situation in detail. The table below shows the rapid process of displacement of other kinds of rice in Taiwan by horai.

Crop Area Under Various Kinds of Rice in Taiwan
(In thousand ko)

	1905	1915	1920	1925	1930	1935
Common Taiwan rice	393	423	417	370	370	263
Clutinous, round	24	39	53	81	68	73
Glutinous, long	...	...	...	...	19	18
Horai	0	0	0	72	135	305
Total	417	462	472	523	592	659

Yields of Various Sorts of Rice in Taiwan were as Follows
(1930-35 average)

	(koku per ko)
Common Taiwanese	12.1
Round glutinous	10.2
Long glutinous	11.7
Horai	14.6

As may be seen, the difference is quite pronounced—from 2.5 to 4.4 additional koku per ko, or an increase in yield of twenty to forty per cent as compared with other

varieties.

But on the other side, the production costs of one ko of common rice in 1925 were ¥223.8, while for horai the amount was ¥342.0, and—what is also very important—whereas thirty-four per cent of the production costs of common rice consisted of the farmer's own labor, home-prepared fertilizers (which the farmer does not buy) etc., these costs in the production of horai amounted to only twenty-two per cent. In other words a much greater part of the expenses on horai consisted of sums paid for commercial fertilizers, etc. and as a result, the farmer does not receive so much profit from horai, but is compelled to plant it because he cannot sell his own [55] kind of rice in the Japanese market. The expansion of area under horai is therefore not so much a sign of prosperity, as it would at first sight appear, as a sign of the growing need of the farmer for money to pay taxes, to pay for irrigation, and to pay for the tobacco which he formerly produced himself (and is now a state monopoly)."

"Of course, the inclusion of Taiwan—a region of low prices—in Japan's customs area of high prices should result in an increase of prices in Taiwan, but this does not mean that Taiwan's farmers were necessarily the gainers. All prices were raised and it is by no means certain that this rise benefited farmers and workers. We may find an indirect answer to this question by calculating the average per capita consumption of cereals in Taiwan. Rice is the principal food for the islanders, and all other cereals produced there amount to less than 0.5 per cent of the production of rice and, consequently, may be neglected. Import and export data are available and Japan may serve as the standard of comparison. To simplify matters we assume that the crop of a given year and the imports of that year are consumed in the same year.

Rice Consumption in Taiwan*

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1905	4,354	57	620	...	3,039.8	1.25
1910	4,187	43	648	3,582	3,250.0	1.10
1915	4,785	64	767	4,082	3,479.9	1.17
1920	4,842	160	619	4,383	3,655.3	1.20
1925	6,443	718	2,057	5,104	3,993.4	1.28

*Footnote on next page.

Rice Consumption in Taiwan* [Cont.]

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1930	7,480	97	2,220	5,357	4,592.5	1.17
1935	9,122	7	4,493	4,636	5,212.4	.87
1936	9,559	7	4,788	4,778	5,452.0	.88
1937	9,233	7	4,842	4,398	5,609.0	.78
1938	9,619	15	4,878	4,756	5,747.0	.83
1939	9,152	8	4,106	5,054	5,880.0	.86

* In calculations made for the compilation of imports and exports before 1930 one koku of rice is taken as equal to 2.7 piculs.
Sources: for 1930-39: Keizai nenkan; for 1905-25: for production, Takahashi, op. cit.; for trade, Nippon boeki seiran. The last column is calculated."

4:Grajdanzev--61-62 S-4 (no date) 1942 Formosans-1-2
116, 241, 435, 452, 477, 655, 177.47 Japan
636.47

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--63-64 S-4 (no date) 1942 Formosans-1-2
116, 241, 249, 435

"Although we have no reliable data concerning the profitability of sugar cane in Taiwan as compared with other crops, we can make certain calculations which will help us to see what the farmer gained from its cultivation. The average holdings of farmers did not increase after 1913 and therefore a larger income in these circumstances could be secured in only two ways—through an increase in yield or a rise in the price of sugar cane or both. The improved yields came as a result of the use of better seedlings, earlier ploughing, more careful attention, greater use of fertilizers, better irrigation. Some of these items demand more labor on the part of the farmer; almost all demand a greater expenditure in money. Let us now compare the receipts of the farmer per ko.

Receipts of Sugar Cane Cultivators in Taiwan

	1921	1927	1935	1936	1937
Yield per ko (1,000 kin)	63.2	89.5	102.8	114.6	112.5
Price per 1,000 kin (yen)*	9.6	7.6	3.4	4.1	4.5
Value per ko (yen)	696.7	537.0	349.5	469.9	506.3
Value per ko at 1913 prices, yen (approximately)	330.0	310.0	220.0	290.0	270.0

* For 1921-27 for the price 'the cost of raw material for manufacturers of sugar in Taiwan' is taken (Takahashi, op. cit., p. 216); for the later years, the price as it is given in the value of total production of sugar cane in Nogyo nenkan; the actual price is probably smaller.

Great accuracy cannot be claimed for these figures but they may give an idea of the trend. The yield since 1921 was doubled, but the receipts in deflated money do not show any improvement. This may be partially due to the fact that the general index of prices should not be used to deflate values in this case; a special index of prices paid by the farmer might show somewhat better results. But the expenditures which the farmer now incurs in order to secure these increased yields—fertilizers, irrigation, etc.—were not deducted, and if they are taken into consideration, one is forced to the conclu-[64] sion that some one other than the farmer got the benefits of the better yields."

4:Grajdanzev--64 S-4 (no date) 1942 Formosans -1-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon.

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane Culture in Taiwan

	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4:Grajdanzev--86-87 S-4 (no date) 1942 Formosans-1-2
116, 171, 262, 435, 439

"As to the general supply of fish for the population of Taiwan, the Japan Year Book has the following to say: '. . . The Taiwanese are a fish-eating people, but the annual catch is so great that a large quantity is exported to Japan proper [87] and other countries' (1).

1. P. 941, 1939-40 edition.

Statistics of the industry tell a different story. Compared with Japan the natives of Taiwan are poorly supplied with fish, for in 1937 the value of fishery products in Japan proper was ¥660,807 or about ¥9.3 per capita as compared with ¥3.8 in Taiwan. It is true that an important part of this catch is exported from Japan and a part is used as fertilizer, but the same is true for Taiwan. As may be seen from the following table, Taiwan is a net importer of fish:

External Trade of Taiwan in Fish
(1,000 yen)

Year	Exports to Japan	Exports to other countries	Gross exports	Imports from Japan	Imports from other countries	Gross imports	Net imports
1937	4,111	832	4,943	10,095	687	10,782	5,839
1938	3,006	491	3,497	11,535	405	11,940	8,443

The secret of this coexistence of exports and imports of fish does not lie in any over-abundance. The Japanese in Taiwan export fresh fish to Japan which they sell for an average price of 26 sen a kin (0.6 kg.), and import two kinds of fish: (a) salted and dried fish at an average price of 12.5 sen a kin and (b) canned fish. It is clear that these two kinds of imported fish are not consumed by the same groups of the population.

We saw above that the population of Taiwan consumes more meat on the average than do the Japanese; now we see that the Japanese consume much more fish than the islanders (2).

2. It was mentioned above that the average consumption of pork in Taiwan is about 37 kin, while in Japan it is only 3 kin; but the average consumption of fish in Japan must be, on the most conservative estimate, 60 to 70 kin."

4:Grajdanzev--88-89 S-4 (no date) 1942 Formosans -1-2
116, 137, 171, 313, 435

"The present distribution of forests and waste lands (i.e. formerly forest or which can be afforested) may be seen from the following table:

Forest Area in Taiwan, December 1936
(1,000 ko)

	On the plains	In the aborigines' territory	Total
State: forests	399,086	1,312,562	1,711,648
waste land	195,529	308,137	503,666
Public: forests	12,112	...	12,112
waste land	3,529	...	3,529
Private: forests	219,095	1,568	220,663
waste land	45,131	...	45,131
Total: forests	630,293	1,314,130	1,944,423
waste land	244,189	308,137	552,326

The Japan Year Book say: 'Reckless cutting of trees was done by Chinese immigrants and this . . . resulted in the devastation of forest districts.' But it is surprising to find that the forest area on the plains (excluding waste land) is about three-quarters of the area under cultivation. However, the exploitation of this tremendous area—2,496,749 ko or about 5.8 million acres—leaves much to be desired. According to official

statistics. the total value of forest products in 1936 was only ¥15.1 million—much less than the value of fishery products or only two per cent of the gross value of the island's production. This sum was made up of the following items: [89] timber, ¥5.6 million; charcoal. 1.9 million; bamboo, 1.7 million; firewood, 2.7 million; and others 3.2 million. If these figures are correct, then of the 2,496,749 ko, one ko brings on the average only six yen, or less than half that in Japan."

"As is well known, Japan is not a country of high wages. Yet wages there are from two to three times higher than the wages of the Chinese in Taiwan and do not seem to have been an obstacle to the development of industry. The wage level is closely connected with the level of retail prices and this we give below.

Retail Prices in Taihoku, May 1939

		(sen)
Sweet potatoes	(per kin)	6.4
Rice, horai	(per kin)	11
Sugar	(per kin)	29
Pork, average quality	(per kin)	43
Miso, per 100 momme	(0.827 lb.)	8
Fish	(per kin)	18-22
Eggs, each		6
Soap, per piece		10-17
Matches, per box		1.4
Firewood, per 100 kin		180
Muslin (per yard)		134

Now, let us take two workers—one skilled and one day laborer. For the skilled workers the average daily wage in the second half of 1938 was ¥1.43 per day, (1) for an

1. This is a simple arithmetic average of 60 different

categories of workers in Taihoku; in so far as highly paid categories are small in numbers, the weighted average would be lower. The official estimate of the average wage for Taihoku is ¥1.27.

unskilled worker ¥0.85. The average family in Taiwan consists of five to six persons. According to the prices given above, the skilled worker can buy with his daily wages, for example, either 17.2 lb. of rice or 4.4 lb. of pork, or 6.5 lb. of sugar. An unskilled worker can make such purchases as 10.2 lb. of rice, or 2.6 lb. of pork, or 3.9 lb. of sugar. By whatever standards, it is evident that the wages of the workers are very low.

The wages of Japanese workers, on the other hand, are at least double those of the Chinese for the same job. For Taihoku the official estimate of the average wage for the Chinese is ¥1.27, for Japanese, ¥2.41 (2). It is thus not profitable for the Japanese

2. A simple arithmetic average for 25 occupations of the Japanese in Taihoku gives ¥2.65.

entrepreneurs to use Japanese workers extensively."

4:Grajdanzev--126 [21 S-4 (no date) 1942 Formosans
116, 435, 453, 457

"The foremost position is occupied by the Taiwan Bank, a private corporation in charge of the monetary system of Taiwan. The great difference between the deposits of this bank and its loans is explained by the issue of banknotes, one of the many ways by which Japanese capital in Taiwan is created. The issue of notes, the reserves of gold and of foreign exchange kept by this bank, as well as the movement of wholesale prices in Taihoku. the capital, may be seen from the table on page 127.

In six and a half years the issue of notes increased three and a half times, the gold and foreign exchange reserve evaporated in the same period, and in the five years 1933-38 wholesale prices increased by about fifty per cent."

4:Grajdanzev--149-150 S-4 (no date) 1942 Formosans-1-2
116, 171, 435, 439, 177.43 Japan
636.43

"Two other aspects of Taiwan's exports should receive our attention. First, it is interesting to compare the gross value of Taiwan's production with its exports, keeping in mind that the gross value is considerably larger than its net value, i.e. by the cost of materials, fuel used in production, etc.

Comparison of the Gross Value of Production and Exports

	1903	1922	1929	1937
Gross value of production, million yen	84.5	354.2	598.6	890.5
Exports, million yen	20.7	158.4	272.0	440.2
Exports as percent of gross value	24.5	44.7	46.3	49.4

From this table it appears that in 1903 about one-fourth of the gross value was exported, while in 1937 the amount had risen to 49.4 percent. This probably means that in 1937 not less than three-fourths of the total net value of production of production[sic]of Taiwan was exported. Such a high ratio of exports to gross value of production is probably approached only [150] by Korea (1).

1. If Taiwan were to receive the equivalent in imports, the large exports would not constitute a problem. But we shall see later that this is not the case.

To see how far this situation was to the mutual advantage of the natives and the

Japanese, one should compare not only the ratio of exports to total production but also the absolute amounts which are not exported. In 1903 there remained 63.8 million yen worth of unexported goods, while in 1937 450.3 million were left. Let us now examine these figures in the light of price-changes. We have no index of prices for Taiwan in 1903, but we do have prices of rice--the most important product of the island--to which the authorities in 1937 gave a weight of 31 percent in the general index (2). A picul of

2. Actually it should be about 40 percent because the authorities gave sugar a weight of 25.3 percent, unduly large in view of the fact that more than 90 percent of the production is exported.

rice in 1903 cost 2.36 yen; in 1937, it cost 9.32 yen, or almost 4 times as much. If we also take into consideration the growth of population, the residual per capita gross production 'in rice prices' was 21.8 yen in 1903 and 19.8 yen in 1937. These are gross values of production, and since industry played a much greater part in 1937 than in 1903, the per capita net 'real' values in 1937 must actually be much smaller than in 1903. This is a startling conclusion. We emphasize again that these figures can only be approximate, yet they are sufficient to indicate the trend of events."

4:Grajdanzev--175-176 S-4 (no date) 1942 Formosans
116, 276, 435, 733

"In the early days of British commercial domination Taiwan was notorious for the prevalence of opium smoking. When the Japanese conquered the island, they decided to apply a method of licensing opium smokers. Those who were addicted to this evil practice were permitted to continue it on payment of a certain fee for a license, but no new addicts were permitted. In 1898 95,449 addicts were licensed. However, some years later a more careful survey brought to light (1) as many as 165,752. In 1908 there were

1. Y. Takagi. Japan Magazine. 1930, pp. 244-248.

119,991 licensed opium smokers, in 1926 there were 31,434 and it was said that the majority of them were over 55 years age. However, in 1938 there were 10,788 opium smokers still alive. In 1906 when there were at least 130,000 licensed opium smokers, they bought 4,395,497 yen worth of opium; in 1938, when there were only 10,788 opium smokers, they bought 1,863,063 yen worth. The explanation is that in 1906 one kilo of opium was sold by the government for 23.0 yen, in 1938, it cost 120 yen, or five times as much. This reliance on price increases, however beneficial it may have [176] been for the Treasury, has unfortunately led some addicts to turn to other, cheaper substitutes, such as morphine and heroin."

15: U.S. Navy --27 [7] (no date) 1944 Formosans -1
116, 465, 511, 435, 556, 563

"Living conditions and the cost of living are intimately connected with the wage scale. Wages in Japan are two to three times higher than the wages of Formosans. For the skilled Formosan the average daily wage in the second half of 1938 was ¥1.13 ($.27) per day, and for the unskilled worker ¥.85 ($.17): figures based upon averages for sixty different categories. The Japanese official averages published for 1939 were ¥1.27 ($.33) for the Formosan-Chinese and ¥2.41 ($.625) for the Japanese laborer. The average Formosan family consists of five persons, who must depend upon these wages. As an indication of the cost of living and the standard possible, there is presented the retail prices of some commodities in Taihoku, in May, 1939, when the yen was worth $.2596:

Table 23: Retail Commodity Prices, Taihoku, 1939

Sweet potatoes per kin (1.3228 lbs.)	6.4 sen
Rice (first grade) " " "	11.0 "
Sugar " " "	29.0 "
Pork (av. quality) " " "	43.0 "
Fish " " "	18-22.0 "
Chicken eggs, each	6.0 "
Soap per piece	10-17.0 "
Matches, per box	1.4 "
Firewood (per 100 kin)	180.0 "

15: U.S. Navy --27 [7] (no date) 1944 Formosans -2
116, 465, 511, 435, 556, 563

Table 23: (cont.)

Miso (bean paste) (100 momme: 0.827 lbs.)	8.0 sen
Muslin, per yard	134.0 " "

241 The Farmers' Outlook. Since the Restoration, the land reform program has been carried out and farmers are enjoying a greater sense of freedom and individual initiative. However, the farmers are inclined to compare the current situation with conditions under the Japanese with regard to farm receipts, living conditions, political freedom, etc. In the eyes of the farmers, the Nationalist Government's success in its administration of Formosa has depended upon and will continue to depend upon how favorably its accomplishments will compare with those of the Japanese.

241 435 It is reported that a large disparity exists between the prices received for farm products and the prices paid for supplies used on the farm. To illustrate this point, the per chia farm receipts from all sources amounted to NT $9,700 in 1952,[17] while the per chia expenditures (for production purposes) were NT $5,400. Thus, the net earnings amount to NT $4,300 per chia, which constituted the support of 4.7 persons, the latter being the average farm population per cultivated chia.

241 208 When asked in a JCRR survey in 1952

17. New Taiwan Dollars. The prevailing rate of exchange during the year was NT $15.65 to US $1.

435 It should be noted that price levels have
457 risen 700 per cent and the amount of notes issued has increased 2,600 per cent. Similarly foreign exchange has not depreciated to the same extent as the increase of money in circulation. The official exchange rate[5] for US dollars has increased from NT$5 to NT$24.78; the market rate[6] for US dollars has increased from NT$7.82 on December 31, 1949 to NT$37.50 on November 6, 1955.

458 The pressure of inflation on the economy
652 of Formosa has been alleviated by a number of factors. The enormous growth in population and industrial expansion tend to absorb a part of the increased money supply. The government controls an abundant reserve of rice, wheat flour, and other essential goods, which may be used to stabilize prices. The depreciation of the external value of the currency has been partially offset by aid from the United States and the personal expenditure of United States advisory personnel in Formosa.

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5. The 1955 figure includes the bank exchange rate of NT$15.65 plus 20 per cent defense tax (NT$3.13) plus the certificate price of NT$6.00.

6. United Press dispatch, Taipei, Nov. 6, 1955.

438 belief has been, particularly in the postwar
434 years, that in Formosa more opportunities for money-making exist in trade and enterprise than in other fields.

A. Channels of Trade

438 The marketing system of Formosa is in
656 part free and in part controlled. Certain commodities are strictly in the hands of the government as far as production and distribution are concerned. Prices of some commodities
[436] are regulated and the movement of other commodities is controlled by the government. Some commodities are controlled in their production phase and some in their distribution phase. Since it is difficult to describe the marketing system in general terms, the process as it applies to a few typical commodities will be discussed.

Rice: To effect control on movements of rice, the Provincial Food Bureau has established seven food districts on the island - Taipei, Hsinchu, Taichung, Tainan, Kaohsiung, East Taiwan, and Penghu - designating each as either "surplus," "self-sufficient," or "deficient." Only the Taipei and Penghu districts are considered deficient areas. Taichung, Hsinchu, Kaohsiung, and Tianan are surplus districts. The regional movement of rice is determined at the discretion of the Provincial

442 function independently to provide sales
443 facilities for some large mills which engage only in processing.

In addition to the independent activities described above, some rural co-operatives also store, mill, and wholesale rice.

As of early 1953, there were 8,115 rice merchants of one kind or another on the island: 2,813 wholesalers, 2,305 retailers, 2,936 mill operators, 49 brokers, and 12 warehousemen.[3]

656 The Provincial Food Bureau, as well
435 as maintaining control over the movement and distribution of rice, also acquires a considerable amount of the rice produced yearly (some 30 per cent in 1951), since the government may barter fertilizer (which it controls) in exchange for rice and also receives some rice in payment of taxes. The bureau rations its rice to civil employees and sets aside a certain amount

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3. Hsieh Shen-chung, "T'ai-wan Ti Nung-ch'an Yün-hsiao Chih-tu," ["The Marketing System of Agricultural Produce in Taiwan"], T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 10, No. 4, Taipei, April 1954, pp. 29-34. The classification used here appears rather arbitrary. It may be that those registered as wholesalers are also engaged in retailing.

each year to meet emergencies and maintain a stable market price.

Vegetables: Taipei, with a population of nearly 700,000 as of late 1955 consumes more vegetables (as well as other commodities) than other cities on the island. Vegetables for the city are produced in its suburban areas and in the regions of Taichung and Changhua during spring and winter. Yilan also supplies a sizable quantity of vegetables to Taipei (about 3,000 metric tons a year). Producers in the vicinity of Taipei sell vegetables directly to consumers or to local vegetable traders who sell to city dealers. In areas at a greater distance from the consumer, local vegetable traders sell to sales-agents, who sell to retailers at 6 per cent commission. The retailers clean and grade the vegetables before offering them to the public.

Salt: The Taiwan Salt Works, the sole producer of salt in Formosa, supplies salt directly to industrial consumers. The supply to general consumers is controlled by the Provincial Food Bureau, which has offices near railroad stations in the vicinity of the salt fields. The allotment of salt to licensed wholesalers is governed by directives from the Provincial Food Bureau.

339 656 435 Cement: Cement was originally distributed under the supervision of the Cement Distribution Secreening Committee of the Provincial Department of Reconstruction. To effect tighter control over the sale and use of all building materials, cement was placed under the supervision of the Provincial Supply Bureau in September 1953. The bureau determines allotments to building material traders' associations and cement traders' associations throughout the island; they in turn allocate cement to their members, and the members to consumers. The wholesale price is fixed, currently at NT $30 per bag (about 50 kgs.); however, the retail price is allowed to fluctuate according to supply and demand -- about NT $50 per bag in early 1955, and about NT $40 in late 1955.[4]

655 Tobacco and Alcoholic Beverages: Production and distribution of these goods are completely under government monopoly. The Taiwan Tobacco and Wine Monopoly Bureau has eleven branches and two business offices, which handle distribution of these commodities to three types of wholesale establishments -- the city, county, and town co-operatives; the

4. Kung-shang Yüeh-k'an [Industry-Commerce Monthly], Vol. 3, No. 10, p. 94; The Central Daily News, Dec. 4, Dec. 15, 1955.

655 tobacco and beverage wholesale houses; and the bureau's own wholesale offices. The tobacco and beverage wholesale houses sell directly to general retailers; all the other types of wholesalers of these commodities sell to their own retailers. All the wholesalers and retailers must be approved by the bureau, which fixes prices at both levels.

B. Small Business

443 Retail sales in large cities are handled by modern department stores, speciality stores and shops, general stores, roadside stands, and peddlers. In general the organized [435] department stores and other shops sell goods at a fixed price whereas the roadside stands and peddlers have no fixed prices. The large stores and shops generally operate at a higher cost and margin of profit than do the peddlers and proprietors of roadside stands, who are satisfied with a small profit, need only minimum capital, and pay no interest, rent, or taxes. Small business has increased in Formosa due to lack of other opportunities for employment. Enterprising people create marginal self-employment by establishing roadside stands for the sale of food and other everyday necessities., The buying public seems to favor this type of "little" business where various items can be bought more inexpensively than in

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

654 services for themselves, in order to keep output in pace with their own milling capacities.[23] The industry had expanded, in fact, too
435 rapidly for its own good. It had suffered several crises, brought on by fluctuations in the demand for sugar in Japan, where its tariff preference led it to sell.[24] To "stabilize production," the important producers organized a cartel (under the Japan Sugar Association) with government permission and guidance.

Buying of cane from farmers had from the start been controlled by agreements among processing firms; the cartel opened a concerted effort to prevent cane prices from rising. The need for this step arose from the fact that sugar cane and rice both were grown in the same soils and more or less during the same seasons. In effect, the two crops competed for land. Japanese had always complained that the Taiwanese had a perverse tendency to cultivate rice when it was more profitable. Under the cartel agreements, sugar firms avoided competitive buying by strict agreements to allocate areas of cane purchase. Owing to their size and diversity, they were able to persuade many farmers to grow sugar instead of rice by withholding irrigation water from rice fields, and by making conditional cash advances to individual families.

By such means the sugar cartel accomplished what the government could never have done unaided: it ensured a steady output of sugar at fixed prices for which it would have been irrational for individual
654 farmers to produce cane.[25] Sugar acquired a place of high wartime priority as a source for industrial alcohol, and beginning in 1939 the Government-General assisted sugar concerns to construct distilleries and make alcohol on the island. Under these circumstances it is not surprising that the sugar processing industry tended to pass into fewer and fewer hands. After a merger in 1940 more than 95 per cent of the sugar in Taiwan was milled by five giant companies. Though more extreme, the history of the sugar industry was essentially that of all large-scale Japanese enterprise in Taiwan.

655 The Government-General itself began to promote industrial ex-
471 pansion during the 1930's by further participation in economic life.

[23] Privately owned and operated railroads attained a length of over half as great as the entire state system. Not all were built by sugar concerns; the largest belonged to lumber companies. Most were of narrower gauge than the main rail lines. See *Statistical Summary*, Tables 440-442.

[24] Costs were higher than in Java throughout the period, putting Taiwanese sugar at a serious handicap in markets outside Japan.

[25] The Government-General did its part to encourage sugar cultivation by putting rice paddies in a higher tax category than comparable sugar fields. And in 1939 it simply took over the entire cartel by issuing a set of detailed regulations to dictate its affairs.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3d,
Economic Background

BANKING AND CURRENCY

652 436 Modern banking, as it is known in the West, came into being on Formosa during the Japanese occupation. The first bank on Formosa was a branch of a Japanese commercial bank, the Churitsu Bank, which was opened in Keelung during the first year of Japanese rule (1895). The Bank of Taiwan was established in 1899. It had the exclusive right to issue currency and was designated as the fiscal agent of the colonial government. It also did commercial banking, accepting deposits and extending loans, and dealt in foreign exchange. The notes issued between 1899 and 1904 were convertible into silver or were exchangeable at par for Japanese yen. In 1904 notes convertible into gold were issued. On notes which were not secured by gold or silver reserves, the Bank of Taiwan had to pay a tax of 5 per cent per annum. This rate was reduced to 3 per cent per annum in 1935. With 453 agricultural and industrial development of the island, banks prospered. The following banks were operating in Formosa at the end of 1944:

453 The total deposits in banks as of December 31, 1954 was NT$3, 110 million, of which NT$1,390 million was from public and governmental agencies. Nearly two-thirds of the total bank deposits in the province, NT$1,957 million were held by the Bank of Taiwan.[3] These statistics indicate the dominant position of the Bank of Taiwan in the economic life of Formosa.

436 Formosa enjoyed a stable currency before Japan attempted the conquest of China. After 1937, a period of inflation began. The amount of currency in circulation increased from 64.2 million yen in 1936 to 536.2 million yen in 1944. Through price- and wage-control and enforced savings, the Japanese administration was able to fight inflation. In 1945, however, the note issue jumped to a monthly average of 1,568 million yen. There was a shortage of food and other consumer goods, and the whole system of economy broke down. Prices soared.

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3. Statistical Abstract of the Republic of China, 1955, Directorate General of Budgets, Accounts, and Statistics, Executive Yuan, Taipei, 1955, pp. 174-75.

436 Formosa came under Chinese control in November 1945. The same monetary unit was continued in circulation but was renamed the Taipi, or Taiwan dollar (T$). At the end of 1945, the total amount of currency in circulation amounted to T$2,311 millions. The dislocation of the credit system, the loss of the Japanese market, the acute shortage of consumer goods, and the urgent need to repair war damages led to the continuous expansion of note issues and bank credit. In three years, currency in circulation increased to T$142,041 million as of December 31, 1948.[4] In 1949, the Chinese National Government was moved to Formosa. The island was faced not only with an influx of refugees requiring consumer goods, but the need to finance a national army and a government administration. Inflation mounted. On June 14, 1949, currency notes reached the astronomical figure of T$527,000 million, and "cash orders," a substitute for currency issued by the Bank of Taiwan amounted to T$1,214,000 million. The total currency and substitute-currency in circulation was T$1,741,000 million. (A U.S. dollar was worth T$235,000.) Prices rocketed. At the last moment a financial crisis was averted by currency reform. On June 15, 1949 new currency was introduced, called Hsin Taipi or the New Taiwan dollar (NT$).

4. Financial Report of the Bank of Taiwan for 1948.

436 The old currency was converted to New
662 Taiwan dollars at T$40,000 to NT$1. The outstanding currency notes and cash orders were reduced to NT$44 million. A ceiling for the new note issue was set at NT$200 million, equivalent to U.S. $40 million at the official rate of NT$5 to US$1. The new note issue was backed by 100 per cent reserves of gold and foreign exchange.

Because of huge military disbursements and the need for the rehabilitation of government enterprises, the Chinese government was compelled to borrow heavily from the Bank of Taiwan. At the end of 1949, the total note issue reached NT$198 million, approaching the nominal maximum. During the following years the law was altered several times to permit the issue of "extra limit currency." (Extra limit currency may be secured by commercial bills of acceptance, warehouse receipts, and loans against packing or packed commodities.) The note issue steadily expanded; at the end of 1954 the total issue reached NT$1,043 million, five times the maximum limit. Despite the efforts of the government to avoid further inflation, general price levels increased with the increase in the amount of notes in circulation.

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Note Issue*

End of Year	Total Amount of Note Issue (NT$million)#	Indices of Note Issue (June 15, 1949 = 100)	Loans and Advances to Public Treasury[x] (NT$million)	Wholesale Prices Indices in Taipei (June 30, 1949 = 100)
1949	198	452	15	183
1950	248	569	497	345
1951	390	895	684	526
1952	589	1,350	681	544
1953	773	1,773	828	631
1954	1,043	2,390	1,138	616
1955[y]	1,164	2,650	not yet available	

* Statistical Abstract of the Republic of China 1955, pp. 164-67.

\# Amount of subsidiary currency is not included in these figures. At end of 1954 subsidiary notes in circulation amounted to NT$175 million.

x Granted to both the central and provincial governments.

y Chung-yang Jih-pao [Central Daily News], Taipei, Jan. 3, 1956, p. 3.

7: Joest--54-55 E-5 (no date) 1882 Formosans
116, 101, 437

Formosa is divided lengthwise into two sections; the Chinese inhabit the western half of the island, while the natives live in the eastern half. [55] Along the boundary there is a stretch of land 10 miles wide which is considered neutral territory. Here there are several hundred Chinese settlements, ranging from single one-storied houses to villages; in this section the two groups meet for barter.

15: U.S. Navy --24 [4] (no date) 1944 Formosans
116, 221, 591, 438, 602

"Temporary movements. The people who move to these industrial sites [MC: i.e. developing industrial centers like Keelung, Shinchiku etc.] leave their families, or perhaps only some of the children, with the grandparents on the farms. There is a constant traffic (largely on foot) between ancestral homes in the country and the houses of sons and daughters in town. A great deal of produce is carried into the city for private consumption in this fashion, and in turn various small goods are carried out again to the country. The continuing and strong relationship between the main house and all branches of a family is of very great importance in Chinese life."

45:Stanford U. S-4, 5 1956 AD1 Formosa
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VIII. IMPORTANT CITIES[3]

Keelung

439 Keelung City, the port for Taipei and northern Formosa, handles nearly one-half of Formosa's imports and a little more than one-fourth of all exports. Apart from factories which manufacture commercial fertilizers, wheat flour, and bicycles, it has ship-building facilities, a railway terminus, and warehouses. It also is a base for deep-sea and coastal fishing. The registered population in June 1953 was 170,000.[4]

Taipei

438 633 Taipei, located on the northern bank of Tan-shui River, is the largest city on the island, with an estimated population of over 700,000 in early 1956. It is the capital of

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3. Information on the important cities is taken from A.F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, pp. 3-109.

4. The registered civilian population, apparently not including military personnel and foreigners.

633 Nationalist China's Central Government as well as of the Taiwan Provincial Government.[5]
438 It is the most important center for commerce and the heart of air, railway, and highway transportation. Institutions of higher learning are concentrated here. The scenic spots, Grass Mountain (Tsaoshan) and Peitou Hot Springs, are nearby, to the north of Taipei.

Taichung

438 The fourth largest city, relatively new and growing, Taichung is located in the middle of Taichung Plain and is one of the island's agricultural centers. It has a population of 222,000.

Tainan

Located near the China Sea and twenty-nine miles north of Kaohsiung, is Tainan, ancient capital of Formosa. It is an agricultural center for sugar-cane, rice, and peanuts and is important in fish culture. The population is about 250,000. Forts Provintia and Zelandia, constructed by the Dutch, and the temples of Confucius and Koxinga (famous general of the Ming Dynasty, 1368-1644) attract tourists.

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5. According to Ya-chou T'ung-hsin [Asia Foundation Bulletin], August 17, 1955, the seat of the Provincial Government will be moved to Taichung on October 1, 1955. For construction and other reasons this has not been realized as of March 1956.

45:Stanford U. S-4, 5 P56 AD1 Formosa
~~AD1~~ AD1

575 of the death of parents. This was a kind of mutual insurance. The association for mutual financial aid, called "hui," was a kind of temporary credit union.

438 361 Set-up of Towns and Cities: Although the life of farmers was highly self-sufficient, they had to exchange some of their products for agricultural implements and other daily necessities. In response to this necessity towns sprang up in the midst of this agrarian society. As will be seen from a map, Formosa has a fairly even distribution of towns along the western plain. The longest distance between two towns or villages in the plains area is under 10 miles; a distance of 6 miles is most common. This means that each individual lives with 5 miles or less of some town or village, and in one day or less can walk to the village center and back home. In other words, even though he walks, every farmer can sell his products and buy his daily necessities at some town or village between sunrise and sunset. Among the small towns and villages there are larger towns, and among larger towns there is an occasional city as a local center. On the whole, there is a systematic distribution of cities, towns, and villages. Obviously this was the result of natural growth in an agrarian society. After the Japanese occupation there were newly developed mining towns, fishing ports, sugar plantation towns, railway and

45:Stanford U. S-4, 5 1956 AD1 Formosa
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361 communication centers, recreational towns
438 or satellite towns close to the large urban areas. Even so, the traditional agrarian town-city set-up is still much in evidence.

3. Associations in the City: Cities in
441 Formosa were mostly developed as the trading centers of agrarian society. Those cities with ports and trade with the mainland had attained a fair size. In 1897, two years after the Japanese occupation, the population of the biggest city in Formosa, Tainan, was 45,330. Its commerce and handicraft were differentiated, and largely organized into merchant guilds. During the Manchu rule there were in Formosa rice guilds, cloth guilds, sugar guilds, silk guilds, string guilds, paper guilds, drug guilds, timber guilds, hemp guilds, oil, needle and iron guilds, porcelain guilds, and tea guilds.[2] Usually the stores of each trade were concentrated in one street, and not infrequently the street was named from the trade. In Tainan there was a Rice Street, Oil-dealer Street, Bean-dealer Street, Fish-monger Street, Cloth Street, Silver-smith Street,

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2. Yoshio Higashi: Economic History of Taiwan, 1944, Taipei, p. 304.

Annex "A," Subparagraph 3e,
Economic Background

TRADE

I. DOMESTIC TRADE

438 434 The most recent complete estimate of Formosa's national income reveals that, in 1951, domestic trade, including wholesaling and retailing, contributed a little more than 11 per cent to the gross national product.[1] This percentage, however, does not include production in terms of storage and transportation related to wholesaling and retailing. If this fact is taken into consideration, it would appear that domestic trade occupies a more important position in the formation of the national income than the statistical figure indicates. As of 1953, about 8.5 per cent of the total working population of 2.9 million were engaged in domestic trade.[2] Popular

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1. Industrial Development Commission, Industry of Free China, Vol. II, No. 5, Nov. 1954, p. 6. Many wholesaler may be engaged in foreign trade and other activities, but detailed classification is not available. Therefore the figure here is an approximate indication.

2. China News Press, China Annual 1954, Vol. 3, p. 77. For detailed breakdown, see the chapter on Population in this handbook.

438 belief has been, particularly in the postwar
434 years, that in Formosa more opportunities for money-making exist in trade and enterprise than in other fields.

A. Channels of Trade

438 The marketing system of Formosa is in
656 part free and in part controlled. Certain commodities are strictly in the hands of the government as far as production and distribution are concerned. Prices of some commodities
[436] are regulated and the movement of other commodities is controlled by the government. Some commodities are controlled in their production phase and some in their distribution phase. Since it is difficult to describe the marketing system in general terms, the process as it applies to a few typical commodities will be discussed.

Rice: To effect control on movements of rice, the Provincial Food Bureau has established seven food districts on the island - Taipei, Hsinchu, Taichung, Tainan, Kaohsiung, East Taiwan, and Penghu - designating each as either "surplus," "self-sufficient," or "deficient." Only the Taipei and Penghu districts are considered deficient areas. Taichung, Hsinchu, Kaohsiung, and Tianan are surplus districts. The regional movement of rice is determined at the discretion of the Provincial

438 656 Food Bureau. Shipment of rice from one district to another is prohibited unless prior permission has been granted by the local district office or a branch office of the Provincial Food Bureau. For example, a Taipei merchant cannot purchase and move rice from the Tainan district without permission from the district office of the Provincial Food Bureau in Tainan.

442 Within this framework of control, rice merchants engage in one or more marketing activities -- transporting, milling, wholesaling, or retailing. They may be roughly classified into eight groups:

1. Local wholesalers and retailers -- receive unhulled rice from farmers for milling and sell to local retailers or to wholesalers at transit market.

2. Wholesalers at transit market -- buy rice, mostly brown, from the local wholesaling mills and sell to wholesalers at consumption markets, say in Taipei. These merchants are usually located in Taichung and Hsinchu, and at times they utilize the service of brokers to effect sales.

3. Wholesalers and retailers at transit market -- their function is the same as the wholesaler at transit market, although

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

471 454 438 There was still another category, a somewhat subtler one, by which Japanese investment was injected into Taiwan's economy. This consists of what might be called organizational changes, like banking facilities and the formation of stable domestic markets for disposing of produce. Many such features had been notably absent before 1895, when most commodity markets were no more than local in scope, prices fluctuated widely, interest rates were usurious, and speculation was the principal business activity. This channel of influence was often not actually separate from others; some efficiencies of this sort appeared even as by-products of other more deliberate innovations. These advantages tended to flow from relations among the modern types of business organization. Hence such benefits went to Japanese businessmen, though they often opened up subsidiary avenues to wealth for a number of Taiwanese in commerce and in service enterprises.[18]

With no significant exceptions, the growth and spread of Japanese business activity in Taiwan served primarily to introduce capital into agriculture without greatly changing the operation of individual farms. It furnished a pattern of services between the fields and the markets in Japan through which to reap the economies of modern organization, and yet ensured that most of the proceeds were reinvested on the island in a pattern determined by official decision.

The Preparations for War

656 During the early or middle 1930's the Japanese Empire began to turn toward preparations for war. The colonies were called upon to increase the measure of their contribution in other lines of production besides Empire self-sufficiency in food. Taiwan was not abundantly endowed with the heavy stuff with which the war was to be made—metallic ores were lacking, and coal deposits were not plentiful—and so it was permitted to assume some of the burden of processing materials formerly supplied to Japan as agricultural and other primary produce. This decision did not issue entirely from military or strategic considerations, since in many cases it amounted to no

[18] Chartered banks were an exception. They harnessed funds for industrial investment, and were all owned and operated by Japanese. ". . . modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese [Taiwanese] have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay." Grajdanzev (1942), p. 126.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

439 Though their books have a wealth of illuminating anecdotes ab
1777 the export trade, they provide almost no observations of any va
about the ordinary affairs of the population. One might imag
from reading such sources that everyone in Taiwan was engaged
foreign commerce or some form of government service.[4]

These informants were, up to a point, honest men. They were
trying to mislead, and deserve credit for considerable acuteness a
sincerity. The most likely reason for their failure to inform us ab
the Taiwanese is that they never had a chance to find out for th
selves. Western merchants simply had no occasion to form more t
special business associations with Taiwanese. Practically all of th
transactions were conducted by contract merchants ("comprador
as middlemen. Foreigners not infrequently made efforts to in
fere in internal affairs, but these all arose over specific issues. T
were attempts to make the social order more nearly serve their e
not to alter it.

As in China, trading relations carried on in this manner did
further the exchange of ideas along with commodities. They w
contrived so as to minimize such interchange. This mutual aloof
worked both ways: it enabled outsiders to get along in ignorance
conditions prevailing in the island, and at same time shiel
the general population from contact with the outside world. Fore
commerce, the foremost potential channel for innovation until
conquest by Japan, was severely circumscribed by seclusiveness
the parties on both sides.

1777 The reasons for this isolation are not all to be found in the
438 tility of officials or in the provincialism of Westerners. The
ers were eager to obtrude their presence further into foreign tra
even if only on their own terms. Government officers were too in
as administrators, their conduct too deeply undermined by directi
from above, to succeed in stifling any positive tendencies tow
change if such had arisen. The real bulwark of conservatism beh

[4] These authors made better traders than ethnographers. They often did not go
yond expressing impatience that Taiwanese should not follow 19th century Eng
trading conventions. The best and most comprehensive of these works (Davidson, Ja
W. [1905]), out of a total of 32 chapters, devoted only a single superficial one to "
Inhabitants of Formosa," where the author did little more than describe the aborig
The apparent exceptions prove the rule. If good material about those Taiwanes
Chinese origin is scarce, books about the aborigines of the interior (of varying qua
are not. Few Westerners penetrated to the dangerous mountain regions of Taiwan,
all of them developed immense curiosity about the customs of these "savages," w
was not held toward the Chinese. See, for example, the titles in Takekoshi, Yosab
(1907), pp. 321-342.

52:Barçlay S-5 (nodate)1954 ADl Formosa ADl

this nominal government policy existed within Taiwan's rural villages. The bulk of the population was made up of peasant farmers and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands.

The rural population led a settled existence. Taiwan being a small area, travel between places was not uncommon, but it was rare for families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island.

Local stability fostered local solidarities. The inconvenience of communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6]

Property institutions helped to buttress the stability in these small communities. In Taiwan, as in China, land ownership was the only durable form that substantial wealth could take. It was durable

[5] Takekoshi, Yosaburo (1907), pp. 252 and 269-270.

[6] The turbulent history of Taiwan has often carelessly represented as one of indiscriminate civil disorder, its early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

"Simultaneously with these military clashes commercial penetration of Taiwan was going on. By the treaty of Tientsin with Great Britain, Taiwan, the former capital of the island (now Tainan), was opened to foreign commerce. In 1860, the year of the ratification of the Tientsin treaty with France, Tamsui was also opened to trade (1). The pioneers

1. Regarding the causes of this opening it is stated in Article VI of the treaty: 'Experience having demonstrated that the opening of new ports for commerce is one of the necessities of the age, it has been agreed that the ports...'

were Jardine Matheson and Company and Dent and Company, two well-known and influential British firms in Hongkong, which in 1858 established trade connections with Taiwan and in 1860 opened offices there. The chief article of export from Taiwan in which they were interested was camphor, while in imports their interests were limited to opium (2). Opium was known in Taiwan before that date, but the years 1860-95 saw

2. Opium was 'practically the only import in which foreigners were interested' wrote Davidson, the American consul in Taiwan for some years.

the greatest spread of this evil. To support the interests of the business firms, British and later American and other consulates were opened in Taiwan. In 1863 the Imperial

Chinese Maritime Customs—actually a foreign-controlled agency in China to service the debts of the Chinese government—began to function at Tamsui. It is interesting to note that at first the customs office was opened on board the opium-receiving hulk Pathfinder, property of Jardine Matheson and Company; at about the same time the British consul opened his offices at Takao on board the opium-receiving hulk Ternate belonging to Messrs Dent and Company. This illustrates the close connection which at that time existed between the Customs, British officials, merchants, and the opium trade. These merchants on several occasions used their own force to compel the Chinese to accept their demands. In 1868 after one such 'small local war' (3) in which British marines had

3. The pretexts for such 'wars' were not difficult to find. Two gentlemen, for example, forced their way into Chinese property to which they had some claim, breaking down the door which was fastened by nails, but were met by 'a mob of [18] some 500 coolies.' 'The two gentlemen attempted immediate flight, but before they had gained many steps they were assailed in the most violent manner with guns, knives, spears and stones by the ferocious ruffians. Mr. Bird was struck down by a stone and beaten and stabbed with spears and muskets,' etc., etc. (Davidson, op. cit., p. 200). Miraculously, both gentlemen remained alive and in command of their faculties. Gunboats appeared on the scene to lend very effective support to their claims.

taken part, although there [18] was not a shadow of hostilities between China and Great Britain at that time, the British compelled the Chinese officials to abolish the camphor monopoly, to recognize the right of foreigners to travel and buy freely, the right of the missionaries to reside and work in the island, etc."

4:Grajdanzev--48 [2] S-4 (no date) 1942 Formosans
116, 241, 439, 656, 177.45 Japan
636.45

"Rice, as we shall see, is a cash crop; probably not less than two-thirds of the crop finds its way to the market. Sugar cane which constitutes from 12.2 to 19.3 per cent of the total, has special importance because the whole crop is marketed. Sweet potatoes and vegetables are chiefly for home consumption. Next in importance, in the order named, are tea, bananas, groundnuts, pineapples, tobacco, jute, and cassava. This almost complete dependence on rice and sugar cane is the result of government policy, as before 1905 the distribution of cultures was not so specialised. But now Taiwan has become a part of the economy of Japan and its function is to serve that country's needs."

4: Grajdanzev--51 S-4 (no date) 1942 Formosans
116, 243, 439, 177.43 Japan
636.43

"The unique position of rice in the economy of Taiwan justifies a more detailed discussion. Rice culture was important before the Japanese came to the island and rice exports to China were quite considerable. However, since the Japanese took control the production of rice has doubled in about a quarter of a century and more than half of the total production now goes to Japan. The credit for this achievement is usually given to the Japanese administration and the expansion has been taken as proof of the beneficent results of Japanese rule."

"Of course, the inclusion of Taiwan—a region of low prices—in Japan's customs area of high prices should result in an increase of prices in Taiwan, but this does not mean that Taiwan's farmers were necessarily the gainers. All prices were raised and it is by no means certain that this rise benefited farmers and workers. We may find an indirect answer to this question by calculating the average per capita consumption of cereals in Taiwan. Rice is the principal food for the islanders, and all other cereals produced there amount to less than 0.5 per cent of the production of rice and, consequently, may be neglected. Import and export data are available and Japan may serve as the standard of comparison. To simplify matters we assume that the crop of a given year and the imports of that year are consumed in the same year.

Rice Consumption in Taiwan*

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1905	4,354	57	620	...	3,039.8	1.25
1910	4,187	43	648	3,582	3,250.0	1.10
1915	4,785	64	767	4,082	3,479.9	1.17
1920	4,842	160	619	4,383	3,655.3	1.20
1925	6,443	718	2,057	5,104	3,993.4	1.28

*Footnote on next page.

Rice Consumption in Taiwan* [Cont.]

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1930	7,480	97	2,220	5,357	4,592.5	1.17
1935	9,122	7	4,493	4,636	5,212.4	.87
1936	9,559	7	4,788	4,778	5,452.0	.88
1937	9,233	7	4,842	4,398	5,609.0	.78
1938	9,619	15	4,878	4,756	5,747.0	.83
1939	9,152	8	4,106	5,054	5,880.0	.86

* In calculations made for the compilation of imports and exports before 1930 one koku of rice is taken as equal to 2.7 piculs.
Sources: for 1930-39: Keizai nenkan; for 1905-25: for production, Takahashi, op. cit.; for trade, Nippon boeki seiran. The last column is calculated."

4:Grajdanzev--56 S-4 (no date) 1942 Formosans-1-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

"Taiwan is famous for its rice production of which it exports almost half. The opinion of Japanese economists is that exports of Taiwan's rice to Japan brought to the island suc prosperity that some measures had to be taken to curb it. But the data presented in this table [See page 55--analyst] show quite a different picture. In 1905 the annual per capita consumption of rice in Taiwan was about 1.25 koku. Then it fell, but an increase in production brought it back to that level in 1925. At about that time the heavy exports of Taiwan's rice to Japan started: These exports brought a sharp fall in per capita consumption—it fell to 0.87 in 1935 and has remained on about the same level since that time. Now, 0.87 koku per year is about 0.8 pound per person per day. It was pointed out that the production of other cereals in Taiwan is almost nil. Only sweet potatoes form a signif icant addition to the diet (more than one lb. per person per day). Some wheat flour is imported but this amounts to only two to three per cent of the exports of rice (by weight).

These figures are for the total population. But the urban dwellers are probably better off than the farmers, so that the average for farmers should be less than 0.87 koku. Exports of rice from Taiwan to Japan cannot therefore be taken as a sign of Taiwan's prosperity, for they resulted in a fall in standards of living for the Chinese in Taiwan. Data for the last five years show that the annual average consumption of rice in Japan is about 1.10 koku, while in Taiwan it is 0.84. In other words, per capita consumption of rice in

"However, it would be a mistake to overemphasize these uprisings. Life was not easy under the conditions described above, but it was better than in Fukien and a definite development was taking place. Before 1600 hardly a thousand Chinese lived on the island; in the middle of the 18th century there were, according to Luchow, two and a half million. This may be an exaggeration, but it is a fact that at the end of the 19th century there were three million Chinese in Taiwan, engaged mainly in the cultivation of rice and sugar. About four hundred vessels were then plying between Taiwan and the mainland exchanging the produce of the island for that of China and in 1893, for example, 21 million lbs. of tea, 5.3 million lbs. of camphor and 98 million lbs. of sugar were ex-[16]ported. Taiwan rice played an important part in the economy of Fukien, as did oilcake, which was used as fertilizer. Taiwan sugar made up a great part of the sugar consumed in North China, and her camphor was a not unimportant item in China's foreign trade. This brief inventory is very important because it shows that the present-day character of Taiwan is not the creation of its present rulers, but is the result of a long historical process, though the progress under Chinese administration was slow in comparison with later developments."

4:Grajdanzev--56 S-4 (no date) 1942 Formosans-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

Japan is thirty-one per cent higher than in Taiwan, though the Japanese consume in addition considerable amounts of wheat, barley, and other cereals, which are almost entirely absent in Taiwan, to say nothing of sweet potatoes."

4:Grajdanzev--56-57 S-4 (no date) 1942 Formosans
116, 241, 439, 441, 655, 177.43 Japan
636.43

"The price ruling on the Tokyo market is, however, not the price which the farmer in Taiwan receives. Between him and the Tokyo or Osaka market are landlords, usurers, a chain of local dealers in rice, big Japanese importers and exporters, and Japanese shipping companies. Each one of them makes profits, [57] and good profits, so that little remains for the farmer, and especially the tenant-farmer.

However, the advice of Takahashi and others fell on fertile ground and, beginning with November 1, 1939, the export of rice from Taiwan to Japan became a government monopoly. The government-general decides how much rice should be produced, works out a plan of exports for each month, buys rice from the special local organizations, and sells it to a Japanese company, Nippon Beikoku Kabushiki Kaisha (Japan Rice Corporation). The other suggestion of the Japanese economists concerning the lowering of the price of rice in Taiwan may also be attempted, though it will be difficult to realize in a time of war inflation and rice shortage in Japan."

4:Grajdanzev--57-59 S-4 (no date) 1942 Formosans-I-2
116, 242, 422, 654, 177.24 Japan
636.24

"At the time of annexation the Japanese [58] government was anxious to improve their 'unfavorable' balance of trade with foreign countries, and the cultivation of sugar cane in Taiwan appeared to be an excellent means of doing this. Japan's imports of sugar at that time were in excess of twenty million yen—about ten per cent of her total imports, and at times equal to the 'unfavorable' balance of trade. Sugar cane is grown in Japan, but climatic conditions and limited area make it impossible to increase the total production significantly. At the most it can supply only a small percentage of the domestic demand for sugar. But Taiwan with its tropical climate could be successfully used for this purpose.

As early as 1896 seeds of improved types of sugar cane were imported from the Hawaiian Islands. In 1898, Kodama, the Governor-General of Taiwan, and his energetic Governor Goto began conferences with Japanese financiers on the question of investment in the sugar industry of Taiwan. A special investigation of the outlook for sugar cane culture in Taiwan was entrusted to Dr. Inazo Nitobe, who presented his report in 1901. In this report Dr. Nitobe recommended that the irrigated area and the area under cultivation be increased through various measures of encouragement, assistance, and direct government action, the establishment of sugar research stations, and the introduction of improved varieties of sugar cane, while other recommendations were made concerning sugar manufacture. The government followed these recommendations, established experimental

stations, imported new varieties of sugar cane from Hawaii and Java, and paid special subsidies and grants to the manufacturers and farmers to induce them to follow its policy. Up to March 31, 1932, it had paid about thirteen million yen in subsidies. Moreover, in 1903 a relatively moderate protective tariff on sugar imported into the Japanese Empire was introduced, the rate being 0.8 sen per kin (0.6 kg.) on No. 20 standard and higher. This rate was increased to 4.65 sen per kin in 1911 on No. 21 standard and higher, to 5.3 sen in 1927 on No. 22 standard and higher, and to 7.15 sen in 1932. As a result—this is the official version—wealth came to the sugar [59] industry and to the island 'and this has resulted in the present industrial prosperity'."

4:Grajdanzev--65-66 S-4 (no date) 1942 Formosans-2

116, 245, 439, 511

[66] Average production for the last five years was 18,038,000 kin, average exports 17,362,000 kin."

4:Grajdanzev--65-66 S-4 (no date) 1942 Formosans -1-2
116, 245, 439, 511

"Tea produced in Taiwan is chiefly of three sorts—black tea, oolong tea (famous for its aroma) and pouchong tea "wrapped'—paochungch'a. Production is as follows:

Production and Exports of Tea in Taiwan

Quantity (1,000 kin = 600 kg.)

	1914	1934	1935	1936	1937	1938
Oolong tea	...	5,292	5,280	5,049	3,48[illegible]	4,519
Pouchong tea	...	5,666	5,685	5,923	4,905	5,929
Black tea	...	6,021	5,490	6,508	10,562	9,835
Total production, incl. others	22,000*	16,997	16,468	17,486	18,955	20,285
Exports		16,641	15,768	16,741	18,604	19,057

Values in thousand yen

	1934	1935	1936	1937	1938
Oolong tea	3,562	3,538	3,571	2,871	3,715
Pouchong tea	3,075	3,086	3,394	3,163	3,677
Black tea	4,250	3,964	4,518	7,418	6,844
Total Incl. others	10,894	10,594	11,486	13,452	14,237
Exports	11,047	9,325	10,200	12,851	12,742

* Approximately

Sources: Keizai nenkan; Nogyo nenkan; Taiwan Jijo.

4:Grajdanzev--66 [21 S-4 (no date) 1942 Formosans
116, 245, 439

"Another important product is the banana. The tree is indigenous to Taiwan, but only under the Japanese have bananas become an important export item. The growth of production may be seen from the following table:

	1909	1921	1935	1936	1937	1938
Area (thousand ko)	0.6	6.1	20.6	22.5	21.9	21.5
Production (million kin)	10.5	86.2	322.5	339.5	364.3	336.8
Exports (million kin)	...	...	231.9	228.7	261.3	222.5
Value of exports (million yen)	...	...	10.2	11.2	12.3	17.6

As the figures show, a considerable portion of the crop is consumed in Taiwan—18.5 kin (11.1 kg.) per person per year, a fact which may be partially explained by the perishability of the fruit. The total value of bananas produced in Taiwan in 1937 was estimated by authorities at ¥8,133,000, but exports comprising only about two-thirds of the crop for the same year, were valued at Y12.3 million, which means traders and carriers were getting more than half the value of exports.

This export is very likely to develop farther. Production is concentrated in Taichu, Tainan, and Takao prefectures. In Taichu the fruit is produced all the year round, but in Takao it ripens only from April to July."

4:Grajdanzev--86-87 S-4 (no date) 1942 Formosans-1-2
116, 171, 262, 435, 439

"As to the general supply of fish for the population of Taiwan, the Japan Year Book has the following to say: '. . . The Taiwanese are a fish-eating people, but the annual catch is so great that a large quantity is exported to Japan proper [87] and other countries' (1).

1. P. 941, 1939-40 edition.

Statistics of the industry tell a different story. Compared with Japan the natives of Taiwan are poorly supplied with fish, for in 1937 the value of fishery products in Japan proper was ¥660,807 or about ¥9.3 per capita as compared with ¥3.8 in Taiwan. It is true that an important part of this catch is exported from Japan and a part is used as fertilizer, but the same is true for Taiwan. As may be seen from the following table, Taiwan is a net importer of fish:

External Trade of Taiwan in Fish
(1,000 yen)

Year	Exports to Japan	Exports to other countries	Gross exports	Imports from Japan	Imports from other countries	Gross imports	Net imports
1937	4,111	832	4,943	10,095	687	10,782	5,839
1938	3,006	491	3,497	11,535	405	11,940	8,443

The secret of this coexistence of exports and imports of fish does not lie in any over-abundance. The Japanese in Taiwan export fresh fish to Japan which they sell for an average price of 26 sen a kin (0.6 kg.), and import two kinds of fish: (a) salted and dried fish at an average price of 12.5 sen a kin and (b) canned fish. It is clear that these two kinds of imported fish are not consumed by the same groups of the population.

We saw above that the population of Taiwan consumes more meat on the average than do the Japanese; now we see that the Japanese consume much more fish than the islanders (2).

2. It was mentioned above that the average consumption of pork in Taiwan is about 37 kin, while in Japan it is only 3 kin; but the average consumption of fish in Japan must be, on the most conservative estimate, 60 to 70 kin."

4:Grajdanzev--103 S-4 (no date) 1942 Formosans
116, 392, 439

"Machine and Vehicle Production in 1937 Consisted of These Items:

	(1,000 yen)
Agricultural machinery, including that for the sugar industry	730
Other machinery and apparatus	5,071
Vessels	730
Vehicles	405
Other products	1,656
Total	8,592

This production by no means satisfies the needs of industry and transport of the island, and the imports of machinery, vehicles and vessels are now valued at thirty to forty million yen a year."

4:Grajdanzev--103 [2] S-4 (no date) 1942 Formosans
116, 323, 339, 439

"Composition of Ceramic Products by Value in 1937
(1,000 yen)

Bricks	3,063
Tiles	923
Cement	3,264
Cement tiles	503
Other products	1,075
Total	8,828

As may be seen from the figures quoted, this industry is practically limited to the production of cement and bricks. Production of cement in 1936 was equal to 143,076 tons and about an equal amount is imported from Japan."

4:Grajdanzev--104 S-4 (no date) 1942 Formosans
116, 371, 387, 439

"Taiwan is a heavy importer of fertilizers, because its domestic industry supplies a very small part of its needs. In 1936, for example, of 147,600 tons of sulphate of ammonia consumed, only 13,059 tons were produced in Taiwan. But this offers a promising field for development because Taiwan is rich in cheap water power (1).

1. In 1937 two large Japanese companies organized Taiwan Kagaku Kogyo Kaisha (Taiwan Chemical Co.) with a capital of ¥10 million, for the production of sulphate of ammonia. It was planned to increase production in the future to 100,000 tons of sulphate of ammonia; but data on the progress of the company are not available and, judging by the imports, production has not advanced to plan. The plant of the company was to be near Sinchiku."

"Actual production of coal reached its maximum in 1927, when 1,850,000 tons were produced. After that a decline set in, the lowest point occurring in 1932 (1,355,000 tons). With the general revival, production rose to 1,550,000 tons in 1935 and in 1937 to 1,744,000 tons. However, the low development of industry and the poverty of the population combine to [109] make the marketing problem difficult. Production capacity is considerably larger than actual production, and as may be seen from the following table, the market for coal is chiefly outside Taiwan.

Consumers of Taiwan's Coal 1932-34

	Quantity (1,000 tons)	% of total
Industry	399.7	27.6
Railways	150.5	10.4
Homes	48.8	3.4
Shipping	498.8	34.4
Exports	330.0	22.8
Other	21.3	1.4
Total	1,449.1	100.0

Source: Taiwan ginko chosa kacho, quoted by K. Takahashi.

Thus only slightly more than forty per cent of the output is consumed in the island

itself. Taiwan is capable of producing more coal than it does now, but the limiting factor is the smallness of the domestic market."

4:Grajdanzev--120-121 S-4 (no date) 1942 Formosans-1-3
116, 439, 505, 705

"The products of Taiwan can be brought to Japan only by sea: it was pointed out above that air freight-transport is insignificant because it is too expensive. As will be shown in the next chapter, the external trade of Taiwan is chiefly with Japan. The following table gives information on the shipping line connecting Taiwan with Japan and the continent.

This table shows that coastal shipping in Taiwan is not developed. The only line of importance is Keelung--Karenko, which is a necessity because the eastern railroad is not connected with the railroad network of the island, freight being transported exclusively by ships. Information concerning the lines connecting Taiwan with Japan shows how close are the commercial relations between the two countries,.... Lines connecting Taiwan with Manchuria direct and via Korea (Takao--Seishin) are of recent origin, while it will be observed that there are many more lines connecting Taiwan with China and with Southeastern Asia than is commensurate with the trade of Taiwan with these regions. The lines connecting the island with China probably serve the army and organizations connected with it, for Taiwan is the supply base for the armies now operating in South China.

Taiwan's Shipping Lines, in 1939

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Keelung--Kobe	6	84	8,000 tons or more
Takao--Tokyo	6	90	4,000 "
Takao--Tokyo*	2	24	2,500 "
Takao--Seishin (Korea)	2	12	2,000 "
Takao--Jinsen (Chemulpo) Korea	2	24	2,000 "
Takao--Dairen (Kwantung, Manch.,)	2	46	4,000 "
Takao--Tientsin	2	24	2,000 "
Takao--Shanghai	2	36	2,000 "
Keelung--Amoy	1	36	1,500 "
Keelung--Hongkong	2	48	1,500 "
Takao--Canton	1	24	1,500 "
Keelung--Java	2	12	3,000 "
Keelung--Philippines	3	24	3,000 "

Taiwan's Shipping Lines in 1939 [Cont.]

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Takao--Aparri (Philippines) since 1938	1	30	3,000 tons or more
Calls of Southern lines	2	24	5,000 "
Keelung--Karenko (Taiwan)	2	300	2,500 "
Coastal line, East of Taiwan	2	70	700 "
Takao--the Pescadores	1	156	700 "
Shinko--Koto†	1	60	50 "
Calls of European lines (Tokyo--London)	8	24	8,000 "

* Used for 'special purposes of the Army'

† Islands to the southeast of Taiwan, a part of the government-general. [Botel Tobago--analyst]"

4:Grajdanzev--131 S-4 (no date) 1942 Formosans
116, 439, 652, 177.65 Japan
636.65

"It might seem more appropriate to examine Taiwan's public finances in a later chapter after a survey of the administrative machinery and its functions. However, one important consideration makes it necessary to consider them here. Our investigation of Taiwan's economy cannot be considered complete without an examination of its external trade, which plays a very important part in the life of the islanders. But the exceptionally heavy movement of goods from the island to Japan cannot be understood simply on the basis of trade or the structure of Taiwan's economy. Certain non-economic factors must be examined before a satisfactory explanation of the movement of commodities can be made. By far the most important among these factors is the government budget, which involves tremendous sums--judging by the standards of the islanders."

4:Grajdanzev--142 S-4 (no date) 1942 Formosans
116, 439, 177.43 Japan
636.43

"We use the term 'external trade' of Taiwan because trade with Japan, cannot from the legal point of view be considered as 'foreign' trade. Throughout the following pages 'external trade' includes the trade of Taiwan with all other countries (including Japan)."

Taiwan's External Trade (In Million Yen)

		Export	Import
1896-1900	average	14.6	18.1
1901-1905	"	20.9	22.1
1906-1910	"	39.4	36.6
1911-1915	"	63.0	56.6
1916-1920	"	158.1	117.0
1921-1925	"	205.3	136.5
1926-1930	"	252.0	186.8
1931-1935	"	273.3	194.7
1936	"	387.9	292.7
1937	"	440.2	322.1
1938	"	456.5	366.7
1939	"	592.9	408.7

In 42 years exports increased from 14.6 million yen (average for 1896-1900) to 592.9 million in 1939, and imports from 18.1 million to 408.7 million for the corresponding dates, an increase of 41 and 23 times respectively. This trade is distributed among countries as follows: [143]

4:Grajdanzev--142-144 S-4 (no date) 1942 Formosans-2
116, 439

Exports

	1896-1900 average	1911-1915 average	1926-1930 average	1936	1937	1938	1939
Great Britain	1	877	1,053	1,372	2,095	1,499	817
France		539	289	241	250	221	194
Germany		978	76	84	83	239	329
Italy			777	2	0	8	279
U.S.A.	659	5,689	4,866	6,146	6,420	4,141	9,365
Br. India	2	129	13	221	175	36	29
Australia		46	35	421	569	282	220
Canada		299	10	117	224	67	114
Dutch East Indies		880	4,103	370	325	246	259
China	9,182	3,864	19,529	7,879	5,575	7,972	33,840
Hongkong	1,869	419	4,553	2,667	3,333	700	142
Manchoukuo				851	1,356	5,180	8,703
Kwantung		59	938	4,008	4,903	14,144	27,417
Japan	2,860	49,122	215,210	358,895	410,259	420,104	509,745
All others	6	120	518	4,675	4,608	1,615	1,216
Total	14,579	63,020	251,970	387,949	440,175	456,454	592,939

4:Grajdanzev--142-144 S-4 (no date) 1942 Formosans-3
116, 439

	1896-1900 average	1911-1915 average	Imports 1926-1930 average	1936	1937	1938	1939
Great Britain	1,326	2,340	3,083	392	792	204	146
France	7	25	57	51	96	131	
Germany	212	998	7,213	3,327	1,203	1,165	1,585
Italy		5	86				18
U. S. A.	957	1,252	3,413	2,908	2,934	2,550	1,750
Br. India	407	1,876	8,475	3,199	2,957	3,206	3,853
Australia	71	35	471	234	4		57
Canada		3	499	446	281	18	155
Dutch East Indies	37	311	2,365	1,843	3,282	2,101	4,529
China	6,771	6,970	25,893	8,622	6,201	1,954	4,253
Hongkong	536	100	76	126	95	6	7
Manchoukuo				19,618	17,185	17,817	22,082
Kwantung		494	2,352	6,878	7,088	7,891	10,299
Japan	4,888	40,071	127,666	243,832	277,895	327,950	357,608
All others	2,878	2,128	5,188	1,210	2,111	1,666	2,308
Total	18,090	56,608	186,837	292,686	322,124	366,659	408,650

4:Grajdanzev--142-144 S-4 (no date) 1942 Formosans-4
116, 439

[144] Trade By Countries In Percentages of Total Exports

	1896-1900	1926-30	1936	1937	1938	1939
Great Britain	0.0	0.4	0.4	0.5	0.3	0.2
France	0.0	0.1	0.1	0.1	0.0	0.0
Germany	0.0	0.0	0.0	0.0	0.1	0.1
Italy	0.0	0.3	0.0	0.0	0.0	0.0
U. S. A.	4.5	1.9	1.6	1.5	0.9	1.6
Br. India	0.0	0.0	0.1	0.0	0.0	0.0
Australia	0.0	0.0	0.1	0.1	0.1	0.0
Canada	0.0	0.0	0.0	0.1	0.0	0.0
Dutch East Indies	0.0	1.6	0.1	0.1	0.1	0.1
China	63.1	7.8	2.0	1.3	1.7	5.7
Hongkong	12.8	1.8	0.7	0.7	0.2	0.0
Manchoukuo	0.0	0.0	0.2	0.3	1.1	1.5
Kwantung	0.0	0.4	1.0	1.1	3.1	4.6
Japan	19.6	85.5	92.5	93.2	92.0	86.0
All others	0.0	0.2	1.2	1.0	0.4	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

4:Grajdanzev--142-144 S-4 (no date) 1942 Formosans-5
116, 439

Imports

	1896-1900	1926-30	1936	1937	1938	1939
Great Britain	7.3	1.7	0.1	0.2	0.1	0.0
France	0.0	0.0	0.0	0.0	0.0	0.0
Germany	1.2	3.9	1.1	0.4	0.3	0.4
Italy	0.0	0.0	0.0	0.0	0.0	0.0
U. S. A.	5.3	1.8	1.0	0.9	0.7	0.4
Br. India	2.3	4.5	1.1	0.9	0.9	1.0
Australia	0.4	0.3	0.1	0.0	0.0	0.0
Canada	0.0	0.3	0.2	0.1	0.0	0.0
Dutch East Indies	0.2	1.3	0.6	1.0	0.6	1.1
China	37.4	13.8	2.9	1.9	0.5	1.0
Hongkong	3.0	0.0	0.0	0.0	0.0	0.0
Manchoukuo	0.0	0.0	6.7	5.4	4.9	5.4
Kwantung	0.0	1.3	2.4	2.2	2.2	2.5
Japan	27.0	68.3	83.4	86.3	89.4	87.6
All others	15.9	2.8	0.4	0.7	0.4	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0"

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-1-3
116, 439, 656, 722, 177.43 Japan
636.43

"These tables [pages 143-144 in category 116--analyst] are of some value beyond the topic of immediate interest. Elaborate theories of international trade have been constructed, the purpose of which is to explain the movement of international trade as distinct from internal trade, but these theories pay little or no attention to factors of political control which are so often of paramount importance in this sphere. Before the occupation of Taiwan, Japan occupied a very modest [145] place in the trade of the island and even after the conquest, her share was at first small; in the period 1896-1900 imports from Japan made up on the average only 27 percent of the total and exports to Japan, only 19.6 percent. It is true that these figures are rather too low because of the absence of data on Japan's trade in 1896, but if these data were available, they would probably increase Japan's share by only 4 or 5 percent. The fact is that even after the occupation of the island, and in spite of the presence of large detachments of troops and swarms of Japanese officials and adventurers, trade continued for some time to flow chiefly in the old channels. However, this situation was soon changed. In 1926-1930 exports to Japan amounted to 85.5 percent of total exports and in 1937 reached a maximum of 93.2 percent, a figure probably unsurpassed in the history of other colonial countries. The same development was achieved in imports. In 1926-30 Japan's share was 68.3 percent, in 1931-35 it was 83.4, and in 1938 it reached a maximum of 89.4. The slight fall

in Japan's share in 1938 and 1939 is apparent rather than real, for in these years Kwantung, Manchoukuo, and maritime China became to all intents and purposes Japanese colonies and for the Japanese in Taiwan it makes no difference from the point of view of profits and foreign exchange whether they trade with Japan or with these regions. In 1939 the share of this 'yen bloc area' of Taiwan's trade was 97.8 percent of her exports and 96.5 percent of her imports. For comparison let us look at the share of China. In 1896-1900 her share in Taiwan exports averaged 63.1 percent, in 1926-30, only 7.0, in 1936, 2.0, and in 1937, 1.3. The same picture appears in the case of imports, for which the corresponding percentages are 37.4, 13.8, 2.9, and 1.9. China is near, --just across the Taiwan Strait, her population is vast her cities are growing, her products are held in high esteem by the Chinese population of the island, she is in great need of Taiwan's products, and yet the trade between these two regions continued to fall catastrophically, But in 1937-1938 the most important points on the Chinese coast were occupied by the Japanese. By 1939 the area under the latter's domination has increased further, and a surprising change is occurring [sic]--the trade of Taiwan with China now shows a remarkable increase.[146]In 1937 exports from Taiwan to China were valued at 5,575,000 yen, but by 1939 they had risen to 33,840,000. Imports from China in 1938 were valued at 1,954,000 yen, in 1939, at 4,253,000. Although China experienced war in the last three years, though many of her cities were ruined, and the purchasing power of the population has fallen, the trade is better than at the start of the conflict. The reason for this reversal

lies not in the economic situation; it is rooted in the change in the political conditions for now maritime China is virtually a Japanese colony.

This will help us to understand why the foreigners--British, Americans, and others--were gradually ousted from Taiwan. Before 1895 British and American trade with the island was larger than that of Japan, the most important branches of trade, as well as shipping, were in British hands. The British owned Douglas Co. monopolized shipping, the Hongkong and Shanghai Banking Corporation dominated the financial sphere, Jardine Matheson, Dent, and Samuel Samuel traded in camphor, sugar, tea, and other products, while the trade in rice was chiefly in the hands of Chinese. Mitsui Bussan--the pioneer Japanese firm--did not appear on the island till 1898. The share of Great Britain in Taiwan's imports fell from 7.3 percent in 1896-1900 to 0.1 in 1936 and to almost zero in 1939, while in the same period that of the United States fell in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. from 5.3 to 1 and to 0.4. [sic] In 1896-1900 Taiwan's average annual imports from Great Britain were valued at 1,326,000 yen, in 1926-30 (in depreciated yen) at 3,083,000 yen and in 1936, at 392,000. The imports from the U.S.A. amounted to 957,000 yen in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. (The purchasing power of the yen of 1939 is probably not more than one-fourth of what it was in 1896-1900.)"

"Independent trade and foreign business are at an end (1) and the handful of foreigners

1. Identical amounts of foreign trade may mean different things for a nation; thus if an American firm buys tea in Taiwan, transports it to the United States in an American ship and sells it to retailers, the net result for the United States is very different from the case where a Japanese firm buys tea in Taiwan, brings it to the United States in Japanese bottoms, and sells it to American retailers.

in Taiwan are in a precarious position. In his [147] book 'Taiwan under Imperialism' Tadao Yanaihara explains this in the following way (2): in their competition with foreign

2. Yanaihara, op. cit., pages 48-49.

and Chinese merchants the Japanese traders had great capital; they also entered the sphere of production; they had the advantage of the cooperation of the Taiwan Bank; they were helped by state monopolies; they enjoyed subsidies from the state; they were protected by the tariff wall. But nowhere in his book does Professor Yanaihara give proof that the Japanese merchants had greater amounts of capital when their enterprises were organized. The huge capital funds were not brought from Japan; they were created in Taiwan itself. Neither can any reason be found for combination of trade and production

as a cause of their success. According to his own statement (op. cit., page 48), the foreign traders and shipping were almost completely driven out (hotondo kuchiku serarete) by 1907. But at that time no Japanese took any part in the production of rice, whereas in tea production Mitsui Bussan Co. and Nozawa have participated only since 1907. As late as 1905 about 90% of the sugar was produced in primitive mills and only 4,535 tons in the mills of the newly-established Japanese enterprises, while the total exports of sugar for 1905 were but 42,600 tons. Pineapples and bananas were unimportant as articles of export in these early years: bananas appeared in the custom reports in 1907 (valued at only 44,129 yen), pineapples to the value of only 18,639 yen were exported in the same year. Since camphor became a monopoly, there is no question of competition with respect to it; while alcohol was practically not exported."

4:Grajdanzev--148-149 S-4 (no date) 1942 Formosans-1-3
116, 439

"Exports By Commodities, (1,000 Yen)

	1900-4 average	1925-29 average	1936	1937	1938	1939
Rice	3,975	67,157	124,318	126,193	128,784	128,502
Sugar	3,234	117,562	166,116	191,546	189,258	259,827
Bananas		9,310	11,166	12,335	13,283	17,006
Tea	5,691	11,035	10,270	12,852	12,742	12,424
Canned Pineapples		2,785	7,244	9,220	10,412	13,342
Camphor, crude	2,912	4,036	5,333	4,476	4,066	6,010
Camphor oil	1,112	2,509	853a	1,063a	3,152	4,030
Alcohol		5,806	5,841	5,765	9,773	16,528
Fresh fish		1,303	3,277	3,268	2,233	3,719
Salt	91	985	1,103a	1,096a	2,259	1,252
Cotton tissues	23	4,010				
Hats, caps	21	2,969	2,453	3,270	2,989	4,829
Coal	25	7,098	2,254	3,932	7,986	9,167
Ores		1,943	15,637		unreported	
Timber			2,075	2,137	3,257	5,106
All others	1,932	17,817	30,009	63,022	66,460	102,197
Total exports	19,016	256,325	387,949	440,175	456,654	592,939

a) Exports to Japan only, other data could not be obtained.

Exports As Percentages Of Total

Rice	20.9	26.2	32.1	28.7	28.2	21.7
Sugar	17.0	45.7	42.9	43.5	41.4	43.8
Bananas		3.6	2.9	2.8	2.9	2.9
Tea	30.0	4.3	2.6	2.9	2.8	3.6
Canned pineapples		1.1	1.9	2.1	2.3	2.3
Camphor, crude	15.3	1.6	1.4	1.0	0.9	1.0
Camphor oil	3.9	1.0	0.2[a]	1.3	2.1	2.8
Alcohol		2.3	1.5	0.2[a]	0.7	0.7
Fresh fish		0.5	0.8	0.7	0.5	0.6
Salt	0.5	0.4	0.3[a]	0.3[a]	0.5	0.2
Cotton tissues	0.1	1.6				
Hats, caps	0.1	1.2	0.6	0.8	0.7	0.8
Coal	0.1	2.8	0.6	0.9	1.7	1.6
Ores		0.8	4.0			
Timber			0.5	0.5	0.7	0.8
All other	10.2	6.9	7.7	14.3	14.6	17.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

a) Exports to Japan only, other data could not be obtained.

1. Source: for 1903-1929, Takahashi, op. cit.; for 1937, An Inquiry into the National Income of Japan (Economic Federation of Japan, Tokyo, 1940).

4:Grajdanzev--149 [2] S-4 (no date) 1942 Formosans
116; 433, 439, 177.24 Japan
636.24

"In 1939 about 81 percent of Taiwan's exports consisted of agricultural raw materials and products manufactured from them such as sugar, tea, and tobacco. In fact the island is practically an agricultural appendage of the Japanese economy."

4:Grajdanzev--149-150 S-4 (no date) 1942 Formosans-1-2
116, 171, 435, 439, 177.43 Japan
636.43

"Two other aspects of Taiwan's exports should receive our attention. First, it is interesting to compare the gross value of Taiwan's production with its exports, keeping in mind that the gross value is considerably larger than its net value, i.e. by the cost of materials, fuel used in production, etc.

Comparison of the Gross Value of Production and Exports

	1903	1922	1929	1937
Gross value of production, million yen	84.5	354.2	598.6	890.5
Exports, million yen	20.7	158.4	272.0	440.2
Exports as percent of gross value	24.5	44.7	46.3	49.4

From this table it appears that in 1903 about one-fourth of the gross value was exported, while in 1937 the amount had risen to 49.4 percent. This probably means that in 1937 not less than three-fourths of the total net value of production of production[sic]of Taiwan was exported. Such a high ratio of exports to gross value of production is probably approached only [150] by Korea (1).

1. If Taiwan were to receive the equivalent in imports, the large exports would not constitute a problem. But we shall see later that this is not the case.

To see how far this situation was to the mutual advantage of the natives and the

Japanese, one should compare not only the ratio of exports to total production but also the absolute amounts which are not exported. In 1903 there remained 63.8 million yen worth of unexported goods, while in 1937 450.3 million were left. Let us now examine these figures in the light of price-changes: We have no index of prices for Taiwan in 1903, but we do have prices of rice--the most important product of the island--to which the authorities in 1937 gave a weight of 31 percent in the general index (2). A picul of

2. Actually it should be about 40 percent because the authorities gave sugar a weight of 25.3 percent, unduly large in view of the fact that more than 90 percent of the production is exported.

rice in 1903 cost 2.36 yen; in 1937, it cost 9.32 yen, or almost 4 times as much. If we also take into consideration the growth of population, the residual per capita gross production 'in rice prices' was 21.8 yen in 1903 and 19.8 yen in 1937. These are gross values of production, and since industry played a much greater part in 1937 than in 1903, the per capita net 'real' values in 1937 must actually be much smaller than in 1903. This is a startling conclusion. We emphasize again that these figures can only be approximate, yet they are sufficient to indicate the trend of events."

From the above table it is apparent that first place in Tai-[149]wan's exports is occupied by sugar, its value in 1939 being 260 million yen. Second place is taken by rice, the exports of which increased from 4 million yen in 1900-4 to 129 million in 1939, and next in order of importance, though far behind come tea, bananas, alcohol, pineapples, and camphor. In 1900-4 the island exported chiefly tea and camphor, and these two products alone made up more than half the total exports."

4:Grajdanzev--149 S-4 (no date) 1942 Formosans
116, 314, 439, 655, 177.31 Japan
636.31

"The government, desiring to utilize the unique position occupied by Taiwan in the supply of camphor, made it a government monopoly. However, in the last few years synthethic camphor production has made striking progress and the monopoly is now definitely broken. This does not mean that natural camphor will lose its market for the expanding celluloid industry can successfully absorb the surplus, but the former advantageous position of the Japanese government is lost."

4:Grajdanzev--150-151 S-4 (no date) 1942 Formosans-1-2
116, 439

"The other matter of great importance is the sharp increase of exports from Taiwan since the start of the present Sino-Japanese war, without a corresponding rise in imports. In 1937 the increase of exports over 1936 (a year of peace) was 52 million yen, in 1938, 68 million, in 1939, 205 million, while imports increased by only 116 million yen between 1936 and 1939. To such a degree were Taiwan's reserves depleted that in spite of the great rise in prices the external trade shows a fall of 7 million yen for the first five months of 1940 as compared with the first five months of 1939. A brief analysis of Taiwan's imports follows. [151]

Imports by Commodity Groups (1,000 Yen) (1)

1. Source: Keizai Nenkan of the Oriental Economist, based on the data of Taiwan boeki geppo.

	1900-4	1925-29	1936	1937	1938	1939
Cereals, starches seeds	1,615	22,939	14,655	15,341	17,168	21,239
Foods and beverages, tobacco	3,788	33,249	45,031	15,341 47,001	17,168 54,214	21,231 66,679
Oils, fats and mfrs. thereof	1,276	7,490	13,877	17,623	19,386	20,593
Chemicals, drugs, dyes, explosives	3,203	9,530	15,586	17,643	18,980	28,096

4:Grajdanzev--150-151 S-4 (no date) 1942 Formosans-2
116. 439

	1900-4	1925-29	1936	1937	1938	1939
Threads, cords	215	3,930	4,568	4,850	4,648	5,214
Tissues, clothing and other textiles	3,175	29,528	38,417	40,888	52,303	48,566
Pulp, paper, books	841	5,257	7,937	9,015	10,008	11,860
Mineral and mfrs. thereof (cement, tiles, sand, etc.)	339	2,536	7,054	9,344	9,075	10,723
Ceramics	333	2,571	3,830	4,097	4,182	5,074
Ores, metals and mfrs.	1,126	15,711	33,553	43,853	48,721	45,909
Vehicles, machinery, arms, precision and scientific instruments	667	10,222	28,319	26,013	29,236	40,478
All others	4,924	47,196	79,859	86,456	98,738	104,227
Total	21,502	190,159	292,686	322,124	366,659	408,650"

"In return for exports to the value of 593 million yen in 1939 Taiwan received only 409 million yen worth of imports (69 percent). In order to move these exports to Japan certain conditions are obviously necessary. Taiwan must import rails, railway equipment, harbor equipment, bags for rice and sugar, fertilizers, etc. Taiwan's exports--rice, bananas, sugar, tea, pineapples, fresh fish, etc. --are foodstuffs. But most of the imports enumerated are of no direct use to the islanders themselves; they are beneficial only insofar as they help them to secure other goods. They are really costs of production. In 1939 at least 60.7 million yen worth of fertilizers, including bean cakes and other cakes, (included in 'all others' in the table above) and about 8 million yen worth of gunny sacks were imported. Another group of imports is connected with the effort to turn the island into a powerful base for further advances into China [152] and the Southern countries. Port facilities far beyond the needs of Taiwan itself, powerful radio stations, fortresses, strategic railways, factories producing war materials are being built. Again we cannot determine exactly how great this group of imports is, though we can guess its growth by following the growth of 'ores, metals and manufactures thereof', etc. These two groups, which in themselves contribute little to the welfare of the islanders, increased from 28 million yen in 1925-1929 to 62 million in 1936, to 70 million in 1937, to 78 million in 1938 and to 86 million in 1939. To some extent this growth is purely illusory since it reflects the rise in prices in these years, but we know that in the Japanese colonies, just as in Japan, the consumption of metals, machines, for peace time uses,

4:Grajdanzev--151-152 S-4 (no date) 1942 Formosans-2
116, 439, 722, 177.43 Japan
636.43

etc., was reduced or stopped completely, so that the greater part is now available for military purposes."

"The remaining imports — imports for consumption — should be divided, wherever possible, into two parts — consumption by Japanese and consumption by Chinese. Without attempting any detailed analysis we may make a few remarks on the basis of the material available. In 1939, for example, 2 million yen worth of condensed milk was imported, as well as 7 million yen worth of sake and 5 million yen worth of beer, not including local production of sake and beer. Neither sake nor beer are Chinese drinks; they are consumed chiefly by 100,000 Japanese male adults and by the troops stationed there. To take another example, in 1939 48.6 million yen worth of fabrics and clothing, including shoes, hats, gloves, buttons, pearls, combs, bracelets, laces, etc. were imported into Taiwan. From this amount 8.1 million yen worth of gunny sacks should be deducted, leaving a balance of 40.1 million. If Japanese residents were able in 1939 to spend 12 million yen on drinks (not including locally produced and consumed beverages), they probably spent not less than double this sum on clothing, shoes and other personal articles (1) which—with a [153] few unimportant exceptions—are imported from Japan.

1. That this is not an overestimate may be judged from the following figures: 77.2 yen per person per year or about 25 yen per family per month can hardly be considered as excessive for clothing (including shoes, etc.) in a country where, for example, one yard of muslin cost 1.34 yen. In a special investigation conducted in 1937-1938, which covered 355 Japanese families with 1,397 members, the average

monthly income of a family was 184.6 yen, of which 23.6 yen was spent on food, 16.9 yen on lodging, leaving an ample margin for clothing and other expenditures. (Data on budgets from the Toyo keizai tokei geppo, July, 1940). An investigation conducted in Japan proper in 1936-1937, only one year earlier than the investigation in Taiwan mentioned above, gives the average expenditure on clothing of 10.18 yen per month for persons with an average salary of 88.37 yen; for the low income brackets it was 3.43 yen, for higher (about 100 yen), 12.18 yen. In our case the average salary is 184.6 yen, so that an expenditure of 25 yen on clothing is quite probable. See Kakei chosa hokoku, (Naikaku tokei kyoku) Tokyo, March, 1938.

If this is true , then not more than 3 yen per capita were spent on imported clothing by the Chinese in 1939 (2). But, as was pointed out in the preceding pages, the Chinese

2. The correctness of our estimate is supported by the budget estimates made by the government officials in 1936 and quoted by Nasu (op. cit.). According to them, the per capita annual expenditure on clothing of a representative Taiwanese farmer was 6.02 yen in 1936. This figure includes imported and locally produced clothing (shoes, hats, etc.) whereas our estimate is for the imported textiles only.

society in Taiwan is not uniform. Its wealthier members spend on clothing many times more than the small farmers, workers, or tenants."

6: Kirchhoff--33 [7] U-4 (no date) 1895 Formosans
116, 439, 489

When four ports were thrown open in 1860 to foreign commerce (Tam-sui and Ki-lung in the northeast, Tai-nan and Ta-kaô in the southwest), in Europe excessive hopes were set on the commercial profits to be obtained from the natural wealth of the island. Nothing was known of the lack of communications in the interior, the utter absence of the canals which, in China, did so much to render easier the transport of goods, or of the poverty of the inhabitants. The sum at the disposal per day of the poor Chinese peasant for himself and his numerous family (the Chinese price of essentials being very low) is but 20 pfennigs! But since then many advances have been made in Formosa, and at least in some stretches the absence of roads has been made good. How much that has fostered commerce can be seen from the increase of total imports and exports for the two most important of these treaty ports. In the 15 years from 1868 to 1883, these figures rose from 7 to 18 million for Ta-kaô, and for Tam-sui from 5.6 million to 20 million.

6: Kirchhoff--33-34 U-4 (no date) 1895 Formosans
116, 252, 439

The main imports from lands other than China are cotton and woolen materials, and Indian opium; then follow metal goods, clocks, maize flour (used by Chinese settlers in baking cakes), boards, lamps, matches, dye for dyeing, umbrellas, needles and related articles. Even more variegated is the list of imports from China, embracing hemp sacks, peas, bricks and fans, jade bracelets, etc., but the value of this commerce which involves for the most part the ports of Amoy, Tsuan-tschau (Tschang-tschou on our maps) and Fu-tschau cannot be estimated. *

*The Europeans acting as customs officials in the treaty ports [34] note only the value of the goods imported from abroad and exported abroad, because they have to collect taxes for the Chinese Government from them alone. Consequently it is obvious that the value of goods from China and exported to China is not included in the sums quoted for Ta-kaô and Tam-sui.

6: Kirchhoff--34 U-4 (no date) 1895 Formosans
116, 439

The bulk of Formosan exports consists of sugar, coal from Ki-lung, tea, camphor, nettle fiber, indigo and wood for construction. Sugar constitutes roughly half of the total exports, indeed almost the total exports of the southwestern harbors, where the only other exports concerned, practically speaking, are sesame and turmeric root (for the manufacture of saffron yellow). The inferior brown kinds of Formosan sugar go to Japan and China, the white sugar is exported to Europe also.

6: Kirchhoff--34 [2] U-4 (no date) 1895 Formosans
116, 372, 439

The coal from Ki-lung might bring in tremendous sums, in view of the steadily growing demand for coal in the South Seas steamer traffic, which at present must be met by coal coming from such distant parts. And, in fact, in Hongkong for example Formosan coal can be delivered at a price per ton of 20.2 marks, so that it is at times cheaper than Japanese and Australian coal, and almost only half the price of English coal. But unfortunately this coal is too bituminous, and therefore burns too quickly, emits a great deal of smoke and deposits much soot in the chimneys. So the Chinese of the mainland prefer their own anthracite, while the foreigners in the Chinese coastal regions are quite willing to burn Formosan coal in stoves in the rooms. In view of the cheapness of the latter, its future seems assured, particularly when it is mixed with slower burning coal that is free of bitumen.

6: Kirchhoff--34 [4] U-4 (no date) 1895 Formosans
116, 439

It must still be stressed that China and Japan naturally occupy first place in the export trade with Formosa, because of their proximity and huge populations, but that the European flags most often seen are the English and the German. . Formosan tea is sent almost exclusively to North America, and the camphor is sent via Hongkong to Europe (the yearly value often amounts to 600,000 marks).

7: Joest--55 [11] E-5 (no date) 1882 Formosans
116, 439

The total imports in the two harbors of Tamsui and Taiwanfu-Takao in 1880 were approximately 20 million Mark, and the total of exports was 30 million Mark, that is, 50 million Mark together. The chief articles of import are opium and Chinese articles of consumption such as European shirting, iron, bags, etc. The exports from the north consist chiefly of tea, camphor, and coal, and those from the south consist chiefly of sugar.

7: Joest--55 [6] E-5 (no date) 1882 Formosans
116, 439

During the previous year [MS: 1881] about 12,000 Pikul of camphor, at a value of about 600,000 Mark, were exported from Formosa.

9: Yamasaki--232 N-5 (1896-1897) 1900 Formosans
116, 249, 439

The second chief product is sugar-cane. It is noteworthy that sugar-cane in Taiwan is much smaller than in the Riukiu Islands. It grows in large quantities in the plain of Tainan. November is the harvest month. The raw sugar is manufactured with the help of a primitive mill in large, cone-shaped huts, of which many can be seen in the southern plain. The most important centers of the export trade in sugar-cane are Takao and Tainan (Anping), the trade being very lively between January and April.

9: Yamasaki--232 [3] N-5 (1896-1897) 1900 Formosans
116, 245, 439

Taitōtei is the only town manufacturing and dealing in tea. The tea is exported via Tamsui to Amoy, and from there the Oolong tea goes in the main to America, in part to England also, and the Pauchong tea goes to the Straits Settlements for the Chinese who live there.

9: Yamasaki--234 [3] N-5 (1896-1897) 1900 Formosans
116, 439, 652

The total national income (Erträge) of Taiwan is estimated at over 40,000,000 yen per year. Of this, the total value of goods exported in 1896 amounted to 11,791,051 yen.

42: Schetelig--386-387 T-2 (no date) 1868 Formosans
116, 135, 177, 361, 439

Kilung is a Chinese town with walls and gates. It is open to European commerce and is distinguished for the by no means inconsiderable beds of coal in the neighborhood and by the traces of a Spanish fort. For as, in the south near Taiwan-fu and in the north near Tamsui, quite substantial remains of Dutch strongholds are to be found, similarly the Spaniards, [387] during their brief period of settlement in the 17th century, seem to have made Kilung the chief point for their operations.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

VIII. IMPORTANT CITIES[3]

Keelung

439 Keelung City, the port for Taipei and northern Formosa, handles nearly one-half of Formosa's imports and a little more than one-fourth of all exports. Apart from factories which manufacture commercial fertilizers, wheat flour, and bicycles, it has ship-building facilities, a railway terminus, and warehouses. It also is a base for deep-sea and coastal fishing. The registered population in June 1953 was 170,000.[4]

Taipei

438 633 Taipei, located on the northern bank of Tan-shui River, is the largest city on the island, with an estimated population of over 700,000 in early 1956. It is the capital of

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3. Information on the important cities is taken from A.F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, pp. 73-109.

4. The registered civilian population, apparently not including military personnel and foreigners.

Kaohsiung

504 712 Kaohsiung is the second largest city and is known for its harbor and large-scale industries. It has a population of 300,000. [439] Because of its warm and rather dry climate, this port handles a major portion of the island's sugar, salt, and cement exports. The naval base of Tsoying is located in the city and the military fort, Fengshan, another important military base, is about six miles north of the city limits.

Makung

712 633 Makung, located in the west of the main island of the Pescadores, is an important naval base and the seat of the Penghu hsien government. The fact that this port lies in the Formosa Strait and between the China Mainland and Taiwan gives it strategic importance.

241 occupation in the first half of the seventeenth century, rice and sugar have been the staple products of the island.

241 Under Chinese rule in the eighteenth
245 and nineteenth centuries, a constant influx of immigrants from the mainland reclaimed the extensive western plains of Formosa for the cultivation of rice and sugar. The foothills surrounding the plains were terraced for the growing of tea. Further in the mountains,
278 camphor was gathered from the dense forests. In the more isolated mountain region, aboriginal tribes practiced hunting and slash-and-burn agriculture. Coal mines were operated for a time by the government but were later abandoned.

489 Except for a 60-mile stretch of railway between Keelung and Hsinchu, communications was primitive until the present century. Rafts, boats, and junks were used along the coast and on lakes and rivers. Overland, the inhabitants were obliged to travel either in man-borne palanquins[3] or ox-drawn carts.
439 Western merchants handled a small international trade, consisting of tea, camphor, and sugar.

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3. A closed litter commonly used as a conveyance in China.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

648 Under the Japanese from 1895 to 1945, the economy of Formosa was geared entirely to that of the colonial power. The island was developed as a major source of foodstuffs to feed the rapidly growing population of Japan. All possible arable land was brought under cultivation. The production of rice [439] more than doubled between 1905 and 1935; the sugar crop tripled between 1910 and 1940.[4] Great strides were made in modernizing communications and transportation throughout the island, including the construction of a network of railways and roads. After 1937, 648 178 439 some effort was directed toward the industrialization of the island. Factories were built, electric power developed, highways and railways improved, and harbors enlarged. A number of large plants were established to use the raw materials of Southeast Asia in the production of semi-finished goods to supply Japanese industry. The chief emphasis was on metals and chemicals. No attempt was made to achieve industrial self-sufficiency on the island. Fertilizer and textiles, two of the most important industrial products in an agrarian economy were totally neglected.

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4. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 24.

[727] Economic dependency on Japan was accentuated
648 by the employment of only Japanese in both
459 technical and managerial positions. From the beginning of the Japanese control, trade was confined almost exclusively to territories within the Japanese empire and managed for the most part by Japanese personnel. Japan took between 90 and 95 per cent of Formosa's exports and supplied 85 to 90 per cent of the island's imports. Some sugar and coal were shipped to China, and small quantities of tea and camphor were sent to the United States.
648 Banking and currency were linked to the
454 Japanese system, and all capital investment was controlled by the Japanese.[5] "Every year, for at least fifteen years previous to the war, Japan is believed to have gained directly 150 million yen from her investments in Taiwan, and for the fifteen years before that lesser but still significant sums".[6]

648 Some of the Japanese industrial projects
727 were never completed. Others wer destroyed

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5. By 1939, 90% of all the capital invested in the island was held either by the Japanese government or Japanese nationals; the remaining 10% held by Formosans was mostly invested in small shops. Taiwan, A Geographical Appreciation, Ottawa, Department of Mines and Technical Surveys, Government of Canaca, 1952, p. 16.

6. Ginsburg, op. cit., p. 25.

[162]
241 The importance of agriculture to the national
434 economy is made more obvious by the fact that a large percentage of Formosan industries involve the processing and transporting of agricultural commodities. Agriculture products also provide an important source of foreign exchange for the island. In 1953, total
[139] exports amounted to approximately US$130,000,000, of which over 90 per cent was derived from the export of agricultural products.

241 The climate in Formosa is eminently suitable for agricultural production. The tropical and sub-tropical atmosphere and abundant rainfall in most parts of the island encourage the cultivation of rice, sweet potatoes, sugar cane, tea, bananas, and vegetables. Rice cultivation is carried on in all parts of the island; sugar cane, sweet potatoes, and peanut are grown in the central and southern sections; tea is cultivated in the northern districts.

648 During the Japanese occupation of
241/ Formosa, the policy of economic development was geared to the economic needs of the Japanese Empire. When a shortage of rice was felt in Japan, rice was produced in

379 Formosa has not yet exploited the hydroelectric potential offered by its heavy annual rainfall and the steepness of its river gradients, and no sustained effort has been made to compensate for the varying water reserves available at different times of year, headwater erosion, the narrow valleys in which the rivers flow, and the silt and gravel which combined to reduce the efficiency of the streams as a source of power. For these reasons, the economic development of potential power sites is as important to Formosa as the implementation of flood control and irrigation programs.

Currently, the Taiwan Power Company has established a committee to investigate and plan the generation of power by atomic energy on Formosa.

IV. FOOD PROCESSING INDUSTRIES

A. The Production of Sugar

249 The history of the sugar industry in Formosa
433 goes back to 1349, when islanders "boiled sea
431 water to make salt and fermented molasses to produce liquor."[17] In 1650, when the Dutch were occupying Formosa, some 6,000 metric tons of sugar cane were produced each year. Of this amount, two-thirds were exported to Japan and marketed in lands as far away as Persia. Under the rule of Cheng Ch'eng-kung (Koxinga), who

17. China News Press, T'ai-wan Ching-chi Nien-pao, 1953 [Annual of Taiwan's Economy, 1953], Taipei, 1953, p. 45.

249 defeated the Dutch, annual production rose to
433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require-
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills came under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
252 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brown Sugar Association produce brown sugar for domestic use and foreign export.

257 The milling capacity of the 26 mills controlled
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is about 12 per cent. These mills operate an average of 150

387 raw materials necessary for the processing of
433 fertilizer are available on Formosa. The island has a relative abundance of limestone, coke, coal, pyrite, and serpentine; phosphate must be imported. However, the present expansion program will only provide two-thirds of the minimum fertilizer
387 requirement of the island. The following table
433 compares the production and importation of chemi-
437 cal fertilizers.

PRODUCTION AND IMPORT OF CHEMICAL FERTILIZERS */

	Production	Importation
1937	31	413
1938	27	444
1939	34	356
1951	112	235
1952	150	403
1953	166	253
1954	168	359

*/ Industry of Free China, Vol. 2, November 1954, pp. 90-91, and Vol. 3, May 1955, pp. 56,70.

651 charge upon all non-exempt import cargo. The proceeds of this tax are forwarded to the provincial treasury. Articles imported for military use, for relief, or for educational or research purposes are exempted from import duty. And customs duties are not levied on the personal effects and supplies imported for use by diplomatic officials and personnel of the administrative agencies of American aid and military missions to Formosa.

The collection of customs duty is the single largest source of income for the central government. In 1954, customs duties amounted to NT $611,022,015[2] There are two customs districts in Formosa - Taipei and Tainan. Sungshan airport is under the administration of the Taipei customs district.

687 Because of the government control on
1139 foreign trade, which forbids the importation of luxury items, smuggling is rampant. In 1954, fines amounting to NT$4,683,485 were collected.

651 The salt tax was once the most important tax on the China Mainland. In Formosa,

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2. The official exchange of Formosa currency in 1954 was NT$18.78 to US$1 and the market rate averaged NT$27.50 to US$1.

443 established stores and shops, provided one has skill in bargaining. Some operators at times manage to sell their items at high prices to unsuspecting customers.

II. FOREIGN TRADE

439 459 Foreign trade has had a stimulating effect upon the economic life of Formosa. The island must export its surplus products to afford the necessary imports of materials vital to its industrial and consumption needs. Businessmen are particularly concerned about the timely arrival of goods from foreign exchange. A great part of a businessman's profit or loss is predicated on his ability to anticipate and take advantage of government changes in the rate of foreign exchange and trade control measures. To operate successfully in Formosan society, a foreign trader must not only have experience and intuition concerning the right time and place to buy and sell, but also must possess initiative, shrewdness, and influence.

Formosa's principal exports include such items as tea, salt, sugar, rice, canned pineapple, bananas, coal, and camphor. Formosa is dependent upon foreign countries for such articles as precision machinery, motor vehicles, raw cotton, gypsum, crude oil, chemical fertilizers, bauxite, wheat, dairy

43/ 45/ products, modern medicines, and soybeans. If export commodities are not sold overseas, the prices of these articles at home may be adversely affected; delay in the arrival of, or restrictions on, imported commodities may cause prices in Formosa to rise; and price changes of import and export commodities may cause a sharp increase in the prices of domestic goods. Shrewd manipulators take advantage of these market conditions to increase their profits. For the economy of Formosa to function and prosper, a stable and efficient system of import and export is imperative.

A. General Position of Trade

In terms of volume, the recent history of Formosa's foreign trade is characterized by a rapid expansion during the two decades preceding 1940, a sudden drop immediately after World War II and a gradual increase since 1945. In prewar years, a constant positive trade balance had accumulated; the postwar years have produced a persistent trade deficit, which in large has been met by aid from the United States.

Japan, the United States, Hong Kong, and Britain have been the most important trade partners of Formosa in the postwar years:

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Formosan Trade, 1953*
(per cent)

Country	Export to	Import from
Japan	45.55	30.63
United States	4.18	38.67
Hong Kong	8.19	5.74
Britain	6.67	4.11
Egypt	3.46	1.61
Netherlands	3.05	3.11
Straits Settlements and Federated Malay States	7.89	1.57
Arabia	2.24	2.57
Other countries	18.72	11.99
Total	100.00	100.00

* The Inspector-General of Customs, The Trade of China, 1953, Taipei, 1954, Chart 4.

Currently, annual trade amounts to about 300 million American dollars whereas the annual trade in the years 1935-37 was about 200 million dollars.[5] When adjusted to prewar

5. Ministry of Economic Affairs, Republic of China; Navy Department, Civil Affairs Handbook, Taiwan - Economic Supplement, Washington, D.C., 1944, p. 72.

439 prices, current trade is still below the prewar
457 level. Many reasons account for this change, but in the main it is caused by a transfer in the management of the island's economy. The Japanese exploited Formosa as a colony, and thus there was a constant flow of goods from the island, creating a trade surplus. The favorable trade balance was based on Formosa's position as an agricultural colony of Japan. The present administration, with aid extended by the United States, is endeavoring to build an independent and self-sufficient economy for the welfare of the people on the island. The recent announcement of Hsu Po-yüan, Minister of Finance, that the island will launch its second Four-Year Economic Plan in 1957 indicates an intention to continue present policy. This, in effect, means that the government will attempt to minimize foreign expenditures and increase foreign earnings while efforts are made to balance domestic production and consumption. As far as foreign trade is concerned, this in no way means the reduction of Formosa's dependence on the outside world. To continue the development of its textile industry, the island still requires imported raw material amounting to over US$20,000,000 annually. The swiftly expanding fertilizer industry depends on the import of phosphate, and the flour industry relies heavily on the import of wheat. The same applies to the petroleum refining industry, which would

probably have to cease operation if the import of crude oil stopped. However, it is clear that the import of raw materials instead of manufactured goods will tend to decrease the total value of import expenditure. To a certain extent, world market conditions and production costs in Formosa also account for the low rate of trade in recent years.

The most important exports of the island have been sugar and rice. In 1954, sugar export accounted for 60 per cent of the total foreign exchange, and rice for about 8 per cent. Tea export was third in volume before 1954; in 1954 it accounted for nearly 10 per cent of the total export. Next in importance are bananas, salt, canned pineapple, coal, and citronella oil, each accounting for from one to five per cent of the total exports in various years.[6]

Import commodities in 1954 were listed by the ministry of economic affairs in the following order of value: machinery and tools, metals and metal products, chemical fertilizers, raw cotton, wheat and flour, and soyabeans, each valued at from US$14,000,000 to US$25,000,000; crude oil and gasoline, medicines,

6. Ibid.

439 ships, motor vehicles and parts, wool and
457 artificial fabrics, fat and wax, chemicals, and salted and dried fish, each valued from US$3,000,000 to US$11,000,000. In recent years, imports of investment goods and industrial raw materials have been increased, while consumer items have been greatly decreased.[7]

Increased activities in industrialization and an expanding population in the last seven years have necessitated a rising volume of imports; exports have failed to keep pace. The following table presents a picture of the situation:

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7. Ibid.

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FORMOSA -- TOTAL IMPORT AND EXPORT* (In millions of U.S. dollars)

	Total export	Total import#	Trade deficit
1950	93.1	110.1	17.0
1951	93.1	143.3	50.2
1952	119.5	207.0	71.9
1953	129.8	190.6	60.8
1954	97.8	203.7	105.9
1955	130.0[x]	-[y]	

* Ministry of Economic Affairs, Formosa.

\# Including commercial import, U.S. aid import, and import through self-provided foreign exchange.

x From Asia Foundation Bulletin, January 20, 1956.

y Not available.

459 The government has established in the past
459 years a set of schemes for control of foreign exchange and trade flow to prevent the flight of capital abroad and reduce the trade deficit.[8]

B. Trade and Foreign Exchange Controls

The Foreign Exchange and Foreign Trade Screening Committee of the Executive Yuan is charged with the duties of determing foreign exchange and foreign trade measures and of examining the use of foreign exchange. The committee functions only as a screening and licensing unit; the Bank of Taiwan is the only organization on the island given authority to engage in foreign exchange business. All imports by public enterprises or private firms, with few exceptions, must be licensed,[9] and the issuance of an import license carries with it approval for the allocation of necessary

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8. Trade deficit here is viewed from an overall economic standpoint. Frequent reports indicating a favorable trade balance only relate to commercial import as compared with export.

9. The exceptions are: imports by the International Co-operation Administration Mission to China, official supplies and personal effects of foreign consulates and diplomatic personnel, commercial samples, etc.

439
457 foreign exchange.

Before arranging for shipment of exportable goods, exporters must make a declaration of value in terms of foreign currency to the Bank of Taiwan. If the sales price is not at least equal to the floor price set by the bank, a separate appraisal by the customs is required. Exporters are required to surrender their export proceeds in foreign exchange to the Bank of Taiwan, receiving in return foreign exchange deposit certificates and New Taiwan dollars at the bank rate; the proportion between two methods of payment is determined by the bank. The deposit certificate are negotiable for ninety days after the date of issuance. Upon expiration, the certificate must be resold to the bank at an officially determined price. The current price[10] amounts to a total exchange rate of NT $24.66 per US $1, figured on the basis of an official exchange rate of NT $15.50 per US $1 plus a "certificate price" of NT $6 per US $1 and a defense tax equivalent amounting to 20 per cent of the existing exchange rate. However, nearly all exporters negotiate the certificates on the open market where a "certificate price" of NT $16-17 per US $1 raises the total exchange rate[11] of the

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10. Regulations Governing Measures Pertaining to Sales and Purchase of Foreign Exchange, promulgated on October 22, 1955.

11. The Central Daily News, Nov. 28, 1955.

439 certificate to NT $34-35 per US $1. Certificates
457 bring high prices on the open market because importers must submit certificates in amounts equivalent to the foreign exchange alloted them by the licensing authorities. The supply of certificates is always less than the demand since there are more importers than exporters and because export-import traders often retain their own certificates against import requirements. If the exporter holds the certificate beyond ninety days, however, he suffers a loss amounting to the difference between the open market and official certificate price. An exporter cannot convert all his foreign exchange proceeds at the market rate since he receives only a part of them in certificates -- in the case of sugar, 80 per cent; and bananas, 50 per cent. On the portion of his foreign sales for which New Taiwan dollars are issued, the exporter sustains a loss amounting to the differences between the exchange rates.

Licensing of imports is carried out within an "import budgeting system," in which the authority announces an import budget once every two months covering imports for the following two months. Each budget specifies what commodities are to be imported and allocates to each commodity a specific amount of foreign exchange. An importer must be

439 duly registered with the government, and he
457 is permitted to apply for permission to import only one kind of commodity during the budget period. Also, a maximum is set on the amount of foreign exchange any one importer may be allotted. The foreign exchange aportioned against any single commodity during a given period may be so small that when it is divided among a number of importers none is assured of a reasonable profit. Some importers sell their import licenses at prices ranging from NT $23,000 to NT $27,000, the cost of import[12] for the buyer of the license will be increased by an amount ranging from NT $11.50 to NT $13.50 per US $1. There exists an acute shortage of foreign exchange in spite of the fact that the government at times engages in the sale of foreign exchange deposit certificates in the open market. A private importer must pay NT $15.65 bank exchange rate at the Bank of Taiwan, plus 20 per cent as defense tax, and must submit the equivalent foreign exchange in deposit certificates. Government enterprises are not required to submit the certificates but must pay the official certificate price of NT$6 to US$1. Thus, the government enterprise is in a more

12. Ibid.

439 advantageous position than the private importer,
457 who has to buy certificates in the amount he needs at current market rates. In effect, government enterprises pay NT $24.78 per US$1 for import and private importers pay NT $34-35 per US $1. The actual rate at which private importers pay for their exchange is thus largely affected by the current market price for the certificates and by the cost of fees that may be necessary to secure additional import licenses.

In summary, trade control is primarily effected by the requirement that exporters and importers to do business must be duly registered with the government, which may refuse to register an applicant In addition, export prices must be in line with the price determined by the Bank of Taiwan; import is restricted by the import budget. In foreign exchange control, the foreign exchange deposit certificate system is implemented by the partial relationship maintained between export and import and by the existence of multiple exchange rates. As well as the official rates for import and export, there exists a black market rate[13] for American

13. Tzu-yu Chung-kuo Pao [Free China Daily], San Francisco, Nov. 7, 1955.

439 notes -- about NT $38 per US$1. There also
457 is a "preferential" rate of NT $34 per US$1 for cash or remittances surendered to the Bank of Taiwan by American personnel and by visiting overseas Chinese.[14]

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14. Courtesy of Professor Li Ch'ao-ying of National Taiwan University.

matrix could easily have reduced death rates to 12 or 15 per 1,000 total population and, if birth rates had remained at 45, shot the rate of natural increase from 2.5 per cent per year to 3.0 per cent or more. 165 563

THE BIRTH RATE

Neither the extension of cultivation, the increase of yields nor the health and medical activities in Taiwan produced any major changes in the familial patterns of the peasants. The recorded birth rate of the Chinese remained above 40. There were some slight evidences of a lower birth rate in the more prosperous and urbanized provinces, but the social and occupational groups that might have adopted the modern individual and familial values, rather than the traditional Eastern values, were few in numbers. 163

The growth implicit in the maintenance of fertility at the level that existed in Taiwan during the last decade of Empire was indeed rapid. The gross reproduction rate for the entire population was over 3.2 and the net rate over 2.0.

It is obvious that no population dependent on agriculture and inhabiting a limited and already densely settled area could reproduce indefinitely at the rate implicit in these figures. Potential growth was more rapid than the actual growth of the thirties, though, for any social and economic changes that would improve levels of living and contribute ultimately toward a reduction in fertility would produce immediate and more rapid declines in the death rate.

THE PROSPECTS: PREWAR JAPANESE VIEW

The balance between the people and the land in prewar Taiwan may have appeared precarious to the Western student but the Japanese foresaw many decades of further expansion before the Malthusian pressures of the people on the food supply would limit either population growth or exportable surpluses. Rice production had increased from 2.1 million koku in 1900 to 4.9 million in 1923 and 9.7 million in 1940. In the latter year the export surplus amounted to five million koku. By 1950 rice production would amount to 12.8 million koku and the quantity available for export to Japan Proper would increase by almost a million koku. 433 241 439

The Japanese also realized that Asian hegemony implied a destiny beyond the agrarian for the once subject peoples and that Japan's own demographic

433 241 439 resources would have to be supplemented by the integration of Taiwanese and Koreans into the industrial nexus of Empire.

THE CONTEMPORARY PROSPECTS

178 727 Today the plans of the Japanese for the further development of Taiwan are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

177 198 The political travesty of the Chinese liberation of the Chinese population of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertilizer and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertilizer increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyze the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

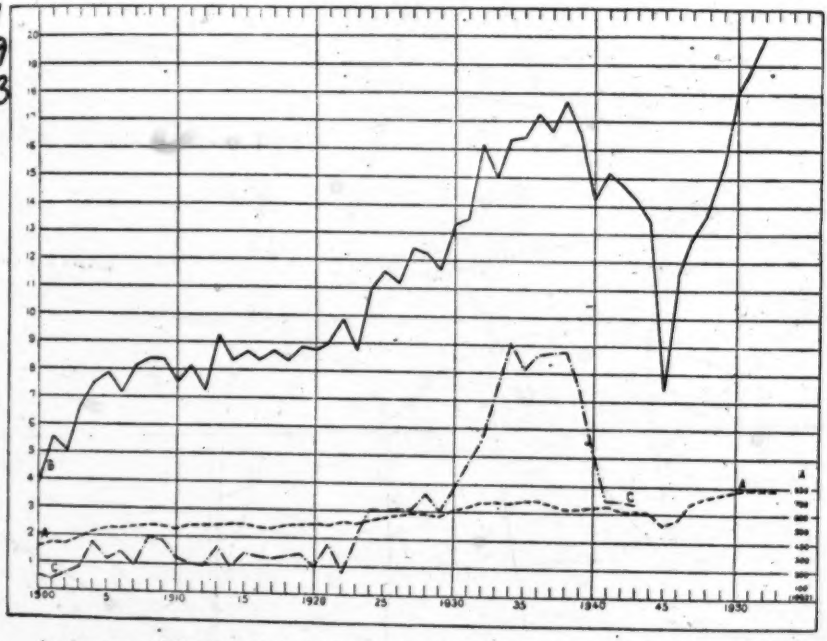
It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1943. p. 201.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Productivity was raised by improvements in various aspects. The rapid increase in the output of rice from the 1920's was the result of the adoption of a new strain (Ponlai rice). By the 1930's, the production of rice in Taiwan was so large as to be twice its local demand, and the surplus rice was exported to Japan. Though the price of Taiwan rice was controlled by the Japanese government and the profit of trade in rice was mainly monopolized by big Japanese traders, the increase of production did have some benefits for Taiwanese, and no doubt, this contributed to the lowering of the death rate after 1920.

Fig. 6 Acreage of Cultivation, Amount of Production and Exportation of Rice, Taiwan, 1900-1953



A: Acreage of Cultivation (unit: 1,000 ha) B: Amount of Production (unit: 1,000,000 hectoliter)
C: Amount of Net Export (unit: 1,000,000 hectoliter)
Source, 1900-1948, from the Rice of Taiwan, 1949, Taipei.
1949-1952, from Taiwan Agricultural Yearbook, 1952, Taipei.

The condition of sugar was a little different from that of rice. The profit in sugar manufacturing was exclusively monopolized by the Japanese enterprisers. But it is undeniable that, in respect to the improvement of agricultural techniques and the raising of productivity, substantial effects were obtained.

As pointed out by W.S. Thompson, "underfeeding weakens the individual and renders him less resistant to disease, whether it be of the degenerative or of the germ

48: Cnen E-4 (no date) 1955 ADl Formosa ADl

The use of commercial fertilizer spread quickly, and with textiles, became one of the main items of import from Japan.

For the improvement of hog raising, the colonial government had imported Berkshire hogs from Japan in 1896, and Yorkshire hogs from England in 1900. After a series of experiments, it was found that the first generation of hybrids between the native hog and Berkshire hog was most suitable to Taiwan, and the promotion of the hybrid was started in 1907. As in other agricultural practice, the traditional way of hog raising was a complicated procedure. Many religious and magical elements were involved in it, and it was not easy for the conservative farmer to adopt the profitable new hybrid. It took more than ten years of government promotion before people became willing to adopt the new hybrid. After 1920 more and more people adopted it, and the number of native hogs declined sharply (Fig. 10). This is the best instance of change in the attitude of the people. A new strain of rice (Ponlai rice) has been extensively cultivated since 1924, and the output of rice has sharply increased.

The 1920's is the turning point in the social history of Taiwan. Epidemics were wiped out, prevention of malaria had improved, the doctors of western medicine exceeded the doctors of the Chinese medicine, and even the cattle pest was wiped out. Political and social movements began for the first time. Primary education spread wider, the conservative farmer began to adopt new strains and new technics, and increase production. Mobility of the people had increased, more bicycles, automobiles, and trucks were used, and the level of living was raised somewhat. It was amid this social milieu that Taiwan's death rate steadily declined while its already teeming population with equal steadiness rose to new heights.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

discourage innovation in agricultural technique, and to keep at low levels the output per person working in agriculture. An economy in this condition requires important modifications when "economic development" is desired. Farming must be made more productive, and radical progress is necessary in other pursuits. Barring some curtailment of consumption, such a change always implies expanding production faster than what is immediately consumed. 433

One of the keys to the Japanese colonial program in Taiwan, and to its demographic consequences, was how they set out to induce this saving. They chose the course of concentrating the additions to income from production in a few corporate business structures, instead of relying on the savings of individuals in Taiwan. Presumably this has been a goal in the management of most colonies, since indigenous sources have rarely been relied upon for large-scale investments. Its corollary—policies to suppress gains in individual native incomes—has been the chief source of hostility against colonial powers. But while most other nations have had only moderate luck in pursuing this objective, with the Japanese it was an outstanding success. 471 433 439

They took care that the formation of capital proceeded rapidly and from internal savings alone. Even in Japan, which in some respects is closely comparable, the whole pattern and purpose were different. While the Japanese were leading their own economy toward self-sufficiency in manufactured commodities, economic change in Taiwan was being contrived with a still surer hand to move in an opposite direction, toward complementarity with Japan. The output of the island was gradually shaped so as to furnish a net contribution of agricultural and semi-processed food and related commodities every year to Japan. These were items which Japanese felt to be essential for their more ambitious plans at home, and which for various reasons they wished to avoid purchasing outside Japan in ordinary world markets.

All the while, they mounted an impressive program of building up physical equipment in the island itself. Thus earnings were being reinvested on a large scale at the same time that they were also being drained off at a considerable pace by exports to Japan. This feat had to be accomplished in only one way—by raising the output of the island sharply while not greatly changing the levels of consumption for the population at large.[2] In this respect the Japanese managed

[2] The alternative—of gains by depressing popular consumption—should probably be ruled out. It cannot be conclusively demonstrated either that levels of living rose or

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

471 the process of capital formation in Taiwan in basically the same way as at home, by prodding the economy at critical points with innova-
433 tions and developing special social policies to divert the gains from consumption to investment. The success of domestic saving in Tai-
439 wan is simply accentuated by the steady flow of commodity shipments to Japan, whereby Taiwan as an enterprise did more than pay its own way.

This success is best summed up in the yearly figures of trade with the outside world. From 1909 on, with the sole exception of 1913, there was an export balance every year in the value of Taiwan's external trade. Most of its entire trade was carried on with Japan—over 90 per cent after 1930 if Manchuria and Korea are included.[3] Related to the total value of exports, the balance amounted to a steady share of about 30 to 40 per cent of all exports to Japan, 25 to 30 per cent of all exports to the entire world, that were not paid for in the form of imports of commodities (see Table 4). It is not proper to infer from these figures that Taiwan occupied a "favorable" position, since apparently the balance was merely carried on the books of a few companies with home offices in Japan. This being the case, such figures probably even understate the amounts taken out.[4]

The Role of Government Policy

648 By implication, the foregoing account reveals that colonial rule
471 yielded quick and gratifying results in Taiwan. These were not

that they fell for Taiwanese. It does seem certain that on the average they must have risen somewhat, but that they did not move very far one way or the other. Undoubtedly some Taiwanese who took part in the new developments became richer, and many who did not became poorer. Agricultural output per farmer definitely increased, as the next chapter will show. There are figures (see Ch'en Cheng-hsiang, 1950, p. 151) that suggest a slight falling off of rice consumption per person, but they must be computed in a way that weakens their reliability. However, the large additions to Taiwan's economy under the Japanese were the new productive facilities, fixed equipment and market organization, which it is the purpose of this chapter to document. There is no way of showing how these improvements were shared by the Taiwanese, though we know that the Japanese took steps to keep the major shares to themselves.

[3] It is fairer to consolidate the "Yen Bloc" as a whole in computing these balances. To some extent imports from Manchuria and Korea were used to offset the account with Japan; this combined account shows a smaller balance than the account with Japan alone in most years. Separate data for Manchuria were not available in preparing Table 4. Aside from their monetary value on a balance sheet, the articles imported from Manchuria and Korea had a special importance, for they consisted mainly of fertilizers that were indispensable to Taiwanese agriculture.

[4] Grajdanzev (1942), p. 157, claims that the export balance cannot be materially reduced by taking account of hidden items; many of these, such as cash remittances to Japan, would actually increase it.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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TABLE 4

VALUE OF EXPORTS FROM TAIWAN, BY PLACE OF DESTINATION, 1899 TO 1942*
(Thousands of Yen)

Years	*Total Exports*	*Exports to Japan and Korea*	*Per Cent of All Exports Going to Japan and Korea*	*Balance of All Exports over All Imports*	
				Amount	*Per Cent of Balance to Total Exports*
1899-1909	24,659	13,932	56.5	−1,574†	−6.4†
1910-1914	59,936	46,727	78.0	4,212	7.0
1915-1919	130,192	98,929	76.0	36,943	28.4
1920-1924	195,767	163,566	83.6	62,039	31.7
1925-1929	256,326	214,533	83.7	65,862	25.7
1930-1934	251,476	230,579	91.7	75,720	30.1
1935-1939	445,653	402,641	90.3	115,005	25.8
1940-1942	527,699	419,570	79.5	97,419	18.5

* Figures are yearly averages over each period.
† (−) indicates an import balance.
Source: *Statistical Summary*, Table 321.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

"ECONOMIC DEVELOPMENT" IN TAIWAN

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The most efficient view of total changes in the island's economy is by reference to its statistics of trade. As indicated above (Table 4), Japan succeeded in securing practically all of Taiwan's external trade to itself, if exports to Korea are counted. During the 1930's even traffic with China, just across the Straits, was almost eliminated.

Compared with a wide range of other Far Eastern countries, Taiwan under the Japanese came to hold a surprisingly high rank in the value of trade per person. At its peak shortly before 1940, the total per capita value of its trade was well above even that of Japan (see Table 5). Since this rank was attained under peculiar conditions,

TABLE 5
ESTIMATED PER CAPITA VALUE OF FOREIGN TRADE OF FAR EASTERN COUNTRIES CIRCA 1939*
(Expressed in U.S. Dollar Equivalents)

Country	*Year*	*Imports*	*Exports*	*Total*
New Zealand	1939	109	127	236
British Malaya	1939	61	72	133
Australia	1938–39	67	64	131
TAIWAN	1937	16	23	39
Korea	1939	15	11	26
Japan Proper	1939	10	13	23
Philippine Islands	1939	8	10	18
Burma	1938–39	5	12	17
Netherlands East Indies	1939	4	6	10
Thailand	1938–39	4	5	9
French Indo-China	1937	3	4	7
China	1939	0.85	0.25	1

* As reproduced in OPNAV, Civil Affairs Handbook. *Taiwan—Economic Supplement* (1944), p. 73.

Source: Far Eastern Unit, Bureau of Foreign and Domestic Commerce, U.S. Department of Commerce.

however, it does not mark Taiwan as an especially "advanced" area (in the sense of supporting bountiful levels of living) except by reference to the Japanese residents in the island.

Taiwan's position in trade with the outside world was created by heavy and increasing exports of a few products, mainly crops sent abroad in only slightly processed state. Compared with what took place in Taiwan's business and financial communities, there was remarkably little shift in the composition of its agricultural output

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1 [p. 2+- Analyst]

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

Land that was improved in this manner not only yielded more at each harvest: over a third of the paddy land yielded more than one harvest each year. Under schemes for rotation and inter-cropping devised by the Japanese, it was not unusual to take three separate harvests from many of these fields in a year. 241 433

The labor of preparing the land, of weeding, and of harvesting was not saved by these changes. They may have involved some net additions—irrigation became a more complicated process in some cases, and the aqueducts for transporting the water required special maintenance. Japanese were aware that the soil could not be farmed more intensively without losing some of its fertility, and encouraged the use of commercial fertilizers, much of which they required to be prepared on the island. The remainder comprised the largest single category of Taiwan's capital imports, greater in value than the iron and steel and machinery which are sometimes identified with the needs of agrarian countries. Importing fertilizers for sale in Taiwan proved to be a profitable line of business; it was reported to be firmly in the hands of a few large Japanese concerns, a fact which should occasion no surprise. It was shortage of fertilizers that brought on declines in average yields of crops after 1940 (see Table 6, above). [427] [471]

The shift in official plans for Taiwan after 1930 leads one to look for some indication of results in the composition of Taiwan's products. The search is not very rewarding. In terms of gross value of product, agriculture did not lose its place as the foremost line of production until 1940 and later. Then it exchanged ranks with "Industry"—because farm produce fell off momentarily rather than because of any sharp rise in manufacturing (see Table 7).[32] The steady but slow decline in the share of agricultural production in earlier years had indicated a tendency to submit more of the agricultural produce to processing before it left the island, and not a shift from farming to manufacturing. 433

It is when the category of "industrial" production is examined in detail that some of the more recent trends emerge. In Table 8, evidently industry in Taiwan had always been centered around food products. Until the mid-thirties these had amounted to three-quarters of the value of all manufactures. Only from then on did the effects of new economic goals begin to appear. The largest advances were made in some of the fields that had been smallest, espe-

[32] The sharp rise in the numbers of Table 7 was largely a matter of currency inflation.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

Furthermore, higher officials were themselves aliens, responsible ultimately to the Manchu court. Their tenure depended on their standing in Peking. Special competence or energy in office was not an advantage—it could even be dangerous, by making them targets of rumor and innuendo. Careers were sometimes ruined on the suspicion that certain officials had separatist leanings or were friendly to foreigners. Personnel were transferred regularly, as in China, to remove them from temptations of familiarity with their offices. Their only safe path to success was to maintain stability in local affairs, and somehow to prevent civil discontent from turning into civil disturbance. 631

This system was calculated to engross its key officers in their personal relations with Peking. It proved to be more effective in ensuring loyalty than in promoting careful government or preventing corruption. There were few deterrents to peculation in office, which was respectable if prudently pursued, and surrounded by many opportunities—such as legal monopolies and illicit export trade—not present in China itself.

These limited and negative objectives of government invited continual lapses of internal rule. Being unfamiliar with local conditions, officials simply did not govern in rural villages. Throughout the countryside they kept the peace by intrigue with powerful families rather than through actual administration—families that relied heavily on property obligations among the peasantry to uphold their influence. The situation put a strain on the administration's own underpinnings, and led to severity in abuses and civil strife to which the mainland itself was unaccustomed. It is a testimony to the serviceability of traditional Chinese institutions that they survived this test. 631 621

Whatever its internal shortcomings, this scheme of political order was well suited to rebuff foreigners, at least foreigners whose advances were not backed by force. Acute frustration among the Western commercial agents in Taiwan stands as evidence that it was accomplishing this part of its purpose. They complained bitterly that officials had connived at Taiwanese violence against Europeans and had even incited such incidents.[8] 439 177

The best information available about Taiwan's external contacts is contained in the published reminiscences and travel accounts of foreign trading representatives. The literary interests of these men throw light on the main preoccupation of their trading activities.

[8] For example, see Pickering, W. A. (1898), Ch. 17.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

439 1777 Though their books have a wealth of illuminating anecdotes about the export trade, they provide almost no observations of any value about the ordinary affairs of the population. One might imagine from reading such sources that everyone in Taiwan was engaged in foreign commerce or some form of government service.[4]

These informants were, up to a point, honest men. They were not trying to mislead, and deserve credit for considerable acuteness and sincerity. The most likely reason for their failure to inform us about the Taiwanese is that they never had a chance to find out for themselves. Western merchants simply had no occasion to form more than special business associations with Taiwanese. Practically all of their transactions were conducted by contract merchants ("compradors") as middlemen. Foreigners not infrequently made efforts to interfere in internal affairs, but these all arose over specific issues. They were attempts to make the social order more nearly serve their ends, not to alter it.

As in China, trading relations carried on in this manner did not further the exchange of ideas along with commodities. They were contrived so as to minimize such interchange. This mutual aloofness worked both ways: it enabled outsiders to get along in ignorance of conditions prevailing in the island, and at the same time shielded the general population from contact with the outside world. Foreign commerce, the foremost potential channel for innovation until the conquest by Japan, was severely circumscribed by seclusiveness of the parties on both sides.

1777 438 The reasons for this isolation are not all to be found in the hostility of officials or in the provincialism of Westerners. The foreigners were eager to obtrude their presence further into foreign trade, even if only on their own terms. Government officers were too inept as administrators, their conduct too deeply undermined by directives from above, to succeed in stifling any positive tendencies toward change if such had arisen. The real bulwark of conservatism behind

[4] These authors made better traders than ethnographers. They often did not go beyond expressing impatience that Taiwanese should not follow 19th century English trading conventions. The best and most comprehensive of these works (Davidson, James W., [1905]), out of a total of 32 chapters, devoted only a single superficial one to "The Inhabitants of Formosa," where the author did little more than describe the aborigines.

The apparent exceptions prove the rule. If good material about those Taiwanese of Chinese origin is scarce, books about the aborigines of the interior (of varying quality) are not. Few Westerners penetrated to the dangerous mountain regions of Taiwan, but all of them developed immense curiosity about the customs of these "savages," which was not held toward the Chinese. See, for example, the titles in Takekoshi, Yosaburo (1907), pp. 321-342.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1951 (*Women te Lukang Chen*, 1951). The decrease took place despite the high rate of population growth in the rest of Taiwan.

175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

464 369 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

and seeing the show, and only partially because of the cost. When the villagers do attend, they generally go in small groups of young boys, or young girls, or a group of older women.

CLOTHING

The villagers' clothing, like their food, is marked by simplicity and a show of thrift. It is not at all uncommon to see a villager wearing work clothes which have been patched several times. Even for special occasions such as a marriage or a large *pai-pai* festival most villagers still dress very simply.

The style of clothing usually varies with age. Older villagers generally wear the traditional Chinese clothing of pantaloons and jacket, although in very hot weather men of all ages wear shorts and a T-shirt when working. In colder weather boys and men (other than the older and more traditionally dressed men) wear ordinary khaki wash pants and several shirts, and a sweater or jacket if they happen to own one. For protection against the cold, a villager depends on a number of layers of clothing, usually cotton, rather than a few layers of woolen items. The cotton padded jacket is worn more by older men and women than by young people.

While older women wear the more traditional clothing, younger women and girls prefer and usually wear the Western-style dresses, skirts, and blouses which have become very popular since the war. Such clothes are usually made to order either by village seamstresses or in Lukang. Young girls and women wear the Chinese tunic dress (*ch'i p'ao*) on the occasion of their marriage, on special outings to Lukang or Taipei, and during important village festivals. Many of the older villagers tell of the old days when "everyone, including the rich, wore coarse cloth, since in those days people were thrifty." But today, these old people complain, "people are no longer satisfied with coarse cloth and want to wear the better cloth."

Still, few villagers remember ever having made their own cloth. "Cloth has practically always been purchased in Lukang or from itinerant merchants." Before the Japanese period, inexpensive undyed cloth was apparently imported from the mainland, and during the Japanese period, cloth manufactured in Japan was used. Since the end of the war, the Taiwanese textile industry has grown rapidly, mainly in the vicinity of Chang-hua City and Ho-mei, and today all the cloth used by villagers is Taiwanese-made.

Nowadays there is a great deal of specialization, and it is both uneconomical and difficult for villagers to make their own clothing unless a member of the household, usually one of the daughters, has studied sewing. A family's clothing is usually made to order by locally

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD1

433 figure for rice acreage registers an increase of 156 per cent over 1945, while the rice yield shows an increase of 221 per cent. There are also gains in sweet potatoes, wheat, sugar cane, tea, fruits, and other agricultural produce. Among the factors contributing to this growth are the fertilizer assistance program under ECA, incentive generated by the rent reduction program, irrigation and reclamation projects, and rural co-operative projects, health work, and improved-seed distribution sponsored by the Chinese-American Joint Committee of Rural Rehabilitation.[34]

Industry

439 The Nationalist policies toward industry may be reflected by a general description of the industrial situation in Taiwan. Prior to 1945, the island was tied to Japanese over-all economy. Its agrcultural productivity, for instance, was dependent on fertilizer imports from Japan. Other products, such as camphor and certain metal-bearing ores, were shipped to Japan for further processing. In recent years there has been a trend toward integration of industries.
387 The production of fertilizer, for example, has been stepped up from a 1945 low of 400 metric tons to an estimated 92,000 tons in 1951.[35] This is against an estimated 1951 demand of 340,000 metric tons in rice and sugar-cane fields
000 alone.[36] Since March 1948, a refining

ernment, *Report on Food Production** (Taipeh, 1949), pp. 33–41; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, pp. 383–402; *Taiwan Today*, cited note 11 *supra*, pp. 77–98.

[34] Raymond T. Moyer, "Economic Administration Program in Taiwan," address before the Chinese Association for the United Nations, March 17, 1951.

[35] *Taiwan Today*, cited note 11 *supra*, p. 108; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, p. 481 (1950 production was estimated to be 55,000 metric tons).

[36] *Taiwan Today*, p. 107; also cf. *Taiwan*

[P.219(A)]

52:Steiner S-4 (no date) 1951

Since March 1948, a refining process has been instituted in the government-managed camphor industry.[37] In areas where Taiwan and Japanese economy complement each other, a trade agreement was signed with Japan on September 6, 1949 under which Taiwan sugar, salt, camphor, cement, and pears are to be exchanged for Japanese consumer and capital goods at an estimated annual volume of US$100,000,000.[38]

AF1 China FORMOSA AP 655 278 439 648

Government-owned and -operated enterprises dominate Taiwan's industrial field. As of 1950, there were 79,058 publicly operated units employing 63,065 workers. Available statistics place privately owned industrial units at approximately 67,660 employing 53,310 workers. Production figure for public industries in 1949 is about NT$718,000,000 as against NT$600,000,000 for private enterprises.[39]

655 471

This situation may be accounted for by the predominant position of Japanese-owned industries in Taiwan which were acquired by the Chinese Nationalist government following the Japanese surrender in September 1945. Since then, petroleum, aluminum, gold and copper mining, salt, coal mining, and steel works have been taken over by the National Government. Power, sugar, fertilizer, cement, alkali, pulp and paper, shipbuilding, and machine tools have been jointly operated by the national and provincial authorities on a capital division of 6 to 4. Some smaller mining units, camphor, tobacco and wine monopoly, and agricultural and forestry enterprises have been managed by the provincial government. The rest, being of smaller scale, have either been taken over by county or municipal govern-

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*Reconstruction**, Vol. 2, pp. 473–74, where the total 1948 demand was estimated to be 141,727 tons.

[37] For a general description, see *Taiwan Reconstruction**, Vol. 2, pp. 436–46.

[38] For detailed listings, see *Taiwan Reconstruction**, Vol. 2, pp. 357–61.

[39] *Taiwan Today*, pp. 121–22.

[p. 219 (B)]

15: U.S. Navy --23-24 (no date) 1944 Formosans
116, 167, 441, 464, 177.16 Japanese
636.16

"The majority of Japanese immigrants go to the island for [24] administrative work or business management. Japanese officialdom some years ago arrived at the reasonable conclusion that since the increase in the Formosan population was proportionately so much greater than the increase of the Japanese, only a program of industrialization (with accompanying influx of Japanese technical labor) would serve to strengthen substantially the Japanese population of the island. Presumably, large numbers of Japanese have immigrated to manage the new technical establishments known to have been established on a fairly large scale in and around Takao, near Shinchiku, and elsewhere since 1941."

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

361 communication centers, recreational towns
438 or satellite towns close to the large urban areas. Even so, the traditional agrarian town-city set-up is still much in evidence.

3. Associations in the City: Cities in
441 Formosa were mostly developed as the trading centers of agrarian society. Those cities with ports and trade with the mainland had attained a fair size. In 1897, two years after the Japanese occupation, the population of the biggest city in Formosa, Tainan, was 45,330. Its commerce and handicraft were differentiated, and largely organized into merchant guilds. During the Manchu rule there were in Formosa rice guilds, cloth guilds, sugar guilds, silk guilds, string guilds, paper guilds, drug guilds, timber guilds, hemp guilds, oil, needle and iron guilds, porcelain guilds, and tea guilds.[2] Usually the stores of each trade were concentrated in one street, and not infrequently the street was named from the trade. In Tainan there was a Rice Street, Oil-dealer Street, Bean-dealer Street, Fish-monger Street, Cloth Street, Silver-smith Street,

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2. Yoshio Higashi: Economic History of Taiwan, 1944, Taipei, p. 304.

441 Timber-dealer Street, Bamboo Street, Bamboo-splintsmaker Street, Stone-cutter Street, Coir palm treating Street, etc. These are much the same as the Bread Street, Milk Street, Fish Street, Honey Lane, etc. of medieval London or the Schustergusse, Gerbergasse, Webergasse, etc. in the medieval German city. The same condition can be found in other old Formosan cities, such as Lukang and Changhua.

442 Besides these merchant-guilds there were guilds of wholesale merchants who traded with the mainland or other ports of the island. Tainan had three such guilds: (1) the North Guild, which traded with North China, and had more than 20 member stores; (2) the South Guild, which traded with South China and had more than 30 member stores; (3) the Port Guild, which traded with other ports of Formosa, and had more than 50 member stores. They all had a shrine as the center of their activities. They participated in public affairs of the city and carried on social welfare activities. In time of disturbance, they contributed money to the government, and volunteered in defense work. An area of Taipei city, Tataoting, was originally constructed by an influencial guild.

575 There were still other kinds of associations in the cities. Among the upper classes, there were associations for the

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438 Food Bureau. Shipment of rice from one dis-
656 trict to another is prohibited unless prior permission has been granted by the local district office or a branch office of the Provincial Food Bureau. For example, a Taipei merchant cannot purchase and move rice from the Tainan district without permission from the district office of the Provincial Food Bureau in Tainan.

442 Within this framework of control, rice merchants engage in one or more marketing activities -- transporting, milling, wholesaling, or retailing. They may be roughly classified into eight groups:

1. Local wholesalers and retailers -- receive unhulled rice from farmers for milling and sell to local retailers or to wholesalers at transit market.

2. Wholesalers at transit market -- buy rice, mostly brown, from the local wholesaling mills and sell to wholesalers at consumption markets, say in Taipei. These merchants are usually located in Taichung and Hsinchu, and at times they utilize the service of brokers to effect sales.

3. Wholesalers and retailers at transit market -- their function is the same as the wholesaler at transit market, although

442 they also sell at retail to local consumers.

4. Wholesalers at consumption market in large cities and in the vicinity of Taipei and Penghu.

5. Wholesalers and retailers at consumption market.

6. Retailers -- retail polished rice to consumers.

7. Brokers -- there are two kinds of brokers: one acts for local mills in the producing area and wholesalers at the transit market and one acts for wholesalers at transit markets and wholesalers at consumption markets.

8. Warehousers -- provide storage space for farmers at harvest season and for transit wholesalers when rice is shipped to consumption areas. The former are in producing areas, the latter are generally in large cities such as Keelung and Taipei. Farmers' associations also store rice for growers.

442 443 Some retailers and most wholesalers own milling and refining facilities to provide rice of various grades of whiteness. Although milling is often included in the process of wholesaling and retailing, these services also

442 function independently to provide sales
443 facilities for some large mills which engage only in processing.

In addition to the independent activities described above, some rural co-operatives also store, mill, and wholesale rice.

As of early 1953, there were 8,115 rice merchants of one kind or another on the island: 2,813 wholesalers, 2,305 retailers, 2,936 mill operators, 49 brokers, and 12 warehousemen.[3]

656 The Provincial Food Bureau, as well
435 as maintaining control over the movement and distribution of rice, also acquires a considerable amount of the rice produced yearly (some 30 per cent in 1951), since the government may barter fertilizer (which it controls) in exchange for rice and also receives some rice in payment of taxes. The bureau rations its rice to civil employees and sets aside a certain amount

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3. Hsieh Shen-chung, "T'ai-wan Ti Nung-ch'an Yün-hsiao Chih-tu," ["The Marketing System of Agricultural Produce in Taiwan"], T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 10, No. 4, Taipei, April 1954, pp. 29-34. The classification used here appears rather arbitrary. It may be that those registered as wholesalers are also engaged in retailing.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

T 174

THE HISTORY OF THE VILLAGE AND AREA

The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

T F 174 167

The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[2] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

F 175 504 167

Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

F 175 162 167 504 442 443

In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

F T 369 464

In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

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AD5 Taiwan Hokkien AD5
Formosa AD1

THE HISTORY OF THE VILLAGE AND AREA

The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[9] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

15: U.S. Navy--23 [8] (no date) 1944 Formosans
116, 167, 221, 443, 177.16 Japanese
636.16

"The Japanese put an end to unregistered immigration and emigration when they took over the island in 1895.

All Chinese wishing to immigrate were required to register with a Japanese consular agent in China, and to register in Taiwan after arrival. Actually, a considerable clandestine unregistered traffic continued by small boats plying the Straits.

Until 1937 there was a seasonal movement of labor. Workers crossed from the mainland to work through the tea, sugar or pineapple seasons. After they had made enough to live on for some months, they returned to their legal homes on the China coast. A considerable number of merchants and day laborers engaged in urban enterprises were accustomed to pass back and forth between Canton and Taiwan, entering principally through Takao. As of July, 1935, there were on the island 11,327 households of Chinese holding Chinese citizenship, totaling 41,651 persons. Since 1937 (the outbreak of the China War) seasonal migration has been suspended."

442 they also sell at retail to local consumers.

4. Wholesalers at consumption market in large cities and in the vicinity of Taipei and Penghu.

5. Wholesalers and retailers at consumption market.

6. Retailers -- retail polished rice to consumers.

7. Brokers -- there are two kinds of brokers: one acts for local mills in the producing area and wholesalers at the transit market and one acts for wholesalers at transit markets and wholesalers at consumption markets.

8. Warehousers -- provide storage space for farmers at harvest season and for transit wholesalers when rice is shipped to consumption areas. The former are in producing areas, the latter are generally in large cities such as Keelung and Taipei. Farmers' associations also store rice for growers.

442 Some retailers and most wholesalers
• 443 own milling and refining facilities to provide rice of various grades of whiteness. Although milling is often included in the process of wholesaling and retailing, these services also

442 function independently to provide sales
443 facilities for some large mills which engage only in processing.

In addition to the independent activities described above, some rural co-operatives also store, mill, and wholesale rice.

As of early 1953, there were 8,115 rice merchants of one kind or another on the island: 2,813 wholesalers, 2,305 retailers, 2,936 mill operators, 49 brokers, and 12 warehousemen.[3]

656 The Provincial Food Bureau, as well
435 as maintaining control over the movement and distribution of rice, also acquires a considerable amount of the rice produced yearly (some 30 per cent in 1951), since the government may barter fertilizer (which it controls) in exchange for rice and also receives some rice in payment of taxes. The bureau rations its rice to civil employees and sets aside a certain amount

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3. Hsieh Shen-chung, "T'ai-wan Ti Nung-ch'an Yün-hsiao Chih-tu," ["The Marketing System of Agricultural Produce in Taiwan"], T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 10, No. 4, Taipei, April 1954, pp. 29-34. The classification used here appears rather arbitrary. It may be that those registered as wholesalers are also engaged in retailing.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

each year to meet emergencies and maintain a stable market price.

Vegetables: Taipei, with a population of nearly 700,000 as of late 1955 consumes more vegetables (as well as other commodities) than other cities on the island. Vegetables for the city are produced in its suburban areas and in the regions of Taichung and Changhua during spring and winter. Yilan also supplies a sizable quantity of vegetables to Taipei (about 3,000 metric tons a year). Producers in the vicinity of Taipei sell vegetables directly to consumers or to local vegetable traders who sell to city dealers. In areas at a greater distance from the consumer, local vegetable traders sell to sales-agents, who sell to retailers at 6 per cent commission. The retailers clean and grade the vegetables before offering them to the public.

Salt: The Taiwan Salt Works, the sole producer of salt in Formosa, supplies salt directly to industrial consumers. The supply to general consumers is controlled by the Provincial Food Bureau, which has offices near railroad stations in the vicinity of the salt fields. The allotment of salt to licensed wholesalers is governed by directives from the Provincial Food Bureau.

655 tobacco and beverage wholesale houses; and the bureau's own wholesale offices. The tobacco and beverage wholesale houses sell directly to general retailers; all the other types of wholesalers of these commodities sell to their own retailers. All the wholesalers and retailers must be approved by the bureau, which fixes prices at both levels.

B. Small Business

443 Retail sales in large cities are handled by modern department stores, speciality stores and shops, general stores, roadside stands, and peddlers. In general the organized [435] department stores and other shops sell goods at a fixed price whereas the roadside stands and peddlers have no fixed prices. The large stores and shops generally operate at a higher cost and margin of profit than do the peddlers and proprietors of roadside stands, who are satisfied with a small profit, need only minimum capital, and pay no interest, rent, or taxes. Small business has increased in Formosa due to lack of other opportunities for employment. Enterprising people create marginal self-employment by establishing roadside stands for the sale of food and other everyday necessities., The buying public seems to favor this type of "little" business where various items can be bought more inexpensively than in

443 established stores and shops, provided one has skill in bargaining. Some operators at times manage to sell their items at high prices to unsuspecting customers.

II. FOREIGN TRADE

439 Foreign trade has had a stimulating
459 effect upon the economic life of Formosa. The island must export its surplus products to afford the necessary imports of materials vital to its industrial and consumption needs. Businessmen are particularly concerned about the timely arrival of goods from foreign exchange. A great part of a businessman's profit or loss is predicated on his ability to anticipate and take advantage of government changes in the rate of foreign exchange and trade control measures. To operate successfully in Formosan society, a foreign trader must not only have experience and intuition concerning the right time and place to buy and sell, but also must possess initiative, shrewdness, and influence.

Formosa's principal exports include such items as tea, salt, sugar, rice, canned pineapple, bananas, coal, and camphor. Formosa is dependent upon foreign countries for such articles as precision machinery, motor vehicles, raw cotton, gypsum, crude oil, chemical fertilizers, bauxite, wheat, dairy

15: U.S. Navy--28 [9] (no date) 1944 Formosans
116, 362, 444, 592

"Middle and lower class people live at the rear of their shops, in the second court, if one exists. Since the same patriarchal habits exist in towns as in the countryside, a great concentration of people is found to be living within one dwelling. Single households may include forty or fifty members. As many as 153 persons have been observed to be living in one old foreign-style dwelling in Taihoku."

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--171-172 S-4 (no date) 1942 Formosans-1-2
116. 452, 476, 563, 661, 177.47 Japan
636.47

"The growth of Taiwan's cooperative societies of all kinds is good testimony to the ability of the Chinese population to organize and to manage quite successful enterprises. The growth of the cooperative movement in Taiwan may be seen from the following table:

The Cooperative Movement in Taiwan

	1913	1918	1930	1935
Number of societies of all types	18	171	407	462
Number of members	2,760	70,428	265,248	342,122
Paid-up capital 1,000 yen	484	4,455	13,949	15,250

[172]

In 1936 the urban credit cooperatives had deposits of 20.7 million yen, while the rural cooperatives had 64.3 million yen. In May, 1940 the corresponding sums were 36.4 million yen and 122.7 million yen. All this is the more remarkable because the cooperatives were developed by the Chinese with little help from the Japanese or from the cooperative associations of Japan (1), and because the government put so many obstacles

1. This does not mean, of course, that the Japanese cooperative associations were unfriendly to the Taiwan cooperative movement. Quite the contrary. Throughout the history of the Taiwan cooperative movement the Chinese received every encouragement from the Japanese societies and from the certain Japanese individuals; but this help could not be great because of the conditions existing on the island. It is

important to emphasize that many individual Japanese physicians struggling with epidemics, teachers bringing education to far-away villages, political organizers helping the Chinese to organize their fight for freedom, and many others whose services to the Chinese were great and whose relation to the conquered people was that of sympathy and often of self-sacrifice, deserve the highest praise. However, it is not the individuals who count most, but the system, and however good the intentions of particular individuals might be, they could not and cannot change the governmental system existing on the island.

in the way of the development. The managerial and controlling staffs of the cooperatives in Taiwan must be approved by the government-general, so that 'undesirable' elements can be eliminated from the movement. The active members of the societies were often arrested and imprisoned and obstacles were put in the way of the creation of a powerful central body for the cooperative movement. But in spite of all obstacles the population of the island succeeded in building up a strong and useful organization."

4:Grajdanzev--172-173 S-4 (no date) 1942 Formosans
116. 452. 241, 476, 563, 177.47 Japan
636.47

"Since the start of the present war, however, through increasing supervision and various regulations, the government has turned the cooperatives into a piece of bureaucratic machinery, rather like the paochia. The chief function of the agricultural cooperatives, which form the backbone of the movement, has become the collection of rice and other products and their transfer to the government. According to the declared rations (1), the farmers in Taihoku province, for example, are to have only from two to,

1. The ration figures are taken from the Ekonomisuto, Tokyo July 1, 1940.

two and half go of rice per day (0.6-0.75 lb.). But this is considerably below the usual consumption of [173] the farming population, so the farmers will not willingly surrender their 'surplus' and the cooperatives have been turned into organs for the compulsory collection of grain and other agricultural products. The only organization created by the islanders which had some semblance of independent existence is thus becoming a mere cog in the Japanese military machine."

4:Grajdanzev--126 S-4 (no date) 1942 Formosans
116, 453, 563

"The banking system collects the liquid funds of the inhabitants and transfers them to those who can put up security and are willing to pay a certain rate of interest. Besides the deposits which are brought to them the banks may to a certain degree 'create' deposits. These operations place them at the centre of economic activity and give them power far beyond that which their own capital could otherwise confer. All banks in Taiwan are in Japanese hands. On page 127 we give in tabular form some information concerning each of the banks operating in Taiwan."

5

4:Grajdanzev--126 [21 S-4 (no date) 1942 Formosans
116, 435, 453, 457

"The foremost position is occupied by the Taiwan Bank, a private corporation in charge of the monetary system of Taiwan. The great difference between the deposits of this bank and its loans is explained by the issue of banknotes, one of the many ways by which Japanese capital in Taiwan is created. The issue of notes, the reserves of gold and of foreign exchange kept by this bank, as well as the movement of wholesale prices in Taihoku, the capital, may be seen from the table on page 127.

In six and a half years the issue of notes increased three and a half times, the gold and foreign exchange reserve evaporated in the same period, and in the five years 1933-38 wholesale prices increased by about fifty per cent."

4:Grajdanzev--126-128 S-4 (no date) 1942 Formosans
116, 426, 453, 656, 177.42 Japan
636.42

"Another bank whose loans are far above deposits is Nippon Kangyo Bank, or the Japanese Bank for the Encouragement of Business. Actually this bank is a mortgage institution and [128] is in the forefront of the organizations which extend Japanese control over real property in Taiwan."

4:Grajdanzev--127 S-4 (no date) 1942 Formosans -1-2
116, 453

"Position of the Taiwan Banks on June 30, 1939

	Paid-up capital (1,000 yen)	Reserves (1,000 yen)	Rate of net profit in 1938	Deposits (1,000,000 yen)	Aggregate loans (1,000,000 yen)
Banks with head-offices in Taiwan:					
Taiwan Bank	13,250	8,200	19.5	109.4	233.4
Taiwan Shoko (Comm. and Indust.)	2,590	904	12.7	60.3	65.4
Shoka Bank	2,840	1,168	7.7	39.8	36.4
Kanan (South China) Bank	1,875	378	9.3	4.3	7.2
Taiwan Chochiku (Savings) Bank	250	132	15.6	20.1	17.8
Banks with head-offices in Japan:					
Nippon Kangyo Bank	116,213-	140,213	¥ 193,000*	3.9*	107.3*

Position of the Taiwan Banks on June 30, 1939 Cont.

	Paid-up capital (1,000 yen) -(1937)	Reserves (1,000 yen)	Rate of net profit in 1938	Deposits (1,000,000 yen)	Aggregate loans (1,000,000 yen)
(Mortgage Bank of Japan)					
Sanwa	72,200	35,710	¥ 955,000*	32.5*	18.6*
Total	20,680†	10,782†	¥ 4,300,000	270.3	486.1

* Branches in Taiwan alone.

† Excluding Sanwa and Nippon Kangyo Bank, which are domiciled in Japan."

4:Grajdanzev--127 [2] S-4 (no date) 1942 Formosans
116, 453

"Note Issue of Taiwan Bank and Wholesale Prices in Taiwan

	Notes (1,000 yen)	Subsidiary coins and notes (1,000 yen)	Total (1,000 yen)	Gold and foreign exchange reserve (1,000 yen)	Index of wholesale prices in Taihoku, 1914 = 100, Annual average
1933 end	48,994	6,518	55,512	15,885	148.6
1934 "	62,654	6,807	69,461	15,885	154.9
1935 "	70,191	7,163	77,354	15,987	157.6
1936 "	79,138	7,455	86,593	15,885	163.1
1937 "	112,033	8,634	120,667	21	188.7
1938 "	140,019	11,732	151,751	1,219	215.7
1939 "	171,169	14,596	185,765	...	238*
1939, May	140,195	12,750	152,945	...	219
1940, "	174,309	15,605	189,914	...	255

* In 1937 the base was shifted to June 1937, but we have converted later indices to the old base, assuming that the index for June 1937 is the same as the annual average index."

"The banks enumerated above [see page 127 in category 116--analyst] are Japanese, and the only institutions in which the Chinese have some measure of influence are the credit cooperatives, which will be discussed later. The table below summarizes information on deposits of all financial institutions of Taiwan.

Growth of Deposits of Financial Institutions in Taiwan
(1,000,000 yen)

	1926	1928	1930	1932	1934	1935	1939
Banks	102.9	111.9	101.2	133.2	152.2	173.0	270.3
Post office	9.1	13.3	16.5	18.1	21.4	23.7	34.8*
Credit cooperatives	28.0	34.9	34.6	47.7	65.5	77.9	118.2†
Total	140.0	160.1	152.3	199.0	239.1	274.6	423.3*†

* Post-office savings deposits on Dec. 31, 1938.

†Of which rural credit cooperatives accounted for ¥87,230,000 on Dec. 31, 1938.

The amount of deposits in Taiwan has thus trebled in thirteen years. In order to judge whether this is a sign of a sharp improvement of the economic position of the islanders, it is necessary to know (1) whether the increase in deposits comes chiefly from Japanese or from Chinese sources, (2) whether the increase in deposits of the Chinese is a real

increase, or whether it only reflects a change of habit (it is evident that the transition from subsistence to money economy is bound up with the increase of deposits at the banks), (3) how far this increase may be ascribed to war-time inflation.

We do not have complete data on the distribution of deposits between Japanese and Chinese, but what is available throws some light on the problem.

Distribution of Deposits in Banks and Post Offices
(million yen)

	Banks		Post offices	
	Chinese	Japanese	Chinese	Japanese
1926	33.0	69.8	2.6	6.6
1935	51.2	121.7	4.9	18.8
1938	...	...	6.9	27.9 "

4:Grajdanzev-,-129-130 S-4 (no date) 1942 Formosans-1-2
116, 453, 458, 563

"Deposits in cooperatives belong chiefly to the Chinese, but no data are available either on the exact composition by nationality of the depositors or on their number. The table given above shows that between 1926 and 1935 the growth of Japanese banking and postal deposits was more rapid than that of the Chinese and that in 1935 about seventy-two per cent of all deposits in the banks and post offices belonged to the Japanese. But in order to see whether there is a real gain we should know the number of the depositors or the average deposit. We have such data only for the post offices.

Average Amount of Savings per Depositor in Post Offices
(in yen)

	1921	1929	1934	1938	
Japanese	33.3	51.0	146.5	89.5	(1937)*
Chinese	8.2	16.6	14.2	13.8	

* Data for the Japanese beginning with 1936 show a strange change: the number of depositors rises sharply without a corresponding increase in the total amount of the deposits. For 1938 the number of non-Chinese depositors is shown as 394,000, while the whole Japanese population in Taiwan is only 308,000. It may be that the increase of more than 100,000 Japanese depositors with a very small increase in deposits reflects the stationing of a larger number of troops in Taiwan.

Calculated from data given in Taiwan Jijo.

Comparison of the deposits of the Japanese and the Chinese shows (1) that the Japanese deposits are from seven to ten times larger on the average than the deposits of the Chinese; (2) that the average size of the Chinese deposits has not shown any increase since 1929, especially if we take the rise in prices into consideration; (3) that the absolute amount of Chinese deposits is so small that it hardly indicates any great prosperity. When the farmer buys fertilizers and sells a larger and larger part of his produce on the market, he will not keep his savings in the form of silver but will prefer to keep it in the bank where it is safer. This is, however, not necessarily a sign of economic improvement.

On the other hand, a comparison of the note issue and the index of wholesale prices suggests that a large part of the increase in deposits in the war years is purely illusory. If a [130] business man is compelled by the conditions obtaining in his business to have in his account a certain sum of money, then with the rise of wholesale prices he has to increase his deposits in order to be able to satisfy his needs to the same extent as before. But this again can hardly be considered as a sign of 'prosperity', at least for the society as a whole."

"The money which the banks and credit cooperatives collect is lent to the business men and farmers, and here one finds a great difference in the position of the big firms and the small farmers or artisans. The banks serve chiefly Japanese firms, and their credit requirements differ little from those in Japan. Small business men secure their credit in urban credit societies which sometimes charge as much as thirteen per cent and usually ten per cent, while rural credit societies usually charge twelve per cent and in the worst cases seventeen per cent. (1) But both urban and rural credit societies grant

1. These rates are taken from Sangyo kumiai nenkan, 1938, Tokyo. K. Takahashi asserts that the usual rate for mortgages on real property is 15 per cent, op. cit. p. 601).

such credit only on good security, so that the demand of many farmers for credit remains unsatisfied and they are compelled to apply for loans to private individuals who charge twenty to twenty-five per cent, and as Takahashi remarks, cases where more than twenty-five per cent is charged are not rare.

This brief survey is sufficient to show that the modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay.

4:Grajdanzev--130 S-4 (no date) 1942 Formosans-2
116, 426, 453, 563, 477

The importance of this fact cannot be overemphasized. The Chinese enterprises are unable to compete with the Japanese, not so much because the Chinese are 'unable to organize corporations' on account of their 'national characteristics,' [rationalizations given by Takahashi for the domination of industry by the Japanese see pages 112-113 in category 116--analyst] but because their financing costs them two to five times as much as it does the Japanese enterprises."

4:Grajdanzev--156 S-4 (no date) 1942 Formosans
116, 453, 457, 563

"We have statistics of domestic and foreign postal money orders for Taiwan. Without exception each year the amount of money orders issued in Taiwan is above the amount of money orders paid in Taiwan. The difference indicates approximately the net remittance by the Japanese in the case of domestic money orders (an order on Japan is regarded as a domestic order in Taiwan), and by the Chinese in the case of foreign money orders. The average amounts for the last 5 years (1933/34-1937/38) are as follows:

	Issued	Paid	Balance
Domestic money orders (1,000 yen)	32,207	19,880	—12,327
Foreign money orders (1,000 yen)	467	96	— 371

Source—Financial and Economic Annual of Japan, 1938.

For the last 5 years the average balance of postal money orders in favor of Japan was 12,327,000 yen while that to the advantage, presumably, of China (1) was only 371,000

1. We say 'presumably of China' because it is difficult to find any other foreign country to which an average of 16,000 remittances are made annually from Taiwan.

yen. There is nothing astonishing in this because the Chinese working in Taiwan who are the citizens of China are either workers or petty traders and, of course, none of them are employed in governmental service. These are statistics of postal money orders, not of bank remittances, but there is no reason to suppose that the situation with respect to the latter is different."

4:Grajdanzev--185-187 S-4 (no date) 1942 Formosans-1-3
116, 453, 648, 177.64 Japan
636.64

"Taiwan 'the stone aiming at the south' was acquired by [186] Japan in 1895. The Bank of Taiwan, established in 1897, had among its tasks penetration of Southern China and Nan-Yo (1). In 1900 it established a branch in Amoy; in 1903—in Hongkong. In 1912 one

1. Nan-Yo includes Southeast Asia and the islands between Formosa and Australia. It is not clear whether the term includes Australia and New Zealand. Inclusion of Australia and New Zealand was denied by the former Minister of Foreign Affairs, Mr. Matsuoka, presumably to alleviate the fears of the Australians, but the maps published by the Japanese theorists of the southward advance include Australia and New Zealand.

in Bangkok. During the same period a well-planned net of agencies of the Bank was laid throughout the Malay archipelago. In 1919 with the assistance of the Bank of Taiwan the Chinese Southern (Hwa Nan) Bank was established with a capital of 10 million yen, and head offices in Taihoku, Taiwan. Its purpose was work among the Chinese emigrants in the colonial countries of Southeast Asia. In the same year the Bank of Taiwan established the South Seas (Nan-Yo) Warehouse Company with a capital of 5 million yen. As early as 1908 the government-general of Taiwan decided to earmark from its budget 700,000 to 800,000 yen annually for the purposes of education, health work, protection, cultivation

of friendship, and financial assistance to the Japanese in South China and Nan-Yo. But beside these purposes, about which some information will be given below, there was financial assistance not only to business men as such, but to business men of a special character. Malaya, Netherlands Indies, Australia, the Philippines, French Indo-China and Siam, not to mention South China, were systematically covered by a network of Japanese photographers, druggists, laundrymen and shopkeepers. There were hundreds of photographers who did not have as many as five clients a year; druggists who never sold any drugs to the natives or any one else; fishermen who were busy in surveying the coasts and taking soundings. We do not know how many of them were paid from the general budget of Japan proper; but we know that the sums appropriated annually by the Taiwan government-general were probably sufficient to support 3,000 such people throughout Southeast Asia (Y240 a year being enough for a frugal Japanese in [187] these southern countries.) To this network one should add the branch offices and agencies of the Bank of Taiwan, and the consulates of the Japanese Empire dotting the same area (2).

2. French officials in Indo-China complained that the Japanese knew more about Indo-China than they did. (Noted in Mirovoye Khozyaistvo, . . . , 1941). The same may be said about other countries of Southeast Asia.

The details of expenditures of the Taiwan government-general for this purpose

according to a Japanese source 'are not clear' (3), but it was said that 60% were spent

3. Taiwan Keizai Nempo, 1941, p. 778.

in South China and 40% in Nan-Yo."

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

Annex "A," Subparagraph 3d,
Economic Background

BANKING AND CURRENCY

652 436 Modern banking, as it is known in the West, came into being on Formosa during the Japanese occupation. The first bank on Formosa was a branch of a Japanese commercial bank, the Churitsu Bank, which was opened in Keelung during the first year of Japanese rule (1895). The Bank of Taiwan was established in 1899. It had the exclusive right to issue currency and was designated as the fiscal agent of the colonial government. It also did commercial banking, accepting deposits and extending loans, and dealt in foreign exchange. The notes issued between 1899 and 1904 were convertible into silver or were exchangeable at par for Japanese yen. In 1904 notes convertible into gold were issued. On notes which were not secured by gold or silver reserves, the Bank of Taiwan had to pay a tax of 5 per cent per annum. This rate was reduced to 3 per cent per annum in 1935. With 453 agricultural and industrial development of the island, banks prospered. The following banks were operating in Formosa at the end of 1944:

45:Stanford U. S-4, 5 1956 AD1 Formosa
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	Number of Branches (including head office)
453 Bank of Taiwan	14
Taiwan Commercial and Industrial Bank	37
Chang Hua Bank	28
Hua Nan Bank	4
Taiwan Savings Bank	20
Cooperative Bank	45
Sanwa Bank*	3
Hypothec Bank*	5

* Headquarters in Japan.

The Bank of Taiwan had 35 branches outside Formosa, and the Hua Nan Bank had five branches outside Formosa. In addition to the above there were also one trust company, four mutual-credit associations, and approximately 500 branches of co-operative and farmers' associations. During the first six months of 1945, to escape allied aerial bombings, banks were dispersed and the number of branch banks was increased.

652 After the war the Nationalist Government took over all the banking institutions on Formosa. Shares owned by the Japanese government and by Japanese firms and individuals were

45;Stanford U. S-4, 5 1956 ADI Formosa
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Bank Deposits and Loans*

	Deposits (NT$ million)	Indices (June 1949 = 100)	Loans and Discounts (NT$ million)	Indices (June 1949 = 100)
1949	207	209	441	678
1950	659	666	632	972
1951	1,283	1,296	837	1,288
1952	2,096	2,117	1,488	2,289
1953	2,668	2,695	1,984	3,052
1954	3,278	3,311	2,711	4,171
(to April) 1955	3,991	4,031	3,066	4,717

* Far Eastern Economic Review, Vol. XIX, No. 6, Aug. 11, 1955, p. 183.

45:Stanford U. S-4, 5 1956 ADI Formosa
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Interest Rates on Time Loans*
(Monthly)

	Bank of Taiwan	Other Banks	Private Lenders
1949	3.90	9.9	17.4
1950	2.10	3.9	12.0
1951	1.80	4.8	10.5
1952	1.80	3.3	6.6
1953	1.20	2.4	4.3
1954	0.99	1.9	4.1
1955 (June)	.99		4.2

* Statistics of Economic Research Department, Bank of Taiwan.
# on unsecured loans in the city of Taipei. Interest rates vary from city to city; from 2.4 per cent to 4 per cent monthly, as of June 30, 1955.

453 The Bank of Taiwan once granted preferential interest rates to public enterprises, but the practice was deprecicated by private industry and has been discontinued. The reduction of interest rates, in spite of inflation, is a healthy sign, because a lower interest rate enables manufacturers to increase their capital investment and to reduce the cost of production, thus contributing to industrial expansion.

45;Stanford U, S-4, 5 1956 ADI Formosa
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BANK LOANS AND DISCOUNTS* (April 1955)
(unit: NT$1,000)

		Total
Public Enterprises		1,617,094
a. Production enterprises	966,605	
b. Provincial Unified Fiscal Account#	599,329	
c. Communications	51,010	
d. Others	150	
Private Enterprises		1,179,203
a. Production enterprises	691,027	
b. Communications	44,502	
c. Others	443,674	
Grand Total		2,796,297

* Data from the Bank of Taiwan. Of the total, 68 per cent was loaned by the Bank of Taiwan and 32 per cent by all other banks.

Including Wine and Tobacco Monopoly Bureau, Forestry Administration, Taiwan Food Board, Bureau of Supplies, Coal Adjustment Commission, and the Provincial Railway and Highway Administrations.

453 The total deposits in banks as of December 31, 1954 was NT$3, 110 million, of which NT$1,390 million was from public and governmental agencies. Nearly two-thirds of the total bank deposits in the province, NT$1,957 million were held by the Bank of Taiwan.[3] These statistics indicate the dominant position of the Bank of Taiwan in the economic life of Formosa.

436 Formosa enjoyed a stable currency before Japan attempted the conquest of China. After 1937, a period of inflation began. The amount of currency in circulation increased from 64.2 million yen in 1936 to 536.2 million yen in 1944. Through price- and wage-control and enforced savings, the Japanese administration was able to fight inflation. In 1945, however, the note issue jumped to a monthly average of 1,568 million yen. There was a shortage of food and other consumer goods, and the whole system of economy broke down. Prices soared.

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3. Statistical Abstract of the Republic of China, 1955, Directorate General of Budgets, Accounts, and Statistics, Executive Yuan, Taipei, 1955, pp. 174-75.

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-1-3
116, 171, 241, 454, 433, 177.24 Japan
636.24

"(3) Increased agricultural production may also be achieved by raising yields per unit of area. Below we give a comparison of yields in Taiwan and in Japan, and in the case of sugar cane, the area of which in Japan is too small, a comparison with Hawaii and the Netherlands Indies, where conditions are similar to those in Taiwan, while groundnut production in Taiwan is compared to that of Kwantung.

Crop Yields In Quintals Per Hectare in Taiwan and Other Countries.

		1928-32 average	1933-37 average	1937
Wheat	Taiwan	8.7	9.7	10.7
	Japan	17.7	19.1	19.1
Barley	Taiwan	6.4	8.0	7.4
	Japan	19.9	20.6	20.9
Maize	Taiwan	11.3	10.8	11.6
	Japan	14.1	14.7	16.7
Rice	Taiwan	22.2	25.1	26.1
	Japan	35.0	36.8	38.6
Sugar cane	Taiwan	684.4	654.4* Four-year average 1933-36.	...
	N. E. I.	1,308.0	1,374* Four-year average 1933-36.	...
	Hawaii	1,349.4	1,515* Four-year average 1933-36.	...

		1928-32 average	1933-37 average	1937
Soya beans	Taiwan	5.6	5.7	6.2
	Japan	10.0	10.0	11.2
Groundnuts	Taiwan	16.2	17.1	18.4
	Kwantung	19.0	20.7	...
Sesamum	Taiwan	3.5	3.9	4.2
	Japan	7.3	7.5	7.5

The yields per hectare of the most important plants in Taiwan's economy are therefore thirty to fifty per cent less than in Japan, or, in the case of sugar, in Hawaii or the Netherlands East Indies, and yet all available sources mention the fertility of the soil in Taiwan, while climatic conditions are at least as good as in Japan or the Netherlands Indies.

The explanation lies in the primitive methods of Taiwan [47] agriculture, including the slight use of fertilizers. Judging by the cultivated area and the number of farmers, the island should have at least 300,000 to 400,000 ploughs, but in 1929 (1) almost all (except

1. The last data available, Nogyo nenkan, p. 642.

18,315 'improved' ploughs for deeper ploughing and 614 of the European type) were of the

primitive Chinese pattern. While in Japan proper an average of ¥170 to ¥180 per hectare is spent each year on commercial and home-prepared fertilizers, in Taiwan less than half that sum is spent for this purpose. These two examples—ploughs and fertilizers—for which quantitative data are available show clearly that Taiwan farming is under-capitalized, especially when we consider that the farmer is obliged to pay ¥2,000 per ko for good land.

This does not of course mean that there is no improvement in the agriculture of Taiwan. The government devotes much effort to increasing the productivity of the farms and the farmers are eager to respond. Yields are now higher than they were twenty years ago, as one may see from the tables given later in this chapter. But progress is slow. It is doubtful whether yields in Japan in 1895—the time of the annexation of the island—were higher than in Taiwan, whereas now they are considerably greater and relatively Taiwan is lagging further and further behind."

4:Grajdanzev--94-96 S-4 (no date) 1942 Formosans-1-3
116, 454, 471, 472, 473

"Finally, we may compare these industries from the point of view of the amount of capital invested in them: (1) [95]

1. Only paid-up capital is included because data for the reserves of smaller corporations could not be found.

Capital Invested in Taiwan's Industry in 1937
(million yen)

	Corporations	Limited partnership	Unlimited partnership	Total
Textile industry	2.7	0.1	0.1	2.9
Machine	3.9	0.9	0.1	4.9
Ceramics	3.3	0.2	0.1	3.6
Chemical	9.6	0.3	0.2	10.1
Lumber	1.5	1.1	0.1	2.7
Food	113.1	4.6	0.4	118.1
Printing	0.5	0.1	...	0.6
Gas and Electricity	47.0	...	...	47.0
Others	1.0	0.3	0.3	1.6
Total	182.6	7.6	1.3	191.5*

Footnote on next page.

* The official estimate of the total capital of industry on Dec. 31, 1937, was ¥258.5 million but it is not clear whether this figure includes nominal capital or only paid-up capital and, whether it includes other investments, government enterprises etc.

Source: Taiwan Jijo, 1939.

Again the food industry is in first place. Actually its position is much more important because it has accumulated considerable reserves. Next in importance is gas and electricity because here investments play a greater part than the number of men occupied while ceramics and printing are poor in capital. It may be of interest to compare the average investment per enterprise for the same year:

Paid -Up Capital per Business Unit
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Textile	671	60	120	477
Machine	353	38	45	123
Ceramics	276	21	33	155
Chemical	387	37	115	289
Lumber	163	93	23	106
Food	1,509	78	44	832

Paid-Up Capital per Business Unit Cont.
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Printing	101	12	...	41
Gas and electricity	7,836	10	...	6,718
Others	76	13	68	38
All industry	1,127	51	54	578

[96] We see from this table that in Taiwan there are very large enterprises in the electric power, food, and textile industries, where capital per enterprise is relatively large, while enterprises in the printing, machine, lumber, ceramics and 'other' industries are very small in size. It should be pointed out that individual enterprises are not included here, (2) but both their capital and the value of their products are insignificant

2. The number of individual enterprises in 1934 were reported as follows: 62 in textiles, 91 in metals, 173 in machinery, 588 in ceramics, 428 in chemicals, 3,960 in foods, 256 in lumber, 126 in printing and 381 in others, a total of 6,065, almost all of them Chinese (Takahashi, op. cit., p. 438).

in comparison with those of the companies."

4:Grajdanzev--96-97 S-4 (no date) 1942 Formosans-1-2
116, 171, 454, 471, 473, 177.47 Japan
636.47

"It is also interesting to compare the size of the companies in Taiwan as regards capital with those in Japan proper and in Korea.

Industrial Companies, their Total and Average Capital in the Japanese Empire, December 31, 1937.

	Companies, number	Total paid-up capital and investments (million yen)	Capital per enterprise (1,000 yen)	Capital per capita of population (yen)
Japan proper	30,518	9,396.9	308	132
Korea	981	246.2	251	11
Taiwan	335	191.5	572	34
Kwantung	358	96.9	271	81
Karafuto	88	33.6	382	103

Source: Dainippon teikoku tokei nenkan, 1939.

It is clear that Taiwan and Korea are poorly supplied with capital per capita of population, but there is an important difference between them: the average capital per company in Taiwan is higher than in any other part of the Japanese Empire, including Japan proper. These are averages and include small as well as large companies, but behind them one may see the silhouettes of big corporations dominating the economic life of Taiwan,

corporations which have few equals even in industrially developed Japan (1).

1. By size of total paid-up capital the corporations and partnerships in industry in Taiwan were distributed as follows: [97]

Size	Number of companies	per cent of total	Total paid-up capital (1,000 yen)	per cent of total
Less than ¥10,000	50	14.9	253	0.1
¥ 10,000- 49,000	111	33.1	1,922	1.0
¥ 50,000- 99,000	34	10.2	1,276	0.7
¥ 100,000- 199,000	48	14.3	3,020	1.6
¥ 200,000- 499,000	40	11.9	4,878	2.5
¥ 500,000- 999,000	20	6.0	4,694	2.5
¥1,000,000- 4,999,000	25	7.5	24,077	12.6
¥ 5,000,000-9,999,000	2	0.6	5,700	3.0
Over ¥ 10,000,000	5	1.5	145,316	76.0
Total	335	100.0	191.1	100.0

Thus, 32 companies—9.6 per cent of the total number—had 91.6 per cent of the total capital of companies."

4:Grajdanzev--106-107 S-4 (no date) 1942 Formosans
116, 316, 433, 454, 177.31 Japan
636.31

"Mining occupies a relatively unimportant position in Taiwan. In 1936, the last year for which data are available, the gross value of mineral products was Y28,727,000, less than ten per cent of the value of industrial production and less than one per cent of total production. But as regards the capital invested, the attention given by the government to oil and, recently, to gold, and the subsidies lavished on actual and potential producers of oil, it occupies quite a prominent position. The caiptal of the mining industry at the end of 1937 was Y46,635,000 (1). There were twenty-four companies, [107] but, just

1. It is not clear whether this is subscribed or paid-up capital, or whether this sum includes reserves and other investments.

as in other fields, three companies dominated the field; Taiyo Kogyo, Taiwan Kogyo, and Keelung Tanko (coal), (2) each having capital of over Y5,000,000.

2. The paid-up capital of this corporation is Y7 million and out of 140,000 shares 43,473 are in the hands of Mitsui Kosan and 41,656 in the hands of Mitsui Bussan."

4:Granjdanzev--118-119 S-4 (no date) 1942 Formosans
116, 454, 496, 655, 177.49 Japan
636.49

"In 1926 there were 950 km.(1) of government railroads in Taiwan; in 1938 there were

1. Taiwan, Its System of Communication and Transportation, 1929.

1,040 km. The lengths of private railways at the same dates were 525 km. and 521 km. respec-[119]tively—a slight decrease. In other words, in the last decade the construction of new railroads in Taiwan has almost stopped. At the end of 1938 the capital invested in the government railroads including expenditures on repairs and restorations was ¥172,499,691."

15: U.S. Navy -- 27 [6] (no date) 1944 Formosans
116, 454, 511, 556, 563

"As an indication of the relative wealth of individuals in Taiwan, it is notable that bank and postal savings deposits of Japanese in Taiwan are from seven to ten times larger than the average deposits of Formosans. It will be noted in the following table that per capita wealth increased rapidly until the outbreak of war between Japan and China in 1937.

Table 22: Average Savings per Depositor in Post Office Accounts

	1921	1929	1934
Japanese	¥33.3	¥51.0	¥146.5
	($15.98)	($23.96)	($44.27)
Formosan	¥8.2	¥16.6	¥14.2
	($3.93)	($7.63)	($4.29)"

576 promotion of education, for moral culture, for music, drama, and literary activities. Various kinds of secret societies and fraternities also existed.

4. The number and types of Associations: As folk associations are essential for the life of the people in folk society, we can expect that there were numerous such associations in agrarian Formosa. Some data exist which wil enable us to make an estimate. The Japanese colonial government made a survey of religion from 1915 to 1918, and the result was published in 1919, as "The Report of the Survey of Religion in Taiwan", Vol. 1. According to this report there was 6,159 associations with 291,161 members.[3] Since informal associations are hard to identify and may not have been recorded, the actual number is likely to be larger than the reported figure.

454 The above figure did not include the associations for mutual financial aid (the hui). According to a survey by the Japanese in 1922, there were 2,055 hui with 24,428 members in Taipei prefecture, 145 hui with 1,720 members in Taichung prefecture. They estimated the number in other prefectures of the island to be 2,200 hui with 26,138 members.

3. Table 27.

454 Thus there was a total of 4,400 hui with 52,286 members in Formosa.[4] If we add these figures to the above, there were 10,569 associations with 343,447 members around 1922. The Formosan population in 1922 (excluding Japanese) was about 3.7 millions, so more than 9 per cent participated in some association. Since this 9 per cent represents adult members of each household, it is evident that a substantiat proportion of households in Formosa participated in associations.

575 All folk associations retained some religious character, so the Japanese treated them all as religious associations. In fact they were organized for a great variety of purposes. In "The Report of the Survey of Religion in Taiwan," eight kinds of associations are enumerated:[5]

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4. Chen Yunghu: "The business of Ho-huei in Taiwan." The Quarterly of the Bank of Taiwan, Vol. V. No. 4, 1953, p. 123.
5. Table 23, p. 129.

[78] Economic dependency on Japan was accentuated
648 by the employment of only Japanese in both
459 technical and managerial positions. From the beginning of the Japanese control, trade was confined almost exclusively to territories within the Japanese empire and managed for the most part by Japanese personnel. Japan took between 90 and 95 per cent of Formosa's exports and supplied 85 to 90 per cent of the island's imports. Some sugar and coal were shipped to China, and small quantities of tea and camphor were sent to the United States.
648 Banking and currency were linked to the
454 Japanese system, and all capital investment was controlled by the Japanese.[5] "Every year, for at least fifteen years previous to the war, Japan is believed to have gained directly 150 million yen from her investments in Taiwan, and for the fifteen years before that lesser but still significant sums".[6]

648 Some of the Japanese industrial projects
727 were never completed. Others wer destroyed

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5. By 1939, 90% of all the capital invested in the island was held either by the Japanese government or Japanese nationals; the remaining 10% held by Formosans was mostly invested in small shops. Taiwan, A Geographical Appreciation, Ottawa, Department of Mines and Technical Surveys, Government of Canaca, 1952, p. 16.

6. Ginsburg, op. cit., p. 25.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

also maintained a zealous staff of workers to put new findings into effect. Taiwanese villagers were mobilized into compulsory associations to utilize the information, and the program was carried on with close cooperation by local authorities.

In addition to these measures, certain of the large Japanese expenditures on outright heavy investment helped to modify agricultural productivity of Taiwanese. The building of railroads, large-scale facilities for irrigation and flood control, and in later years factories for processing agricultural produce all worked some radical changes in the relations between the farms and the markets abroad. But these reached down only occasionally to disturb the operation of individual peasant farming. What one Japanese writer has called the process of "capitalist development in Taiwanese agriculture" was not so much a matter of developing investment in agriculture itself as of surrounding agriculture with capital improvements.[14]

Many improvements were introduced directly by the Government-General. Usually a charge was levied on their use or the expense was defrayed by heavy taxation. The government matched each of these steps of its own by prompting the large private firms to carry on parallel works inside their corporate domains. This sort of extra-curricular investment was widely undertaken by Japanese companies, and led to the growth of giant integrated concerns, some larger than their counterparts in Japan.[15]

A remarkable set of inducements existed for engaging in this sort of corporate expansion. Taiwan in the first place had the reputation of being the most profitable locale for investment in the Empire.[16] In addition to this, the Government-General frequently offered subsidies, partial subscription of funds by itself, special legal privileges, a trifling burden of taxation, and in general more cordial relations with the state than were available elsewhere. The response to these terms was apparently more enthusiastic than had been anticipated. It rose at times to feverish speculation, followed by short depressions among Japanese financial circles,[17] and led the Government-General to impose restrictive schemes for fixing prices and output.

[14] Yanaihara, Tadao (1929), p. 140 ff. He points out that most Japanese held land as landlords, like the Taiwanese, not as capitalists. The exception to this rule—and it is a large exception—was the management of sugar-growing plantations by a few of the large sugar-processing companies.

[15] Grajdanzev, A. J. (1942), p. 96.

[16] Yanaihara (1929), p. 146.

[17] Price movements of rice and sugar in Japan intensified some of these effects, especially in the late 1920's and for several years after 1930. See Grajdanzev (1942), pp. 99-101.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

471 There was still another category, a somewhat subtler one, by which
454 Japanese investment was injected into Taiwan's economy. This con-
438 sists of what might be called organizational changes, like banking facilities and the formation of stable domestic markets for disposing of produce. Many such features had been notably absent before 1895, when most commodity markets were no more than local in scope, prices fluctuated widely, interest rates were usurious, and speculation was the principal business activity. This channel of influence was often not actually separate from others; some efficiencies of this sort appeared even as by-products of other more deliberate innovations. These advantages tended to flow from relations among the modern types of business organization. Hence such benefits went to Japanese businessmen, though they often opened up subsidiary avenues to wealth for a number of Taiwanese in commerce and in service enterprises.[18]

With no significant exceptions, the growth and spread of Japanese business activity in Taiwan served primarily to introduce capital into agriculture without greatly changing the operation of individual farms. It furnished a pattern of services between the fields and the markets in Japan through which to reap the economies of modern organization, and yet ensured that most of the proceeds were reinvested on the island in a pattern determined by official decision.

The Preparations for War

656 During the early or middle 1930's the Japanese Empire began to turn toward preparations for war. The colonies were called upon to increase the measure of their contribution in other lines of production besides Empire self-sufficiency in food. Taiwan was not abundantly endowed with the heavy stuff with which the war was to be made—metallic ores were lacking, and coal deposits were not plentiful—and so it was permitted to assume some of the burden of processing materials formerly supplied to Japan as agricultural and other primary produce. This decision did not issue entirely from military or strategic considerations, since in many cases it amounted to no

[18] Chartered banks were an exception. They harnessed funds for industrial investment, and were all owned and operated by Japanese. ". . . modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese [Taiwanese] have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay." Grajdanzev (1942), p. 126.

4:Grajdanzev--99-101 S-4 (no date) 1942 Formosans
116, 433, 455

"The value of sugar cane produced in the island in 1937 was officially estimated at ¥55 million, while the value of sugar produced in the same year was estimated at ¥202 million.

The high profits led periodically to feverish activity, investments in new and very often highly speculative fields, followed by over-production, a fall of prices, reduction of area under sugar cane, reduction of the price paid for cane and attempts to market the surplus abroad at lower prices, chiefly in the Chinese market. This speculative activity brought on a tremendous financial crisis in 1927 with the collapse of the Suzuki [p. 100 contains a table on sugar corporations; see category 116--analyst] [101] firm, and the speculative activity at the present time, based on expectations of continued war and demand for armaments, may bring even more violent repercussions (1).

1. Toyo keizai, November 9, 1940, reports a sharp fall in production of sugar in 1940-41 and in the profits of the sugar companies."

423 (0.248 acre) of urban land. Any excess portion should be sold in two years, after which period the hsien or municipal government could expropriate it at the assessed value. The area of urban land devoted to industrial use shall be determined according to the requirement in each case.[23]

423 651 As to taxation, the higher the price of the land, the heavier will be the tax. The minimum is 1.5 per cent and maximu, 6.5 per cent. The land value increment tax is levied at the time of any transfer of ownership or at the completion of a ten-year period. Any increase of value from previous transfer shall be taxed progressively from 30 per cent to 100 per cent.[24]

423 It is estimated that 10,000 hectares (24,700 acres) of urban land throughout the province will be affected by the new regulations.[25] The steady growth of population, better communication facilities, and more prosperous industry and commerce have caused a great [455] advance in land price. Urban land has become the object of speculation. The need for reform of urban land is as evident as the need for reform

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23. Article XXXIV and XXXV, Regulations Governing the Equalization of Urban Land Ownership.

24. Ibid., Articles XX and XXI.

25. United Nations, Economic Survey of Asia and the Far East, 1954, Bangkok, Feb. 1955, p. 89.

4:Grajdanzev--105-106 S-4 (no date) 1942 Formosans
116, 376, 457, 177.71 Japan
636.71

"Cheap water power is an important asset to Taiwan in all plans for its industrial development. Prior to 1930 it was estimated that the twenty-three major streams can produce as much as 1,040,000 kw., but, according to Takahashi, recent estimates put the capacity at a much higher figure—about two million kw. Of this about 230,000 to 240,000 kw. was utilized in 1939. Development before 1933 was slow. In 1919 the capacity was 10,000 kw.; in 1933, about 40,000 kw. But in 1930-31 a project was worked out for the utilization of Jitsugetsutan (Lake Candidius), a lake in the mountains in the centre of the island located 726 m. above sea level. The project was elaborated chiefly for the purpose of creating an armament industry (1) but there was no money to finance it, so work on the

1. That the primary motives were military is definitely stated in Taiwan Jijo, 1939, p. 418, and Sekai nenkan, 1939, p. 177.

project stopped. Finally, money was found in the United States, where in July 1931 a loan of US $22,800,000 or ¥45,737,210 was arranged. In October 1931 work was resumed and in 1934 the project was completed. In July [106] 1937, a second project was finished at the same lake."

4:Grajdanzev--126 [21 S-4 (no date) 1942 Formosans
116, 435, 453, 457

"The foremost position is occupied by the Taiwan Bank, a private corporation in charge of the monetary system of Taiwan. The great difference between the deposits of this bank and its loans is explained by the issue of banknotes, one of the many ways by which Japanese capital in Taiwan is created. The issue of notes, the reserves of gold and of foreign exchange kept by this bank, as well as the movement of wholesale prices in Taihoku. the capital, may be seen from the table on page 127.

In six and a half years the issue of notes increased three and a half times, the gold and foreign exchange reserve evaporated in the same period, and in the five years 1933-38 wholesale prices increased by about fifty per cent."

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year—a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

4:Grajdanzev--156 S-4 (no date) 1942 Formosans
116, 453, 457, 563

"We have statistics of domestic and foreign postal money orders for Taiwan. Without exception each year the amount of money orders issued in Taiwan is above the amount of money orders paid in Taiwan. The difference indicates approximately the net remittance by the Japanese in the case of domestic money orders (an order on Japan is regarded as a domestic order in Taiwan), and by the Chinese in the case of foreign money orders. The average amounts for the last 5 years (1933/34-1937/38) are as follows:

	Issued	Paid	Balance
Domestic money orders (1,000 yen)	32,207	19,880	—12,327
Foreign money orders (1,000 yen)	467	96	— 371

Source—Financial and Economic Annual of Japan, 1938.

For the last 5 years the average balance of postal money orders in favor of Japan was 12,327,000 yen while that to the advantage, presumably, of China (1) was only 371,000

1. We say 'presumably of China' because it is difficult to find any other foreign country to which an average of 16,000 remittances are made annually from Taiwan.

yen. There is nothing astonishing in this because the Chinese working in Taiwan who are the citizens of China are either workers or petty traders and, of course, none of them are employed in governmental service. These are statistics of postal money orders, not of bank remittances, but there is no reason to suppose that the situation with respect to the latter is different."

4:Grajdanzev--156-158 S-4 (no date) 1942 Formosans-1- 3
116, 457 177.45 Japan
636.45

"The trade balance of Taiwan with all countries other than Japan is usually 'passive', but this trade also does not present a special problem. If Taiwan, for example, bought beans from Manchuria for 20 million yen and sold goods to Japan to the [157] value of 80 million yen, we may consider that this means that value of 80 million yen worth of goods were sold from Taiwan to Japan. The freight payments which accrue chiefly to the Japanese need not trouble us because they are included in Taiwan's statistics of imports and excluded from the statistics of exports. Thus we find the commodity balance of trade almost exactly measures the amount of profits and other earnings of the Japanese individuals, companies, and the government-general which they put at the disposal of Japan proper(1). Invisible items of the balance of payment with foreign countries do

1. Actually the profits derived by Japan from Taiwan are even greater, because (a) the gold produced in Taiwan and sent to Japan is not included in the trade statistics and (b) there was very active smuggling by Japanese of goods from Taiwan to Chinese ports, estimated by Japanese authors at several million yen a year.

not complicate the picture. Naturally, there is not an exact correspondence between the amounts transferred to Japan and the balance of payments from year to year and especially from month to month; more goods may be sent this year than there are

profits and savings transferred, but in the following year the situation will be reversed if the normal functioning of the financial mechanism is to continue.

Let us now look at the balance of payments of Taiwan. In the first thirteen years of the Japanese administration (1896-1908) the balance was usually passive and the net aggregate amount of these passive balances was 31,655,000 yen (after deduction of active balances). It is fair to assume that this sum approximately represents net Japanese investments in Taiwan—a sum for which no equivalent was received up to 1908. Since that time the balance has been active. Admittedly, these investments do not include Japanese expenses of military occupation. But these were taken care of by the huge indemnity paid by China to Japan after the war of 1894-1895. This indemnity, as is well known, was in excess of the cost of war to Japan.

Active Trade Balance of Taiwan (1,000 Yen)

	Aggregate	Annual Average		Aggregate	Annual Average
1909-1913	26,384	5,276	1929-1933	354,672	70,934
1914-1918	167,117	33,423	1934-1938	481,642	96,328
1919-1923	212,148	42,430	1939	184,289	184,289
1924-1928	382,971	76,594			
			Grand Total	1,809,223	

[158] Thus from an annual average of 5.3 million yen in 1909-13 the active balance of Taiwan rose to 96,328,000 in 1933-1938 and reached a peak of 184,289,000 in 1939. In

many cases the trade balance cannot serve as a good indicator of what a country pays to others for foreign investments. However, the case of Taiwan is different. The items complicating the balance of payment as apart from the commodity balance are almost absent here. There are few islanders abroad and there are few foreigners (except the Japanese) in Taiwan. There are no other foreign investments (other than the Japanese) on the island worthy of consideration. The islanders do not travel abroad, the foreigners do not travel in the island. Almost all economic relations are with Japan; the economic relations with other countries, insofar as they exist, are taken care of in the balance of payments."

4:Grajdanzev--158 S-4 (no date) 1942 Formosans
116, 457, 563, 661, 177.43 Japan
636.43

"Of course, some part of the [trade--analyst] balance is made up by the remittances of the Japanese on the island to Japan-proper, remittances which may be presented as 'earned income' and not an income from investment. However, the thousands of Chinese citizens who reside on the island remit home to China only paltry sums. They are unable to earn as much as the Japanese, mainly because the privileged position of the Japanese is the result of the colonial status of the island. The services performed now by the Japanese in most cases could be as well performed by the islanders, but their part is to be servants of the ruling nation. It should be clear than that this 'earned income' can be considered as a special form of the general income from the colonial exploitation of the island."

4:Grajdanzev--158-159 S-4 (no date) 1942 Formosans
116, 171, 457, 477, 661, 177.43 Japan
636.43

"The usual explanation of Japan's ability to obtain year after year tens of millions of yen worth of goods over and above what is sent from Japan to Taiwan is that this balance represents the interest on Japanese capital invested in Taiwan and the profits of the Japanese businessmen there. But a closer analysis of the figures given above reveals that this explanation is not satisfactory. It is important to understand that we are concerned here with investments and the returns on them, not from the point of view of an individual, but from the point of view of two regions——Taiwan and Japan. From 1896 to 1908. [159] inclusive, Japan sent goods to the value of 31,655,000 yen over and above her imports from the island and this represents her real outlay in the colony. She now receives from Taiwan sums which in every year since 1914 have been greater than this original 31,655,000 yen; which in every year since 1924 have been more than twice as great; and which in every year since 1934 three times as great, and in 1939 were six times as great as the original sum. Is this the legitimate interest on capital and profits of the entrepreneurs which are due to their energy, foresight and managerial ability?

Of course, we know that high profits are made not only in Taiwan, but, say, in the United States as well. Does this fact refute our thesis of exploitation? In no way. The existence of monopolies in the United States is a fact known to all. However, these monopolies are not permanent. Some of them appear, some disappear, every year."

4:Grajdanzev--159 S-4 (no date) 1942 Formosans
116. 457, 652, 661. 177.43 Japan
636.43

"For our purposes it is irrelevant whether all or only a few of the Japanese firms on the island make high profits; whether there are bankruptcies among them or not. We are concerned here with Japan's position in Taiwan as a whole. The existence of the Japanese firms on the island which make less than 10 percent on the invested capital, of the Japanese entrepreneurs who fail and the Japanese adventurists who return to Japan disappointed and disillusioned does not refute our thesis. It was shown in some detail above that beside investment profits as such there is derived from Taiwan the income of Japanese officials, and income originating in taxation, monopolies, fines, etc., most of this due in the last analysis to one source—Japan's colonial power. All this brings us to the conclusion that the active balance of Taiwan's trade represents mostly an unusually high degree of exploitation of the Chinese on the island by the Japanese government and industrialists.

To those who ask whether the colonies are profitable or not, it may be said that the ruling group of Japan knows that they are. They are able in Taiwan to support 300,000 Japanese on a much higher level than those Japanese would enjoy in Japan and in addition to extract profits of more than 100 million yen a year."

15: U.S. Navy--31 [2] (no date) 1944 Formosans
116, 563, 262, 463, 457

"The Japanese diet is simple. Rice is the staple with a garnish of pickle or fish and bean paste soup. Most Japanese are managers of large enterprises, government officials or wholesale businessmen, settled in and around the large cities. They have created a large number of hotspring and recreational resorts. There are few Japanese of great wealth with permanently established residences in Taiwan, for the work of the majority is the creation and transfer of wealth from Taiwan to absentee proprietors in Japan Proper."

45:Stanford U. S-4, 5 1956 AD1 Formosa
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both in yield per acre and in total amount, so there is at present not only a sufficient supply to feed the increased population, but also a substantial amount for export.

United States aid appropriations for China from 1951 to 1954 was as follows:

1951	US$ 98,034,000
1952	81,479,000
1953	105,503,000
1954	111,821,000
	US$ 396,837,000

In fiscal year 1955, the allotment totaled US$102,000,000, distributed among the following programs:[13]

Military program	US$ 37,000,000
Commodity aid	34,000,000
Industrial construction	28,000,000
Technical assistance	3,000,000
	US$ 102,000,000

From the disorganized and demoralized condition of Formosa in 1949, the joint Chinese

13. As reported by Martin Wong, Secretary-general of the Council for U.S. Aid on Aug. 12, 1955.

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457 It should be noted that price levels have risen 700 per cent and the amount of notes issued has increased 2,600 per cent. Similarly foreign exchange has not depreciated to the same extent as the increase of money in circulation. The official exchange rate[5] for US dollars has increased from NT$5 to NT$24.78; the market rate[6] for US dollars has increased from NT$7.82 on December 31, 1949 to NT$37.50 on November 6, 1955.

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652 The pressure of inflation on the economy of Formosa has been alleviated by a number of factors. The enormous growth in population and industrial expansion tend to absorb a part of the increased money supply. The government controls an abundant reserve of rice, wheat flour, and other essential goods, which may be used to stabilize prices. The depreciation of the external value of the currency has been partially offset by aid from the United States and the personal expenditure of United States advisory personnel in Formosa.

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5. The 1955 figure includes the bank exchange rate of NT$15.65 plus 20 per cent defense tax (NT$3.13) plus the certificate price of NT$6.00.

6. United Press dispatch, Taipei, Nov. 6, 1955.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

443 established stores and shops, provided one has skill in bargaining. Some operators at times manage to sell their items at high prices to unsuspecting customers.

II. FOREIGN TRADE

439 459 Foreign trade has had a stimulating effect upon the economic life of Formosa. The island must export its surplus products to afford the necessary imports of materials vital to its industrial and consumption needs. Businessmen are particularly concerned about the timely arrival of goods from foreign exchange. A great part of a businessman's profit or loss is predicated on his ability to anticipate and take advantage of government changes in the rate of foreign exchange and trade control measures. To operate successfully in Formosan society, a foreign trader must not only have experience and intuition concerning the right time and place to buy and sell, but also must possess initiative, shrewdness, and influence.

Formosa's principal exports include such items as tea, salt, sugar, rice, canned pineapple, bananas, coal, and camphor. Formosa is dependent upon foreign countries for such articles as precision machinery, motor vehicles, raw cotton, gypsum, crude oil, chemical fertilizers, bauxite, wheat, dairy

43 products, modern medicines, and soybeans.
45 If export commodities are not sold overseas, the prices of these articles at home may be adversely affected; delay in the arrival of, or restrictions on, imported commodities may cause prices in Formosa to rise; and price changes of import and export commodities may cause a sharp increase in the prices of domestic goods. Shrewd manipulators take advantage of these market conditions to increase their profits. For the economy of Formosa to function and prosper, a stable and efficient system of import and export is imperative.

A. General Position of Trade

In terms of volume, the recent history of Formosa's foreign trade is characterized by a rapid expansion during the two decades preceding 1940, a sudden drop immediately after World War II and a gradual increase since 1945. In prewar years, a constant positive trade balance had accumulated; the postwar years have produced a persistent trade deficit, which in large has been met by aid from the United States.

Japan, the United States, Hong Kong, and Britain have been the most important trade partners of Formosa in the postwar years:

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

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Formosan Trade, 1953*
(per cent)

Country	Export to	Import from
Japan	45.55	30.63
United States	4.18	38.67
Hong Kong	8.19	5.74
Britain	6.67	4.11
Egypt	3.46	1.61
Netherlands	3.05	3.11
Straits Settlements and Federated Malay States	7.89	1.57
Arabia	2.24	2.57
Other countries	18.72	11.99
Total	100.00	100.00

* The Inspector-General of Customs, The Trade of China, 1953, Taipei, 1954, Chart 4.

Currently, annual trade amounts to about 300 million American dollars whereas the annual trade in the years 1935-37 was about 200 million dollars.[5] When adjusted to prewar

5. Ministry of Economic Affairs, Republic of China; Navy Department, Civil Affairs Handbook, Taiwan - Economic Supplement, Washington, D.C., 1944, p. 72.

439 prices, current trade is still below the prewar
457 level. Many reasons account for this change, but in the main it is caused by a transfer in the management of the island's economy. The Japanese exploited Formosa as a colony, and thus there was a constant flow of goods from the island, creating a trade surplus. The favorable trade balance was based on Formosa's position as an agricultural colony of Japan. The present administration, with aid extended by the United States, is endeavoring to build an independent and self-sufficient economy for the welfare of the people on the island. The recent announcement of Hsu Po-yüan, Minister of Finance, that the island will launch its second Four-Year Economic Plan in 1957 indicates an intention to continue present policy. This, in effect, means that the government will attempt to minimize foreign expenditures and increase foreign earnings while efforts are made to balance domestic production and consumption. As far as foreign trade is concerned, this in no way means the reduction of Formosa's dependence on the outside world. To continue the development of its textile industry, the island still requires imported raw material amounting to over US$20,000,000 annually. The swiftly expanding fertilizer industry depends on the import of phosphate, and the flour industry relies heavily on the import of wheat. The same applies to the petroleum refining industry, which would

439 probably have to cease operation if the import
459 of crude oil stopped. However, it is clear that the import of raw materials instead of manufactured goods will tend to decrease the total value of import expenditure. To a certain extent, world market conditions and production costs in Formosa also account for the low rate of trade in recent years.

The most important exports of the island have been sugar and rice. In 1954, sugar export accounted for 60 per cent of the total foreign exchange, and rice for about 8 per cent. Tea export was third in volume before 1954; in 1954 it accounted for nearly 10 per cent of the total export. Next in importance are bananas, salt, canned pineapple, coal, and citronella oil, each accounting for from one to five per cent of the total exports in various years.[6]

Import commodities in 1954 were listed by the ministry of economic affairs in the following order of value: machinery and tools, metals and metal products, chemical fertilizers, raw cotton, wheat and flour, and soyabeans, each valued at from US$14,000,000 to US$25,000,000; crude oil and gasoline, medicines,

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6. Ibid.

439 ships, motor vehicles and parts, wool and
457 artificial fabrics, fat and wax, chemicals, and salted and dried fish, each valued from US$3,000,000 to US$11,000,000. In recent years, imports of investment goods and industrial raw materials have been increased, while consumer items have been greatly decreased.[7]

Increased activities in industrialization and an expanding population in the last seven years have necessitated a rising volume of imports; exports have failed to keep pace. The following table presents a picture of the situation:

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7. Ibid.

459 The government has established in the past
459 years a set of schemes for control of foreign exchange and trade flow to prevent the flight of capital abroad and reduce the trade deficit.[8]

B. Trade and Foreign Exchange Controls

The Foreign Exchange and Foreign Trade Screening Committee of the Executive Yuan is charged with the duties of determing foreign exchange and foreign trade measures and of examining the use of foreign exchange. The committee functions only as a screening and licensing unit; the Bank of Taiwan is the only organization on the island given authority to engage in foreign exchange business. All imports by public enterprises or private firms, with few exceptions, must be licensed,[9] and the issuance of an import license carries with it approval for the allocation of necessary

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8. Trade deficit here is viewed from an overall economic standpoint. Frequent reports indicating a favorable trade balance only relate to commercial import as compared with export.

9. The exceptions are: imports by the International Co-operation Administration Mission to China, official supplies and personal effects of foreign consulates and diplomatic personnel, commercial samples, etc.

439 foreign exchange.
457

Before arranging for shipment of exportable goods, exporters must make a declaration of value in terms of foreign currency to the Bank of Taiwan. If the sales price is not at least equal to the floor price set by the bank, a separate appraisal by the customs is required. Exporters are required to surrender their export proceeds in foreign exchange to the Bank of Taiwan, receiving in return foreign exchange deposit certificates and New Taiwan dollars at the bank rate; the proportion between two methods of payment is determined by the bank. The deposit certificate are negotiable for ninety days after the date of issuance. Upon expiration, the certificate must be resold to the bank at an officially determined price. The current price[10] amounts to a total exchange rate of NT $24.66 per US $1, figured on the basis of an official exchange rate of NT $15.50 per US $1 plus a "certificate price" of NT $6 per US $1 and a defense tax equivalent amounting to 20 per cent of the existing exchange rate. However, nearly all exporters negotiate the certificates on the open market where a "certificate price" of NT $16-17 per US $1 raises the total exchange rate[11] of the

10. Regulations Governing Measures Pertaining to Sales and Purchase of Foreign Exchange, promulgated on October 22, 1955.

11. The Central Daily News, Nov. 28, 1955.

439 certificate to NT $34-35 per US $1. Certificates
457 bring high prices on the open market because importers must submit certificates in amounts equivalent to the foreign exchange alloted them by the licensing authorities. The supply of certificates is always less than the demand since there are more importers than exporters and because export-import traders often retain their own certificates against import requirements. If the exporter holds the certificate beyond ninety days, however, he suffers a loss amounting to the difference between the open market and official certificate price. An exporter cannot convert all his foreign exchange proceeds at the market rate since he receives only a part of them in certificates -- in the case of sugar, 80 per cent; and bananas, 50 per cent. On the portion of his foreign sales for which New Taiwan dollars are issued, the exporter sustains a loss amounting to the differences between the exchange rates.

Licensing of imports is carried out within an "import budgeting system," in which the authority announces an import budget once every two months covering imports for the following two months. Each budget specifies what commodities are to be imported and allocates to each commodity a specific amount of foreign exchange. An importer must be

duly registered with the government, and he is permitted to apply for permission to import only one kind of commodity during the budget period. Also, a maximum is set on the amount of foreign exchange any one importer may be allotted. The foreign exchange aportioned against any single commodity during a given period may be so small that when it is divided among a number of importers none is assured of a reasonable profit. Some importers sell their import licenses at prices ranging from NT $23,000 to NT $27,000, the cost of import[12] for the buyer of the license will be increased by an amount ranging from NT $11.50 to NT $13.50 per US $1. There exists an acute shortage of foreign exchange in spite of the fact that the government at times engages in the sale of foreign exchange deposit certificates in the open market. A private importer must pay NT $15.65 bank exchange rate at the Bank of Taiwan, plus 20 per cent as defense tax, and must submit the equivalent foreign exchange in deposit certificates. Government enterprises are not required to submit the certificates but must pay the official certificate price of NT$6 to US$1. Thus, the government enterprise is in a more

12. Ibid.

439 advantageous position than the private importer,
457 who has to buy certificates in the amount he needs at current market rates. In effect, government enterprises pay NT $24.78 per US$1 for import and private importers pay NT $34-35 per US $1. The actual rate at which private importers pay for their exchange is thus largely affected by the current market price for the certificates and by the cost of fees that may be necessary to secure additional import licenses.

In summary, trade control is primarily effected by the requirement that exporters and importers to do business must be duly registered with the government, which may refuse to register an applicant. In addition, export prices must be in line with the price determined by the Bank of Taiwan; import is restricted by the import budget. In foreign exchange control, the foreign exchange deposit certificate system is implemented by the partial relationship maintained between export and import and by the existence of multiple exchange rates. As well as the official rates for import and export, there exists a black market rate[13] for American

13. Tzu-yu Chung-kuo Pao [Free China Daily], San Francisco, Nov. 7, 1955.

439 notes -- about NT $38 per US$1. There also
457 is a "preferential" rate of NT $34 per US$1 for cash or remittances surendered to the Bank of Taiwan by American personnel and by visiting overseas Chinese.[14]

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14. Courtesy of Professor Li Ch'ao-ying of National Taiwan University.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

rates of birth and death were more and more equalized. The difference between the highest and the lowest birth rate among different localities was 13.4 per 1,000 in 1906, but had fallen to 8.5 per 1,000 in 1935; the difference between the highest and the lowest death rate among different localities was 32.6 per 1,000 in 1906, but it was only 8.9 per 1,000 in 1935 (see Table 4, cf. 1: p. 169).

Table 4: The Highest and the Lowest Birth Rate, the Highest and the Lowest Death Rate of Different Prefectures of Taiwan in Selected Years (Rate: per 1,000 population)

		1906		1935				1906		1935	
Birth Rate		Whole Province	39.3	Whole Province	45.2	Death Rate		Whole Province	34.0	Whole Province	20.5
	The Highest	Nanto Prefecture	47.7	Tainan Prefecture	48.1		The Higheat	Chiai Prefecture	52.9	Taitung Prefecture	24.4
	The Lowest	Yansuika Prefecture	34.3	Taipei Prefecture	39.6		The Lowest	Hsinchu Prefecture	20.3	Penghu Prefecture	15.5
	Differece		13.4		8.5		Difference		32.6		8.9

Source: 10:1906, 1935.

13. *Agriculture and Industry*

To get primary agricultural products and processed agricultural products, especially rice and sugar, which Japan needed urgently, was one of the main policies of Japan in Taiwan. The colonial government had spent much of time and money for the promotion of the production of rice and sugar. They made various kinds of surveys, researches, and experiments, used the system of police and pao-chia for enforcement, and as a result, the outputs of rice and sugar had increased tremendously.

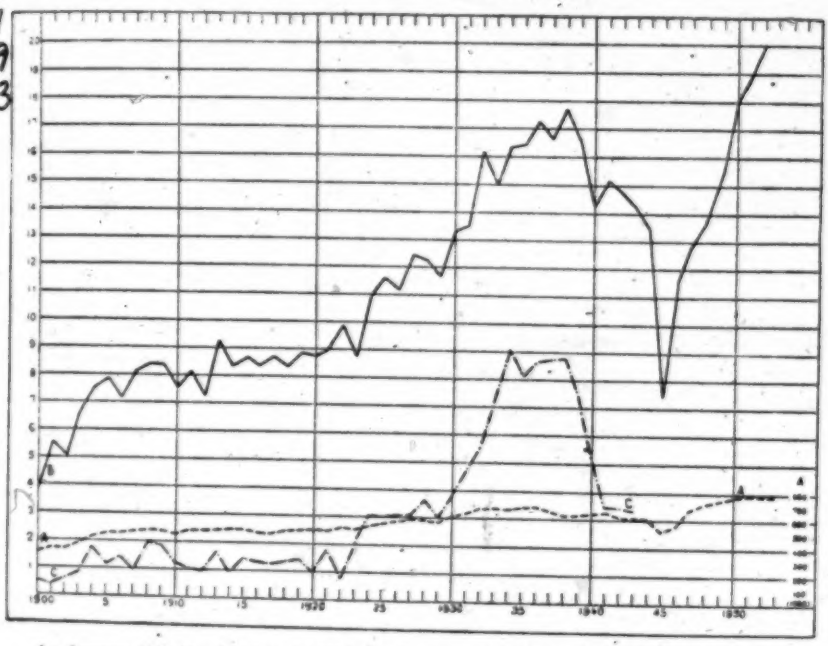
Among the various types of production in Taiwan, agriculture and manufacturing were the two main types, and the proportion occupied by forestry, fishery, and mining was rather small. In 1912, the value of the total output of all types of production amounted to 146,374 thousand yen. Among these, the proportion of agriculture was 63%, manufacturing was 32%, and the total of three other types (forestry, fishery, and mining) was only 5%. By 1942, manufacturing had developed fairly well, its production value had exceeded that of agriculture. The value of the total output of all types of production in 1942 was 1,515,627 thousand yen. Agriculture's share of this was 42%, manufacturing was 46%, and the total of three other types was 12%. Agriculture and manufacturing, the two main types of production, were again represented by rice and sugar respectively. The proportion of the value of rice to the total value of agricultural products was 59% in 1912, and 39% in 1942. The proportion of the value of sugar to the total value of manufactured products was 79% in 1912 and 42% in 1942. Considering these facts, it seems not unproper to take rice and sugar as representative of Taiwan production.

From figure 6 we can see, that in comparision with the increase of acreage of cultivation (line A), the increase in the output of rice (line B) was tremendously high.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

Productivity was raised by improvements in various aspects. The rapid increase in the output of rice from the 1920's was the result of the adoption of a new strain (Ponlai rice). By the 1930's, the production of rice in Taiwan was so large as to be twice its local demand, and the surplus rice was exported to Japan. Though the price of Taiwan rice was controlled by the Japanese government and the profit of trade in rice was mainly monopolized by big Japanese traders, the increase of production did have some benefits for Taiwanese, and no doubt, this contributed to the lowering of the death rate after 1920.

Fig. 6 Acreage of Cultivation, Amount of Production and Exportation of Rice, Taiwan, 1900-1953



A: Acreage of Cultivation (unit: 1,000 ha) B: Amount of Production (unit: 1,000,000 hectoliter)
C: Amount of Net Export (unit: 1,000,000 hectoliter)
Source, 1900-1948, from the Rice of Taiwan, 1949, Taipei.
1949-1952, from Taiwan Agricultural Yearbook, 1952, Taipei.

The condition of sugar was a little different from that of rice. The profit in sugar manufacturing was exclusively monopolized by the Japanese enterprisers. But it is undeniable that, in respect to the improvement of agricultural techniques and the raising of productivity, substantial effects were obtained.

As pointed out by W.S. Thompson, "underfeeding weakens the individual and renders him less resistant to disease, whether it be of the degenerative or of the germ

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464, 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-1-2
116, 249, 433, 458, 654, 177.24 Japan
636.24

"There can be no doubt as to the importance of sugar cane cultivation and of the sugar industry in Taiwan and the degree of success achieved by the Japanese government and Chinese cultivators.

However, a close examination of the table [See page 59, category 116--analyst] reveals some interesting features. It was pointed out how much effort was expended by the officials on the improvement of sugar cane culture. But in spite of all the efforts of the government and of the experimental stations the yield per ko did not show any signs of improvement during the first fifteen years. If the development was as steady as is officially described, why then was the increase of production up to 1921 taking place exclusively as a result of the increase in the planted area?

Further, the increase in sugar production may also come through the increase of sugar content in the juice of the sugar cane. It is interesting to note that in this respect too, little, if any, improvement is noticed up to 1922, but that after that year the sugar content rose from 9.5 per cent in 1922 to 13.2 per cent in 1935 and in this year was considerably higher than in Java or Cuba (12.3 and 11.6 per cent respectively). Finally, the table shows that after the peak of production (and area) was reached in 1917-18, production fell, then rose slowly up to 1928-29, fell sharply by almost thirty per cent and then began to rise again.

The explanation of these fluctuations is that the Taiwan sugar industry (and, as a consequence, also the cultivation of sugar cane) passed through several crises of the most severe character. 'Overproduction' is a word familiar to this industry, and to the planters also. Of course, it must be emphasized that this 'overproduction' is of a special character, because the consumption of sugar in Japan is relatively low and, though physically the demand of the population for sugar [61] is not satisfied, there is insufficient purchasing power available to buy it.

All this is very important for the problem in hand. The government's efforts were probably as great from 1900 to 1922 as afterward, subsidies were given more lavishly than later on, but the results in the first twenty years were rather meagre. In other words, the development was due not so much to the government's and the manufacturers' efforts as to some other factors inherent in the development of the economy of Taiwan and Japan."

4:Grajdanzev--101 S-4 (no date) 1942 Formosans
116, 433, 458, 477

"All this is mentioned here [see previous paragraphs--analyst] in order to remind readers that the development of Taiwan's sugar industry, as well as of industry in general, was not smooth and uninterrupted, but passed through booms, crises, depressions—phenomena well known from the history of other countries. Taiwan can now produce much more sugar than it actually does produce (as a comparison of figures for 1933 and 1939 indicates), but the small domestic market, combined with a desire to reap high monopoly profits, keeps production far below the level of capacity, while entrance into the international market for the protected Taiwan sugar is not easy. The manufacturers are organized into a cartel which regulates prices and production in order to avoid cut-throat competition and maintain monopoly profits."

"The banks enumerated above [see page 127 in category 116--analyst] are Japanese, and the only institutions in which the Chinese have some measure of influence are the credit cooperatives, which will be discussed later. The table below summarizes information on deposits of all financial institutions of Taiwan.

Growth of Deposits of Financial Institutions in Taiwan
(1,000,000 yen)

	1926	1928	1930	1932	1934	1935	1939
Banks	102.9	111.9	101.2	133.2	152.2	173.0	270.3
Post office	9.1	13.3	16.5	18.1	21.4	23.7	34.8*
Credit cooperatives	28.0	34.9	34.6	47.7	65.5	77.9	118.2†
Total	140.0	160.1	152.3	199.0	239.1	274.6	423.3*†

* Post-office savings deposits on Dec. 31, 1938.

†Of which rural credit cooperatives accounted for ¥87,230,000 on Dec. 31, 1938.

The amount of deposits in Taiwan has thus trebled in thirteen years. In order to judge whether this is a sign of a sharp improvement of the economic position of the islanders, it is necessary to know (1) whether the increase in deposits comes chiefly from Japanese or from Chinese sources, (2) whether the increase in deposits of the Chinese is a real

increase, or whether it only reflects a change of habit (it is evident that the transition from subsistence to money economy is bound up with the increase of deposits at the banks), (3) how far this increase may be ascribed to war-time inflation.

We do not have complete data on the distribution of deposits between Japanese and Chinese, but what is available throws some light on the problem.

Distribution of Deposits in Banks and Post Offices
(million yen)

	Banks		Post offices	
	Chinese	Japanese	Chinese	Japanese
1926	33.0	69.8	2.6	6.6
1935	51.2	121.7	4.9	18.8
1938	...	...	6.9	27.9 "

4:Grajdanzev--129-130 S-4 (no date) 1942 Formosans-1-2
116, 453, 458, 563

"Deposits in cooperatives belong chiefly to the Chinese, but no data are available either on the exact composition by nationality of the depositors or on their number. The table given above shows that between 1926 and 1935 the growth of Japanese banking and postal deposits was more rapid than that of the Chinese and that in 1935 about seventy-two per cent of all deposits in the banks and post offices belonged to the Japanese. But in order to see whether there is a real gain we should know the number of the depositors or the average deposit. We have such data only for the post offices.

Average Amount of Savings per Depositor in Post Offices
(in yen)

	1921	1929	1934	1938	
Japanese	33.3	51.0	146.5	89.5	(1937)*
Chinese	8.2	16.6	14.2	13.8	

* Data for the Japanese beginning with 1936 show a strange change: the number of depositors rises sharply without a corresponding increase in the total amount of the deposits. For 1938 the number of non-Chinese depositors is shown as 394,000, while the whole Japanese population in Taiwan is only 308,000. It may be that the increase of more than 100,000 Japanese depositors with a very small increase in deposits reflects the stationing of a larger number of troops in Taiwan.

Calculated from data given in Taiwan Jijo.

Comparison of the deposits of the Japanese and the Chinese shows (1) that the Japanese deposits are from seven to ten times larger on the average than the deposits of the Chinese; (2) that the average size of the Chinese deposits has not shown any increase since 1929, especially if we take the rise in prices into consideration; (3) that the absolute amount of Chinese deposits is so small that it hardly indicates any great prosperity. When the farmer buys fertilizers and sells a larger and larger part of his produce on the market, he will not keep his savings in the form of silver but will prefer to keep it in the bank where it is safer. This is, however, not necessarily a sign of economic improvement.

On the other hand, a comparison of the note issue and the index of wholesale prices suggests that a large part of the increase in deposits in the war years is purely illusory. If a [130] business man is compelled by the conditions obtaining in his business to have in his account a certain sum of money, then with the rise of wholesale prices he has to increase his deposits in order to be able to satisfy his needs to the same extent as before. But this again can hardly be considered as a sign of 'prosperity', at least for the society as a whole."

45:Stanford U. S-4, 51956 AD1 Formosa
~~AD1~~ AD1

727 to 86,000 metric tons in 1945-46. The
433 Formosan farmer was faced with the "worst prospect in living memory," as one observer remarked.[8]

434 In spite of the seriousness of economic
178 conditions on Formosa, the Chinese government was able to make only limited progress in reconstruction following the restoration of the island to Chinese control. For one thing, the Nationalist Government was involved in a costly war with the Communists and faced with a huge rehabilitation program on the Mainland. Furthermore, without a surplus of exportable goods, China could not obtain the foreign exchange necessary to re-equip the damaged plants and restore agricultural production on Formosa. The island's economy continued to deteriorate until 1949, when Mainland China was overrun by the Communists and the National Government was withdrawn to Formosa.

458 The sudden influx of over one million
185 mainlanders and half a million soldiers further strained the resources of the island. Inflation was running wild and food was short. However, the removal of the national government to Formosa was not without benefit to the island.

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8. H. Maclear Bates, Report from Formosa, New York, Dutton, 1952, p. 117.

185 First of all, the presence of President Chiang
458 Kai-shek strengthened the political stability of the island. Then the arrival of technical and experienced personnel and capital equipment from the Mainland greatly facilitated the island's economic rehabilitation. With the gold evacuated from the Central Bank of China at Shanghai, the Nationalist Government was able to institute currency reform. Steps were immediately taken to increase the production of food-stuff, and a program was initiated to relieve the Formosan farmers' burden of high rents and high taxes. Taxation was simplified by discontinuing numerous special levies. To insure the cultivator a fair share of his crop, a land reform program was undertaken. Land rents were cut from their previously usurious rate of about 60 per cent of the main crop to a maximum of 37.5 per cent. A limit was set on the ownership of tenanted land. Any land holding in excess of the stated limit was bought by the government and resold to the tenant.

648 In 1950 economic improvement quickened. At the outbreak of the Korean conflict, the United States government assigned the Seventh Fleet to patrol duty in the Formosa Strait. Fear of Communist invasion, which had been the underlying cause of the constant flight of capital, was dispelled. Public confidence was further enhanced by the revival of American economic assistance in June of the same

435 It should be noted that price levels have
457 risen 700 per cent and the amount of notes issued has increased 2,600 per cent. Similarly foreign exchange has not depreciated to the same extent as the increase of money in circulation. The official exchange rate[5] for US dollars has increased from NT$5 to NT$24.78; the market rate[6] for US dollars has increased from NT$7.82 on December 31, 1949 to NT$37.50 on November 6, 1955.

458 The pressure of inflation on the economy
652 of Formosa has been alleviated by a number of factors. The enormous growth in population and industrial expansion tend to absorb a part of the increased money supply. The government controls an abundant reserve of rice, wheat flour, and other essential goods, which may be used to stabilize prices. The depreciation of the external value of the currency has been partially offset by aid from the United States and the personal expenditure of United States advisory personnel in Formosa.

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5. The 1955 figure includes the bank exchange rate of NT$15.65 plus 20 per cent defense tax (NT$3.13) plus the certificate price of NT$6.00.

6. United Press dispatch, Taipei, Nov. 6, 1955.

However, these favorable factors may be of no help if the trend toward inflation continues unabated. The principal cause of continued inflation is government borrowing. Advances to the public treasury at the end of 1954 amounted to NT$1,138 million; the total note issue was only NT$1,043 million. Unless the Chinese government is able to drastically reduce its huge budgetary deficit by raising more revenue and cutting its expenditures, it will be difficult to control inflation, and unless the dangers of inflation are avoided, it will be impossible to achieve financial stability.

4:Grajdanzev--115 S-4 (no date) 1942 Formosans
116, 461, 857

"There is no information concerning the number of children occupied in Taiwan's industry, nor of hours of work and leisure. Japanese Labor Year Books (Rodo nenkan) contain hundreds of pages on labor conditions in foreign countries, but not on the conditions of workers in Taiwan and Korea."

40: Kirk --19 S-2 (no date) 1941 Formosans
116, 185, 208, 461, 656, 177.20 Japanese

"The common people today are called upon to make so many sacrifices that the government is appealing to their sense of loyalty to the Empire and to their intense national patriotism to keep the masses united and in a mood to endure further privations. The present campaign for 'Spiritual Mobilization' includes (1) encouragement of savings, spending nothing for luxuries and very little for necessities ; (2) mobilization of gold; (3) free gifts of labor, money, and materials to help carry on the war; (4) improvement of health and training to increase the stature. Very few persons are exempt from labor services. Road and bridge building, flood prevention, cleaning and caring for shrines and shrine grounds, clearing and cleaning airports, and tree planting are types of labor which any ablebodied person may be called upon to do. When a worker receives notice to report on a certain day and at a certain time and place, he usually thinks twice before he dares to ignore the summons."

C. General Characteristics

181 Formosans are considered to be industrious and resourceful. Perseverance, tenacity, and endurance are characteristics of the majority. The rural people show a strong feeling of solidarity and affection to members of their community and have a strong attachment to the soil as representative of their homeland and their way of life. Family loyalty and filial love are considered the greatest of virtues. Deep love for the family circle is further accentuated by the frontier environment of Formosa. In the cities, people tend to become more independent and self-reliant. Because it is not the custom to pool resources for joint enterprises outside the immediate family, only small businesses can be established. If the head of a small urban household suffers a long illness or extended unemployment, the family falls into dire need. Most families so afflicted must return to rural areas and live with kinsmen until they have acquired enough capital to go back to the city and try again.

D. Recreations and Sports

241 Formosa's subtropical climate makes
• 461 farming possible in all seasons; most farmers

241 on the island work every day of the year. The
461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

177 A majority of city dwellers have running water and electric lights. Most families in the cities own sewing machines and bicycles. As the islanders acquire Western conveniences and possessions, their patterns of living take on the configurations common to the occidental world.

526 Sports -- soccer, basketball, and baseball -- are popular among the younger generation. A Formosan basketball team toured the United States and countries in Southeast Asia in 1955. A soccer team from Formosa is to participate in the Olympics in Australia.

524 Mah-jongg and chess, traditional games
517 of the leisured class, have retained their popularity among the older generation. The young favor motion pictures and dancing.
517 Government officials and wealthy persons of
529 other classes take their families to one of the numerous scenic resorts or hot springs in

467 Labor Organizations. Labor organizations include trade unions, farmers' associations, and fishermen's associations. Trade unions are weak and cannot be called unions in the real sense of the term, because the law does not provide for effective collective bargaining and also prohibits strikes, shut-downs, and walkouts of any kind during the present emergency period. The trade unions are organized under government supervision and tend to be used for carrying out government policies with respect to the workers. However, the educational and welfare activities performed by the unions should not be overlooked.

461 The Outlook of the Workers. Most of the farmers, as a result of the recent land reform, have become owner-cultivators and are looking forward to owning their own houses, sending their children to school, and enjoying better living conditions. On the other hand, because of limited employment opportunities and low wage levels, the non-agricultural laborers do not appear to face a very promising future.

464 The Future Labor Force. In 1950, the entire male labor force was estimated at 2.1 million. George Barclay states that the male labor force 25 years from now (1980) could amount to about 4 million, assuming that the

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER IV

The Disposition of Manpower

THE human side of livelihood in the countries of Asia understandably attracts serious attention. For many years both Westerners and Asians have displayed increasing interest in the tedium of work in this portion of the world. Human labor under these conditions has variously been held the object of pity for its drudgery, praise for its industriousness, impatience for its low productivity, and admiration for the contentment it sometimes fosters and for its integration with cultural traditions. 461

Such impressions are not always a help in gaining a disinterested and factual grasp of the problem. They often are based on sentiment or feeling more than on actuality. Few of the commentators on the lot of the Asian peasant have ever come into contact with it at first hand, which may help to account for the diversity of views on the subject. Yet underlying all of them is a certain foundation of fact. No one will deny that work in these parts of the world is normally toilsome and arduous. It is, by our standards, conducted with such a lack of advantage from effective instruments that prodigious amounts of labor must be expended simply to keep alive. In addition, as compared with industrial societies, a person's usual work is more firmly imbedded in the social position that he occupies, which in turn may bear less relation to the income that he gains or the commodity that he produces.

No single project could properly cover all of these aspects of livelihood. For Taiwan the advantages of the data that exist lie in adopting a demographic view of work and discovering how laboring activities are distributed through the population. This approach does not enable us to answer all of the questions that usually arise about economic activities and their setting, but we can move from it to a more adequate conception of the connections between livelihood and the social structure. This point of view was introduced in the previous chapter in order to fill out the one-sided picture that resulted from taking Japanese policy at face value and surveying the economy through its specialized corporate structures. Since the body of facts to be covered was large, the evidence of the occupational statistics has up to this point been treated cursorily. 121

15: U.S. Navy--32 [11] (no date) 1944 Formosans
116, 482, 462, 464

"Hours are long and, because of the abundance of unskilled man-power, few draft animals and little machinery are used in transport. Women and children and men pull carts and furnish motive power for the narrow-gauge push-car lines. Only the women of the Hakka Formosan-Chinese work in the fields, however. Women and children are employed extensively in tea-picking and sorting and in the ubiquitous small household industries."

15: U.S. Navy--32-33 (no date) 1944 Formosans
116, 462, 466, 883

"The percentage of women among the total number of [33] employed persons in various industries is indicated by the following figures:

Table 25: Percentage of Industrial Workers who are Women.

Textile industry	73.4	Chemicals	26.4
Metals	10.6	Lumber	5.8
Machinery	1.2	Foodstuffs	34.8
Ceramics	18.2	Printing	12.9
'Others'	68.2		

The textile industry is negligible in Taiwan. If it is excluded, women numbered approximately 30.6 percent of the people employed in Taiwan in 1936. Women and children labor in the mines and are used to provide motive power for wagons, push-car lines and construction gangs. The wages for women are usually about half those for men. Human life as well as labor is cheap, and the employers in Taiwan are notoriously careless of safety and sanitary conditions in industry."

4:Grajdanzev--113-115 S-4 (no date) 1942 Formosans -1-2
116, 171, 288, 462

"Japanese economists argue that the prosperous condition of the villagers makes it difficult for industry in Taiwan to secure female workers, so that in 1935, for example, women made up [114] only 30.6 per cent of all workers, (1) while in Japan the proportion

1. In 1936 women made up 32.6 per cent of all workers. Kagaku kogyo nenkan, 1939.

was 47 per cent. Let us make a closer examination of the figures.

Proportion of Women in Different Industries

	In Japan		In Taiwan	
	1935	1933	1935	1936
Textile industry	80.9	80.6	80.9	73.4
Metals	7.1	8.8	10.5	10.6
Machinery	8.5	0.5	0.7	1.2
Ceramics	20.6	13.7	15.2	18.6
Chemicals	35.1	23.4	23.4	26.4
Lumber	9.0	5.6	6.6	5.8
Foodstuffs	18.1	34.3	33.3	34.8
Printing	18.1	12.5	10.8	12.9
Gas and electricity	0.8	—	—	—
Others	51.4	[illegible].0	62.2	68.2
Total	47.0	31.7	30.6	32.6

From this table it may be seen that in the textile and ceramic industries the percentage of women is about the same in Taiwan as in Japan; in metals, foodstuffs, and 'other' industries it is larger, while in machinery, chemicals, and printing it is smaller but is growing. The smaller percentage total (32.6 per cent in Taiwan and 47 per cent in Japan) is explained by the simple fact that in Taiwan there is no significant textile industry. If we exclude the textile industry, then in 1936 the proportion of women in industry was 30.6 per cent for Taiwan and only 18.7 per cent for Japan (2). It is no fault

2. The figure for Japan is calculated from the data of Nippon rodo nenkan, 1938.

of the Chinese women and it is not a sign of Taiwan's prosperity if the industries existing in Taiwan are less suited to women. To say, as Takahashi does, that the textile industry is absent in Taiwan because the women, being prosperous, do not want to work, is naive. Taiwan is in the sphere of the Japanese customs tariff and experiences all the pressure of Osaka and Nagoya competition; it has no cotton of its own, nor has it such good harbors and commercial organization that it could be supplied with cotton cheaper than Kobe. It is natural then [115] that the cotton industry has had no chance to develop. But, as was mentioned, in other branches of industry the proportion of women in industry is higher in Taiwan than in Japan."

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

suggestion that the organization of livelihood in general had been profoundly altered under the Japanese. But any discussion of the problem very soon outruns crude data like these. Though Table 11 is comprehensive, covering all groups in the population, it lumps together people of too many kinds, and thereby hides many significant types of variation. The same material can be used more efficiently when refined by some of the controls at our disposal.

In the first place, not everyone in the population was equally well reported as to occupation. Asia being even more than the West a man's world, occupational data do not mean the same thing for males and females. Women are barred from many occupations and, whatever their duties, are not readily regarded in society as having regular employment. Whether a woman in Taiwan reported herself as being employed or not often depended on other attributes of her social position more than on the actual tasks performed—for example, whether she had yet been married, whether widowed or divorced, what work was followed by other members of her family, or simply local custom governing attitudes toward the work of women. For reasons that will be elaborated in the following chapter, we shall henceforth separate females from males in all occupational tables, under the assumption that the working activities of males more accurately reflect the composition of employment in the economy.

Omitting females from Table 12 has the effect of correcting the inflated appearance that they give to agriculture, especially in the earlier years. With this more meaningful series of observations, it is striking not merely that activities were so diversified in the beginning, but that they changed so little. In the 35 years that followed this first general census the structure of occupations among men remained about the same. By this more adequate criterion, agriculture lost almost no ground as a field of employment after 1905. Still nearly two-thirds of all working men were farmers as late as 1930, the terminal date for these figures. From Table 11 it is clear that the same thing must have been true in 1940.

And so, even including the Japanese, those who were caught up in the "industrialization" made up a minor part of all males in Taiwan. Demographically, this cardinal aspect of "economic development" was never anything but a small-scale operation.

Obviously, Table 11 and Table 12 cannot bring to light the full extent of trends accompanying events over this period. These figures indicate only shifts from one broad type of activity to another. They

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

THE DISPOSITION OF MANPOWER

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In general, activities having to do primarily with livelihood are so important in human societies that they are always subjected to some special forms of coordination. Never are they treated casually in a society, as minor points of etiquette or personal friendship may be. Much of their importance arises from the fact that the same persons who engage in them also occupy other positions of social significance. This coordination, therefore, cannot be primarily a matter of regulation within the realm of economic behavior,[10] but consists of keeping such behavior consistent with the social order. Demographically, the problem is found wherever occupational functions overlap with other roles in the same individuals.

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Two of the commonest regions of overlap in a population are with sex and age. Most of Asia, for example, is beset by such hazards to human existence that its peoples have maintained their numbers only by bringing forth abundant offspring. High fertility, which until recent centuries had been the universal offset to high mortality, has always necessitated a distinct kind of social position for women. Being the only ones capable of parturition, females in these societies come under the influence of family institutions that attach high priority and emphasis to the bearing and rearing of progeny.[11]

This circumstance has profoundly affected the part of women in economic activity. Most of the ways thought proper for an adult woman to have contact with the people beyond her family circle are in a married status. Few women escape marriage. Indeed, it is so normal an event that to pass the age of 25 unwed is considered a serious misfortune. To covet matrimony in vain does not carry with it any of the other possibilities (such as occupational careers) that exist in Western societies, and becomes a matter of anxiety if not humiliation for an entire family.

All this does not mean that women under these conditions do not work. The lot of a "home-maker" is a more laborious one in agrarian than in industrial countries, and may encompass more different sorts of particular activities from case to case. A wide range of tasks, including production of many physical commodities, is conducted as

[10] If it were, it would cease to present any problem, for it could be reduced simply to bureaucratic patterns of large-scale organizations.

[11] This does not mean that the particular family institutions are everywhere the same: such societies have long been renowned for the variety in such matters as marriage ceremonies, types of education of children, adolescent behavior and the division of labor in specific household tasks. We are not here concerned with superficial variation, but with the general features which are shared.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

659 a matter of course within the households that finally make use of them—items which in industrial societies are ordinarily purchased 462 in the market. In these activities women are occupied often from childhood to old age, and sometimes more vigorously than men. It is this economy of the household, and not real inactivity, that utilizes the efforts of females in useful pursuits but provides against their holding extra-familial occupations.

We can be certain that a goodly portion of the work done in Taiwan was concealed in the activities of women. When such is the case, estimates of manpower based on occupational data are necessarily distorted, especially when these data have been compiled without overt care to this problem. Here the only feasible procedure in measuring manpower is to exclude altogether this important segment—womanpower—and to concentrate only on the "male labor force" as representing the dominant working patterns of the population.

659 Even within the male population, however, not all of its members are eligible or able for permanent employment. Close to half of all males in Taiwan—practically all those without occupations—were consistently of ages in which employment was not customary. Age always has a great deal to do with whether a person follows an occupation or not, and often with the sort of work he may perform. Tasks that are looked upon as useful are commonly ones that infants and the aged, for example, lack the capacity for doing. In between these extremes, some males of certain ages are excluded from the labor force when sufficient value is attached to other activities such as school attendance, acquisition of special skills, patriarchy, or infirmity—either due to priority of the competing activities themselves (regardless of who performs them) or due to the kinds of persons involved.

These various factors determining employment are so closely associated with age that at any one time almost all of the men of young and middle adulthood in a population have some occupation. The exclusions are concentrated in the years of childhood and old age. For this reason it is meaningful to speak of the "population of working ages," and often more information is available about them as a whole than about the labor force itself.

The Labor Force in Taiwan

162 Let us continue this line of inquiry by inspecting the portions of 464 the population that are employed in relation to sex and age. With

52:Barclay S-5 (nodate)1954 ADl Formosa ADI

TABLE 17

THE LABOR FORCE IN THE TOTAL POPULATION, TAIWAN AND THE UNITED STATES

Proportions of All Persons in Each Age Group Who Had an Occupation, Male and Female, 1930

Age Groups	Taiwan (Taiwanese Only*) All Occupations	Taiwan (Taiwanese Only*) Occupied outside Agriculture	United States (All Groups) All Occupations
	Males		
15–19	85.4	24.4	47.8
20–24	96.4	33.6	89.9
25–34	97.5	35.9	97.3
35–44	97.3	33.9	97.6
45–54	93.8	29.0	96.5
55–64	81.8	21.6	90.2
65+	54.7	11.9	58.3
	Females		
15–19	38.0	5.6	26.6
20–24	32.0	4.6	42.4
25–34	31.2	5.2	27.8
35–44	31.2	5.7	22.6
45–54	23.3	4.4	20.4
55–64	13.4	3.0	16.1
65+	4.3	1.3	8.0

* Domestic servants among the Taiwanese, male and female, have been excluded.
Sources: U. S. Dept. of Commerce, Bureau of the Census, *15th Census of the United States, 1930, Population*, Volume V, *General Report on Occupations*. Chap. 4, Table 2.
Taiwan—Census of 1930, Prefectural Volumes, Table 15.

For reasons advanced above, data on occupations for women are less satisfactory. In Table 17, roughly one-third of the women in most ages up to 45 reported some occupation in 1930; but practically all stated that they were "farmers."[15] While superficially these figures appear to make a good showing against the data for the United States, the resemblance is misleading. In fact, on the basis of this information

besides Japan itself. But these events occurred too late to have much effect on the ages of starting work.

[15] Even for the few women who acknowledged occupations outside of agriculture, the specific kinds of work that occupied the bulk of this group are, suspiciously, the very ones that are usually conducted in households. For example, most of the "industrially employed" women were engaged in handicraft production (wood and bamboo articles, food processing, Panama hats) typically conducted on a household scale.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

one can really say next to nothing about the employment of Taiwanese women. Henceforth, except for special purposes, we shall confine ourselves to using occupational data for men only.

Occupational Composition of the Male Labor Force

With the outline of total employment among males of different ages now established, it is only a matter of course to follow up by showing the occupational composition of the same group. This amounts to a close view of the data in Chapter III, considered for the moment apart from the differences in age structure and differences in the extent of employment in various ages.

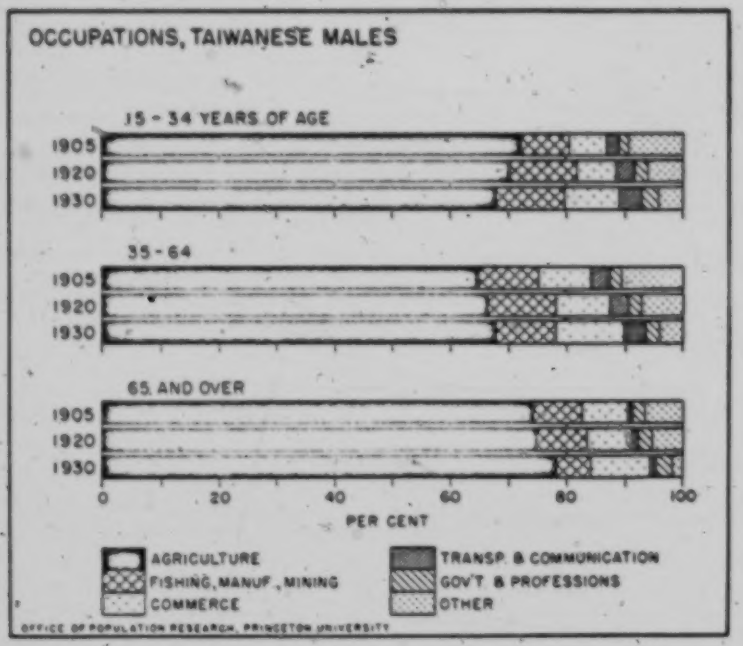

Fig. 12. Occupational Composition of Taiwanese, by Age, 1905-1930.

Even taken by separate age groups, Taiwanese men were performing the same types of work after 25 years of colonial rule as at the beginning. The situation can be efficiently summarized in Fig. 12, which bears out in some detail the evidence of the last chapter. As regards the whole of the male working population, the stability existing from one time to another was not exaggerated in Chapter III.

4:Grajdanzev--32-34 S-4 (no date) 1942 Formosans-1-5
116, 162, 171, 463, 563

"Even in advanced countries occupational statistics are not precise, and in the colonies they are far less reliable. Nevertheless, if one wants to determine only the general characteristics of the population, occupational statistics for Taiwan reveal something. The following table divides the population into such broad categories as 'occupied in agriculture and forestry', 'occupied in industry and mining', etc. The division is given for the whole population and also, for the Chinese and the Japanese separately. The year taken is 1930, because no later figures are available, but it will be shown later that no great changes have taken place since that time. Unlike Korea, where the members of the family who do not take part in work are included in the same occupational group as that of the head of the family, in Taiwan they are registered as having 'no occupation'.

Occupational Statistics For Taiwan, 1930
(in thousands)

	Agriculture and forestry	Industry Fishing	Industry and mining	Trade	Communication	Public serv. & prof.	Others	No Occup.	Total
Japanese	4.4	1.6	15.2	18.1	9.1	37.6	4.5	137.7	228.2
Natives	1,191.7	26.8	144.2	151.0	49.8	37.4	67.6	2,645.1	4,313.6
Total (incl. others)*	1,197.1	28.6	173.6	178.3	63.1	76.0	73.4	2,802.4	4,592.5

* Includes 'foreigners', chiefly Chinese from China proper.

The same table is given below in percentages, taking the number of those occupied as 100 For the sake of comparison corresponding figures for Japan proper for the same year are given: [33]

Occupational Distribution Of Taiwan
(percentages, 1930)

	Agric. and forestry	Fishing	Industry and mining	Trade	Communications	Public serv. & prof.	Others	Total occupied
Taiwan								
Japanese	4.8	1.8	16.8	20.0	10.1	41.5	5.0	100.0
Natives	71.4	1.6	8.6	9.0	3.0	2.2	4.1	100.0
All, incl. others	67.0	1.6	9.7	10.0	3.5	4.2	4.1	100.0
Japan proper (1930)	47.7	1.8	20.0	15.1	3.7	6.9	4.5	100.0

In a condensed form this table indicates to us the most important problems of Taiwan. Taking the native population, we see that almost three-fourths are occupied in agriculture. Forestry as a rule serves only as subsidiary occupation to agriculture. At the same time only 8.6 per cent are occupied in industry and mining, and this also includes those occupied in domestic industries where the productivity of labor is almost as low as in Chinese agriculture. At the same time there are more persons occupied in trade in the broad sense than in industry (9.0 and 8.6 per cent respectively) while only three

per cent are occupied in transportation. This illustrates the low level of economic development of the country. In this respect comparison with Japan is interesting. Only a few decades ago Japan herself was at about the same stage of economic development as China. Now, we see that less than half of her population are engaged in agriculture and 20 per cent in industry and mining.

The occupational statistics prove once more that there are two distinct groups in the population; 41.5 per cent of the Japanese, as compared with only 2.2 per cent for the natives, are occupied in public service and the professions, i.e. they form the backbone of the administrative services of the island. We shall see later that only the lowest positions in these services are open to the Chinese. Almost 17 per cent of the Japanese are occupied in industry, and they occupy all the key positions. About 18 per cent of them are occupied in trade and 10 per cent in communications. Comparison with figures for 1905 indicates furthermore that no substantial changes have taken place since then. [34]

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Chinese					
1905	75.5	6.1	8.2	1.4	8.8
1930	73.0	8.6	12.2	2.2	4.1

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Japanese					
1905	*	23.5	32.5	37.8	6.2
1930	*	16.8	30.1	41.5	11.6

* Included in 'other occupations.'

More than 75 per cent of the Chinese were occupied in agriculture in 1905, and 73 per cent in 1930; there was a slight rise in the number occupied in industry—from 6.1 to 8.6—and a more pronounced increase of those occupied in trade. As is well known, trade is the refuge of the unemployed and under-employed and its rapid growth as compared with other professions is hardly a sign of strength.

In twenty-five years the number of Japanese occupied in government administration rose from 37.8 per cent to 41.5 per cent. The fall in the percentage of those occupied in industry may be due to the fact that in the period from 1896 to 1905 very many Japanese were obsessed with the idea of making money in Taiwan in the shortest possible time. Since then the potentialities of the island have become better known, large business organizations have squeezed out the independent ventures. In any case these figures illustrating the changes in Taiwan in twenty-five years do not show that with the passing of time the occupational composition of the Chinese and of the Japanese of the island tends to become similar. If data were available for each occupation showing how many Japanese

4:Grajdanzev--32-34 S-4 (no date) 1942 Formosans-5
116, 162, 171, 463, 563

and how many Chinese are in important executive positions and how many in subordinate positions, the gap would appear much wider. Unfortunately, direct data are not available, but we shall see later that there is no indication that the division is becoming less sharp."

4:Grajdanzev--73-74 S-4 (no date) 1942 Formosans-1-3
116, 162, 463, 472

"Industry has expanded relatively rapidly, but even in 1935 there were only 67,255 workers in industrial enterprises employing more than four workers each or having a prime-mover. Nevertheless, according to the current official statistics which follow, 'agricultural population' of Taiwan formed only about fifty per cent of the population in 1938.

Changes in Agricultural Population in Taiwan

	1935	1937	1938
Total families (1,000)	897.6	...	...
Families occupied in agriculture (1,000)	419.9	427.4	...
Agricultural families as % of total	46.7	...	...
Total population (1,000)	5,212.4	5,609.0	5,747.0
'Agricultural population' (1,000)	2,790.3	2,880.4	2,896.4
'Agricultural population' as % of total	53.6	51.3	50.4

As early as 1935, according to this table, the families occupied in agriculture made up only 46.7 per cent of the total, while the agricultural population made up 56.3 per cent in that year and only 50.4 per cent in 1938. According to the census statistics, in the 25 years between 1905 and 1930 the Chinese population occupied in agriculture fell

only from 75.5 per cent to 73 per cent of the total Chinese population, while the current statistics show a fall of 3.2 per cent (of the total population) in three years. Even before 1935 the number of [74] agricultural families showed a definite lag as compared with the growth of total population, as may be seen from the following table.

Comparison of Changes in Total Population and in Agricultural Families in Taiwan*

Year	Total population (1,000)	Index of growth	Year	Agricultural families (1,000)	Index of growth
1905	3,039.8	100	1903	383.1	100
1925	3,993.4	131	1924	390.2	102
1930	4,592.5	151	1929	407.7	106
1935	5,212.4	171	1935	419.9	109
1937	5,609.0	185	1937	427.4	111
1938	5,747.0	189	1938	424.5	111

*The years given for each category do not always coincide because of absence of data: we have taken the years for which the information could be found.

In thirty-three years the population of Taiwan increased by eighty-nine per cent while on the basis of these figures the number of families engaged in agriculture, increased

by only eleven per cent. Such changes are of course quite possible. The agricultural population might send its 'surplus' to cities, where they may find employment in industry, commerce, public services and so on. But as was mentioned already, the number of workers in industry was very small in 1935 and there is no indication that it has increased considerably in the last three or four years. The difference between sixty-five and fifty per cent is, in absolute numbers, about 900,000 persons, or between 500,000 and 550,000 gainfully employed persons--quite a considerable figure for even a great country."

"This predominance of the food industry, or, in other words, of the processing of agricultural products, may also be illustrated by the following figures of workers by industries in Taiwan for 1937 covering enterprises with five and more workers, (1) or with a prime-

1. Government enterprises are excluded.

mover. [94]

	Absolute figures	Per cent of total
Textile	3,951	4.5
Metals	2,884	3.3
Machinery	4,214	4.8
Ceramics	10,528	12.1
Chemical	4,988	5.7
Lumber	2,674	3.1
Printing	3,027	3.5
Food industry	48,615	55.7
Other	6,363	7.3
Total	87,244	100.0

Source: Dainippon teikoku nenkan, 1939.

4:Grajdanzev--93-94 S-4 (no date) 1942 Formosans-2
116, 171, 433, 463

"The total number of workers in 1937 was only 87,244, while in Japan in the same year it was 2,936,512, or 34 times as many, though the population of the latter in the same year was only 12.7 times as great as Taiwan's. The number of workers in the food industry made up 55.7 per cent of the total, a smaller proportion than that based on the gross value of production, while the proportion of ceramics in the total was unexpectedly high (12.1 per cent) and that of the chemical industry only 5.7 per cent. The divergence may be explained (1) by special conditions in the industries concerned (e.g. the relation between gross value and net value is different in different industries); (2) by the prominence of modern or of primitive types of industrial enterprises—those in ceramics, printing, bookbinding and the lumber industry, for example, are chiefly small enterprises without machinery where productivity per worker is small; but in the food industry as will be shown later on, and in the chemical industry new and efficient enterprises predominate; (3) by the monopolistic position in the market of certain industries, which permits them to exploit the consumers."

4:Grajdanzev--110 S-4 (no date) 1942 Formosans
116, 315, 463

"There are no recent data on the number of workers occupied in mining but in 1930, according to the census of population, the number was 24,000 persons or about 1.4 per cent of the active population of the island."

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-1-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

"Our analysis of industry and mining must not be limited to a survey of present conditions and the plans of the government, etc. Properly speaking it should only begin here. The population of Taiwan is about five per cent Japanese and about ninety-five per cent Chinese and aborigines. In order to evaluate the place of these two groups in industry and mining we should know wage levels and working conditions as well as the all-important question of who are the entrepreneurs and who the wage earners. Unfortunately, some of these questions cannot be answered because of the absence of information.

The latest available report concerning the nationality of capital in Taiwan's companies refers to the years 1929.

Distribution of Corporate Capital in Taiwan by Nationality in 1929
(1,000 yen)

	Japanese	Chinese	Other*	Total
Agriculture	4,434	4,962	4	9,399
Industry	180,497	16,786	1,658	198,941
Commerce	23,128	28,082	2,033	53,242
Communications	3,186	2,571	25	5,781
Fisheries	2,258	1,190	20	3,467

Distribution of Corporate Capital in Taiwan by Nationality in 1929 [Cont.]
(1,000 yen)

	Japanese	Chinese	Other*	Total
Mining	12,243	3,441	1,422	17,107
Total	225,745	57,033	5,161	287,939

* Chiefly Chinese from the mainland, citizens of the Chinese Republic.

The share of the Japanese was therefore 90.7 per cent in industry and 71.6 per cent in mining, while the corresponding shares for the Chinese were 8.5 per cent and 20.1 per cent. It is true that these figures do not include individual enterprises, which are chiefly Chinese, but it is quite evident that their inclusion would not greatly change the picture because the average capital of such enterprises is very small. On the other [111] hand this table does not include government enterprises which should be considered for all practical purposes as Japanese enterprises (the managerial staff is Japanese and the profits may be transferred to Japan at any time), and the capital of these government enterprises is huge. As is seen from the table, the capital of all corporations was about ¥288 million in 1929, yet in the same year the capital of the state railways alone was ¥122 million. Beside railways the government has many enterprises of all kinds. Since 1929 the situation has further changed to the disadvantage of the Chinese group for in the

last few years, as was shown above, huge new companies have been established and the capital of old ones increased. The new companies are Japanese. In 1929, for example, the capital of the Japanese companies occupied in the fisheries was ¥2,258,000; in 1939 two Japanese companies with headquarters in Japan proper, whose capital is ¥65,500,000 were operating in Taiwan. Of course, only a part of this capital is sunk in their Taiwan enterprises, but it is clear that the situation in 1939, in this as well as in many other respects, is less favorable to the Chinese than it was ten years before.

The same thing has occurred in mining, where the total capital is now ¥46.6 million, instead of ¥17.1 million as in 1929. The increase is due to the activities of the Japanese Koyo Kogyo, Taiwan Kogyo, and Keelung Tanko corporations."

4:Grajdanzev--111-112 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 477

"A similar expansion [similar to that in mining--analyst] has taken place in industry, where all large new enterprises are owned by Japanese who make up only five per cent of the population, but now own at least ninety-five per cent of the capital in Taiwan's industry and more than ninety per cent of the capital in mining. But if one takes into consideration the fact that the Japanese enterprises are modern, while those of the Chinese are small and have more primitive equipment, (1) it becomes clear that the share

1. Compare the data on sugar mills given above.

of the Japanese enterprises in production is even greater than comparison of the respective holdings would indicate. Furthermore, the shares of corporations in Taiwan are not subject to free purchase and sale. These are monopolistic [112] organizations, and shares in them are not offered on the open market but are held by the big corporations of Japan."

4:Grajdanzev--1I3 1 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 177.47 Japan
636.47

"Our first question is now answered: the Chinese as a group receive very little from Taiwan's industry and mining in the form of interest on capital or entrepreneurs' profits. Any advantages which they may derive from these industries arise then chiefly from their position as workers. Let us see now what they receive in this capacity. In 1936, out of 81,589 workers occupied in industrial enterprises with five or more workers or having a prime-mover, 76,251 (93.5 per cent) were Chinese—almost the same percentage as in the population of Taiwan. The remaining 6.5 per cent were chiefly Japanese."

4:Grajdanzev--119-120 S-4 (no date) 1942 Formosans
116, 463, 497

"Besides these railroads there are in Taiwan special roads for transporting sugar cane from the fields to the mills, the total [120] length of which in 1938 was 2,098 km. There is also a unique system of communication on the island, 'light railways', or very narrow tracks of light rails on which run 'push-cars' propelled from behind by Chinese coolies. They are used for both passengers and freight, but their importance is declining: even at Taiwanese wages a coolie cannot compete successfully with a locomotive.

Taiwan's 'Light Railways'

	1929	1938
Length of roads (km.)	1,022	806
Cars	5,645	3,545
Passengers carried (1,000)	5,251	2,002
Goods (1,000 tons)	803	503
Total receipts (1,000 yen)	2,419	1,153 "

15: U.S. Navy--31 [2] (no date) 1944 Formosans
116, 563, 262, 463, 457

"The Japanese diet is simple. Rice is the staple with a garnish of pickle or fish and bean paste soup. Most Japanese are managers of large enterprises, government officials or wholesale businessmen, settled in and around the large cities. They have created a large number of hotspring and recreational resorts. There are few Japanese of great wealth with permanently established residences in Taiwan, for the work of the majority is the creation and transfer of wealth from Taiwan to absentee proprietors in Japan Proper."

15: U.S. Navy--33 [4] (no date) 1944 Formosans
116, 563, 463, 465, 177.46 Japanese
636.46

"Formosan-Chinese furnish almost all labor. Japanese are generally employed as foremen or skilled labor, or in particularly vital operations. For instance, they provide the personnel on the moving stock of the Government Railway system. This accounts for the difference in wage scales whereby the Japanese laborer receives from 80 to 150 percent more than Formosan-Chinese who do the same work. A Japanese tailor, for instance, at one time received two yen a day as against 1.20 yen per day for a Formosan-Chinese; a worker in a pineapple cannery 1.50 as against the Formosan-Chinese wage of 70 sen."

42: Schetelig--388 T-2 (no date) 1868 Formosans
116, 162, 186, 463, 609

The population of Sawo, which is cut off from all communication by land with the rest of the island (except with the Caponlan Plain), is consequently made up of the dregs of the Chinese population. Since agriculture is impossible, they belong to a genus of seaman such as exists only in China, for on occasion they can transform themselves into pirates, shore robbers, camphor wood thieves or mandarin's soldiers, as required. Sawo is a place with an evil reputation even among the Chinese.... Shortly after we had arrived camphor agents landed and, although they were extremely polite to us on the surface, they nevertheless looked at us suspiciously for they thought that their secret trade might be unfavorably influenced by us. These persons then stirred up the inhabitants against us and spread the rumor that we were traveling in the interests of a foreign government, the Prussian Government, and they hampered us in all our movements. The web of intrigue that was thrown around us was extremely finely spun, and every day there were new troubles and new affronts; for the Chinese, when he is evil, observes the principle that evil must be profitable to him, or it is not worth the trouble. Finally, after they had tried in vain to starve us out, for we were well supplied, we had to forego water transportation. The boats and junks were hidden from us and we were compelled to travel by land over the ridge of hills to the north to the plain of Caponlan, since we could not leave behind the instruments, etc. Fortunately there were five of us and we were all armed, for among these rogues a single man would have perhaps had a hard time.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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D. Occupational Composition

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In 1953, of 5,400,000 people more than twelve years of age, 1,800,000 were engaged in agriculture, 23,000 were in industry, and 460,000 were students. There were 2,000,000 people without formal occupation, but most of them (1,700,000) were housewives. Agriculture is the most predominant occupation although the proportion of agricultural workers to the total working population has declined gradually during the last forty years. From 1915 to 1940, the proportion of farmers in relation to the total working population decreased from 70.1 per cent to 62.4 per cent;[11] the percentage for 1953 was 53. For detailed breakdown, see Table 4.

11. T'ai-wan-sheng Wu-shih-i-nien-lai T'ung-chi T'i-yao [Statistical Summary of Taiwan for the Past Fifty-one Years], Taipei, Provincial Government of Taiwan, 1946, pp. 130-38; See also Results of the Seventh Population Census of Taiwan, 1940, Taipei, 1953, pp. 68-69.

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Table 4. Population by Occupation */

	Population	Male	Female
Over 12 yrs. of age	5,422,044	2,777,938	2,644,106
Agriculture	1,811,767	1,277,139	534,628
Mining	36,659	32,786	3,873
Industry	232,873	207,752	26,121
Commerce	251,230	231,866	19,364
Transportation	68,196	65,480	2,716
Public Service	119,728	109,489	10,239
Professionals	74,644	57,925	16,729
Service Industry	225,969	168,181	57,788
No Occupation ✱/	2,005,777	219,851	1,785,886
Student	462,469	291,971	170,498
Military Service ✗/	58,967	57,563	1,404
Others	72,805	57,935	14,870
Under 12 yrs. of age	3,015,972	1,548,700	1,467,202
Current total Y/	8,438,016	4,326,708	4,111,308

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463 scarcity of employment has resulted in the increase in the number of "self-made" jobs, such as the keeping of small, temporary streetside shops and stands, peddling, "household industries" of various kinds, cart-pulling, and pedicab-operating. Marginal self-employment is the chief source of income for approximately one-fifth of the males 15-50 years of age in the seventeen areas surveyed in 1954 by the China Mission of the American Mutual Security Agency and a group from National Taiwan University. A large proportion of those marginally self-employed would shift to regular industrial jobs if such jobs became available.[4]

369 Because of under-employment and the
464 prevailing low wage-scale, women and children often take up various kinds of work in order to supplement family incomes. Many urban households augment their income by raising hogs or fowl. Overcrowding in urban areas, the increase in the number of peddlers, streetside stands, and the feeding of hogs and fowl in crowded districts create a very serious health and sanitation problem.

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3. (continued) today far exceeds the number reported under Japanese rule. See the section on Criminal Codes and Procedures in the chapter on Law and Order.

4. Raper, op. cit., p. 5.

III. INDUSTRIAL LABOR

464 The Labor Force. The Economic Stabilization Board estimates that the current industrial labor force engaged in all types of manufacturing and mining is in the neighborhood of 0.3 millions.[19] It is reported that nearly 20 per cent of the workers are women; one per cent, child workers.[20] The same report states that in 1951 the average age of male workers in public enterprises was 31 and that of female workers 24. If all the government enterprises were considered, 25 per cent were within the age bracket of 21 to 25 years.[21]

463 Composition of the Labor Force. Industrial workers are heavily concentrated in the Taipei, Tainan, and Kaohsiung areas on account of the existence of coal mines and textile factories in the north and of chemical and machinery manufacturing factories in the south. The distribution of workers according to the county (hsien) follows:

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19. Ibid., p. 33.
20. Free China Labor League, T'ai-wan Lao-kung Yün-tung Kai-k'uang [General Condition of the Labor Movement in Taiwan], Taipei, 1952, pp. 7-8.
21. Ibid.

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45:Stanford U. S-4, 5 1956 AD1 Formosa
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NUMBER OF PERSONS ENGAGED IN MANUFACTURING AND MINING AS OF DECEMBER 1951 IN FORMOSA*

Hsien	Manufacturing	Mining
Taipei (incl. Yangmingshan Adm)	67,963	40,686
Yi-lan	5,449	-
Tao-yuan	5,800	941
Hsin-chu	8,382	2,363
Miao-li	8,797	4,465
Tai-chung	17,880	66
Nan-tou	3,148	-
Chang-hua	8,909	-
Yun-lin	6,568	-
Chia-yi	11,743	-
Tai-nan	24,027	256
Kaohsiung	28,109	-
Tai-tung	2,615	-
Hua-lien	1,117	39
Peng-hu (Pescadores)	1,343	-
Total	206,740	49,756

45:Stanford U. S-4, 5 1956 AD1 Formosa
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* Taiwan Provincial Government, The Structure of the Taiwan Economy, Taipei, 1953.

463 In terms of industrial divisions, workers in the food-processing industry constituted in 1951 about 30 per cent of the total number of workers. The following table shows the distribution of workers by industries and by sex:

45:Stanford U. S-4, 5 1956 ADI Formosa
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NUMBER OF EMPLOYEES (BY INDUSTRY AND SEX) IN GOVERNMENT ENTERPRISES*

Industry	(March 1, 1952) Total	Male	Female	(December 31, 1951) Total	Male	Female
Textile	7,816	2,399	5,417	28,873	8,409	20,464
Metal	3,259	3,050	209	3,626	3,257	351
Machine & Tools	7,440	7,095	345	7,121	6,753	368
Kiln	4,843	3,930	913	10,390	7,482	2,908
Chemical	17,881	14,465	3,416	9,440	6,558	2,882
Wooden#	6,596	6,158	438	4,377	3,934	443
Printing	2,014	1,472	542	1,889	1,625	264
Food Processing	29,519	25,741	3,838	20,067	15,493	4,574
Gas & Electricity	5,019	4,810	209	-	-	-
Others	252	157	95	3,393	1,484	1,909
Total	84,699	69,277	15,422	89,176	55,013	34,158

45:Stanford U. S-4, 5 1956 ADl Formosa
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* Taiwan Provincial Government, Department of Reconstruction as quoted by L. R. Smith and W. R. Etter, Labor in Taiwan, Taipei, MSA/MC, 1953.

This term is used in the original source and presumably includes logging and lumber workers.

463 According to a 1952 survey of 17 urban areas, industrial and government employees and mining workers accounted for 45 per cent of all gainfully employed workers over 12 years of age. However, for the province as a whole the ratio was only 18 per cent. The breakdown of occupation distribution is shown below:

PERCENTAGE OCCUPATIONAL DISTRIBUTION OF WORKERS*

Occupation	Whole Province	Seventeen Cities and Towns
Total	100	100
Industry	8	21
Commerce	9	21
Government employees	4	12
Transportation and Communications	2	7
Professionals	2	5
Mining	1	3
Agriculture	62	20
Domestic service	8	8
Others	3	3

* A. F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954.

463 Marginal Self-employment. Due to the over-supply of labor in urban areas, many people have created employment for themselves by engaging in the so-called "marginal self-employment." It is "marginal" in the sense that the manpower is utilized less than its full and productive use. In the capital city of Taipei, 34,500 heads of households, supporting over one-fifth of the city's population, were engaged in the following types of employment in 1953:

NUMBER OF SELF-EMPLOYED PERSONS IN TAIPEI, 1953*

Occupations	Number
Small shopkeepers and peddlers	20,000
Pedicab operators	9,000
Freight-cart pullers	2,500
Household Industries	2,000
Ox-cart drivers	350
Truck-hoppers	250
Others	250
Total	34,350

* A. F. Raper and others, op. cit.

Small retailers and peddlers have increased in recent years. The majority of small retailers

463 sell towels, shirts, soap, food, etc., at roadside stands. Household industries such as cake baking, handicrafts, etc., are also very common. Truck-hopping is an entirely new occupation in Formosa. The truck-hoppers are young and husky persons who hop on the moving trucks and start bargaining for unloading jobs as soon as the trucks reach their places of unloading.

IV. WAGE LEVELS AND WORKING CONDITIONS

465 434 The Wage Level. Government statistics shows improvement of the wage level in recent years. During the years 1949-52, the index of wages and salaries rose faster than the retail price index:

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The Industrial Workers' Outlook. The outlook of industrial workers is determined by the low wages, high prices, and pressure of population on the employment situation. From surveys made by the FOA among coal miners (120 households) at Hsu-ti, dock workers (450 households) in Keelung, salt workers at Putai (132 households), and fishermen (105 households) at Kaohsiung, Suao, and Tainan during 1954, it was learned that a high percentage of workers felt that current conditions were worse than in 1937. The following tabular presentation of the survey results may be examined:

45:Stanford U. S-4, 5 1956 ADI Formosa
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CONSENSUS OF OPINION ON CONDITIONS IN 1954 COMPARED TO CONDITIONS IN 1937*
(in per cent)

	Better	Worse	About the same	No Answer	
Coal Miners (120 households)	12	29	32	27	100
Dock workers (450 householders)	8	32	30	30	100
Salt workers (132 households)	11	52	28	5	100
Fishermen (105 households)	34	34	29	3	100

* Compiled from Foreign Operations Administration, Mutual Security Mission to China, unpublished pamphlets.

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Reasons such as higher price levels, low real wages, and unemployment were given by those who thought that the situation had deteriorated. For the "better" answers, more freedom and more United States aid were mentioned as reasons.[25]

When asked whether in their opinion conditions in the next ten years were like to be better or worse, more than three-fourths of the coal miners thought the situation would be about the same, while 14 per cent indicated that it would be worse. To the same question, 26 per cent of the dock workers answered "better" and two per cent, "worse," while 67 per cent gave no answer. Twenty-one per cent of the Putai salt workers said "worse," and 16 per cent "better"; and 62 per cent gave no answer.

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25. It may be noted that the workers interviewed may have said "better" with the expectation of receiving increased United States aid. Likewise, they may have said "worse" with the hope that current conditions may be improved. These answers are by no means conclusive. Many of the workers of 1954 were probably very young in 1937, and it is difficult to say whether they would recollect correctly after a lapse of seventeen years, a long war, and the change of government.

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208 The reason for the "worse" answers were found to be overpopulation, more competition, more unemployment, and low income. More United States aid, possible reconquest of the Mainland, and more employment were given as reasons why conditions might improve.

V. LABOR ORGANIZATIONS

467 The Limited Role of Trade Unions. Although Article 5 of the Labor Union Law (revised) of January 7, 1949, states: "The functions of a labor union are as follows: (A) to conclude, revise, or abolish any agreement or contract on behalf of the members...," the trade unions in Formosa function principally as a medium of political education and undertake limited welfare activities on behalf of their members.

During the Japanese occupation unionization was banned by the Government-General. At that time most of the workers were not sufficiently educated or aggressive enough to form unions. Despite the National Government's attempts to encourage unionization, in view of the existing emergency conditions, trade unions are not permitted to exercise their bargaining power. The government has undertaken to train union officials. At the same time, government promotional and

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 376 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

433 have always supplied a large part of the Taiwanese diet. How well
241 these three basic crops represent the whole of Taiwanese agriculture may be seen from their share in the total recorded value of farm produce (see Fig. 4).[18]

241 The spatial arrangement of crops discussed in the previous chap-
621 ter has an important bearing on the question of persistence in organization of agriculture. Rice fields were found throughout the flat lowland area, overlapping in every civil division with the other types of farming. In its import for the nature of the rural society, this fact overshadows most effects of diversification and rationalization of farming. The types of social system that can give rise to paddy cultivation of rice seem to be uncommonly well equipped to resist change. They are centered around settled family relationships that provide for uninterrupted use of suitable fields over many generations. This is the case throughout most of the paddy-rice areas of Asia, where these conditions resemble what is to be found in Taiwan.[19] Hence, from this stability within farming itself, one should not expect to find that its social setting was greatly different as a result of Japanese occupation.

Changes in Pattern of Employment

463 Farming is so important to Taiwan that it has first been treated separately, with very little reference to its place among other activities. By viewing it in relation to the pursuits of the entire working population, we can take into account the nature of alternative opportunities outside of agriculture.

There would not be much point in looking for possibilities of non-agricultural employment if the economy could not have supported a larger proportion of people in other activities. This is where many agrarian countries have felt the effect of poverty to stand in the way of their industrial progress. From the start of its modern era, Taiwan's peculiar status as a food exporter suggests that food supply was no barrier. Since that time, special diligence in the matter made land and human effort more effective in producing crops. Advancing both of these aspects of productivity implied that at least some movement of people to pursuits outside of agriculture was economically feasible.

[18] These trends, of course, indicate nothing about "well-being" of farmers, since large capital charges (for irrigation, fertilizer, and government administration) were being made against farm incomes.

[19] See Taeuber, Irene B. (1947), pp. 21-43.

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ECONOMIC ACTIVITIES AND SOCIAL CHANGE

It is certain that Taiwan underwent some social changes under the Japanese. The colonial program itself was one, with consequences that were far-reaching. Moreover, the expansion of population and production could not have occurred without further adjustments in social institutions, for in the so-called natural environment men rarely succeed (under the most favorable conditions) in enlarging their works in exact scale. But to have left so much of the old society intact, these changes must have been distributed unevenly through the population; some portions must have been influenced more than others.

In ascertaining the facts of the case, the first step is to see how the working population became involved in new activities. The work of peasant farmers was least affected. Hence one should look for the largest results in alternative fields. The only way for specialization to have progressed very far, in view of what is known of the agricultural economy, was through the spread of employment other than farming.

Fortunately, there is reliable information to show who performed the principal economic activities at certain times. Five census enumerations were conducted with great concern for determining the occupational composition of the population. In four of these, up to 1930, tables were published classifying the people in detail according to occupation and other characteristics, using categories that are nearly if not exactly comparable from year to year.[20] The proportions of all working persons found among various classes of occupations have been assembled from these sources in Table 11. In 1940, the same information was collected and tabulated, but not published with full explanation of procedures; only the one table reproduced here has become available outside of Taiwan.*

Even as early as 1905 not everyone in the island was restricted to agriculture as a means of support. Slightly more than two-thirds of all persons with occupation were so engaged, with a group half as large remaining to be accounted for in other pursuits. These data

[20] Where the classification departed from previous practice, continuity can be preserved in broad groups of occupations by re-allocating occupations in the smaller groupings. Where such re-grouping has been possible, it will be appropriately noted in the text. Later, in cross-tabulations with other characteristics, the broadest categories often must be used as they stand.

* While this book was in press, a collection of tables from the census of 1940 was published in Taiwan. See *Results of the Seventh Population Census of Taiwan, 1940* (Taipei, Provincial Government of Taiwan, Bureau of Accounting and Statistics, March 1953).

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TABLE 11

OCCUPATIONAL COMPOSITION, TOTAL POPULATION OF TAIWAN

Per Cents of All Occupied Persons Reported in Each Occupation,* 1905, 1930, and 1940. All Ethnic Groups, Both Sexes

Occupation†	*1905*	*1930*	*1940*
Agriculture‡	71.2	68.2	64.6
Fishing	2.2	1.8	5.4
Mining	0.5	1.4	1.9
Manufacturing	6.2	8.5	7.6
Commerce	6.7	12.0	10.0
Transportation	2.1	3.0	2.7
Gov't. and Prof.	2.3	4.9	5.1
Other	8.8	0.2	2.7
Total Occupied	100.0	100.0	100.0
Per Cent Occupied	45.8	38.8	37.6

* Persons classified as Domestic Servants have been removed.

† The data used in this table to represent the years 1930 and 1940 are not of precisely the same sort as those showing the occupational distribution of the population in other tables. The scheme for classifying occupations was greatly changed between the censuses of 1930 and 1940; as a result, the only basis for comparison between these two dates is the classification according to "Industry," of which the main categories remained the same. Hence the figures in Column 2 and Column 3 of this table represent the distribution of occupied persons by the "Industries" in which they worked, and not by their "Occupations."

‡ In all of these tables of employed persons, unless specified to the contrary, the category "Agriculture" includes "Forestry."

Sources: *Census of 1905, General Volume*, Table 45.
Census of 1930, Statistical Tables, Table 28.
Ch'en Cheng-hsiang, *Land Utilization in Taiwan* (1950), p. 62.

bear out the evidence of history during Manchu times, to the effect that a good many people had already been occupied in services connected with exporting and marketing primary produce.

Observations in 1905 cannot, of course, perfectly represent conditions ten years earlier—some Japanese were present in the statistics, and their influence in the economy was beginning to be felt. But these early census materials offer the closest approach to the pre-Japanese period that is possible. They depict a situation that must have been very similar to that of the final years of Chinese rule in Taiwan.

Table 11 summarizes the effects of major shifts in occupation throughout the entire working population, reaching to the eve of World War II. Though only an abbreviated picture, it belies any

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suggestion that the organization of livelihood in general had been profoundly altered under the Japanese. But any discussion of the problem very soon outruns crude data like these. Though Table 11 is comprehensive, covering all groups in the population, it lumps together people of too many kinds, and thereby hides many significant types of variation. The same material can be used more efficiently when refined by some of the controls at our disposal.

In the first place, not everyone in the population was equally well reported as to occupation. Asia being even more than the West a man's world, occupational data do not mean the same thing for males and females. Women are barred from many occupations and, whatever their duties, are not readily regarded in society as having regular employment. Whether a woman in Taiwan reported herself as being employed or not often depended on other attributes of her social position more than on the actual tasks performed—for example, whether she had yet been married, whether widowed or divorced, what work was followed by other members of her family, or simply local custom governing attitudes toward the work of women. For reasons that will be elaborated in the following chapter, we shall henceforth separate females from males in all occupational tables, under the assumption that the working activities of males more accurately reflect the composition of employment in the economy.

Omitting females from Table 12 has the effect of correcting the inflated appearance that they give to agriculture, especially in the earlier years. With this more meaningful series of observations, it is striking not merely that activities were so diversified in the beginning, but that they changed so little. In the 35 years that followed this first general census the structure of occupations among men remained about the same. By this more adequate criterion, agriculture lost almost no ground as a field of employment after 1905. Still nearly two-thirds of all working men were farmers as late as 1930, the terminal date for these figures. From Table 11 it is clear that the same thing must have been true in 1940.

And so, even including the Japanese, those who were caught up in the "industrialization" made up a minor part of all males in Taiwan. Demographically, this cardinal aspect of "economic development" was never anything but a small-scale operation.

Obviously, Table 11 and Table 12 cannot bring to light the full extent of trends accompanying events over this period. These figures indicate only shifts from one broad type of activity to another. They

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TABLE 12

OCCUPATIONAL COMPOSITION OF WORKING MALES IN TAIWAN TOTAL, ALL ETHNIC GROUPS

Per Cents of Occupied Males Reported in Each Occupation, 1905, 1920, and 1930*

Occupation	*1905*	*1920*	*1930*
Agriculture	67.7	64.3	63.1
Fishing	2.7	2.2	2.0
Mining	.6	1.5	1.3
Manufacturing	6.2	9.5	8.9
Commerce	7.8	8.3	10.9
Transportation	2.7	3.9	4.5
Gov't. & Prof.	2.8	4.1	5.1
Other	9.5	6.2	4.2
Total Occupied	100.0	100.0	100.0
Percent of Males Occupied	67.2	62.4	58.2

* Domestic servants have been excluded.
Source: Data of Table 16.

make no allowance for a more subtle kind of change—differences evolving within these groups of occupations.

These variations may take two forms. One consists of movement among the positions that comprise each broader group. This disturbance in the framework of positions can be taken as a result of innovations that actually altered the organization of work. It was noteworthy only in those lines where Japanese took a direct hand (see Table 13, below). Where it involved changes across the boundaries of the occupational groups tabulated in Table 12, the effects appear as occupational shifts from one census to the next. These one would expect to arise from such sources as the drawing of sugar workers from old into modern mills; from the wider shift toward factory work within the generic scope of "manufacturing"; the adjustment of commerce to the newer export industries; or the replacing of archaic transport or banking enterprises with wage-earning employees of Japanese concerns—though only a portion can be detected through the broad categories that we have used.

These differences also took a second form that cannot be conveyed in terms of the distribution of working activities. Many new skills were introduced within the existing arrangement or organization of work. The agricultural program was achieved primarily through this

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unobtrusive path, along with many of the spectacular improvements in productivity in other fields.[21] This form is the more elusive one to deal with, for it did not of itself produce shifts in employment. At the same time, the dimensions of economic achievement in Taiwan were too large to have been confined to the limits of occupational change shown in Table 12, unless they depended heavily on this second channel.

TABLE 13

RELATIVE GROWTH OF EMPLOYMENT IN DIFFERENT LINES
TOTAL POPULATION, ALL ETHNIC GROUPS

Occupation	*Ratios of Males Employed in 1930 to Those in 1905, by Occupation*
Agriculture	1.18
Fishing	.94
Mining	2.68
Manufacturing	1.81
Commerce	1.78
Gov't. & Prof.	2.28
Transportation, etc.	2.26
Other	.56
Total, All Occupations	1.27
Total Males	1.46

Sources: *Census of 1905, General Volume*, Table 45.
Census of 1930, Statistical Tables, Table 28.

Comparing the occupational structure at successive points of time is not the best measure of change. In some respects a better one is to indicate how the different lines of employment shared in the outstanding demographic trend, the growth of population. With 1905 as a base, the relative increase for each occupational stratum expresses more clearly the strides that were being made outside of agriculture (see Table 13).

These results would have been far different if none of the social changes under colonial rule had occurred—if, for example, the original situation had been fully stable, in the sense of being able to reproduce itself indefinitely, with no interference from outside or within save the single effect of population growth. (It is, of course,

[21] The two approaches were not independent. For example, introducing the use of fertilizers on a wide scale did not appreciably interfere with the management of peasant farms; but it did stimulate a lively business in supplying commercial fertilizer materials. The important point is that the two types of effect often fell in different places—in this case, the fertilizer trade went chiefly to Japanese importers.

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nothing more than a hypothetical exercise to assume this course of events, since population growth itself presupposes some conditions that had not been present before.) Under these assumptions, presumably each occupational stratum would have received an equal share of the increase, and the ratios of expansion for all would have been identical. The fact that they grew so unevenly illustrates that the actual events departed considerably from this imaginary sequence.

Several conditions would be required in order to maintain this hypothetical stability. People would need to follow well-accepted rules in adopting occupations, customs that would impede any widespread transfers by individuals from one kind of work to another. Chinese have for centuries come close to this result by passing many types of work down from fathers to sons. In Taiwan, keeping the various lines of work in balance would have implied a close adherence to such traditions by most of the population, as it did in the past. In effect, the unequal ratios of increase between occupations meant that many men who would have become farmers did not, but entered some alternative employment instead.[22]

Table 13 also indicates which occupations were most affected. Employment expanded rapidly in some of the fields where Japanese capital was prominent. These were also the fields that employed technical specialists and made the least use of the traditional fund of skills existing among the Taiwanese. Growth in these lines did not necessarily broaden employment opportunities for Taiwanese. There were in all 26.6 per cent more occupied males in Taiwan in 1930 than in 1905,[23] but 2.3 times as many in professional and administrative positions and in occupations connected with transportation, 81 per cent and 78 per cent more in manufacturing and commerce respectively. The farming segment in the population lagged slightly behind the total of employed men; but it was so large initially that it could relinquish large numbers of actual or potential members to other occupations before showing signs of the loss.[24]

[22] This aspect of occupational transfers will be taken up in some detail in the next chapter.

[23] This ratio is less than the increase in the general population, because changes in the age composition over this period raised the proportions of children and aged persons in the total. The proportions of men occupied in the prime working ages—15 to 64—remained practically the same.

[24] Losses from agriculture did not supply all of the additional employment in the expanding fields. The group "Other Occupations" was the source of almost the same portion of the inequalities in these figures. Being a catch-all, this category is always a weak spot in occupational statistics. In Taiwan it was made up chiefly of "day laborers,"

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These ratios measure how far each occupation increased irrespective of its size in relation to others at the start. Table 13 therefore expresses the force of events on each occupation, and not the force of occupational changes in the economy. This being the case, they should not all be given equal weight. The development of mining, by this criterion, exceeded any of the other fields. Though truly a creation of Japanese exploration and investment, the mining industry in Taiwan never reached any substantial size, and does not merit special attention as a field of employment.

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Lacking detailed evidence for the period following 1930, some conjecture is needed. Official sources and more recent descriptive materials in English are unreliable, since they invariably exaggerate the extent of Japanese achievement. We have certain data, however, to suggest the dimensions of expansion in demographic terms. While Japanese planners tried to raise production in all lines, they concentrated on a few specific items that were especially important to Japan. They paid most attention to enlarging factory facilities for the processing of primary products. Hence, it should be possible to detect some of this flurry of new activity in the numbers of people working in factories.

Statistics of factory employment in Taiwan were begun in 1914, and published each year ending in 1941. They fell far short of being perfect indicators, being subject to many kinds of inaccuracy that a census enumeration can easily avoid.[25] Nevertheless as a series of observations they furnish very useful results. The rise of factory employment may be compared with growth in the total population in Fig. 10, where the numbers of persons employed in "factories" from year to year are plotted on a logarithmic scale. The growth in total population and in agricultural population is also shown, in hundreds of persons.

Factory employment rose steadily from the beginning to the end

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not otherwise classified. Its decline represented some actual movement of workers and new recruits into new jobs, and in part merely assigning of new names to the same work. This circumstance tends to magnify the difference between agriculture and other occupations, but does not otherwise distort the picture shown in Table 13.

[25] They apparently paralleled the corresponding figures for Japan in covering all factories with more than five workers. They were published without explanation of standards or procedures, which were less rigorous than those used in the censuses. It is not specified whether factory workers were full or part-time workers; they are not shown separately by ethnic affiliation; their numbers must have increased (independently of any change in actual employment) by the adding of new enterprises to the reporting system; and their actual duties are not given.

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463 162 of this period. There were only two departures from this growth—the prosperous days of 1920 and 1929 and their aftermaths. Overlooking these brief deviations from the trend, the average rate of growth from 1918 until 1935 was *no greater than that of the total population*. Only in 1936 did the force of economic expansion reach the population to the extent of diffusing factory work more widely through it.

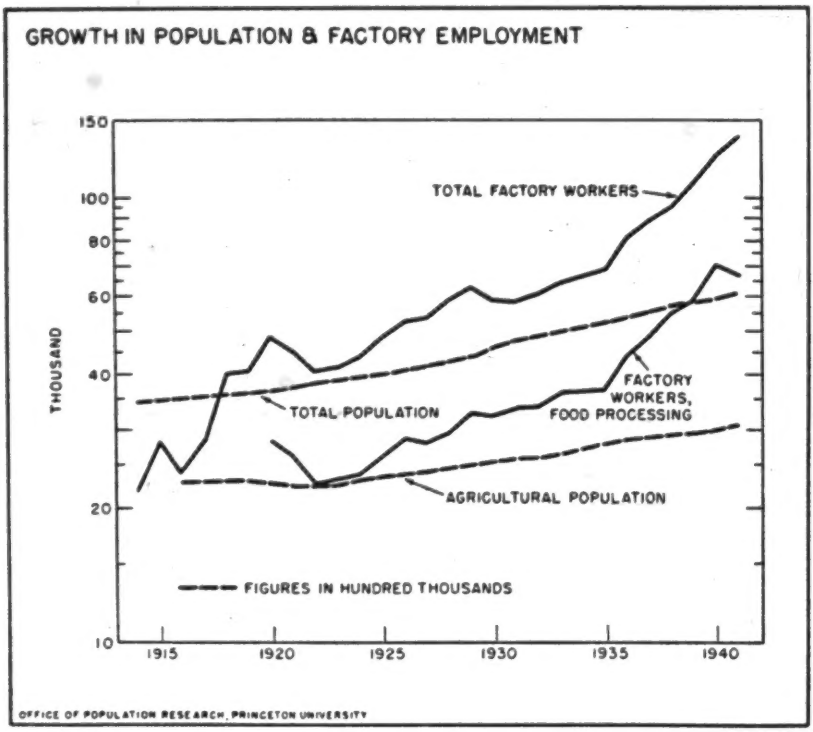

Fig. 10. Increase of Factory Employment and of Population in Taiwan, 1914-1941.

The largest part of the total (about 55 per cent) was made up of workers in sugar mills (see Fig. 10). The sugar industry kept its priority in the later economic planning. It serves as a reminder that the expansion of production continued to be dominated by this single industry, systematically nurtured and expanded as a source of alcohol for Japan.

The evidence for the spread of factory work can be supplemented

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by the annual registry of agricultural population (i.e., members of families dependent on agriculture).[26] The two major spurts in factory employment occurred during the first World War and just preceding the second. These were the only two periods of substantial slackening in gradual increments of farm population to the point of actual decline in the early 1920's. After 1940 this portion of the population resumed its usual rate of growth, suggesting that the opportunities for shifting the balance of employment had begun to disappear.

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Occupational Shifts: Taiwanese and Japanese

The data up to this point illustrate some of the redeployment of manpower in the economy. They give no basis for considering the social changes that were responsible, for they do not disclose who were the participants. To understand how manpower responds to altered environmental conditions, one must know some of the affiliations that have shaped its members' decisions. Moreover, "economic development" is of no great interest here for its own sake, but rather for the nature of its reception and use by peoples not yet under its full influence. Therefore the Taiwanese are the important group to observe, and in a different sense the Japanese in their role of aliens on the scene.

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Most of the apparent diversification in economic activities shown in Table 12 did not consist of movements in the Taiwanese population at all. It reflected primarily the special characteristics of Japanese in Taiwan. Though never more than one-twentieth of the total population, their nationals were so concentrated in certain special positions that they often outnumbered Taiwanese. Once this special group is removed (Table 14), Taiwanese appear to have contributed only a small amount to the total occupational shifts up to 1930. Separated from the presence of Japanese in these key posts, the part of Taiwanese in the modernized sectors of the economy was indeed a modest one.

[26] The total population and agricultural population have been reduced to one-hundredth of their size to fit into Fig. 10. They can consequently be used to show more than merely relative trends. Where either one intersects a trend line for factory employees, the ratio of the latter to the former is 1:100, or 1 per cent. (Of course, the scale being logarithmic, the same relation does not hold between points separated by larger intervals.) This circumstance helps to point out how small the total amount of work in factories was in relation to the entire population. At its peak, judged by these figures, it occupied less than 3 per cent of the population. It remained under 2 per cent for most of this period.

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TABLE 14

OCCUPATIONAL COMPOSITION OF TAIWANESE
Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	69.9	68.9	68.0
Fishing	2.8	2.2	2.1
Mining	0.5	1.4	1.3
Manufacturing	5.6	7.9	7.6
Commerce	7.4	7.6	10.2
Transportation, etc.	2.2	3.2	3.9
Gov't. & Prof.	1.8	2.2	2.7
Other	9.8	6.6	4.2
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	66.7	61.8	57.7

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.
Source: Data of Table 16.

As for the Japanese, most who were old enough to work had been born in the Home Islands. All of these had arrived in Taiwan as a result of some decision to move, and presumably had some purpose in being there. Theirs was a highly selective migration. It brought in the promoters and technicians, the industrialists and clerical personnel, the officials and minor functionaries to operate this first colonial venture. As in most colonies, they enjoyed facilities and perquisites of a superior type—better, if not to conditions generally prevailing in the home country, at least to the standards that they as individuals could have expected at home.[27]

Much of the migration was coordinated with economic policy.[28]

[27] On top of better vocational opportunities, Japanese commonly received special bonuses for service in Taiwan. Rates of pay for comparable wage labor in Taiwan were consistently higher for Japanese (see *Statistical Summary*, Tables 301-303).

[28] This had not always been the case. For most of the first decade after 1895, Japanese were permitted to go to Taiwan with little restriction. The freedom attracted an "undesirable" element to the island, whose business activities were so unbridled and uncoordinated as to call forth a stricter government policy to deal with incoming personnel. Japanese looked back from the later ordered development on this early chaotic period with horror. The unsatisfactory results of laissez-faire may also have contributed to the decision to centralize the most profitable opportunities in state hands. Through official monopolies in the major export lines, it was possible to regulate continuously the conduct of Japanese businessmen as well as to make substantial levies in these enterprises for revenue.

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Japanese drew lessons from the colonial experience of European powers in supplying the special skills and competencies that their program required. Government and private industry recruited their personnel from Japan, according to needs which they determined in advance. In one respect they learned the lessons of staffing their technical positions better than their teachers: they paid more attention to procuring lower levels of skills from their own ranks along with filling the top functions. Important implemental positions, like police, railroad technicians, and maintenance men, were heavily staffed with Japanese.

All Japanese nationals, regardless of whether specially recruited or not, were favored over Taiwanese when employed by Japanese concerns.[29] The best openings were in professional and official positions, as administrators in government and finance. Less coveted, but still bearing prestige over Taiwanese counterparts, were the jobs of technical and skilled workers in transportation and industry, and petty officials in the government bureaucracy. In every census Japanese appeared consistently in these occupations (see Table 15).

As a group, they were conspicuous in staying out of agriculture,

TABLE 15

OCCUPATIONAL COMPOSITION OF JAPANESE IN TAIWAN

Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	1.0	4.4	4.6
Fishing	0.6	2.0	2.1
Mining	5.0	1.9	0.5
Manufacturing	20.6	27.4	18.2
Commerce	16.5	15.0	14.6
Transportation, etc.	13.9	11.7	11.0
Gov't. & Prof.	41.3	37.2	45.6
Other	1.1	0.4	3.4
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	80.4	69.0	60.8

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.
Source: Data of Table 16.

[29] Notwithstanding, the colony had its failures. The census reports list a scattering of Japanese as day laborers, ricksha pullers, longshoremen, and in similar occupations.

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despite the fact that most were engaged in some capacity in helping the passage of farm products to Japan. Japan made almost no use of Taiwan as an outlet for its own growing agricultural population. From time to time the authorities announced projects for settling farmers from the Home Islands. These plans may have been designed to make a favorable impression among government circles in Japan itself; none ever proved feasible in Taiwan. Only a few thousand "colonists" of this type came to Taiwan and made a start in farming. In spite of manifold blessings of official support, subsidies, and special privileges, the settlements never managed to prosper. The families often left the countryside for better employment in towns and cities, and during the 1930's the whole idea was abandoned.[30]

Taiwan's economy was thus organized not only to export its narrow range of commodities to Japan, but to import its basic specialized skills in the persons of Japanese migrants. For the authorities this was an easy answer to the problem of staffing essential functions with people of appropriate training and experience. It avoided, among other things, the need to devise means for securing them from the human resources at hand in Taiwan. From the standpoint of Japan it was not an efficient solution. It drew upon types of manpower that the Japanese at home could not well afford to lose, and at the same time failed to make the best use of talents existing among the Taiwanese.[31] This anomaly in distribution of skills between the two areas is illustrated in Fig. 11. Japanese residents in Taiwan were a highly selected group even for Japan itself, where technical abilities were also scarce.

Possession of an external source of supply for specialized skills had

[30] Yanaihara, Tadao (1929), pp. 174-175, notes that it was already a failure before 1930.

[31] The founding of Taihoku Imperial University was an outstanding example of this policy. It was an institution of high caliber, well equipped and operated by men of repute in Japan. The University notably did *not* engage in training any considerable number of technical personnel among Taiwanese. It was organized to promote research rather than teaching, its classes were small, and Taiwanese students were not readily admitted. See Kerr, George H. (1942), p. 53 ff.

On a more practical plane, several technical schools were later established for limited training of Taiwanese. These, to use the common expression of educators in this country, were "vocational" rather than "professional" in that they taught manual instead of liberal skills. Enlargement of educational facilities came too late to provide the technical training needed for the war effort, though it did serve to advance literacy (in the Japanese language) among Taiwanese youth (see *Census of 1930, Statistical Tables*, Table 81). Once started, the spread of educational facilities made considerable headway. By 1943, 70 per cent of Taiwanese children of legal school age were attending some sort of school. In time this more liberal turn of policy might have paved the way for admitting Taiwanese into more responsible positions in the island's new industrial program.

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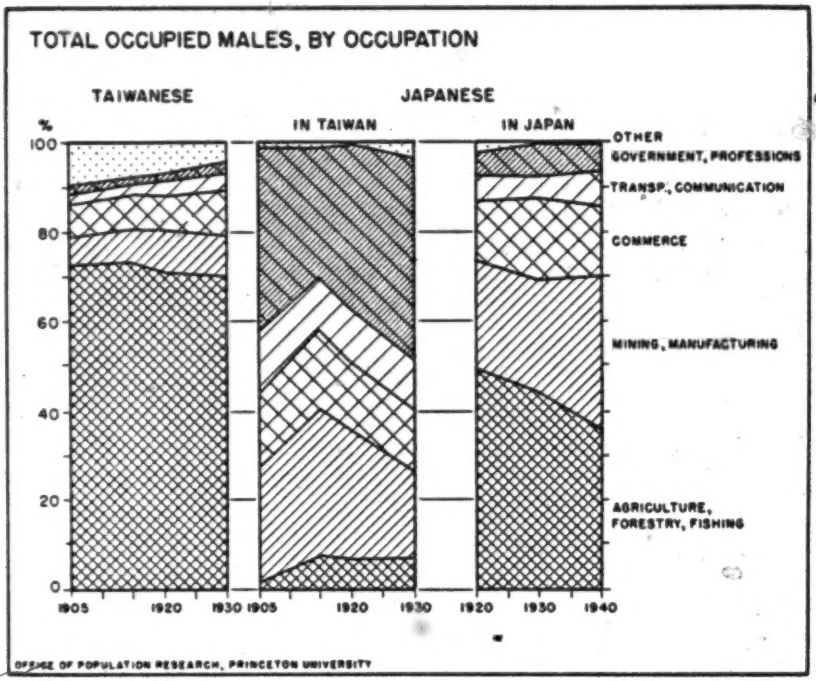

Fig. 11. Trends in Occupations in Taiwan and Japan, 1905-1940.

certain cogent advantages. The alien status of Japanese nationals was useful in keeping high standards of responsibility and performance among members of the public and private bureaucracies. This personnel could be interposed to administer Taiwanese affairs without becoming susceptible to local pressures. Though the Japanese had gained access to the rural society by manipulating its traditional institutions, they had to guard against subversion of their administration by influence from the Taiwanese side.

They did not succeed, as no large organization has, in making their officials completely disinterested and honest. There were scandals and reports of self-enrichment on the part of several of their highly-placed nationals. When it came to collusion with Taiwanese, however, they were all but incorruptible. The instances of improbity that achieved publicity in Taiwan were mostly between government and business interests. Irregularities of this sort did not threaten the objectives of the regime, for these parties had more at stake together than at issue in the economic expansion. Much of what was lost in

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563 this wasteful scheme of recruiting from abroad therefore must have been regained in the form of security against the conservative influence of tradition from within.

In one respect, however, this policy proved to be an unqualified loss to the Japanese. They established a caste-like status for their own nationals, hedged about with favoritism in employment, education, and business opportunity. This widened the gulf that the general severity of their rule had made between themselves and the Taiwanese. The enmity that they had earned among the population left them unprepared to bring it effectively into the last-minute industrial effort called forth by the war.[32]

We know from the Japanese themselves that the latter 1930's were for them years of exceptional new decisions and vigorous efforts at expansion. Official policy began to assert itself more strongly in matters of industrial planning and investment. The previous success in aiding farm production, which had given official circles some occasion for complacency, suddenly became inadequate. The government began at a strenuous pace to mobilize Taiwan's economy for serving the broader purposes of the Empire.

563 On very short notice they sought to transform Taiwan into a quasi-industrial appendage of Japan. The attempts to encourage new
• 463 aptitudes and incentives among Taiwanese are as interesting to con-
162 template, in terms of their implications for manpower, as were the attempts to prevent this very development. The two objectives are of course incompatible, but they were fostered side by side by the Japanese under the stress of preparing for war. Yet by 1940, at the peak of all this energy, the portion of the working population employed outside of agriculture was scarcely greater than at earlier census dates—still only one-third, and this figure includes an undetermined number of Japanese residents (see Table 11). Only a tiny fraction of the people in Taiwan had taken up factory employment, and many of these were also Japanese. We are left with the conclusion that Japanese colonial policies and indigenous tradition had combined to restrict social change within a small segment of the population. Japanese comprised most of this segment. New activities were spread thinly among Taiwanese, and left the remainder engaged in the same pursuits as their ancestors for countless generations.

[32] During the quickened prewar mobilization of their resources in Taiwan, despite the crowded condition of agriculture, Japanese businessmen actually complained of a *shortage* of labor in industry.

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TABLE 16

Taiwan: Total Males, and Males with Occupation Distributed by Occupation, at Census Dates, 1905 to 1930. Total All Groups, Taiwanese, Japanese, and Others*

Occupation	*1930*	*1920*	*1915*	*1905*
TOTAL MALES				
Occupied	1,369,877	1,180,842	1,155,777	1,081,667
Agr. and Forestry	864,884	761,047	776,181	731,479
Fishing (Excl. Salt)	27,709	25,858	26,911	29,465
Mining	18,345	17,240	9,741	6,843
Manufacturing	122,066	112,063	94,338	67,526
Commerce	148,847	97,726	93,171	83,815
Transportation	61,323	45,645	38,901	29,138
Gov't. and Prof.	69,644	48,018	34,737	30,566
Other	57,059	73,245	81,797	102,839
TAIWANESE MALES				
Occupied	1,265,185	1,100,297	1,088,199	1,045,667
Agr. and Forestry	860,613	757,917	772,437	731,102
Fishing (Excl. Salt)	25,916	24,261	26,150	29,260
Mining	16,970	15,629	8,319	5,203
Manufacturing	95,832	87,314	72,444	58,833
Commerce	129,372	83,600	79,823	77,060
Transportation	48,677	35,428	29,505	23,186
Gov't. and Prof.	34,260	23,811	19,177	18,923
Other	53,545	72,337	80,344	102,100
JAPANESE MALES				
Occupied	75,812	63,853	53,403	27,835
Agr. and Forestry	3,474	2,815	3,430	285
Fishing (Excl. Salt)	1,617	1,310	611	170
Mining	411	1,187	1,113	1,360
Manufacturing	13,796	17,530	16,482	5,739
Commerce	11,043	9,567	9,498	4,592
Transportation	8,360	7,466	6,273	3,871
Gov't. and Prof.	34,511	23,751	15,328	11,502
Other	2,600	227	668	296
OTHER MALES				
Occupied	28,880	16,629	14,169	8,165
Agr. and Forestry	797	315	312	86
Fishing (Excl. Salt)	176	280	150	35
Mining	964	424	309	260

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TABLE 16 (continued)

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Occupation	1930	1920	1915	1905
Manufacturing	12,438	7,209	5,410	2,954
Commerce	8,432	4,538	3,849	2,163
Transportation	4,286	2,727	3,122	2,081
Gov't. and Prof.	873	455	232	143
Other	914	681	785	443

* For comparability, Domestic servants are excluded at all dates; Ceramics workers are assigned to Manufacturing in 1905 and 1915; Salt workers are assigned to Manufacturing from Fishing in 1905, 1915, and 1920.

Sources: *Census of 1905, General Volume*, Table 25.
Census of 1915, Statistical Tables, Table 66.
Census of 1920, Descriptive Report, Appendix, Tables 51 and 52.
Census of 1930, Statistical Tables, Total Island, Tables 45 and 46.

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one can really say next to nothing about the employment of Taiwanese women. Henceforth, except for special purposes, we shall confine ourselves to using occupational data for men only.

Occupational Composition of the Male Labor Force

With the outline of total employment among males of different ages now established, it is only a matter of course to follow up by showing the occupational composition of the same group. This amounts to a close view of the data in Chapter III, considered for the moment apart from the differences in age structure and differences in the extent of employment in various ages.

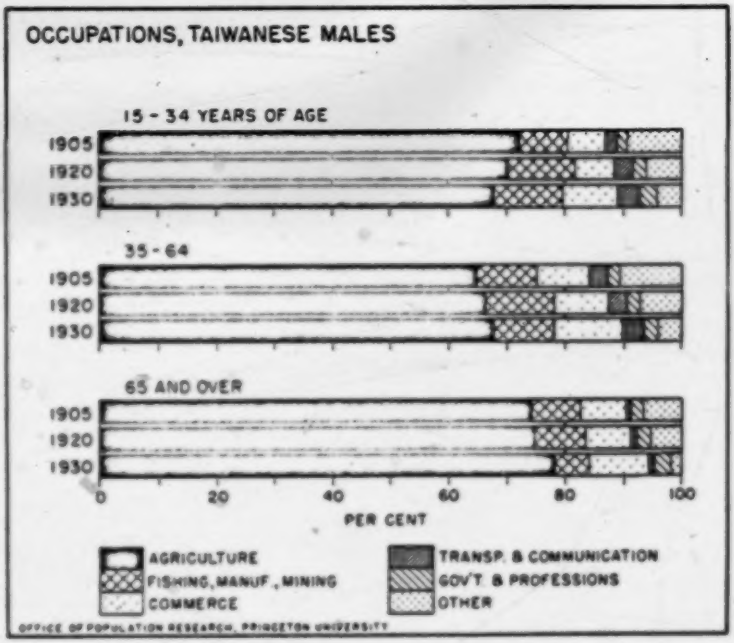

Fig. 12. Occupational Composition of Taiwanese, by Age, 1905-1930.

Even taken by separate age groups, Taiwanese men were performing the same types of work after 25 years of colonial rule as at the beginning. The situation can be efficiently summarized in Fig. 12, which bears out in some detail the evidence of the last chapter. As regards the whole of the male working population, the stability existing from one time to another was not exaggerated in Chapter III.

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162 463 Broad features like these were reduplicated in a degree that overshadows all accompanying trends—in this case down to the disposition of manpower at all working ages at successive dates. Fig. 12 shows clearly that this society had, up to 1930, put new generations to work along lines very similar to those of the old.

That these proportions should remain almost constant through time implies great stability of the agrarian social order. But this evidence is of a nature that best illustrates the more prominent relationships, and does not give much weight to the shifts that did occur. Farming activities again appear predominant—as in fact they were—to the point of eclipsing the trends in growth of other types of employment. These can be brought out only through the use of more responsive measures.

Moreover, even this degree of stability does not mean that individuals could not have moved from one occupation to another. A circulatory movement of individuals is fully consistent with the data of Fig. 12, provided that the avenues remained unchanging. It is not only possible but implied by the data themselves. In Fig. 12 the swelling and contracting of employment among different occupations from lower to higher age strata of course represent only the positions of people in these ages at one time; but a pattern that is repeated so closely in three successive censuses can hardly reflect just the events of a short period. Over such a long span of time, unless the various occupations lost their members through widely different rates of death and retirement, this pattern could come about only from losing them through movement to other occupations.

If part of this movement is a matter of such circulation, it demonstrates all the more strongly the part of traditional institutions in maintaining the society against the forces of change. Movement of this type will not be readily distinguished from shifts as a result of actual change, when the two are later analyzed apart from the composition of the labor force. It is therefore important to make clear at this point that whatever the extent of such shifts (as yet undisclosed by these techniques), there must always have been a prominent element of circulation involved.

Movement between Occupations

463 The data of Fig. 12 are poorly adapted to illustrate the nature of occupational movements in the population. Agricultural employment is preponderant, and masks the shifts that individuals actually

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made between the classes of occupations that are listed. All movements in other lines of work hence appear small because they were absorbed in the numbers of all occupied persons, instead of being compared with the numbers that had been in each line before.

Some moves of occupation always occur in conformity with traditional usages—like entry into the labor force itself, moving from one position to another with gradual acquisition of skill, the advancement of successful men and the decline of failures, and eventual retirement from active work. Shifts such as these are found even among the peoples who are the most bound by custom, and do not depend on the existence of new social conditions. The problem in this section is to develop a more sensitive procedure to detect some of these transfers.

A more direct approach to this "hidden" movement is to locate persons in their later occupational careers after they once have started. Comparing the population in the *same* interval of age at two successive points of time meant that we were dealing with different people each time. Their selection of occupations might have been the same at both dates, since one of the functions of tradition is to perpetuate a given system of choice in new generations; but this type of comparison might not reveal what happened to any of them after the first observation was made. Uncovering this subsequent behavior rests on finding the same persons at a later date, which means also at different ages.

Age, as regarded by demographers, is one of the few characteristics carried by people that are predictable indefinitely into the future. Those who were in age 20 in 1920 will be exactly age 30 at the same time of the year in 1930. Accordingly, those persons who reported an occupation in 1920, and survived, can be located in an age interval exactly ten years higher in 1930. By the simple device of assembling the appropriate pair of figures and removing those who died during the interval, occupied persons in any age group can easily be compared with their survivors at the later date. One can then find whether, as a group, they still remained occupied, and to what extent.

The same basic reasoning applies as between one type of employment and another; the survivors of a group of farmers at one time, for example, can be compared with the number actually found at another. The difference in this instance would represent the net gain or loss to these farmers in relation to the remainder of the economy,

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463 including entries, retirements, and transfers to other classes of occupations.

As in all formal problems in which one seeks to determine the influence of some factors while removing others, this procedure requires that certain conditions be met. First of all, the population should be one in which some significance may be attached to "net movement" between occupations. In an industrial society, occupational transfers are frequent: over a period of several years an individual may make multiple moves, or certain occupations may be subject to many entries and exits among members of a given age group. If widespread, either of these types of event would make an estimate of net change meaningless, because they would distort it as an indicator of the true number of moves. In Taiwan, with foreknowledge that few people changed occupations after first adopting one, it is safe to assume that net movement is a good approximation to total movement across broad classes of occupations.

Second, it should almost go without saying that occupational categories used in this comparison should be comparable, if not identical, at the two points of time. This condition is moderately well satisfied among the different occupations as they are arranged here.[16]

Next, the risks of death at each age should, for perfect accuracy, be equal from one occupational group to another. It is unlikely that this condition could be strictly fulfilled in any population. In Taiwan, many of the pursuits that were conducted in cities, for example, were probably more healthful than farming, for the hazards of city life were not greater than those in the countryside. Here, the mortality estimates that are used must be derived from the average experience among all Taiwanese males. Since no allowance can be made for variations between different occupations, some unknown biases probably enter the computations from this source.

Age reporting must be very accurate in order to give assurance that the persons being compared are the same. By defining age in terms of the date of birth, the censuses of Taiwan developed age reporting that was more accurate and consistent than in most Western countries. While between 1920 and 1930 there was a slight change in

[16] With one exception, which will be pointed out below. There must also be reason to believe that the activities comprising a given occupation have themselves not greatly changed over the period. This is one condition over which the investigator has no control whatever. We can simply assume for Taiwan that it is met reasonably well for the period in question.

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the technique of assigning age, it was systematic through all ages and cannot create bias either by age or by occupation.

Finally, because mortality estimates are usually applied to a population in the form of survival ratios, persons should be distributed evenly within the intervals of age that are used. When these intervals are broad, there is greater chance of introducing some inaccuracy due to uneven grouping within them, since mortality is known to vary with age. The intervals used for this manipulation all spanned 5 years of age, and some element of control is therefore lacking. This is especially true for occupied persons aged 15 to 19, the only group that departed greatly in internal composition from the general population.[17] There is no reason to believe that the imprecision arising from this source should create any appreciable bias by occupation. Even where certain occupations may have distinctive age patterns of recruitment or retirement that give them age groups with unusual internal structure (e.g., farmers aged 15 to 19), the bias is very small.[18]

These conditions would have to be met in order to apply the procedure we have outlined to make estimates that are precise in number. But the procedure itself is only an approximation. Nonfulfillment of any one of the conditions would not necessarily be serious, and could be foreseen and minimized by some arbitrary correction. No allowance can be made for the interaction of all of them, and for this reason some caution is appropriate in interpreting the following results.

With these qualifications, the way is clear to construct a set of comparisons between 1920 and 1930 according to the outline above. We shall estimate the balance of men entering and leaving ("retiring" from) the working force by subtracting the survivors of those who were already at work in 1920 from those who were found with employment in 1930. (The survivors from 1920 are advanced ten years of age: all ages given in the following tables represent ages achieved by 1930.) In the same way, we shall estimate the balance of

[17] The mortality estimates were formed by life table ratios of L_{x+10}/L_x. For convenience, and because it made no perceptible difference in the results, values were used for only the middle year of age in each 5-year interval. The values employed were taken from tables for actual cohorts, developed in connection with a later part of this study. They thus represent the actual mortality experience of the middle age cohort in each 5-year interval.

[18] Actually, to avoid *bias* by occupation from this source, the condition may be relaxed from that of *even* internal age distributions that are the same among occupations within a given five-year interval. This problem is therefore less serious than it would first appear to be.

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movement into or exits from a given occupational class by subtracting the survivors of those at work in that occupation in 1920 from those found at work in that occupation in 1930. The results of these operations can be designated as "gain" or "loss"; the ratios of these numbers to the calculated survivors as "per cent gained" or "per cent lost."[19]

Drawing upon the range of ages from 15 to 64 carries the comparison through the span of greatest employment. The figures furnish in cross-section a picture of occupational movement in any selected categories with respect to all the remainder. While a cross-section, it is not an instantaneous view. Each entry in the table is based on the experience over a 10-year period for the given age group. Hence the number of age groups that can be usefully included is restricted by the length of this period. Older men have been dropped at age 70, which means that this last group was aged 55-59 in 1920. Similarly, the youngest age group is that of men 25-29, since in 1920 they were only 15-19, and too few of the boys under age 15 claimed occupations in 1920 for them to be of great interest.[20]

The *differences* between survivors and actual workers in 1930, and the ratios in which they stand to the numbers of survivors, are the most useful forms for interpreting these estimates. In Fig. 13 these are shown graphically in the arbitrary categories of "gain" or "loss," as explained above. The bar diagram in Fig. 13 shows the actual numbers of net entries and withdrawals, during the decade 1920-1930, of all occupations taken together. It is of some special interest in establishing the shape of these movements at different ages throughout the male labor force, and as a standard against which to compare the patterns for separate occupational groups.

More important here is the second part of Fig. 13, giving the *percentages* of the survivors of 1920 workers who had changed their occupational status between 1920 and 1930. Along the middle segment of the age scale, these percentages are practically zero (ages 30-44, covering the actual age span of 20-44). The working force as a whole was almost stationary over this entire interval, consisting of those persons who were already employed, with few entrants and few withdrawals in relation to the numbers who were already there. Over this span it is not likely that many entries and exits occurred

[19] Where entries are still taking place, these are not true proportions: the numerator is not included in the denominator.

[20] By a special arrangement, it will be possible somewhat later to deal more adequately with the males 15-19 and to include the group 10-14.

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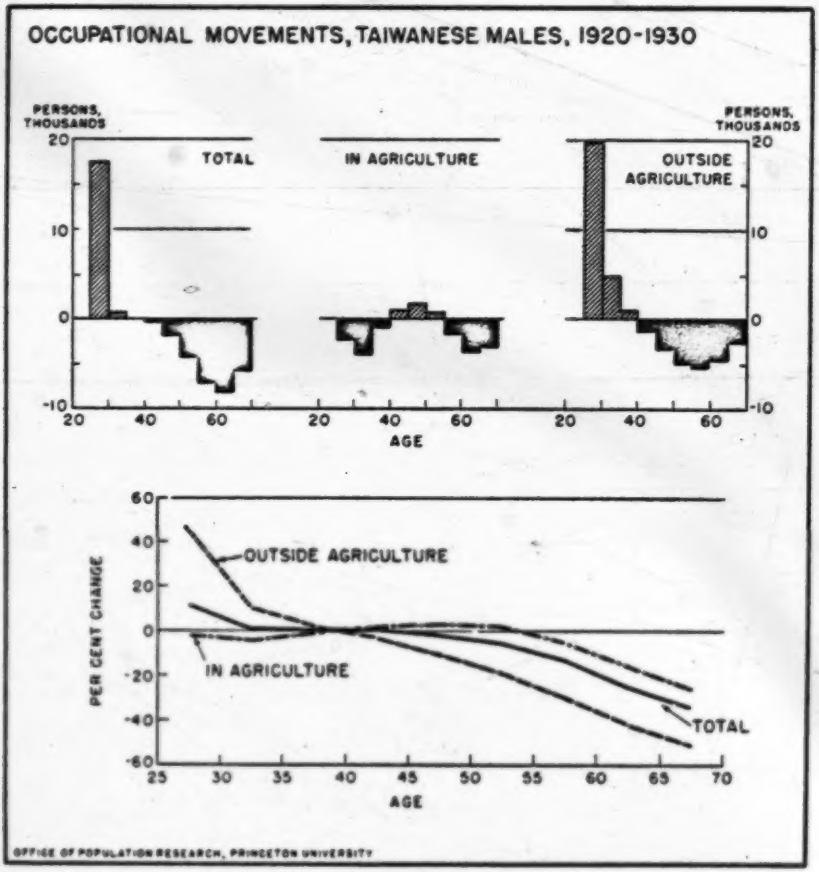

Fig. 13. Occupational Movement of Taiwanese Males, 1920-1930. Net "Gain" or "Loss" Inside and Outside of Agriculture, and in the Total Labor Force.

so as to balance each other; clearly few men began or left off work completely (except through death) in these ages, and what movement there was must have been limited to transfers from one occupation to another.

It was established above (Table 17) that the maximum degree of employment was reached by age 30. It follows from these data that in this decade almost everyone who was likely in his life-time to acquire an occupation had already done so at age 20.[21] By similar 464

[21] A small part of this pattern may possibly be a peculiarity of the unusual decade involved. The census of 1930 was taken during a world depression, which had a brief but severe effect in Taiwan. There are hints that this was reflected slightly in the pro-

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464 reasoning, 90 per cent of all men who were going to become employed by 1930 must have held occupations already between ages 15-19 in 1920: since only 10 per cent of the employed survivors to this group had begun their employment later than 1920, though by 1930, at ages 25-29, the ones with occupations already accounted for almost all the population in that age.

One takes for granted that the boundary lines between being occupied or not were somewhat indistinct among young men entering and old men leaving the labor force. Even so, Fig. 13 gives a picture of the age incidence of retirement just as interesting as its evidence for the stability of employment through earlier adult ages. Starting with the men who reached ages 45-49 in 1930, the rate of exits from occupations over the preceding 10 years rose sharply with advancing age. Of the Taiwanese aged 55-59 in 1920, more than half the survivors had retired before age 70. Earlier ages exhibit what appears to be a gradual progression toward this rate of retirement. This would hold true even if we assume that the world depression in 1930 forced older men out of the labor force more rapidly than in normal times. The pattern would remain the same; only its age spacing would change.

These findings tend to conform to what the earlier chapters would lead one to expect. They do not provide much new information (except by way of verification of the procedure that is being used). Of greater significance are the patterns that hold among the occupations that make up the labor force. This is shown in Fig. 13 where the bars also represent the numbers of Taiwanese males "gained" or "lost" in 1930 as compared with 1920.

463 Agriculture is the most striking of these. There was an actual loss of several thousand young adult men who had been farmers between the ages of 15 and 30 in 1920. This does not imply that agriculture was failing to recruit new farmers. The losses in part reflect the fact that males undertook occupations at younger ages (at least in their census returns) in farming than in other pursuits. Agriculture gained many of its entrants *before* age 25 (the youngest age shown in these charts); by age 25 it may or may not have continued to re-

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portions of older men claiming some occupation in 1930. Despite the tendency of the "customary occupation" census concept to resist inroads of short-term unemployment, these proportions are slightly lower in advanced ages than those in previous censuses. Even so, the "true" figure might make the proposition above even stronger, by revealing "normal" retirement to have been slower than Fig. 13 suggests.

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cruit new workers—something that this procedure can never reveal—but was in any case exporting enough young men to the rest of the economy to outweigh these and create a net loss of workers.

Though substantial in the total number of workers involved in net movements among other occupations,[22] this rural exodus fades into insignificance when related to the number of men in these lower ages who remained in agriculture (Fig. 12). Obviously the standard against which to measure these events has much to do with assessing their importance. Losses of young men from agriculture supplied a fair share of all the entrants to other occupations in these ages. But this movement was not enough to make more than a slight inroad in the store of manpower for farming—and was more than offset by recruitments with agriculture between the ages 10-14 and 20-24. In this age interval, agriculture absorbed more than half of the total entrants to all occupations from 1920 to 1930.

If among the survivors of, let us say, all males 15-19 agriculture had merely matched its own recruitment to the scale of the total labor force (i.e., that of Fig. 12, above), two-thirds of the total entrants to the labor force in this age would have become farmers instead of entering other occupations as in fact they did.

No less important is the stream of older men—40 to 54 in 1930—who were entering agriculture. Though numerically not a large group, they reveal a degree of movement at least as great as that of the persons who abandoned farming at younger ages.[23] These were the ages in which "retirements" from other occupations were beginning. If we assume that the exodus of young farmers was a "normal" occurrence (and some of the earlier census data suggest this is so), it is almost certain that these older recruits to agriculture were reentrants or "returnees" who had previously left.

The figures again reveal only *net* movement; if some farmers of these ages were "retiring" from agriculture, then returnees must have been more numerous than the actual figures here indicate. Evidently agriculture not only supplied young men to other parts of the economy, but reclaimed older workers that other occupations

[22] It needs to be emphasized frequently that the procedure we are following does not give an exact estimate of the total number of men who left agriculture for other work, even in the decade in question. Some of the actual exits were probably balanced by new recruits, though the number at these ages was undoubtedly smaller for agriculture than any other occupation.

[23] I.e., in view of the fact that not many men were alive in these ages, these entrants bear a larger proportion to the total number of farmers of the same age. Their significance in this respect can be read from Fig. 13.

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463 had discarded. Re-entry to agriculture was thus for some men an alternative to ceasing work altogether.

The data for other occupational groups can best be examined in Fig. 14. The bar diagrams show the amounts of net gain or loss, which should be compared with the total amount in Fig. 13. The chart of percentages gain or loss gives the corresponding view of movement for each, taking into account at each age the number of persons who were already there. The first indicates the numbers of people involved; the second abstracts from this.

Due to changes in census practice, certain of the chief occupational classes must be lumped together so as to be comparable between 1920 and 1930. These consolidations make it impossible to say very much about activities in the non-agricultural portion of the economy that is not already implied by the relation of agricultural employment to all of them. This sector can be split into three main parts to compare their uses of manpower: industry and commerce (also including fishing and mining), professional positions and public administration, and transport and communications. Though not of the same size, all three of these classes absorbed and released workers in a similar age pattern, and all were distinct from agriculture and from the total labor force (see Fig. 12 and Fig. 13). All were most conspicuously users of youth, and taken together they obviously depended on people already working in agriculture for recruits. To some extent all, but especially transport and communications, tended to cast off older workers sooner than agriculture.

Evidently workers in transportation and in professional fields or the administrative bureaucracy were recruited more exclusively while very young. This is not surprising, in view of the fact that most Taiwanese held only junior positions in these fields, and frequently positions where some specific technical training put youth at a premium (for example, drivers of motor vehicles, railroad trainmen, school teachers, telegraph workers, clerks).[24]

Finally, a few words are required about the group of "other occupations." The steady "loss" of persons from this category is a fixed feature of Taiwan's whole succession of occupational censuses. Under the assumptions applied in the rest of the occupations, Fig. 14 would appear to indicate a flood of departures, in all ages, from these mis-

[24] However, transportation workers also included a number of pullers of rickshas and other carts, who would likewise tend to enter this employment while young, but for different reasons.

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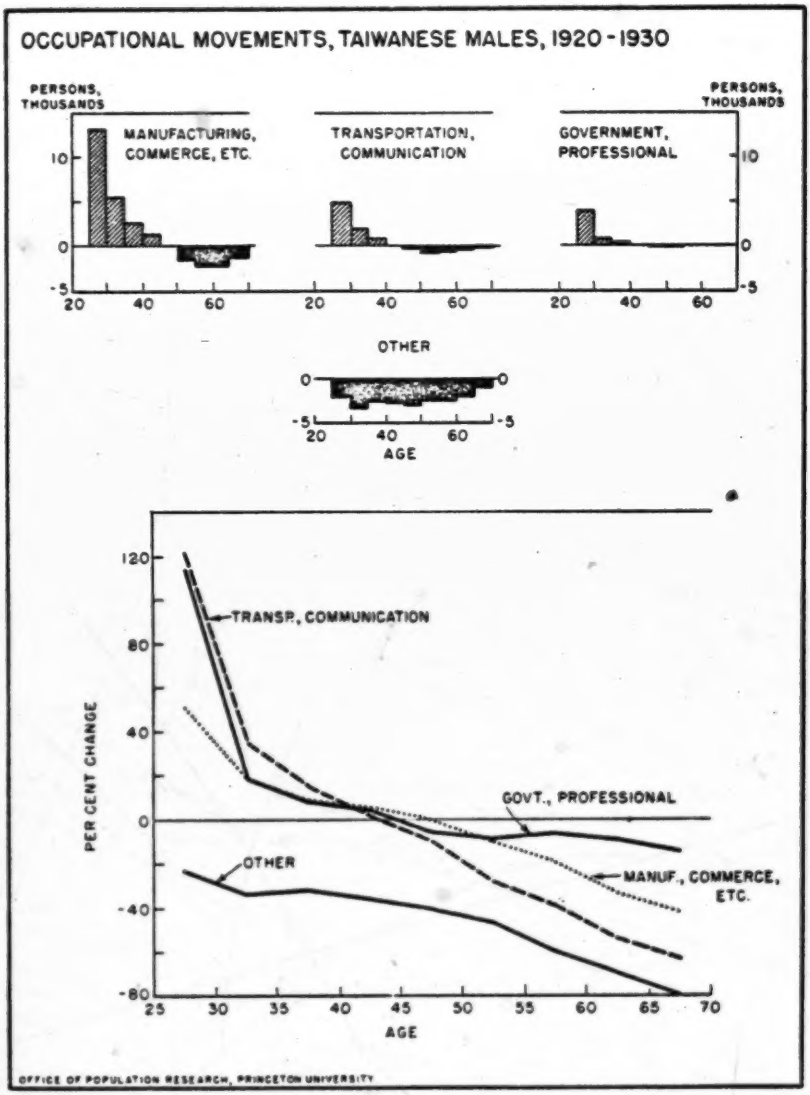

Fig. 14. Occupational Movement of Taiwanese Males, 1920-1930. Net "Gain" or "Loss" in the Occupations Outside of Agriculture.

cellaneous activities. More reasonably, it implies that most of these workers were shifted to more specific occupations merely by refinements of classification in 1930. Accordingly, these reclassified per-

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sons must have "entered" the remaining occupations. The data for "other occupations" are by themselves useless. Here they serve as an additional reminder that the estimates of occupational movement in this section are inexact, and deserve to be treated with caution.[25]

Using only the figures for males who held occupations, it has not been worth while to carry out these procedures with those who fell below age 25 in 1930 (age 15 in 1920). It is formally possible to estimate the survivors after a decade to employed boys aged 10-14 in 1920, probably to a fine degree of accuracy. But so few had acquired occupations by that age, outside of agriculture, that the results would have been meaningless as a basis for deducing any kinds of movements.

Yet this neglected age span—between age 10 and age 24—is highly significant. It is here that most males initially entered the labor force. At some point between these limits most Taiwanese undertook their first regular adult employment, exercising whatever choice was available to them. The nature of a person's work for many years in the future tended to be fixed by this initial occupation. This stage in the occupational careers of most males has a special import in an agrarian society. Most of the attitudes and skills pertinent to livelihood are imparted during childhood in the household—occupations, in effect, tend to be inherited. Knowing the sorts of households where boys spend their childhood, it should be a test of whether they were adopted in accordance with tradition if we are able to predict their subsequent occupations.

Taiwan's population statistics are not without resources pertinent to this question. In the census of 1920, following the practice of previous years, the census authorities did more than classify by their type of work just the persons who claimed an occupation. Each census schedule included a space for everyone not reporting an occupation to be entered as "dependent" or "without occupation." The "dependents" made up practically all of this residual group. They were taken to be those who performed minor household work,

[25] One can almost rule out the possibility that errors from this source have spuriously created the patterns derived from the data. In the first place, the men who have been reclassified from "other occupations" were not concentrated in any special age range, but rather spread more or less evenly over the whole span of working ages. Secondly, it is most likely that these persons were re-allocated to the *non-agricultural* sector of the labor force, and not within farming itself. They could in that case not affect the most important comparison of all—the differences between agriculture and the rest of the economy.

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excluding ordinary domestic servants. Tables were published assigning all persons in this group to the occupation on which they depended—in most cases, that of the household head.

One such table, with this material cross-tabulated with age, can be used to supplement the data for men with full-fledged occupations. Here the "dependent" category amounts to a table of almost all the population outside those actually reporting occupations, classified by the type of work that they performed in the household. Virtually all of them (99.6 per cent) were members of the family of the household head. In other words, for young boys this table represents a division roughly along the lines of economic activity that supported their families.

All except a small fraction of Taiwanese males attained some occupation sooner or later during adulthood. Most of those who were recorded as dependents at the pre-adult ages of 10-14 and 15-19 would soon pass into some regular occupational group, and so were not far from such a transition at the time they were enumerated. This peculiarity makes it possible to treat the data as an approximate distribution of pre-labor force males according to the source of livelihood of their families. From this information we can count virtually all the males in these ages who would ever enter an occupation in the sense we ascribe to the term here, classified by the type of pre-occupational work they performed.

The same operations that were applied earlier in this section can be repeated with the male population thus tabulated (occupied and dependents combined), arranged by age. The results are plotted in Fig. 15 for the decade 1920-1930. No comparable tables of dependents were published after 1920. Hence, the survivors to occupied males plus dependent males of 1920, in each age interval beginning this time with 10-14, have been compared simply with men who had an occupation in 1930.

Fig. 15 supplements the findings of Figs. 13 and 14 by incorporating the group of males that reached ages 20-24 in 1930. It adds nothing new to the results at older ages. In fact, a small number of "dependents" are found among males even in adult age groups—a few men always remained in this status. In the "working ages," their proportion to all males was very slight—as low as two per cent. The survivors to workers and dependents taken together, therefore, were slightly more than the workers found in 1930. Fig. 15 is subject to

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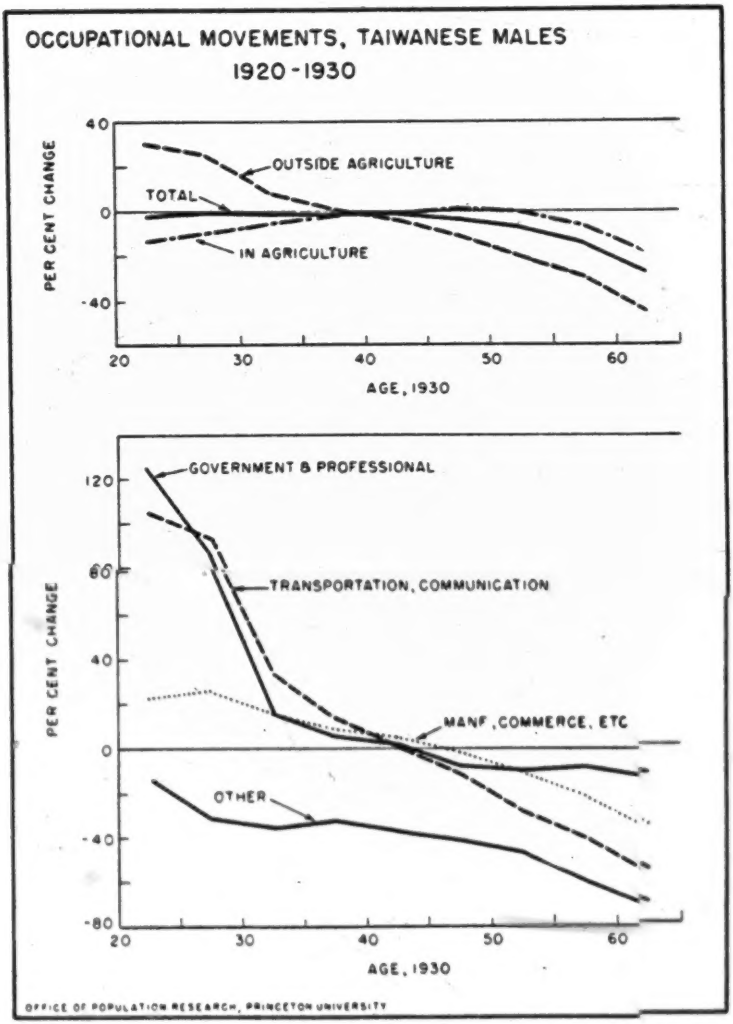

Fig. 15. Occupational Movement and "Inheritance" of Occupations by Taiwanese, 1920-1930. Net Movement between Occupations, and Movement into Occupations by Pre-Labor Force Males.

a small amount of exaggeration in the "loss" at all adult ages from this source.

For the total male labor force, the ratios of gain and loss over the decade 1920-1930 to survivors from 1920—by age in 1930—are connected in Fig. 15 by one continuous line. These ratios take into

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account the survivors of prospective as well as actual members of the labor force, starting with age 10 in 1920. This provision depicts a total occupational system that was self-sufficient with respect to the supply of young entrants during the decade 1920-1930. In the present set of data, next to no one was recruited into employment from outside. Therefore, deviations from this self-sufficiency in any occupational class implies some shifting—some failure to "inherit" occupations—and should also reveal the direction of the movement.

If the assumptions are correct, farming households apparently supplied a greater proportion of their males in these earlier ages to the rest of the labor force than did agricultural employment at later ages according to Fig. 13. Since boys in young ages were more numerous than men in their twenties, the *numbers* involved were much larger. Industry and commerce (also including fishing and mining) must have absorbed most of the young males who left agricultural households for other work. But they seem to have supplied an even greater number of their young workers over this period from their own families.

As in Fig. 13, the fields of transport and communications, and professional occupations and public administration, stand out as borrowers of youth from other families. Extending this test to younger ages only accentuates their debtor position in gaining manpower. This gain is evidence that these fields were expanding, but expanding by a very distinctive mode of recruitment. As before, "other occupations" indicate merely that the classification was inconsistent through time. But since the effect of this shortcoming is less among the ages specially discussed here, it need be of less concern than before.

Census data in this form have thus given a comprehensive picture of the principal flows of persons moving from one occupation to another in this decade. Even though the permanent result of the movement (in terms of changing the age-specific occupational structure of the population) was very small, these materials show that changes of occupation were actually more numerous and followed well-defined patterns. In particular, agriculture had a double role. It was the outstanding source of supply of young men in other occupations; and it was a pursuit to which many men returned when they were no longer youthful. From this we may draw the inference that some diversification of livelihood can be absorbed by an agrarian society with a minimum of lasting effect: rural agriculture "lends" workers

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463 to the rest of the economy in their young adulthood, and takes them back after their years of greatest contribution are past.

Manpower and Age Composition of the Population

464 Unfortunately for the conclusions of this chapter and the previous one, no population data on employment of any consequence have been published for Taiwan since the census of 1930. All that exist for the very interesting period leading up to World War II are the economic statistics reviewed in Chapter II (of quality far inferior to census figures), undisciplined travel accounts of a few foreigners, and the quasi-official reports of the Japanese themselves—half secretive and half boastful.

For this reason there is special value in observing the size of the population of working ages, from which the labor force is drawn, and its development as a component of the total population of Taiwanese. Requiring only detailed information by age and sex, this important measure can be derived from more recent census materials which were not published with elaborate occupational tables. It can be carried up to 1940 with exact figures, and extended beyond this date by the use of special assumptions.

All of the foregoing tables in this chapter have been arranged so as to represent occupational behavior of Taiwanese within certain age strata. This was a device for excluding temporarily two closely related aspects of labor force study: the age structure of the population at any one time, and trends in the size of different age strata. Insofar as these factors help to fix the supply of labor and the amount of dependency in a society, they exert a profound and subtle influence on economic activities.

At a given moment, among male Taiwanese some form of occupation was almost universal in most of the span between ages 15 and 60. Narrowing attention to the men between ages 15 and 64, as the "population of working ages"—to follow a common convention—will obviously include all ages of extensive employment. Not many boys younger than age 15 held occupations, and few people survived at all after age 65 (not all of these remaining occupied). Therefore, the group of men aged 15-64 also contained practically all working males.

Viewed as representing their region in the world, the Taiwanese are not one of the "major" populations of Asia. Consequently, we are free to analyze their composition without introducing the idea

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hsiung and Chiayi had not a single ward with as high as 90 per cent of its population Japanese. For Taiwanese, on the other hand, Taipei consisted neither more nor less of mixed wards than the other cities. In all, at least nine-tenths of the Taiwanese population of every city stayed in districts in which less than a majority of the inhabitants were Japanese.

The Taiwanese in Cities

Of all Taiwanese, so few went to cities that one is prompted to ask whether there were not some special factors present restricting the size of this migration. The effects of such a selective process over many years should produce differences in the characteristics of persons living in cities and of those living outside.

Since few if any newcomers had an opportunity to take up agriculture in the cities, a prominent feature of cityward migration was a movement to new work. To the extent that it was, one would expect that the migrants were the types of persons who usually undertook new occupations in Taiwan—for example, men rather than women, primarily in the ages of young adulthood. If the migrant population had been limited to these categories, cities with large proportions of migrants in their populations must have had disproportionate numbers of young men as compared with the rest of the island. Such a tendency has characterized rapid urbanization elsewhere.

In addition, cities frequently offer opportunities for employment that are considered superior to those found in the countryside. This is especially true of many agrarian societies, where rural poverty sometimes reaches extremes that make the meanest of urban jobs seem attractive. Where such conditions exist, movement to cities very often serves to drain off large numbers of men in young working ages who have lost or overcome their attachment to farming.

In 1935, these effects of age and sex selection were hardly perceptible in Taiwan's urban population taken as a whole. The age composition of all their males combined was nearly the same as the rural population (Table 29). Surprisingly, urban females likewise had almost the same age structure as those outside of cities. Hence, there could have been no sweeping dislocation of persons of different age and sex groups as a result of urbanization in Taiwan.

There are special circumstances in which it is not hard to imagine some movement of single individuals in an agrarian society; this has

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TABLE 31

INTER-CITY DIFFERENCES IN OCCUPATIONAL COMPOSITION

Per Cent of Occupied Males in Selected Types of Occupation in Each of Seven Municipalities, 1930
All Nationality Groups

Cities	*Manufacturing*	*Commerce*	*Transportation*	*Government*	*Agriculture*	*Other Occupations*
Taipei	26	30	10	18	6	10
Chilung	16	21	23	9	4	27
Hsinchu	21	25	10	13	20	11
Taichung	23	28	10	19	14	6
Tainan	28	28	13	18	5	8
Chiayi	22	29	10	12	20	7
Kaohsiung	24	19	20	11	13	13
Total Seven Cities	24	27	13	15	9	12

Source: *Census of 1930, Statistical Tables,* Table 40.

divisions from rural conditions. Nevertheless, large blocs of Taiwan's urban population still supported themselves by farming. Only three Municipalities in 1930 had as few as one-twentieth of their working males engaged in agriculture. It is small wonder that these cities had failed to show symptoms of advanced urbanism in other respects.

Other types of employment in these cities also had certain special features. Government administration in Taipei, transshipping of seaport cargoes in Chilung and Kaohsiung, and sugar processing in Taichung and Tainan were reflected as important activities in their share of all male employment. These figures, pertaining to 1930, reveal nothing of the intensified industrial activity in these cities in the succeeding decade. They are the only available indication in demographic terms of the peculiarities of individual cities. In any event, we are less interested in these peculiar elements than in the relations between types of employment and urban settlement among Taiwanese. Since Table 31 does not show Taiwanese separately, it is affected by differences in the proportions of Japanese and in their work among the various cities. Hence the information, while illuminating, is less useful than one might wish.

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More information is available for the population of all seven cities combined. By means of some estimation, we can find the occupational

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TABLE 32

OCCUPATIONAL COMPOSITION IN CITIES OF TAIWAN BY ETHNIC GROUP, 1930*

Distribution of Occupied Males by Occupation and Nationality

	Taiwanese	*Japanese*	*Other Nationalities*
A. Per Cents by Occupation			
Agriculture	13.1	0.9	0.2
Fishing	2.1	2.2	0.5
Mining	2.1	0.2	1.1
Manufacturing	22.8	18.6	43.8
Commerce	29.1	19.6	27.8
Transportation	13.7	10.2	19.1
Govt. & Prof.	6.4	44.4	3.3
Other	10.7	3.9	4.2
Total Occupied	100.0	100.0	100.0
Per Cent Occupied of All Males	54.4	58.0	76.8
B. Per Cents by Ethnic Group			
Agriculture	97.5	2.4	0.1
Fishing	70.8	27.2	2.0
Mining	89.9	3.8	6.3
Manufacturing	65.0	19.0	16.0
Commerce	73.2	17.8	9.0
Transportation	69.1	18.5	12.4
Govt. & Prof.	28.2	70.0	1.8
Other	84.7	11.1	4.2
Total Occupied	67.4	24.0	8.6

* Includes the seven cities of Municipal rank in 1930.
Source: Estimated from *Census of 1930, Statistical Tables*, Table 39.

composition of each ethnic group separately (Table 32).[21] Taking account only of males with occupation, these data represent the urban Taiwanese at less of a disadvantage next to the Japanese than was true over the entire island. Of course, one must remember that Taiwanese (and Mainland Chinese) in the same type of work with Jap-

[21] The necessity to "estimate" arises because occupational data *by ethnic groups* were given in "Occupation" units (i.e., persons with a principal occupation plus persons with a secondary occupation), and counted some persons twice. In the tables shown here, the ethnic composition of "Occupations" has been applied to the total of persons (males) in each occupation.

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162 anese usually had subordinate positions. Nevertheless, it seems con-
463 clusive that by moving into cities Taiwanese were able to narrow
563 the gap that separated their forms of livelihood from those of the Japanese.

The ethnic composition of occupied persons (appended to Table 32) indicates how the differences in occupational structure among these ethnic groups were weighted in the urban population. Taiwanese, of course, predominated in all lines except in government service and professional activities. Keeping these coveted positions in their own hands was one of the ways in which Japanese were able to live side by side with the rest of the population and avoid the pressure of competition.

Chinese nationals ("Other Nationalities" in Table 32) in these cities also appeared in a few types of work far more than in the working population as a whole. Their specialties were of an opposite kind: many worked as laborers in small manufacturing enterprises and as longshoremen, accounting for their large share of all "Manufacturing" and "Transportation" workers.

TABLE 33

OCCUPATIONAL DISTRIBUTION OF TAIWANESE MALES REPORTING AN OCCUPATION, INSIDE AND OUTSIDE MAJOR CITIES, 1905, 1920, 1930

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	1905		1920		1930	
	*Inside**	*Outside*	*Inside*†	*Outside*	*Inside*‡	*Outside*
Agriculture	2.3	72.1	13.2	71.9	13.1	74.0
Fishing	.6	2.9	1.2	2.3	2.1	2.0
Mining	28.4	5.4	1.1	1.4	2.1	1.3
Manufacturing			27.1	6.9	22.8	5.9
Commerce	37.7	6.4	28.9	6.4	29.1	8.2
Transportation	10.4	1.9	11.2	2.8	13.7	2.8
Govt. & Prof.	5.6	1.7	6.7	1.9	6.4	2.3
Other	15.0	9.6	10.6	6.4	10.7	3.5
Total Occup.	100.0	100.0	100.0	100.0	100.0	100.0

* Comprises the cities of Taipei, Taichung, and Tainan. The boundaries for Taipei in this tabulation were smaller than the city as subsequently organized.

† Cities of Taipei, Taichung, and Tainan, with the same boundaries used at later census dates.

‡ Cities of Taipei, Chilung [illegible], Taichung, Tainan, Chiayi, Kaohsiung.

Sources: *Census of 1905, Detailed Tables, Prefectural Volume*, Table 17.
Census of 1920, Prefectural Volume, Table 16.
Census of 1930, Statistical Tables, Table 39.

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MIGRATION AND THE GROWTH OF CITIES

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Finally, the role of migration in social change can be clear only if we can make comparisons at different points of time. Occupational profiles of city and non-city working males are available in not quite the same form for three separate dates. The census reports of 1905 and 1920 each included a table of occupied persons in three cities (Taipei, Taichung and Tainan). Placed next to the corresponding figures in 1930 (Table 33), these early data are reasonably similar in all three years.

Not all of the same cities are included, and so the occupational distributions for cities alone do not stand close comparison with each other. One's attention is therefore drawn to the structure of occupations *outside* the cities involved. In Table 33, it appears that by removing the small group of urban working persons from the total population of Taiwanese, one in effect also removes most of the diversification in employment over time, and consequently a large share of the social changes that occurred in Taiwan. In other words, the new activities that resulted from Japanese occupation remained sealed up in the few urban centers. The Taiwanese population outside of these cities remained essentially as agrarian as at the beginning of Japanese rule.[22]

Even if as centers of innovation we did not consider Taiwan's cities important, a study of migration would have made them so. Permanent migration was rare among Taiwanese; but of those who migrated, a large proportion went to a few cities. Even though these cities were not growing fast enough to enlarge their share of all Taiwanese very substantially, they did the greatest part in redistributing the population.

The real significance of these shifts of residence arose from the fact that they were also shifts in activities. For the most part withdrawal from agriculture meant exit from rural communities. People departed every year to large towns or cities that had some provision for more diverse kinds of livelihood. It was primarily in these centers that the Japanese fostered modern enterprises and developed a need for labor. Migration was one of the forms of the response to

[22] Obviously, since more cities are represented in the 1930 figures, the figures themselves are biased and there is some chance of bias in the conclusion that we have drawn. By taking occupied men of all ethnic groups, the same comparison can be made based on the *same three cities* at all dates. This is possible because the table for all ethnic groups was published for each city separately (cf. Table 31, above). The result is the same, in that the data indicate no change in occupational structure outside even these three cities.

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166 these new opportunities for employment. It steadily brought more
162 Taiwanese into contact with the modern side of the Japanese economic program.

Yet even though movement to the cities did widen the horizons of
166 a few Taiwanese, it was surrounded by circumstances that tended to minimize this effect. The familial character of the migration made
178 the break between country and city less sharp than it might have been. Removal to a city did not expose migrants very readily to whatever new influences were there. These were all dominated by Japanese, who kept most of their innovations to themselves and erected barriers against free intercourse with the rest of the population.

Urban growth therefore did not promote general social change among the Taiwanese. It removed into cities those who were to feel the strongest effects of contact with these alien elements. Migration thus helped to absorb the modern aspects of economic development so that they did not intrude into the affairs of rural communities.

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592 554 government policy could have been felt in this sphere, and so it must have been a pattern of long standing among the Taiwanese. Though there is no way of knowing how much the variation amounted to between individual families, between various sources of livelihood it was of a very restricted nature. One of the principal features of the Chinese social order, however, is that there has been very little variation in the general notions that people in different stations hold about what forms of conduct are *desirable*—the standards of behavior within one's family, or with members of related families, have been remarkably similar from group to group, whether or not these ideals are completely fulfilled in fact. It has also been characteristic of this system through many historic periods that it has not given rise to rigid status and class distinctions that became hereditary and remained fixed over time. The commonest sources of prestige have been associated with symbols that leave some room for personal achievements, and not simply privileged birth, in their attainment—the adoption of genteel as apart from vulgar pursuits, a highly esteemed and arduous classical education, and observance of traditional forms of ritual that are inappropriate to commonplace affairs. Wealth, in almost any form of livelihood, has conferred a capacity (e.g., through leisure) to practice these ideals, in many ways that poverty denied to the greatest part of the society.

Status distinctions of this sort are lines that cut across most if not 592 all of the occupational divisions recognized in Japanese census prac- •463 tice, though they obviously were present in some more than others (commerce or government service, for example, more than agricul- 554 ture or fishing). There are further resources, however, to use in finding out the extent of variation within occupations. In the one master table published with the census of 1920, households were also classified by three additional categories of "occupational status"—"Owners" or "Independent Workers," "Officials," and "Laborers."[10] Each household, if the head was occupied, was assigned to one of these groups as well as to a regular occupation, so as to specify more fully the nature of the head's position. The classification is limited in value, for it is not certain that the terms signify anything that is

[10] The English terms are only approximations of the meaning in Japanese. The sense of "Independents" (*Yeh-chu* in the Chinese reading of the term) really is closer to the notion of "master" of an enterprise, somewhat like the term "self-employed" in Western census practice. "Officials" (*Yi-yüan* in Chinese, where it means a lowly and subordinate position) has an honorific connotation in Japanese. "Laborer" (read *Lao-wu* in Chinese) is relatively unambiguous, though it is not clear what line divides it from the others.

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consistent from one occupation to another. In agriculture, a person apparently was "independent" if he actually operated a farm (without distinction between landlords and others), and "laborer" if simply working for another. Agricultural occupations had hardly any positions that could be designated as "officials"; practically all of these were found as government officials or professionals of s[illegible] kind. These terms are so vague that it is useless to be distressed ov[illegible] what they do not reveal. The service they *do* perform is to separate, within each broad occupational class, the more from the less successful families ("independent" as opposed to "laborers," based on the fortunes of the household head), and to distinguish a few of the cases that do not easily fall in either of these (the "officials," wherever they occurred).

The households of "laborers," in each of the main classes of occupations, were on the average smaller than those in the same occupations that were more prosperous, and smaller even than those of "officials" (see Table 55). The more prosperous ("independent") households were consistently larger than either of the others, whether they were composed solely of family members or included outsiders.[17] Mixed households of "independent" heads were the largest of all, and had smaller proportions of outsiders than mixed households of the two other "status" groups. In other words, the wealthier mixed households exceeded the lesser ones in the same manner that had marked the difference between mixed households and those composed of family relatives only—chiefly through the extension of their families rather than the incorporation of outsiders. Not merely in the families of farmers, but within any occupational category, the households of the well-to-do were larger than those of the poorer portions of the population, and in this same pattern.

Households whose heads were "independently" employed had the smallest proportions of their male family members engaged in full-time work. But while leisure, as measured by this standard, was especially common in "independent" households whether outsiders were present or not, it was greater in mixed households of this group

[17] Here, as before, persons living alone ("single-person households") have been excluded, and Table 55 represents co-resident households only. Therefore the actual number of persons per household is less important (e.g., for comparison with later dates in Taiwan or with other data), than the pattern of variation from group to group in Table 55. It happens in this case that most of the single-person households were of the "laborer" group, and so would make the contrast between the two more pronounced if included, by giving the "laborers" a still smaller figure for average household size.

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TABLE 55

AVERAGE SIZE OF HOUSEHOLD AND EXTENT OF MALE EMPLOYMENT IN FAMILIES CLASSIFIED BY "OCCUPATIONAL STATUS," 1920

By Occupation of Head and Type of Household

	Number of Households	*Households of All Types*	*Purely Family Households*	*Mixed Households*
A. Average Persons per Household, both Sexes, by Occupation of Head.				
All Occupations				
a. Independents*	388,635	6.4	6.2	8.7
b. Laborers	128,768	4.4	4.4	5.4
c. Officials	1,462	4.9	4.6	5.8
Agriculture				
a. Independents	309,158	6.6	6.4	9.5
b. Laborers	41,314	4.2	4.2	5.5
Outside Agriculture				
a. Independents	79,477	5.7	5.5	7.1
b. Laborers	87,454	4.5	4.5	5.3
B. Per Cent of Male Family Members Who Reported an Occupation				
All Occupations				
a. Independents		62.0	62.3	57.9
b. Laborers		65.1	65.0	69.2
c. Officials		54.0	52.5	60.9
Agriculture				
a. Independents		62.6	63.0	58.1
b. Laborers		67.6	67.6	65.2
Outside Agriculture				
a. Independents		58.8	59.0	57.3
b. Laborers		64.0	63.7	70.0

* For an explanation of the meaning of these terms, see text.
Source: From *Census of 1920, Detailed Tables*, Table 36.

than anywhere else (see Table 55, Section B). Apparently these more prosperous households also took in outsiders for different purposes. Though not shown in Table 55, the non-relatives in "laborers'" households were chiefly "lodgers" (whatever might be included under this term); the ones in "independent" households were mostly

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listed as employees, who allowed family members to be released from regular work.

Changes Between 1920 and 1930

The decade between 1920 and 1930 produced little change in household or family structure as far as size or other observable features were concerned (see Table 46, above). Families on the average became slightly larger than before, but chiefly by additions to their dependent children and possibly older relatives. When the data for 1920 are put back into terms appropriate for comparison with 1930 (that is, by replacing the single-person households in the computation of averages), it appears that the growth of households was distributed almost uniformly in different portions of the population—it is necessary merely to add the figure of about 4/10 to the average size of households in each major occupational group in 1920 to approximate the size found in that group in 1930. The tables showing household composition were much abridged in 1930, and permit only restricted comparison. In many of the features already used to describe their structure in 1920, however, households in 1930 were practically the same. They were made up almost entirely of family relatives; and presumably the contrasts between mixed and purely family households were unaltered. The same uniformity in sex composition prevailed among the various classes of occupations, with the same exception in the case of households with non-occupied heads. Since these data contribute nothing to the discussion, they have not been reproduced here.

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There is more to be gained by comparing economic activities of family members. The burden of dependency was on the average slightly increased between 1920 and 1930, as we have seen (Table 46, above). By 1930, households representing all the main sources of support (i.e., occupations of heads) had smaller proportions of male family members occupied than 10 years before.[18]

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Agricultural households seemed to share less in this rise of family dependency than others (see Table 56). In part the divergence may be because peasant agriculture is better able to provide a secure livelihood for many who could not find steady employment elsewhere—especially young boys and older men. We have found, in

[18] How the added burden was shared between households of only family and mixed households cannot be ascertained, though the similarity of other patterns leads one to presume that this one remained nearly the same as in 1920. This was one of the items of detail omitted in publication of the 1930 census.

4:Grajdanzev--25-26 S-4 (no date) 1942 Formosans
116, 168, 464, 656, 609, 177.16 Japan
636.16

"Since the occupation of the island, the Japanese authorities have forbidden the free immigration of Chinese. Coolies were [26] admitted in limited numbers each year for seasonal work but they were compelled to return to the mainland after the expiration of their contract. Besides the coolie class some Chinese could enter Taiwan for business purposes with the permission of Japanese consular authorities, but they remained Chinese citizens and were treated as foreigners. These two groups of Chinese make up most of the 'foreigners'. The fall in their numbers in 1937 and 1938 is connected with the Sino-Japanese war, for many then preferred to return to China and the total number of 'foreigners' is now comparatively small. Thus the purpose of the Japanese authorities —to exclude the Chinese from the island—has been accomplished, but this has been more than offset by the natural increase of the Chinese population."

4: Grajdanzev--44 S-4 (no date) 1942 Formosans
116, 161, 433, 464, 471

"Two thousand yen per ko (2.4 acres) is an apalling [sic] price where the daily wages of a worker are about one yen per day, and it prevents the landless from having a chance to become owners of land. However, the phrase 'population pressure' is not used here in the Malthusian sense. The question is not one of food--the island produces twice as much as the islanders consume--but of employment. Openings in industry are few; independent industrial enterprise is almost impossible because a plant worth a few hundred or thousand yen cannot compete with a modern factory. The only occupation left is that of the farmer--a customary occupation for the majority of the islanders. The rise in land values is a symptom of the growing difficulty of finding employment, and not of a growing scarcity of food."

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464, 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

4:Grajdanzev--66-67 S-4 (no date) 1942 Formosans
116, 245, 255, 464, 471, 177.24 Japan
636.24

"Pineapples were cultivated in Taiwan before the occupation of the island by the Japanese, but only after the introduction of canning did the industry begin to expand rapidly. The fruit is raised on the hill slopes and thus does not compete with [67] cereals or sugar cane. The authorities estimate that more than 20,000 ko can be used for pineapple plantations, but the area under cultivation is now only 9,000 ko. Data on production are given below.

Pineapple Production in Taiwan

	1921	1935	1936	1937	1938
Area under pineapples (1,000 ko)	1.3	7.0	8.0	8.9	9.9
Crop (1,000,000 kin)	8.9	87.1	110.2	107.8	116.0
Value (1,000 yen)	367	2,626	3,129	3,115	...
Value of exports of (¥1,000) canned pineapples	865	7,306	5,857	7,600	10,620*

* Exports of canned and fresh pineapples.

Sources: Nogyo Nenkan; for 1938, Taiwan Jijo.

Production, chiefly of the plantation type using hired labor, is chiefly in Japanese hands."

15: U.S. Navy --23-24 (no date) 1944 Formosans
116, 167, 441, 464, 177.16 Japanese
636.16

"The majority of Japanese immigrants go to the island for [24] administrative work or business management. Japanese officialdom some years ago arrived at the reasonable conclusion that since the increase in the Formosan population was proportionately so much greater than the increase of the Japanese, only a program of industrialization (with accompanying influx of Japanese technical labor) would serve to strengthen substantially the Japanese population of the island. Presumably, large numbers of Japanese have immigrated to manage the new technical establishments known to have been established on a fairly large scale in and around Takao, near Shinchiku, and elsewhere since 1941."

15: U.S. Navy --24 [3] (no date) 1944 Formosans
116, 166, 369, 464, 177.36 Japanese
636.36

"The industrial centers at Keelung, Shinchiku, Takao and Karenko have attracted many voluntarily. The better paid technical and supervisory personnel are Japanese, but the common labor is Formosan-Chinese drawn from local rural communities. There is evidence that the creation of a number of new air establishments has necessitated the development of servicing communities near them, either at the fields' borders or in nearby villages. The development of a town at Toshien, just north of Takao, is the most important example of a 'war town' on the west coast. Karenko's new industries and the hinterland development of villages on a Japanese pattern and with Japanese names are examples of a more permanent new development."

15: U.S. Navy --27 [4] (no date) 1944 Formosans
116, 592, 562, 304, 464

"As in China, the older women who have sons are allowed to wield great influence within the home. Unmarried women and girls have few rights. Footbinding has been forbidden by the Japanese. There has been no attempt to limit female and child labor under even the most extreme conditions."

15: U.S. Navy--31 [6] (no date) 1944 Formosans
116, 563, 464

"In 1936 there were 81,589 workers employed in industrial enterprises having more than six workers or having a prime-mover. Of these 76,251 (93.5 percent) were Formosan-Chinese. The others were a few aborigines, a few Chinese nationals and Japanese overseers."

15: U.S. Navy--31 [8] (no date) 1944 Formosans
116, 167, 464, 177.46 Japanese
636.46

"Labor problems are dealt with by the several offices of the Government-General. There is no 'Labor Bureau' as such.

Before the China 'Incident' there were few restrictions upon the employment of an alien within Taiwan provided the alien had entered the country legally, held a visa from a Japanese consul and was duly registered in Taiwan. All Chinese laborers entering were required to be licensed for labor by the immigration authorities. The government itself has attempted to employ local labor or semi-skilled and skilled labor from Japan. After August, 1937, steps were taken to end the immigration of Chinese, and in 1938 it was announced that all Chinese nationals who thereafter left Taiwan for any point outside of the Empire of Japan would automatically be barred from re-entry."

15: U.S. Navy--32 [7] (no date) 1944 Formosans
116, 464, 167, 177.16 Japanese
636.~~16~~

"The industrial program which has been developing since 1930 has received special stimulus since the China war broke out. Initially it had been retarded by an acute shortage of skilled or semi-skilled labor. To remedy this, a program for encouraging the migration of skilled and semi-skilled Japanese workmen from Japan to the island was inaugurated in 1937 by the Taiwan Government. The mining industry suffered most severely, as indicated by the fact that the percentage of increase in labor employed in the mines is greater than the percentage of increase in production."

15: U.S. Navy--32 [10] (no date) 1944 Formosans
116, 166, 464, 177.16 Japanese
636.16

"The labor shortage is especially acute on the east coast where major industrial developments are planned for the next few years. To alleviate the shortage a bureau has been set up which attempts to engage workers on the west coast, send them around to the east, and there settle them in advantageous places.

In January, 1939, an employment bureau organized in Karenko (capital ¥200,000), brought 500 labor immigrants from the west coast of the island and put them to work in the Japan Aluminum Company's factory. They were given land (1/2 acre to each house) and were required to raise hogs, for there is a shortage of pork on the East Coast. A government bureau plans to continue this resettlement work."

15: U.S. Navy--32 [11] (no date) 1944 Formosans
116, 482, 462, 464

"Hours are long and, because of the abundance of unskilled man-power, few draft animals and little machinery are used in transport. Women and children and men pull carts and furnish motive power for the narrow-gauge push-car lines. Only the women of the Hakka Formosan-Chinese work in the fields, however. Women and children are employed extensively in tea-picking and sorting and in the ubiquitous small household industries."

369 The
463 scarcity of employment has resulted in the increase in the number of "self-made" jobs, such as the keeping of small, temporary streetside shops and stands, peddling, "household industries" of various kinds, cart-pulling, and pedicab-operating. Marginal self-employment is the chief source of income for approximately one-fifth of the males 15-50 years of age in the seventeen areas surveyed in 1954 by the China Mission of the American Mutual Security Agency and a group from National Taiwan University. A large proportion of those marginally self-employed would shift to regular industrial jobs if such jobs became available.[4]

369 Because of under-employment and the
464 prevailing low wage-scale, women and children often take up various kinds of work in order to supplement family incomes. Many urban households augment their income by raising hogs or fowl. Overcrowding in urban areas, the increase in the number of peddlers, streetside stands, and the feeding of hogs and fowl in crowded districts create a very serious health and sanitation problem.

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3. (continued) today far exceeds the number reported under Japanese rule. See the section on Criminal Codes and Procedures in the chapter on Law and Order.

4. Raper, op. cit., p. 5.

464 Employment Situation. The population density of Formosa is the second highest in the world. In 1951 there were 667 persons to one square mile of land.[2] Because of limited economic resources and overpopulation, partial and under-employment are more prevalent than complete unemployment. Manpower appears to be rather poorly distributed, with the result that the rate of under-employment in some cases is unusually high. This is particularly true among civil service personnel and employees of various government-owned enterprises. Industrialization, though at a rapid pace, has not given rise to technological unemployment. Under the inflationary conditions generated in the economy, the number of workers has increased. As reported in the Yearbook of Labor Statistics 1953, the employment index in manufacturing rose from 100 in 1948 to 178.8 in 1952.[3]

465 Working Hours and Wages. The law provides that the regular work week consists of an eight-hour day, six days a week.

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2. Mutual Security Agency Mission to China, Chinese-American Economic Cooperation, Taipei, Vol. 1, No. 5, May 1952, p. 44. The population was estimated at 9.2 million.

3. International Labor Office.

467 Labor Organizations. Labor organizations include trade unions, farmers' associations, and fishermen's association. Trade unions are weak and cannot be called unions in the real sense of the term, because the law does not provide for effective collective bargaining and also prohibits strikes, shut-downs, and walkouts of any kind during the present emergency period. The trade unions are organized under government supervision and tend to be used for carrying out government policies with respect to the workers. However, the educational and welfare activities performed by the unions should not be overlooked.

461 The Outlook of the Workers. Most of the farmers, as a result of the recent land reform, have become owner-cultivators and are looking forward to owning their own houses, sending their children to school, and enjoying better living conditions. On the other hand, because of limited employment opportunities and low wage levels, the non-agricultural laborers do not appear to face a very promising future.

464 The Future Labor Force. In 1950, the entire male labor force was estimated at 2.1 million. George Barclay states that the male labor force 25 years from now (1980) could amount to about 4 million, assuming that the

•464 natural rate of increase and emigration remain the same.[7] Since agricultural employment, which was about 1.2 million in 1950, is assumed to remain constant because of limited arable land, the number of jobs for male non-agricultural workers will have to be tripled by 1980, just to provide enough employment, to say nothing of an improved standard of living.[8]

II. FARM LABOR

241 Size of Farm Households and Labor Force. In 1952, the total rural population of Formosa amounted to 4.3 million, or about 680,000 farm households. The average size of a farm household at that time was 6.3 persons.[9] An accurage estimate of the size of farm labor is extremely difficult because women as well as children also take part in farming. Women also work in the field and dry harvested rice. Children may deliver food to the field where adult family members work. Farming in Formosa is a household responsibility, and a clear-cut

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7. A Report on Taiwan's Population, Princeton, Princeton University Press, 1954, pp. 53-55.

8. The constant number of farmers at 1.2 million for the period 1950-80 is only an assumption. In 1954, the total number of farmers was reported to be 1.8 million.

9. Taiwan Provincial Government, Taiwan Agricultural Yearbook, 1953, Taipei, 1953, pp. 36-37.

241 Formosan farms in 1952 would reach 1.7 million man-equivalents.[12]

241 464 Size and Mobility of Surplus Farm Labor. In Formosa there are two, three, and, in some cases, as many as four harvests per year. Therefore the frequency of planting and harvesting is high. The supply of family labor is usually constant. It is true that where there are extra young workers in the family, they often are attracted to the cities in quest of employment or to road construction, water conservation work, etc.; however, strong family ties usually cause them to return if city employment fails to materialize or when temporary construction jobs terminate. The high frequency of planting and harvesting accounts for the absence of prolonged periods of seasonal slack in farm work in spite of the constant supply of family labor.

Formosan farm labor in general is not mobile. Under the current laws regulating the lease of farms, the tenants, by virtue of their contracts with the land owners, have

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12. This figure comes close to the total agricultural workers of 1.8 million in September 1954 as reported in Taiwan: Land of Opportunity, Economic Stabilization Board, Republic of China. However, the latter estimate did not disclose how the figure was reached.

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the right to cultivate the land for six years.[13] This arrangement gives the farmers a feeling of security and tends naturally to tie them down to the land. As a result of the land reform, 76 per cent of the farmers are now owner-cultivators,[14] whose land ownership results in low mobility. However, it should be noted that all surplus farm labor can be made available for other employment, permanent or temporary.

As seen in the following table, the per chia farm population increased from 3.0 persons in 1929, to 4.3 persons in 1949, and 4.7 persons in 1952.[15] As of 1952, the size of surplus labor on the farms may be estimated at 68,000 man-equivalents.[16] This labor force is a surplus in the sense that the available manpower exceeds the actual need.

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13. Article V, Regulations Governing the 37.5 per cent Land Rental, promulgated on June 7, 1951.

14. United Nations, Department of Economic and Social Affairs, Economic Survey of Asia and the Far East 1954, Bangkok, 1955, p. 88.

15. The increase is principally through natural increase of the farm population.

16. The estimate is based on the JCRR survey Farm Income of Taiwan in 1952. The provincial average of 270 days requiring 3.21 man-equivalents applies to the production of all crops. Supposing that each farmer can work (continued next page)

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16. (continued) 310 days per year (less Sundays and holidays), each 3.21 man-equivalents will have done 40 days of work in addition to the 270 days required for farming. When this extra working manpower is multiplied by the existing farm labor force -- 1.7 million -- it will result in a farm surplus labor force of 68,000 man-equivalents. This is a conservative estimate because some farm families put in more than 400 working days a year in several regions and because farmers seldom take holidays other than national ones.

III. INDUSTRIAL LABOR

464 The Labor Force. The Economic Stabilization Board estimates that the current industrial labor force engaged in all types of manufacturing and mining is in the neighborhood of 0.3 millions.[19] It is reported that nearly 20 per cent of the workers are women; one per cent, child workers.[20] The same report states that in 1951 the average age of male workers in public enterprises was 31 and that of female workers 24. If all the government enterprises were considered, 25 per cent were within the age bracket of 21 to 25 years.[21]

463 Composition of the Labor Force. Industrial workers are heavily concentrated in the Taipei, Tainan, and Kaohsiung areas on account of the existence of coal mines and textile factories in the north and of chemical and machinery manufacturing factories in the south. The distribution of workers according to the county (hsien) follows:

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19. Ibid., p. 33.
20. Free China Labor League, T'ai-wan Lao-kung Yün-tung Kai-k'uang [General Condition of the Labor Movement in Taiwan], Taipei, 1952, pp. 7-8.
21. Ibid.

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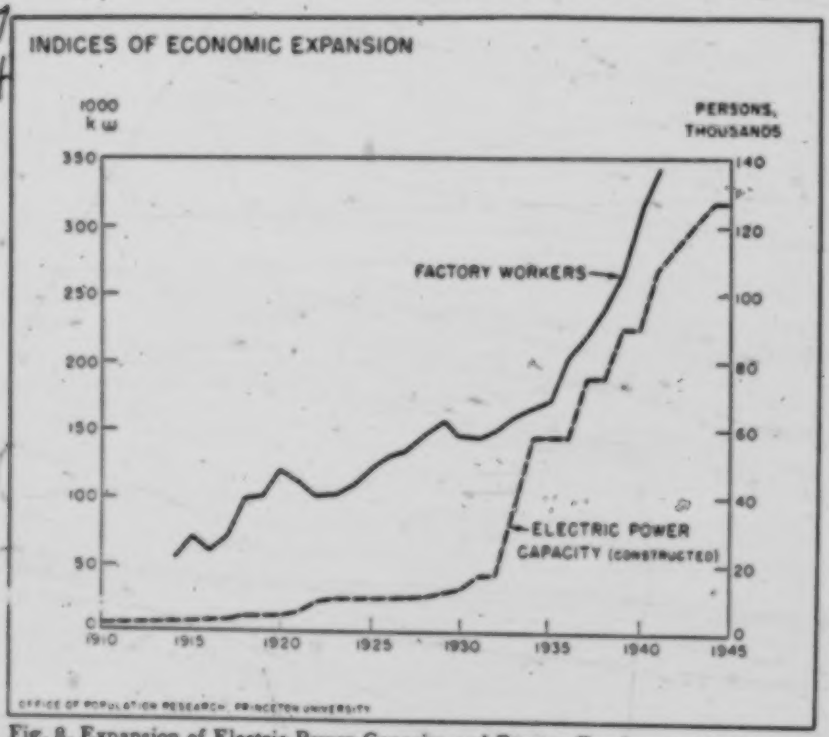

Fig. 8. Expansion of Electric Power Capacity and Factory Employment in Taiwan, 1910-1945.

471 than material forms of capital. Japanese in the past had never cul-
433 tivated an adequate fund of these among the Taiwanese. The same mechanisms which had served so well in channeling a large part of the total product each year toward desired uses had suppressed any opportunities for industrial employment that might attract Taiwanese who had administrative skills. What the Japanese themselves referred to as the "industrialization of Taiwan" was nothing but a corporate superstructure placed on an agrarian base. This was not capable of diffusing an industrial culture thoroughly among the general population, because it had been devised to prevent this very thing.

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659 462 a matter of course within the households that finally make use of them—items which in industrial societies are ordinarily purchased in the market. In these activities women are occupied often from childhood to old age, and sometimes more vigorously than men. It is this economy of the household, and not real inactivity, that utilizes the efforts of females in useful pursuits but provides against their holding extra-familial occupations.

We can be certain that a goodly portion of the work done in Taiwan was concealed in the activities of women. When such is the case, estimates of manpower based on occupational data are necessarily distorted, especially when these data have been compiled without overt care to this problem. Here the only feasible procedure in measuring manpower is to exclude altogether this important segment—womanpower—and to concentrate only on the "male labor force" as representing the dominant working patterns of the population.

659 Even within the male population, however, not all of its members are eligible or able for permanent employment. Close to half of all males in Taiwan—practically all those without occupations—were consistently of ages in which employment was not customary. Age always has a great deal to do with whether a person follows an occupation or not, and often with the sort of work he may perform. Tasks that are looked upon as useful are commonly ones that infants and the aged, for example, lack the capacity for doing. In between these extremes, some males of certain ages are excluded from the labor force when sufficient value is attached to other activities such as school attendance, acquisition of special skills, patriarchy, or infirmity—either due to priority of the competing activities themselves (regardless of who performs them) or due to the kinds of persons involved.

These various factors determining employment are so closely associated with age that at any one time almost all of the men of young and middle adulthood in a population have some occupation. The exclusions are concentrated in the years of childhood and old age. For this reason it is meaningful to speak of the "population of working ages," and often more information is available about them as a whole than about the labor force itself.

The Labor Force in Taiwan

162 464 Let us continue this line of inquiry by inspecting the portions of the population that are employed in relation to sex and age. With

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some idea by this time of what the census standards of employment purported to be in Taiwan, one should then see how they are performed in practice. As a first step it is interesting to compare the occupied portion of the population with a corresponding group elsewhere. To judge from the proportions of men occupied by age in various countries—and under varied kinds of census administration—the extent of employment is approximately the same among the recorded populations of the world.[12]

In 1930, for example, these proportions in Taiwan closely resembled in most ages those for the United States, when a similar standard ("gainful occupation") was used in this country to assign status in the labor force. In Table 17, the figures for these two countries were nearly alike among all men above age 25, though they were markedly higher in Taiwan at younger ages. The parallel does not imply that "work" amounted to the same thing among men in both populations. Nor does their divergent use of young men suggest that Americans were necessarily more prone to idleness than Taiwanese. The chief significance of Table 17 comes rather from showing that work as defined for census purposes commands the energies of practically all of the young adult men in both populations,[13] despite the wide differences in economic organization between the two countries.

Granted the basic similarity, the principal difference in Table 17 deserves comment. In the first place men in Taiwan evidently begin to do regular work much earlier in life than in the Western world. Extension of general education into the years of later adolescence, as everyone is aware, is a recent and modern phenomenon and confined to a few countries, for it has just recently been felt to be indispensable to the skills that this new world requires. The luxury of being able to maintain these services is not readily appreciated without contrasting it with less fortunate areas. In Taiwan, as in most of Asia, practically everyone destined to have an occupation was already employed before age 20. Many, not shown here, even entered a permanent occupation, in which they remained, before reaching age 15.[14]

[12] Notestein, Frank W., et al. (1944), p. 118.

[13] It is interesting to note that the differences made by different criteria—i.e., more refined labor force measures—are slight, if not trivial, for our purposes. Cf. Durand, John D. (1948), Appendix A, pp. 197-200.

[14] The census data showing dependency of childhood up to 1930 do not tell the whole story. In the latter 1930's the Japanese made concessions toward the extension of schooling, until by 1940 Taiwan was perhaps better in this regard than most Asiatic countries

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TABLE 17

162 THE LABOR FORCE IN THE TOTAL POPULATION, TAIWAN AND THE UNITED STATES

462 Proportions of All Persons in Each Age Group Who Had an Occupation, Male and Female, 1930

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Age Groups	Taiwan (Taiwanese Only*) All Occupations	Taiwan (Taiwanese Only*) Occupied outside Agriculture	United States (All Groups) All Occupations
	Males		
15–19	85.4	24.4	47.8
20–24	96.4	33.6	89.9
25–34	97.5	35.9	97.3
35–44	97.3	33.9	97.6
45–54	93.8	29.0	96.5
55–64	81.8	21.6	90.2
65+	54.7	11.9	58.3
	Females		
15–19	38.0	5.6	26.6
20–24	32.0	4.6	42.4
25–34	31.2	5.2	27.8
35–44	31.2	5.7	22.6
45–54	23.3	4.4	20.4
55–64	13.4	3.0	16.1
65+	4.3	1.3	8.0

* Domestic servants among the Taiwanese, male and female, have been excluded.
Sources: U. S. Dept. of Commerce, Bureau of the Census, *15th Census of the United States, 1930, Population*, Volume V, *General Report on Occupations*. Chap. 4, Table 2.
Taiwan—Census of 1930, Prefectural Volumes, Table 15.

162 For reasons advanced above, data on occupations for women are less satisfactory. In Table 17, roughly one-third of the women in most 462 ages up to 45 reported some occupation in 1930; but practically all stated that they were "farmers."[15] While superficially these figures appear to make a good showing against the data for the United States, the resemblance is misleading. In fact, on the basis of this information

besides Japan itself. But these events occurred too late to have much effect on the ages of starting work.

[15] Even for the few women who acknowledged occupations outside of agriculture, the specific kinds of work that occupied the bulk of this group are, suspiciously, the very ones that are usually conducted in households. For example, most of the "industrially employed" women were engaged in handicraft production (wood and bamboo articles, food processing, Panama hats) typically conducted on a household scale.

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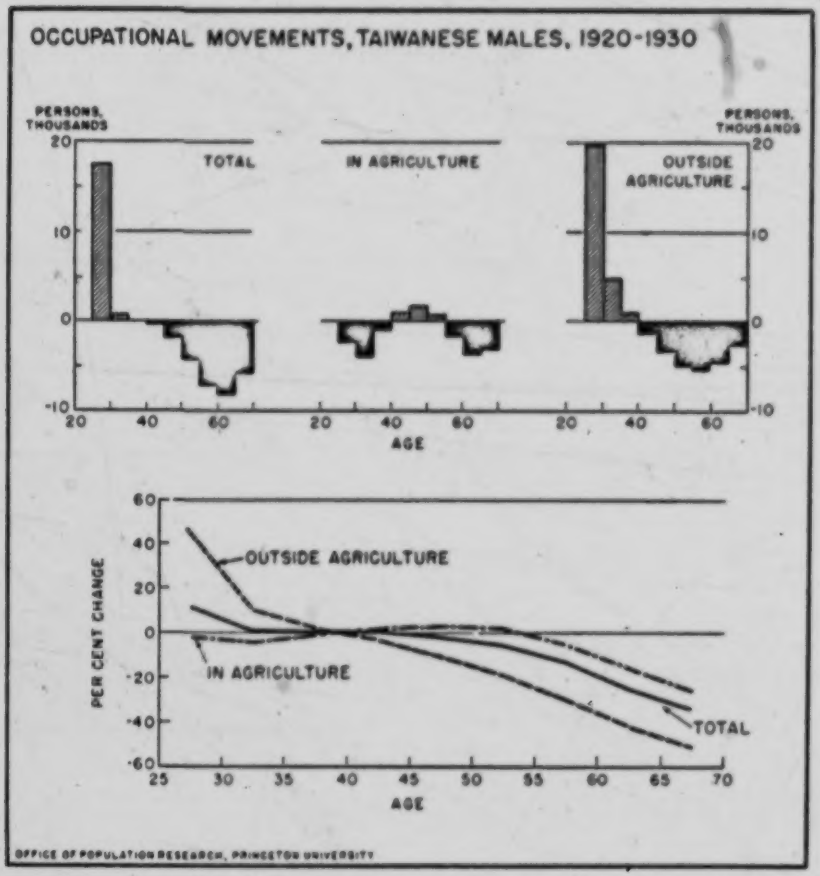

Fig. 13. Occupational Movement of Taiwanese Males, 1920-1930. Net "Gain" or "Loss" Inside and Outside of Agriculture, and in the Total Labor Force.

so as to balance each other; clearly few men began or left off work completely (except through death) in these ages, and what movement there was must have been limited to transfers from one occupation to another.

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It was established above (Table 17) that the maximum degree of employment was reached by age 30. It follows from these data that in this decade almost everyone who was likely in his life-time to acquire an occupation had already done so at age 20.[21] By similar

[21] A small part of this pattern may possibly be a peculiarity of the unusual decade involved. The census of 1930 was taken during a world depression, which had a brief but severe effect in Taiwan. There are hints that this was reflected slightly in the pro-

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464 reasoning, 90 per cent of all men who were going to become employed by 1930 must have held occupations already between ages 15-19 in 1920: since only 10 per cent of the employed survivors to this group had begun their employment later than 1920, though by 1930, at ages 25-29, the ones with occupations already accounted for almost all the population in that age.

One takes for granted that the boundary lines between being occupied or not were somewhat indistinct among young men entering and old men leaving the labor force. Even so, Fig. 13 gives a picture of the age incidence of retirement just as interesting as its evidence for the stability of employment through earlier adult ages. Starting with the men who reached ages 45-49 in 1930, the rate of exits from occupations over the preceding 10 years rose sharply with advancing age. Of the Taiwanese aged 55-59 in 1920, more than half the survivors had retired before age 70. Earlier ages exhibit what appears to be a gradual progression toward this rate of retirement. This would hold true even if we assume that the world depression in 1930 forced older men out of the labor force more rapidly than in normal times. The pattern would remain the same; only its age spacing would change.

These findings tend to conform to what the earlier chapters would lead one to expect. They do not provide much new information (except by way of verification of the procedure that is being used). Of greater significance are the patterns that hold among the occupations that make up the labor force. This is shown in Fig. 13 where the bars also represent the numbers of Taiwanese males "gained" or "lost" in 1930 as compared with 1920.

463 Agriculture is the most striking of these. There was an actual loss of several thousand young adult men who had been farmers between the ages of 15 and 30 in 1920. This does not imply that agriculture was failing to recruit new farmers. The losses in part reflect the fact that males undertook occupations at younger ages (at least in their census returns) in farming than in other pursuits. Agriculture gained many of its entrants *before* age 25 (the youngest age shown in these charts); by age 25 it may or may not have continued to re-

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portions of older men claiming some occupation in 1930. Despite the tendency of the "customary occupation" census concept to resist inroads of short-term unemployment, these proportions are slightly lower in advanced ages than those in previous censuses. Even so, the "true" figure might make the proposition above even stronger, by revealing "normal" retirement to have been slower than Fig. 13 suggests.

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463 to the rest of the economy in their young adulthood, and takes them back after their years of greatest contribution are past.

Manpower and Age Composition of the Population

464 Unfortunately for the conclusions of this chapter and the previous one, no population data on employment of any consequence have been published for Taiwan since the census of 1930. All that exist for the very interesting period leading up to World War II are the economic statistics reviewed in Chapter II (of quality far inferior to census figures), undisciplined travel accounts of a few foreigners, and the quasi-official reports of the Japanese themselves—half secretive and half boastful.

For this reason there is special value in observing the size of the population of working ages, from which the labor force is drawn, and its development as a component of the total population of Taiwanese. Requiring only detailed information by age and sex, this important measure can be derived from more recent census materials which were not published with elaborate occupational tables. It can be carried up to 1940 with exact figures, and extended beyond this date by the use of special assumptions.

All of the foregoing tables in this chapter have been arranged so as to represent occupational behavior of Taiwanese within certain age strata. This was a device for excluding temporarily two closely related aspects of labor force study: the age structure of the population at any one time, and trends in the size of different age strata. Insofar as these factors help to fix the supply of labor and the amount of dependency in a society, they exert a profound and subtle influence on economic activities.

At a given moment, among male Taiwanese some form of occupation was almost universal in most of the span between ages 15 and 60. Narrowing attention to the men between ages 15 and 64, as the "population of working ages"—to follow a common convention—will obviously include all ages of extensive employment. Not many boys younger than age 15 held occupations, and few people survived at all after age 65 (not all of these remaining occupied). Therefore, the group of men aged 15-64 also contained practically all working males.

Viewed as representing their region in the world, the Taiwanese are not one of the "major" populations of Asia. Consequently, we are free to analyze their composition without introducing the idea

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of vast numbers, and the global problems that these tend to raise. Compared with some of these more familiar examples, in Asia and

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TABLE 18

AGE COMPOSITION OF TAIWAN AND SELECTED OTHER COUNTRIES, *CIRCA* 1930

Both Sexes

	Percentages of Total Population in Each Age Interval						
Age	*Taiwan**	*Japan*	*British India*	*U.S.S.R. (incl. Ukraine)*	*United States*	*England & Wales*	*Sweden*
0–14	41.0	36.6	39.9	37.2	29.4	23.8	22.1
15–39	39.0	38.3	41.1	41.3	41.2	40.4	41.7
40–64	17.5	20.3	16.8	17.5	24.0	28.4	27.0
65+	2.5	4.8	2.2	4.0	5.4	7.4	9.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Taiwanese only.

Source: Institut International de Statistique, *Aperçu de la Démographie, 1929-1936*. The Hague, 1939. Table 7.
Statistical Summary of Taiwan, Table 58.

the West, Taiwan ranked with India, a land of proverbial "population problems." Together these two areas illustrate an ironic historical circumstance: those areas that for other reasons are most handicapped by poverty are also the ones with the greatest burdens of dependency, and with the smallest proportions of their people in working ages. The differences are outstanding in the ages of maturity, near the range between age 40 and age 65, when Western nations have been in a position to make far better use of the accumulated training and experience among their people (see Table 18). While next to nothing is directly known of its earlier demographic history, Taiwan was already in this situation when it entered its census era, and was placed still more at a disadvantage as time went on.

Through time, the population of these various ages in Taiwan has not shifted so signally as it has grown. From 1905 to 1940, each of these age strata almost doubled in size. In the same period, the important span 15-64 underwent slow but steady changes in relation to the rest of the population, older and younger. Its share in the total was reduced, though its numbers grew by more than one-half. On the other hand, the proportion of aged (always small) did not greatly change, though their numbers doubled. But most signifi-

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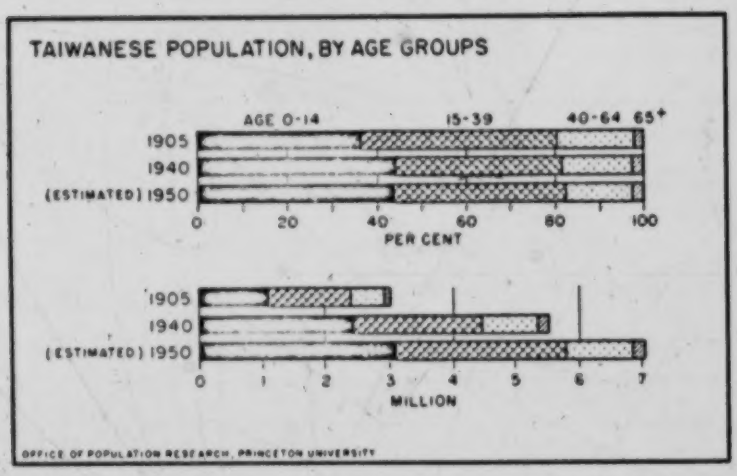

Fig. 16. Taiwanese Population in Working and Dependent Ages, 1905, 1940 and Projected to 1950.

cantly, infants and children, represented by all persons under 15 years of age, expanded into an ever larger part of the total population (see Fig. 16).[26] This young and dependent segment did not advance its share in rapid strides; only by 1940 did it reach 44 per cent of all Taiwanese. A glance at Table 18 will show how extremely this departs from the composition of populations in industrial countries. There is little reason to suppose that the trend would have continued much further, even with the large numbers of births that contributed to it each year and the efforts at health control already sponsored by the Japanese.

On the purely hypothetical assumption of continuance of mortality and fertility through the 1940's as in the period 1936-1940, a bar has been added to Fig. 16 for 1950. It gives an indication of what these same circumstances might have produced in ten more years. As an actual estimate it is of no value, since conditions did not in fact remain so favorable after the end of Japanese rule. The resulting figures are nevertheless of interest, for they suggest that without new improvements in longevity this trend might have progressed already as far as it could go.[27]

[26] Fig. 16 is based on data for males and females combined, since when it comes to dependency of childhood and old age both required support. It is implicitly assumed that women in prime adult ages are not dependent in this same sense.

[27] It is interesting to note that the age composition of Taiwanese in 1940 was almost identical with that of the "stable population"—i.e., the age composition that would

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THE DISPOSITION OF MANPOWER

With continuance of these demographic conditions—and infinite resources for their support—the Taiwanese could probably have expanded in this same scale forever. But, while the pattern of occupational movement that we have observed was also a stable one that did not contain many elements of change, it could not have perpetuated current conditions indefinitely, any more than the actual growth has been allowed to continue without setback. The phenomenon of growth itself was an underlying factor of instability for the society. If the Japanese had remained in control, they would have been forced to recognize the problem sooner or later, and either provide additional opportunities for livelihood or risk disruption of their program from other sources. Their efforts toward industrialization were too small and too selfish to have made any difference in the result.

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have resulted from indefinite persistence of the fertility and mortality rates of the same period, 1936-1940. The rate of increase implied by the structure of this hypothetical stable population is somewhat higher than that which was actually recorded at the time.

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592 This uniformity was due in large measure to the fact that almost all women were members of their households by virtue of kinship, 562 and hardly any of them stayed as non-relatives in the families of others. True, slightly over 20 per cent of all persons who were counted as outsiders were women; but this still did not amount to a large *number*, and it has already been pointed out that many must have been wives or children of men in this status.

Though on the average they were found in nearly equal numbers with men, there is no chance that women occupied the same positions in their families. Chinese ideas of propriety in behavior are never more consistent than in creating a distinction in familial roles based on a person's sex. The patriarchal ideal of authority in Taiwanese families is illustrated by the infrequency with which women became heads of households. Among those of the household heads who were employed (that is, practically all of them), men exceeded women by nine to one; in all but seven per cent of these households it was reported that the affairs were managed by men. In the minority of families where the head was not employed, this responsibility fell almost as often on women as on men—45 per cent of these households were managed by women. The only way for most women to accede to this position was through the death of their husbands. Therefore the concentration of female heads of households among the households with no apparent source of family support most likely represents those widows who were not taken in by their husbands' relatives.

Family Membership and Employment

592 Questions of livelihood, which are important to all peoples, are treated with a particular seriousness by Chinese. They are usually 464 regarded as questions of household management, and thereby become closely interlocked with the ideas and values of the family system itself. When this happens, a large part of a society's economic life is likely to be sealed up in self-sufficient family units, and to lack the aspect of inter-dependence that characterizes the activities of individuals in the industrial regions of the world.

The households of Taiwan were the scene of most of the effort that went into providing support for the population, and hence are the most appropriate place to look for traces of its organization. A good indication of the contribution to household support in different classes of households is given by the extent of regular work by

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male residents. The work of women may have been equally important; but the indices for assessing it have the same shortcomings in making such comparisons that they had in measurement of the labor force—female labor was almost entirely contained within household units, and the census statistics do not represent it accurately at all, but only the willingness to acknowledge and report it as such.

Work by men was looked upon more readily as maintaining the household in relation to the external society, despite a similar tendency for it to be in actuality an internal matter. Male family members seemed to have regular employment in almost the same proportion regardless of the occupation of the head of the household. Slightly over 60 per cent of them reported some occupation in 1920 if the head is counted. This, of course, is only what is implied by the findings in earlier chapters, for the figure is close to that fraction of the entire male population in working ages. Although the average size of family varied among different groups, the share of family members' services taken by full-time work did not. The one exception to this rule large enough to appear in Table 54 occurred in families engaged in commerce, which for some reason held more non-employed men than families in any other non-agricultural type of work.[18] But if leisure was supported to any appreciable extent in Taiwanese families, there is little sign that it was concentrated in any particular field of livelihood.

It will make the comparison more complete if we also adopt an alternative view of dependency. Since in households with head occupied the head by definition cannot be a dependent, it is only fair to compare family members in commercial and other households after the family heads are excluded. The remaining males are the ones whose conduct is subordinate to the authority of the head, and who represent the part of the population most likely to have leisure status where a family's wealth will permit. It would appear that farming families, which had more of these subordinate members to support, put their services to much greater use. Only 35.5 per cent of subordinate males in commercial households reported employment in 1920 (35.9 per cent in purely family households). Other families tended to be distributed in between (see the columns "Excluding Head" in Section B, Table 54).

[18] Whatever the explanation for this peculiarity, it stemmed from an unusually *large* number of non-occupied men rather than abnormally *few* who had an occupation, since commercial families were uncommonly large in every respect as compared with other non-agricultural households.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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Families with unoccupied heads, which in several respects formed a class by themselves, were not so distinct when it came to employing their subordinate male family members. When the head is included in the computation, the fact that he (or she) was not occupied gives an appearance of dependency far greater than that found anywhere else in the population. Excluding the head (in Table 54) reveals that more of the remaining family members were employed than in any other field of livelihood except agriculture. Unfortunately there is no way of knowing what sorts of work they did; if

TABLE 54

EMPLOYMENT AND DEPENDENCY IN TAIWANESE HOUSEHOLDS, 1920

Male Family Members Who Reported a Regular Occupation, and Those Who Reported None, by Type of Household

A. Average Male Family Members Per Household, Occupied and Dependent†	*Households of All Types*	*Purely Family Households*	*Mixed Households*
All Households			
a. Occupied	1.74*	1.74*	1.84*
b. Dependent	1.15	1.13	1.43
Households with Head Occupied			
a. Occupied	1.85	1.84	1.96
b. Dependent	1.11	1.09	1.36
Households with Head Not Occupied			
a. Occupied	0.86	0.86	0.85
b. Dependent	1.49	1.46	2.04
Head Occupied in Agriculture‡			
a. Occupied	2.01	1.99	2.32
b. Dependent	1.18	1.15	1.66
Head Occupied Outside Agriculture			
a. Occupied	1.52	1.53	1.48
b. Dependent	0.97	0.97	0.97
Head Occupied in Manufacturing			
a. Occupied	1.46	1.45	1.47
b. Dependent	0.89	0.89	0.90
Head Occupied in Commerce			
a. Occupied	1.56	1.57	1.49
b. Dependent	1.11	1.11	1.13
Head Occupied in Other Non-Agricultural Occupation			
a. Occupied	1.54	1.54	1.47
b. Dependent	0.93	0.94	0.81

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TABLE 54 (continued)

B. Per Cent of Male Family Members Occupied	Households of All Types		Purely Family Households		Mixed Households	
	Including Head	Excluding Head	Including Head	Excluding Head	Including Head	Excluding Head
All Households	60.2	45.8	60.6	46.1	56.3	42.4
Households with Head Occupied	62.5	45.6	62.8	45.8	59.0	43.1
Households with Head Not Occupied	36.6	47.7	37.2	48.7	29.5	36.2
Head Occupied in Agriculture	63.0	48.0	63.4	48.2	58.3	45.7
Head Occupied Outside Agr.	61.2	38.4	61.3	38.6	60.4	36.4
Manufacturing	62.0	40.0	62.0	40.2	61.9	38.4
Commerce	58.4	35.5	58.7	35.9	57.0	33.0
Other§	62.3	39.3	62.2	39.3	64.5	40.3

* Household heads with no occupation are of course not included. All figures of average persons per household have been rounded, and sometimes will not add to the totals that are shown in other tables; they also will not always produce the exact percentages shown in the lower section of this table.

† "Dependent" refers to persons reporting no occupation in the census.

‡ "Agriculture" includes Forestry.

Source: From *Census of 1920, Detailed Tables*, Table 36.

many of the unoccupied heads were widows who had not re-married, it may be surmised that these households probably had representatives in most occupational groups.

But the most pervasive distinction in engaging in work or leisure within families appeared in those that incorporated outsiders to assist in the work of the household—the mixed households—which made less use of labor by family members than households consisting of family members only. In all but one of the occupational classes of Table 54, employment was less common among members of the families living in mixed households, whether the heads are counted or not. Households with heads not occupied were no exception. Even their subordinate male family members were put to work less often—when not dependent solely on their own resources of manpower, such families supported the greatest amount of leisure that can be found in any of these groups.

Differences of Occupational Status

The variation that these data show in the composition of family groups was recorded at a date before any strong force of Japanese

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listed as employees, who allowed family members to be released from regular work.

Changes Between 1920 and 1930

The decade between 1920 and 1930 produced little change in household or family structure as far as size or other observable features were concerned (see Table 46, above). Families on the average became slightly larger than before, but chiefly by additions to their dependent children and possibly older relatives. When the data for 1920 are put back into terms appropriate for comparison with 1930 (that is, by replacing the single-person households in the computation of averages), it appears that the growth of households was distributed almost uniformly in different portions of the population—it is necessary merely to add the figure of about 4/10 to the average size of households in each major occupational group in 1920 to approximate the size found in that group in 1930. The tables showing household composition were much abridged in 1930, and permit only restricted comparison. In many of the features already used to describe their structure in 1920, however, households in 1930 were practically the same. They were made up almost entirely of family relatives; and presumably the contrasts between mixed and purely family households were unaltered. The same uniformity in sex composition prevailed among the various classes of occupations, with the same exception in the case of households with non-occupied heads. Since these data contribute nothing to the discussion, they have not been reproduced here. 592

There is more to be gained by comparing economic activities of family members. The burden of dependency was on the average slightly increased between 1920 and 1930, as we have seen (Table 46, above). By 1930, households representing all the main sources of support (i.e., occupations of heads) had smaller proportions of male family members occupied than 10 years before.[18] 592 464

Agricultural households seemed to share less in this rise of family dependency than others (see Table 56). In part the divergence may be because peasant agriculture is better able to provide a secure livelihood for many who could not find steady employment elsewhere—especially young boys and older men. We have found, in

[18] How the added burden was shared between households of only family and mixed households cannot be ascertained, though the similarity of other patterns leads one to presume that this one remained nearly the same as in 1920. This was one of the items of detail omitted in publication of the 1930 census.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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TABLE 56

CHANGES IN THE EXTENT OF MALE EMPLOYMENT IN TAIWANESE FAMILIES 1920 TO 1930

(Persons Living Alone Are Included)

	Per Cent of Male Family Members Occupied, Including Head	
	1920	*1930*
All Households	61.0	56.9
Households with Head Occupied	63.4	59.6
Households with Head Not Occupied	36.6	36.6
Head Occupied in Agriculture*	63.4	60.0
Head Occupied Outside Agriculture*	63.4	58.5

* The remaining occupational groups are not shown for comparison here, because the tables published in 1930 followed a different scheme of classification for households—according to the "*industry*" of the heads. The category "Agriculture" has been made comparable in 1930 by taking those engaged in "Cultivation" only. (A special table published in 1930 shows that almost everyone in this category was also classified as having an agricultural "occupation"; workers in "Forestry," of course, are not included.) The group with head "Not Occupied" is the same in both occupational and industrial classifications.

Source: From *Census of 1930, Statistical Tables, Total Island*, Table 5. Data for 1920 from preceding tables.

Chapter IV, that agriculture in Taiwan exerted its greatest attraction compared with other occupations for men of these ages. Thus men of these borderline ages probably were reported as employed in agriculture, and as dependents elsewhere, and some of this divergence may be simply a difference of standards rather than of work that was performed. But farming families had more use for the services of these people (and of those with physical disabilities); it is possible that the greater readiness to recognize these services—of women as well as of men—reflects their actual importance in contributing to the support of their households.

This apparent trend toward creating a gap between agriculture and other parts of the society was not a very impressive one. It is worthy of attention chiefly because it stands alone; there are no other new patterns of dependency to be found between 1920 and 1930, since the other occupational categories cannot be matched at both dates. And, more important, insofar as there was a leisured group or class among Taiwanese, it was still not to any marked extent occupationally aligned.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

Work Within the Household

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People's working activities play a part in familial life that is larger than merely the support that they provide. Since they are ordinarily not carried on in isolation, these activities supply one of the connections between the family and the remainder of the society. In industrial countries they sometimes appear to dominate this connection, and have become one of the criteria that fix a person's station in society. In agrarian countries it tends to be the other way around; the working roles of most adults are carried on as adjuncts to their other familial roles, and depend on kinship obligations for coordination. This, for example, is almost completely the case in household enterprises, and holds true in varying degrees for such wider market transactions that exist.

In Taiwan, the productive effort of most people was in fact confined to work pursued in cooperation with other family members and organized as household duties. This has already been demonstrated in a negative way as far as women were concerned—the occupational statistics, in failing to show very much about the work of women, do confirm that they were scarcely ever employed outside of their households. In household enterprises—and practically all farming was conducted on this basis—the head of the household was almost automatically the chief participant. However, since the statistics give no positive answer in the case of women or household heads, it is in the activities of subordinate male family members who were employed that we have the best indication of the concentration of work within households, and of its variation in different sections of the society.

Except for the minority counted as "employees," these remaining men were the ones with most opportunity to find work unrestricted (or unaided) by their kinship affiliations—i.e., in something that might approach a "labor market." Yet as late as 1930, over two-thirds of the Taiwanese men in this group still pursued their occupations in the households of their own families (see Table 57). In reality their labor was even more family-centered than this. In the large majority of households the head had some occupation, and there 76.1 per cent of all occupied male family members worked in the same enterprise. The remaining household heads had no occupation themselves, and hence did not operate family enterprises that could claim the services of men in their families. Most of the men in these fam-

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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TABLE 57

CONCENTRATION OF EMPLOYMENT WITHIN HOUSEHOLDS, 1930
Per Cent of "Subordinate" Male Family Members
(i.e., Excluding the Household Head) Who Were
Employed Within Their Households
(Taiwanese Households Only, Including Persons Living Alone)

	Per Cent of Employed "Subordinate" Male Family Members Whose Employment Was Inside Their Household
All Households	68.2
Households with Head Occupied	76.1
Households with Head Not Occupied	21.6
Head Occupied in Agriculture*	87.3
Head Occupied Outside Agriculture	34.2
Manufacturing	33.1
Commerce	42.2
Other	26.3

* See note to preceding table.
Source: From *Census of 1930, Statistical Tables, Total Island*, Table 5.

ilies who were occupied found employment outside—only 21.6 per cent of them carried on their work in the family.[19]

Among those households with heads occupied, there were differences just as great between the fields of livelihood that provided support for the households. Farming families kept 87.3 per cent of their subordinate working males occupied at home. It was their numerical weight in the population that made the figure for all occupations so high—in non-agricultural households it was only one-third (see Table 57). The influence of the more modern parts of the economy is indicated by the fact that families engaged in these fields had the greatest proportion of working-out among their eligible men.[20] Of the non-agricultural categories of occupation shown in Table 57, the commercial households came the closest to conforming to the norm exemplified in agriculture.

[19] Literally, the data of Table 57 refer to those working in the "same occupation or same enterprise" as the head of the household. The meaning is not so broad as the literal translation might suggest, because "same occupation" did not mean merely "also in agriculture" or "also in commerce" or some other large category. It means the same type of work in considerable detail—"also a butcher" or "also a bean-curd maker," for example. In nearly every case it probably meant work in the same family enterprise.

[20] Of course, many who worked out may have gone to work for relatives, and still did not enter the labor market.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

Of interest for the sake of comparison are the corresponding data illustrating the variation between different parts of the island (Table 58). In most of the individual Prefectures there were only minor differences in the extent to which employed men in all families (excluding the heads) performed their work at home. The most populous sections seemed uniform in the proportion that were so en-

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TABLE 58

CONCENTRATION OF EMPLOYMENT WITHIN HOUSEHOLDS: VARIATION BETWEEN PREFECTURES OF TAIWAN, 1930

Per Cent of Employed "Subordinate" Male Family Members Whose Employment Was Inside Their Households

Name of Prefecture	*All Households*	*Households With Head Occupied*	*Head Occupied in Agriculture**	*Head Occupied Outside Agriculture*	*Head Reporting No Occupation*
Taipei	50.4	59.6	81.8	21.4	10.5
Hsinchu	72.3	79.5	88.5	34.3	19.7
Taichung	71.0	79.1	88.3	36.5	25.6
Tainan	71.6	79.5	88.6	41.6	25.7
Kaohsiung	72.2	78.4	85.7	45.9	26.5
Taitung	95.1	95.8	97.6	52.0	69.9
Hualien	82.5	85.0	91.8	30.5	34.1
P'enghu	64.5	64.5	75.1	54.8	30.7
Total Island	68.2	76.1	87.3	34.2	21.6

* See footnote for Table 56.

Source: From *Census of 1930, Statistical Tables*, by Prefecture (respective Prefectural volumes), Table 5.

gaged; the deviations in the two Prefectures on the East Coast (where hardly anyone worked outside of his household), and in P'enghu Islands, did not affect many people. Taipei Prefecture was the significant exception to the rule, for it was the only place with considerable numbers of male workers occupied in extra-familial pursuits.

The more detailed columns of Table 58 help to clarify the source of the variation. As the site of the capital city and administrative center of the island, and the portion in which Japanese concentrated their efforts in developing modern conveniences and comforts, Taipei had even before 1930 gained many features of distinction over the rest of the island. It was at this time the transportation hub (built around shipping from the port of Chilung, which later de-

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

596 464 clined), the home of one-third of all Japanese, the location of the better educational facilities, the commercial area of most importance for trade in other than farm products, and of course the center of most large government and business offices. Taipei Prefecture, therefore, had proceeded farthest in the spread of non-agricultural activities in its population. Even though a substantial group in this population does not appear in these tables because they were Japanese, the effect of their presence is evident in the way that non-farming occupations were conducted by Taiwanese—all but 21 per cent of the men in such work (excepting the heads of households and people staying in the households of others) were employed away from their families, a proportion less than any other Prefecture and only half the figure in some. Agriculture was much less affected by the unusual character of other pursuits, but it did not go untouched. Though most farmers in Taipei did their work in their own households, they fell somewhat below the mark set by the rest of the agricultural population.[21]

Significantly, in all of the other Prefectures (except P'enghu, which was not of much account in size), agricultural households were nearly uniform in the degree to which they retained the use of services by subordinate men in their families—close to 90 per cent of the men in this category who lived with their families.[22] The principal differences from one Prefecture to another when all households are considered at once, therefore, must have arisen from the prevalence and the mode of organization in activities *outside* of agriculture, for they practically disappear when farming households alone are compared.

592 596 There can be little doubt that the family system, through its weight in the conduct of household affairs, has furnished the most important social setting for behavior of the Taiwanese. We have not only the testimony of Chinese tradition to support this conclusion, but the corroboration of statistical evidence as well. Practically everyone was a member of some familial household—most were related by

[21] Taipei was the site of tea plantations, which, through a greater use of wage labor, may have been responsible for the deviation from the pattern elsewhere in the island. A plantation might employ men (and actually did employ many women) on a more or less regular basis from several farming households, and leave their services free at some seasons of the year for work in their own fields.

[22] Naturally this does not include those who had left home to enter some other occupation; these would appear as outsiders in some other households or as persons living alone, perhaps in some cases as separate families.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

just north of the Tropic of Cancer—the winters of this coastal area, unlike the interior, are cold and raw while the summers are extremely hot and humid. Winter temperatures seldom fall below the middle forties, but icy winds frequently blow with almost gale force across from the mainland and the Strait of Formosa. Although the area itself never has snow, on a clear January or February day snow-capped peaks of the high interior mountains to the east can be seen from the village.

As in most of Asia, rain is seasonal. Between 80 and 85 percent of the annual rainfall comes during the late spring and summer months (April to September) (Chen, 1950:5).[1] During the heaviest rains and the late summer typhoon season, roads as well as paddy fields are often flooded. In this particular area, frequently the rain alone makes it possible to transplant the rice seedlings, for the irrigation water is often late in reaching the Hsin Hsing area, lying as it does so far from the mountain headwaters. With the passing of the rainy season the weather is relatively dry for the remainder of the year, and all crops depend almost entirely on water from the elaborate irrigation system.

For two decades or more this area has been able to harvest three crops annually. In the irrigated areas two crops of rice are grown; sometimes a vegetable or some other crop is substituted. The third dry crop is usually wheat or sweet potatoes. On dry land, two or possibly three crops a year are grown as well. Such intensive cultivation has been made possible through a favorable climate, irrigation facilities, and an increased availability of chemical fertilizer. It has also come about partially as a result of the population increase, which has provided additional labor to work the available land and to exploit previously undeveloped lands.

Although most of the original inhabitants from the mainland settled on the relatively fertile coastal plain where Hsin Hsing is located, the land resources could not be fully exploited because of their small number. Today, this situation is reversed, and in spite of large-scale irrigation, land scarcity makes it necessary for parts of expanding families, and even whole households, to move to urban centers to find work. Land scarcity in the whole Hsin Hsing area is so severe that even villagers who remain there must go outside the village to earn a livelihood for their families or to supplement the family income. Although the problem may be unusually acute in Hsin Hsing village and in some neighboring villages, it must nevertheless be recognized that it is characteristic of a large part of Taiwan. If the population of the rural areas of the island continues to grow at its present rate, the land scarcity which is now so severe in the Hsin Hsing area will undoubtedly become a major problem for the greater part of the Taiwan countryside.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1 •

THE HISTORY OF THE VILLAGE AND AREA

The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[9] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

F 175 648 lists brought a change in regime to Taiwan. This is known as the "Restoration." At the outset the Taiwanese people welcomed the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been F 175 killed in the war in Southeast Asia. The other villagers from Hsin 648 Hsing who had surrendered or been taken as prisoners while working 423 in Japanese labor groups were returned to Taiwan in ships. The re- 464 turn of these men to the land was followed by a general population 161 increase, and in the Hsin Hsing area this quickly aggravated the prob- 423 lem of land scarcity; tenancy became a greater problem than ever 464 before. Families could neither buy nor rent enough land to support [178] themselves adequately, and, in addition, the war period had brought [462] about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

Tn 175 423 [648] [241] [434] Tn [161] After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

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LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

"Japanese authors complain that wages in Taiwan are high, and that they are high because of the prosperous condition of the farmers. The farmers are so well off that they do not want to leave the farms. Takahashi tells a story, for example, of how government officials were not able to hire a sufficient number of laborers for irrigation works at the rate of wages prescribed by these officials. The chief obstacle to the development of industry, we are told, is high wages. Moreover, these wages are rising continuously. The official Taiwan Jijo says: 'wages of the islanders up to 1920 rose by 200 per cent in comparison with the prewar level, while in comparison with the period before the Japanese occupation the increase is wonderful' (odoroku-beki) (1). Below we give wages per

1. Op. cit., p. 610.

day for corresponding groups of workers in Tokyo and Nagoya in Japan, and Taihoku and Taichu in Taiwan.

Wages per Day in 1939
(yen)

	Japan		Taiwan	
	Tokyo	Nagoya	Taihoku	Taichu
Turners	4.20	2.84	1.60	no data
Cement workers	2.36	2.58	no data	0.95

4:Grajdanzev--115 [21 S-4 (no date) 1942 Formosans-2
116, 171, 465

Wages per Day in 1939 [Cont.]
(yen)

	Japan		Taiwan	
	Tokyo	Nagoya	Taihoku	Taichu
Foundry workers	4.01	2.38	1.20	no data
Millers	2.93	2.45	1.15	0.70
Dyers	3.07	1.78	1.09	no data
Printers	3.33	2.12	1.80	1.00
Day laborers, men	2.10	2.20	0.85	0.74
Day laborers, women	1.24	1.30	0.60	0.55

Sources: For Taiwan, Taiwan Jijo; for Japan, Rodo nenkan."

4:Grajdanzev--116 S-4 (no date) 1942 Formosans-1-2
116, 171, 435, 465, 563

"As is well known, Japan is not a country of high wages. Yet wages there are from two to three times higher than the wages of the Chinese in Taiwan and do not seem to have been an obstacle to the development of industry. The wage level is closely connected with the level of retail prices and this we give below.

Retail Prices in Taihoku, May 1939

		(sen)
Sweet potatoes	(per kin)	6.4
Rice, horai	(per kin)	11
Sugar	(per kin)	29
Pork, average quality	(per kin)	43
Miso, per 100 momme	(0.827 lb.)	8
Fish	(per kin)	18-22
Eggs, each		6
Soap, per piece		10-17
Matches, per box		1.4
Firewood, per 100 kin		180
Muslin (per yard)		134

Now, let us take two workers—one skilled and one day laborer. For the skilled workers the average daily wage in the second half of 1938 was ¥1.43 per day, (1) for an

1. This is a simple arithmetic average of 60 different

categories of workers in Taihoku; in so far as highly paid categories are small in numbers, the weighted average would be lower. The official estimate of the average wage for Taihoku is ¥1.27.

unskilled worker ¥0.85. The average family in Taiwan consists of five to six persons. According to the prices given above, the skilled worker can buy with his daily wages, for example, either 17.2 lb. of rice or 4.4 lb. of pork, or 6.5 lb. of sugar. An unskilled worker can make such purchases as 10.2 lb. of rice, or 2.6 lb. of pork, or 3.9 lb. of sugar. By whatever standards, it is evident that the wages of the workers are very low.

The wages of Japanese workers, on the other hand, are at least double those of the Chinese for the same job. For Taihoku the official estimate of the average wage for the Chinese is ¥1.27, for Japanese, ¥2.41 (2). It is thus not profitable for the Japanese

2. A simple arithmetic average for 25 occupations of the Japanese in Taihoku gives ¥2.65.

entrepreneurs to use Japanese workers extensively."

4:Grajdanzev--117 S-4 (no date) 1942 Formosans
116, 465, 472, 511, 563

"We saw previously that the development of modern industry in Taiwan did not benefit the Chinese as entrepreneurs. Now it becomes evident that it brought very little to them as workers. If we use Engel's ratio of sixty per cent as an estimate of the share of wages spent on food in low-wage countries, it appears that the wages of the unskilled worker in Taiwan can purchase about one pound of rice per day for each member of his family."

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-1-5
116, 465, 652, 177.65 Japan
636.65

"The expenditures of Taiwan government-general may be classified as follows:
Expenditures of the Government-General (1,000 Yen) (1)

1. Source: Okurasho Nempo.

Purpose [a]	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Government-general	1,758	1,939	2,289	2,232	2,416
Grants to local governments	14,704	14,985	15,733	16,171	16,648
Pensions	4,915	4,898	5,088	5,190	5,414
Public finance [b]	9,210	8,623	9,412	9,920	14,315
Police, court, prison [c]	4,474	4,547	5,437	5,534	5,342
General hygiene, hospitals [d]	716	572	833	978	1,204
Education	4,720	5,096	5,499	4,119	4,840
University [e]	295	322	349	3,236	3,797
Research and Investigations	2,630	2,570	3,055	3,186	3,929

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-2
116, 465, 652, 177.65 Japan
636.65

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
Railroads and roads (new construction)	7,136	8,537	8,475	9,839	9,588
Ports, rivers	9,113	9,625	10,669	9,120	13,327
Communications (new construction)	717	1,623	1,718	1,442	1,798
Help to sufferers in natural calamities	2,894	435	600	1,272	326
Development of State lands	204	193	335	445	497
Rice control	405	1,180	1,218	121	2,217
War	287	2,017	8,727	18,299	21,150
Meteorological stations [138]	73	94	278	507	890
Propaganda	146	155	427	1,228	1,957
of which for 'spiritual mobilization'			37	57	60

4:Grajdanzev--137-138
116, 465, 652, 177.65
636.65

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
'Expenses of establishments (shisetsu) in South China and the South Seas'	583	618	1,080	2,046	4,074
Secret funds	181	176	176	159	190
Encouragement of industry	3,969	5,707	5,873	9,058	11,468
Temples and shrines	709[f]	134	349	377	599
Total	69,839	74,046	87,620	104,479	125,986

a) The classification offered here is in most cases quite different from the official one; see below for explanations.

b) Chiefly debt service and the cost of tax collection.

c) Not including those paid from the budget of local governments.

d) These are net expenditures, receipts from the patients are deducted.

e) As will be shown later, the University serves chiefly the Japanese. It existed before 1938, but the expenditures were not disbursed from the budget of the government-general.

f) Includes expenditures on the memorial exhibition ('Forty years of Japanese rule').

To this it is useful to add the table of expenditures of provincial and local governments:

Expenditures of Provincial and Local Governments (1,000 Yen)

	1938 budget	1939 budget estimates
Cost of government, including police	8,289	7,630
Debt service	4,389	4,413
Education	13,177	14,144
Hospitals and hygiene	5,447	5,193
Encouragement of industry	5,172	6,488
Guards	757	1,110
Public Works	7,156	7,052
Repairs	6,796	4,361
Shrines	146	103
Other expenditures	19,827[a]	21,159[a]
Total	71,156[a]	71,653[a]

a) This includes several millions in cases of double counting

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-5
116, 465, 652, 177.65 Japan
636.65

(grants from the provincial governments to local ones), but we have no means of tracing them."

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans -1-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

"Living conditions and the cost of living are intimately connected with the wage scale. Wages in Japan are two to three times higher than the wages of Formosans. For the skilled Formosan the average daily wage in the second half of 1938 was ¥1.13 ($.27) per day, and for the unskilled worker ¥.85 ($.17): figures based upon averages for sixty different categories. The Japanese official averages published for 1939 were ¥1.27 ($.33) for the Formosan-Chinese and ¥2.41 ($.625) for the Japanese laborer. The average Formosan family consists of five persons, who must depend upon these wages. As an indication of the cost of living and the standard possible, there is presented the retail prices of some commodities in Taihoku, in May, 1939, when the yen was worth $.2596:

Table 23: Retail Commodity Prices, Taihoku, 1939

Sweet potatoes per kin (1.3228 lbs.)	6.4 sen
Rice (first grade) " " "	11.0 "
Sugar " " "	29.0 "
Pork (av. quality) " " "	43.0 "
Fish " " "	18-22.0 "
Chicken eggs, each	6.0 "
Soap per piece	10-17.0 "
Matches, per box	1.4 "
Firewood (per 100 kin)	180.0 "

15: U.S. Navy --27 [7] (no date) 1944 Formosans -2
116, 465, 511, 435, 556, 563

Table 23: (cont.)

Miso (bean paste) (100 momme: 0.827 lbs.)	8.0 sen
Muslin, per yard	134.0 " "

15: U.S. Navy--27 [10] (no date) 1944 Formosans
116, 465, 511

"The rapid advance in the cost of living and its adverse effect on living standards must be kept in mind when notice is taken of wages listed in the Economic Supplement."

15: U.S. Navy--32 [8] (no date) 1944 Formosans
116, 465, 511, 563

"The Formosan-Chinese can work at a lower wage-scale than the Japanese, but at the same time are supposed to be less efficient."

15: U.S. Navy--33 [3] (no date) 1944 Formosans
116, 465

"The scale of wages in Taiwan varies considerably in the various cities of the island for the same kind of effort, this being due to the small scale of industry in general. When there are large numbers of workers employed in any one industry, the difference in wages paid in each city is small."

15: U.S. Navy--33 [4] (no date) 1944 Formosans
116, 563, 463, 465, 177.46 Japanese
636.46

"Formosan-Chinese furnish almost all labor. Japanese are generally employed as foremen or skilled labor, or in particularly vital operations. For instance, they provide the personnel on the moving stock of the Government Railway system. This accounts for the difference in wage scales whereby the Japanese laborer receives from 80 to 150 percent more than Formosan-Chinese who do the same work. A Japanese tailor, for instance, at one time received two yen a day as against 1.20 yen per day for a Formosan-Chinese; a worker in a pineapple cannery 1 50 as against the Formosan-Chinese wage of 70 sen."

464 Employment Situation. The population density of Formosa is the second highest in the world. In 1951 there were 667 persons to one square mile of land.[2] Because of limited economic resources and overpopulation, partial and under-employment are more prevalent than complete unemployment. Manpower appears to be rather poorly distributed, with the result that the rate of under-employment in some cases is unusually high. This is particularly true among civil service personnel and employees of various government-owned enterprises. Industrialization, though at a rapid pace, has not given rise to technological unemployment. Under the inflationary conditions generated in the economy, the number of workers has increased. As reported in the Yearbook of Labor Statistics 1953, the employment index in manufacturing rose from 100 in 1948 to 178.8 in 1952.[3]

•465 Working Hours and Wages. The law provides that the regular work week consists of an eight-hour day, six days a week.

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2. Mutual Security Agency Mission to China, Chinese-American Economic Cooperation, Taipei, Vol. 1, No. 5, May 1952, p. 44. The population was estimated at 9.2 million.

3. International Labor Office.

465 Overtime is paid at time and a half. National holidays are observed.[4] Actual practice, however, diverges from the above provisions in some cases. National holidays are only generally observed. In government agencies and enterprises, banks, schools, and other public institutions the eight-hour-day principle stands. However, in most mines and factories 10 hours or more a day and 6.5 to 7 days a week are usually the rule.[5] Low wages force employees to work long hours.

Wage payments include money wages, payment in kind, and in most cases free housing. However, the level of wages is low, and workers' receipts are generally inadequate to meet their necessary expenditures. A survey made by the FOA Mutual Security Mission revealed recently that nearly half of the workers in a coal mine were in debt, and 48 per cent of the money borrowed was spent on food.[6]

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527 4. National holidays include: January 1, Founding of the Republic of China; March 29, Martyr's Day and Youth Day; August 27, Birth Day of Confucius; October 10, "Double Tenth"--National Day; and November 12, Dr. Sun Yat-sen's Birthday.

000 5. China News Press, Chung-hua Nien-pao, 1953 [China Annual, 1953], Taipei, 1954, Vol. II, p. 115.

6. FOA Mutual Security Mission to China, Project Evaluation Office, unpublished pamphlets based on 1954 survey.

463 sell towels, shirts, soap, food, etc., at roadside stands. Household industries such as cake baking, handicrafts, etc., are also very common. Truck-hopping is an entirely new occupation in Formosa. The truck-hoppers are young and husky persons who hop on the moving trucks and start bargaining for unloading jobs as soon as the trucks reach their places of unloading.

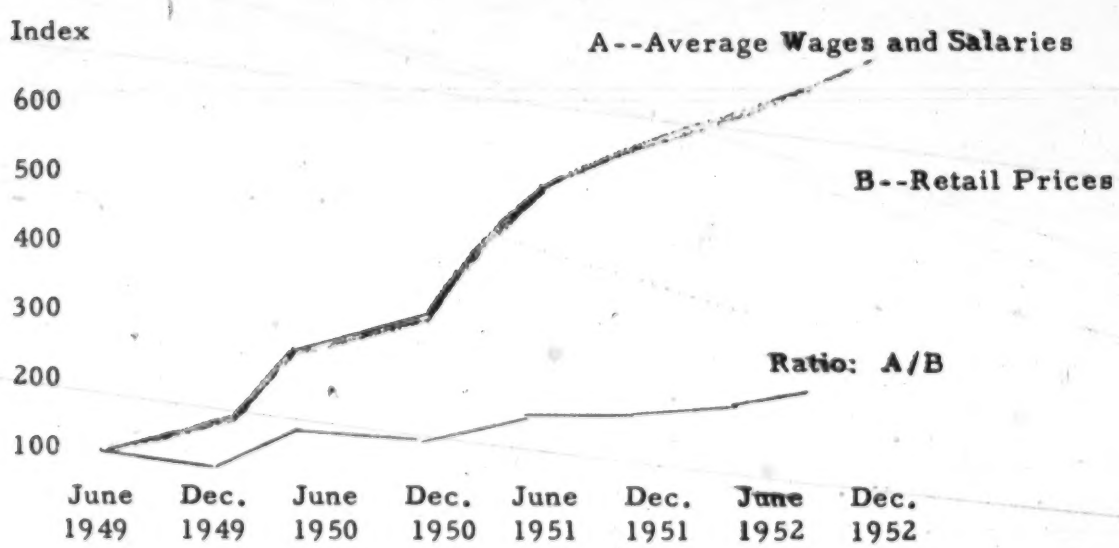
IV. WAGE LEVELS AND WORKING CONDITIONS

• 465 434 The Wage Level. Government statistics shows improvement of the wage level in recent years. During the years 1949-52, the index of wages and salaries rose faster than the retail price index:

45:Stanford U. S-4, 5 1956 AD1 Formosa

HC5 A34

Trend of Wages and Retail Prices --1949-52
Indexes (June 1949 = 100)



Source: Plotted from Appendix II, The Structure of the Taiwan Economy by Taiwan Provincial Government

465 434 The average income of 1,383 sample households in the month of June 1953 in urban areas was estimated at NT $585,[22] while that of the average laborer's household was estimated at NT $400. The estimated average gross income in 1952 and 1953 for the households surveyed may be seen in the following table:

YEARLY GROSS INCOME OF 1,383 HOUSEHOLDS (in NT $)

	1952	1953
Total Average	5,684	7,722
Employers	27,252	27,271
Self-employed	6,482	9,206
Laborers	3,826	5,148
Professionals	6,974	11,208
Civil Servants	4,203	9,174
All Others	5,481	7,128

* A. F. Raper and others, op. cit.

22. A. F. Raper and others, op. cit.; this amount is a little less than US $40 at the foreign exchange rate of NT $15.65 to US $1.

465 434 Roughly 85 per cent of the gross receipts of the laborers and self-employed are in cash, and 15 per cent in other allowances and payment in kind. For the civil servants, only about one-half is in cash. Payment in kind consists of rice, edible oil, salt, and charcoal. For instance, there is a monthly allowance of 66 pounds of rice to each laborer and each adult family member living with him, as well as one-half of that amount to each child under 10 years of age. The total rice allowance for each labor household, however, is restricted to 224 pounds per month.

511 The relatively low standard of living of the laborers is reflected by the pattern of household expenditures, of which food expenditure comprises the major portion. A breakdown of expenditures in 1952 for the 1,383 households surveyed is shown in the table below:

46 HOURS OF WORK PER DAY IN 45 FACTORIES AND MINES, JUNE 1951*

Daily Working hours	8	9	10	12
Percentage of factories and mines	13	4	16	12
Percentage of factories and mines	29	8.8	35.6	26.6

* Free China Labor League, op. cit., p. 10.

The league also reported that the average number of working days per month for all industries in Formosa was 28.3 for male laborers and 25.8 for female laborers. For male workers, those in the ceramic industry worked the longest hours, 29.6 days a month, while those in the food industry worked only 20.5 days.

• 45 Wage Scale. Aside from miners, textile workers in Formosa are apparently the highest paid of all the factory workers, followed by workers in the printing and machinery industries. The monthly income of workers in selected industries is shown below:

45:Stanford U. S-4, 5 1956 ADI Formosa

465

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MONTHLY INCOME OF WORKERS IN SELECTED INDUSTRIES IN 1952*

Industry	Number of working days	Average daily wages (NT $)	Average monthly income (NT $)
Metal	24.9	11.96	298
Machinery	28.5	13.90	396
Chemical	28.0	10.33	289
Ceramics	29.6	12.23	361
Textile	28.7	14.74	422
Food	20.5	14.45	296
Printing	25.1	15.90	400

* Working days of laborers from Free China Labor League, op. cit., and average daily wages from Yearbook of Labor Statistics 1953 by International Labor Office; average of January-October 1952 only.

4:Grajdanzev--80-82 S-4 (no date) 1942 Formosans-1- 3
116, 427, 466, 675, 177.42 Japan
636.42

"The tenancy contract in Taiwan, as it was a few years ago, had the following features: (1) (1) It was a short-term contract—for the most part for one year only and cases were

1. For a more detailed description see K. Takahashi Gendai Taiwan Keizairon, pp. 293-303.

frequent where the landlords broke the contract before its expiry. It is possible for them to do this because the tenants are more numerous, there is stiff competition among them, and they cling to the plots which they are able to secure. There have [81] been cases when the term was six years and even ten years (opening of new land or reclaimed land), but these were exceptional. (2) It was almost exclusively an oral contract and in case of conflict the landlords were more successful than the tenants in securing their own interpretation of it. (3) The landlord usually received security from the tenant in money or in kind, amounting to from forty to sixty per cent of the rent, deposited with the owner at the time the contract is made. No interest is paid on this amount. This deposit represents a heavy additional burden on the tenants, who, as a rule, have no cash and are compelled to borrow the money at high interest rates while they themselves do not receive any interest on it. In many cases this results in sub-tenancy—a rich farmer renting land and sub-letting it to poor tenants.

Through the efforts of the government these general features were somewhat changed. The government policy was as follows: (I) the term of tenancy should be five to six years or more; (2) if, after the expiry of the contract, the contracting parties do not denounce the contract within six months, it must be regarded as automatically renewed; (3) in time of crop failure the rent is to be reduced by mutual agreement; (4) in case of arrears (without a justifiable reason) or misuse of soil, the contract may be voided by the landowner; (5) no transfer of land by the tenant can be made without agreement and approval by the landowner; (6) changes in the form of the plot and other changes influencing the productive capacity of the land must be approved by the landowner; (7) if improvements are approved by the landowner, he must bear the expenses of the improvements fully or in part; (8) no contract may be declared void before expiry without sufficient reasons; otherwise compensation must be paid; (9) disputes are to be settled by special arbitration committees.

It is unwise to attach too much importance to these government efforts, however good their purpose may be. True, in 1935 sixty-eight per cent of all area leased was leased under written contracts, while in 1938-39 the percentage had risen to 76.6 per cent. Arbitration committees are established, as well [82] as societies of landowners and tenants, the purpose of which is to bring social peace to the relations between the landowners and tenants as well as to effect a change in the ideology of the farmers. Money

grants from the government-general are made to aid these societies and officials appointed to direct them. But all this does not touch the core of the problem. The problem of tenancy is not to secure the tenant in his lease for one year, or how to distribute the costs of improvements, as this touches chiefly the misuse of power by the landlord. With a secure contract for three or five years, the tenant must still pay the rent, and he has no assurance that the lease will be extended after expiry of the contract. The policy states that in case of crop failure the rent should be reduced by mutual agreement, but in Taiwan it used to be customary for the farmer to pay the rent whether the crop failed or not, and there is no guarantee that this custom will not form the basis of the 'mutual agreement'. In this agreement there is no equality between the opposing parties. The same should be said about the arbitration committees--everything depends upon the degree of influence of the landowners in these committees."

15: U.S. Navy--31 [5] (no date) 1944 Formosans
116, 466, 656, 177.46 Japanese
636.46

"Through direct employment and through indirect control of the large agricultural and industrial companies, the Japanese government is the largest single employer of Formosan labor. Control and supervision has been strict since the Japanese occupation of the island, but the progressive invocation of the National Mobilization laws after the outbreak of the China 'Incident' has made government control of labor complete. Although there is evidence of chronic discontent among laborers on Taiwan since the 'liberal' days of the 1920's, government policy has been careful to prevent the development of any leadership. The usefulness of Taiwan as a base for military operations and as a link in the new imperial system depends upon the smooth functioning of transportation and communication and (to a growing degree) of industrial activity. All this in turn depends upon the strict control and obedient service of Formosan-Chinese labor, both skilled and unskilled. The Japanese fear any labor agitation, and realize that they are extremely vulnerable to slow-down tactics, if these should be initiated."

15: U.S. Navy--31 [9] (no date) 1944 Formosans
116, 466, 651, 177.65 Japanese
636.65

"The hoko system of mutual responsibility within households and local communities is under closest police supervision and control. Through it the government can demand and receive contributions both of hours of labor and of taxes in kind. Close check can be kept also on all labor unrest and agitation."

15: U.S. Navy--32 [3] (no date) 1944 Formosans
116, 466, 467, 656, 177.46 Japanese
636.46

"In 1931 the upsurge of reactionary power at Tokyo made possible the outbreak of the Manchurian Incident and the stage was set for the war program. Labor leadership, labor organizations and union programs came to an end much more quickly in Taiwan than in Japan Proper. By the end of 1931 everything which smacked of opposition had been suppressed. The employers in the strategic industries, transportation and communications are official or semi-official bodies. Hence there can be no dispute over labor questions."

15: U.S. Navy--32 [6] (no date) 1944 Formosans
116, 745, 466, 177.46 Japanese
636.46

"Hours of labor average about ten per day, including Sundays, although most employees get two days off each month. There are no labor laws or workmen's compensation laws, as there are in Japan. Excepting in cases of Government laborers, as in the Monopoly Bureau or the Government Railways, there are no provisions for bonuses or overtime payment, but most Japanese employers follow the Government example and pay for overtime work. The Government provides free housing for certain classes of Government employees, and retires long-time employees on small pensions. Private industry makes no such provisions, except sometimes where the employer is a wealthy family bearing a paternal relationship toward workmen long in service. The Government also has a scheme for compulsory social insurance payments. No such provisions exist in private industry. If a laborer is injured on the job, it is customary for the employer to pay hospital expenses. If he is killed or totally disabled, the employer makes a money contribution, called 'consolation money' to the injured man or to his family. Thirty days' notice is usual in discharging an employee; in lieu of notice, thirty days' wages are generally paid."

15: U.S. Navy--32-33 (no date) 1944 Formosans
116, 462, 466, 883

"The percentage of women among the total number of [33] employed persons in various industries is indicated by the following figures:

Table 25: Percentage of Industrial Workers who are Women.

Textile industry	73.4	Chemicals	26.4
Metals	10.6	Lumber	5.8
Machinery	1.2	Foodstuffs	34.8
Ceramics	18.2	Printing	12.9
'Others'	68.2		

The textile industry is negligible in Taiwan. If it is excluded, women numbered approximately 30.6 percent of the people employed in Taiwan in 1936. Women and children labor in the mines and are used to provide motive power for wagons, push-car lines and construction gangs. The wages for women are usually about half those for men. Human life as well as labor is cheap, and the employers in Taiwan are notoriously careless of safety and sanitary conditions in industry."

15: U.S. Navy--33 (no date) 1944 Formosans
116, 466, 177.46 Japanese
636.46

"Under the National Mobilization laws which have been put into effect the conscription of labor by the Japanese has been complete. Even before this, the forced contribution of labor, directly or indirectly, was managed in various ways. Work on semi-public undertakings was called a patriotic duty. Schools, young people's associations, and local ward organizations were expected to contribute certain hours of labor or, in lieu of them, special donations. If an individual Formosan is absent from any announced 'voluntary' project, complete explanation must be made to the authorities concerned. Types of semi-public undertaking include road-building, flood prevention, irrigation works, construction and care of shrines, land clearance, airfield construction, and tree-planting. The figures which follow indicate labor contributions over a one-year period:

Table 26: Enforced contributions of labor.

	No. of Laborers	Hours of Labor
School groups (primary and middle schools, Native and Japanese)	629,510	3,101,869
Young Men's Organizations	221,574	1,567,248
Adults in various organizations	399,708	2,265,361

Men of the upper class, especially those with advanced education and experience outside of the island, live in constant fear of impressment and transportation to the front for Army labor service."

466 Formerly the employee was an apprentice with a status of a house servant, but now the relationship is regulated by written contracts.

4. Male and Female Servants

566 Up to the early years of Japanese rule a type of true servitude existed in Formosa. These servants were not slaves, but were bought and sold for money, and were very low in social status. Male servants disappeared earlier in time, but female servants remained until a much later date. It is interesting to note that, the civil status of female servants in Formosa was somewhat different from their status on the mainland. On the mainland their servitude was life-long, but in Taiwan they were bought by contract, and emancipated when the servant or her family could provide money to buy her back. In the case of marriage, her intended husband had to pay money to buy her freedom. Her status somewhat resembled the indentured servant of colonial North America. The frontier spirit, the newness of social institutions, and the scarcity of women seem to be the cause of this contrast between the mainland and Taiwan.

In 1917, the higher court of justices in Taipei invalidated the purchase system of female servants as detrimental to public welfare and morals. The following year the commissioner of police, fortified by this

466 Long Working Hours. Free China Labor League reports that, in June 1951, workers in 45 sample factories and mines generally worked 10 hours a day.[23] However, because of the generally low income of the wage earners many people do supplemental work in addition to their regular employment. In 1952, laborers worked on their regular jobs 53 hours a week with an average of 14 hours of overtime; besides, they worked 23 additional hours on various other types of employment.[24]

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23. Free China Labor League, op. cit., p. 10. Although the percentage of factories and mines containing different lengths of working hours may not apply to all the factories and mines on the island, it nevertheless gives some indication of the existing conditions.

24. A. F. Raper and others, op. cit., p. 139. For the surveyed household heads only.

466 HOURS OF WORK PER DAY IN 45 FACTORIES AND MINES, JUNE 1951*

Daily Working hours	8	9	10	12
Percentage of factories and mines	13	4	16	12
Percentage of factories and mines	29	8.8	35.6	26.6

* Free China Labor League, op. cit., p. 10.

The league also reported that the average number of working days per month for all industries in Formosa was 28.3 for male laborers and 25.8 for female laborers. For male workers, those in the ceramic industry worked the longest hours, 29.6 days a month, while those in the food industry worked only 20.5 days.

465 Wage Scale. Aside from miners, textile workers in Formosa are apparently the highest paid of all the factory workers, followed by workers in the printing and machinery industries. The monthly income of workers in selected industries is shown below:

467 from large factories and mines. Special unions include railroad workers, postal workers, and salt miners; each of these has a federation at the provincial level in addition to the locals.

The Fishermen's Association and Farmers' Association are independent of the federation systems. The former has been instrumental in co-operating with the provincial government and United States aid agencies in making low-interest loans to fishermen and loans of fishing boats, rationing of cloth and rice, establishing medical stations, improving fish markets, etc.

VI. LABOR RELATIONS

466 Paternalism: Paternalism, in the Oriental sense of the word, concedes full authority to the head of the family and exacts complete loyalty and obedience from family members. In Formosa, the owner or manager of a plant is referred to as "Lao Pan" -- meaning, the owner. Lao Pan is also the term used for "master" or "ship's master," and it carries the connotation of complete domination not only over the use of fixed property but also over the person or persons employed on the premises. The lives and working conditions of the workers are largely, if not completely, dependent upon the whims of the master.

466 Some employers have strongly opposed unionization because in their opinion their own beneficence outweighs any advantages that may be offered by union membership. Any grievances which the workers may have must be handled with extreme care and diplomacy on the part of the workers, or else be interpreted by the employer as a display of disrespect or disloyalty.

467 Labor Welfare Measures. Each of the city general labor unions and hsien federations has a "Labor Welfare Committee" with the function of improving living conditions and mitigating the hardship imposed by the low wages. For instance, there is a "Labor Clinic" in the Keelung City General Labor Union and the Hsien Federations of Labor of Taichung, Hsinchu, Yilan, Chiayi, and Taoyuan.[27] Also, union stores which sell daily necessities to the members at a lower price are very popular. Various enterprises and employers also undertake to provide recreation and medical facilities, daily necessities at a lower price, mutual aid funds, etc. As an example, a government-owned cigarette manufacturing factory has a clinic of its own, and provides welfare facilities such as a day nursery, a laundry shop, cold drink stands, a barber shop, public baths, etc.

The income of the trade unions, derived mainly from membership fees, has been limited

27 Ibid.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

words in Japanese, such as expressions to be used when entering the predominantly Japanese-manned police stations and other official places. Some uneducated men, however, learned a modicum of Japanese when they served in the Japanese army labor corps during the war period.

Under the Japanese the teaching of the Chinese written language as well as the traditional Chinese classical literature in the schools was illegal. However, village men tell about a Chinese school "secretly" conducted in a temple in Lukang even through the late 1930's. There children and teenagers were taught to read and write Chinese and to study the Chinese classics. Only a very limited number of people from Hsin Hsing and the neighboring villages attended such schools, and there were few who attended the Chinese school who did not attend the Japanese primary schools as well.

In the Hsin Hsing area, then, except for the few Taiwanese who managed to attend secondary schools or colleges or who were laborers during the war, the number of persons able to read and speak Japanese (or read Chinese) was small. Grajdanzev, mostly on the basis of Japanese sources, noted that "after 1937 five and one half million Chinese (in Taiwan) could not read a newspaper in their own language, though most of them do not know Japanese" (1942:170). The effectiveness of the Japanese educational system for much of the population of the rural area has perhaps been exaggerated. Although the Japanese school system was greatly expanded between 1937 and 1945, it appears that it did not have time to develop any depth in its effect on the peasant.

Under the Nationalist government's theoretically "compulsory" education, almost all students and former students of the present school system can now speak some Mandarin, which is the only language used in the school after the first or second year. Some of the younger middle-aged men have developed a functional knowledge of simple Mandarin as a result of recent work contacts in Taipei or service in the Chinese army.

The language situation in Hsin Hsing and the surrounding rural area is as follows (for 1958): Very young children speak only Taiwanese (Min-nan) up through the first few years of school. Children in higher grades and young people up to the age of about twenty-six speak Mandarin with varying degrees of fluency in addition to their native Taiwanese. Their fluency depends upon the amount of schooling they have had, how long they have been out of school, and the amount of contact they have had with the language at work or in other special situations after leaving school.

Some men and a few women between twenty-four and forty-five speak some Japanese in addition to Taiwanese. The men learned it

36: Rowe S-4 (no date) 1955 AF1 China AF1
Formosa AD1

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pine apple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use.

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak.

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1952), cement (389,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures.

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 630,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–52, the world market price began to rise, and sugar production is gradually returning to its previous high levels.

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries.

A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government.

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes.

C F 433 [387] [251] 499 C F 377 433 C F 257 433 C F 433 [228] C F 466 C F 651

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -1-2
116, 467, 656, 668, 177.66 Japan
636.66

"In October, 1921, Lin Hsien-t'ang, Ts'ai Pei-ho (who was arrested in 1923), Chiang Wei-sui and others organized the Taiwan Bunkakyokai (Taiwan Cultural Society), which very soon became the centre of the national movement among the moderate elements. But in 1926 the Marxist groups made their appearance on the island for the first time when twenty Chinese formed the Taiwan Proletarian Youth League (Taiwan Musan Seinenkai). Since that time the political movement has separated into two branches—the Moderates centered around the Bunka Kyokai and were strongly represented in the Taiwan Agricultural Cooperatives, and the revolutionary Marxist organizations closely connected with the workers union (Taiwan Koyuso remmei), which in 1928 was reported to have had as many as 6,367 members and to have organized several successful strikes. However, after 1928 there began a new era of suppressions and arrests and one after another the Chinese organizations fell victims to it. The Marxist groups were the first to go. In 1931 the Taiwan Koyuso remmei was suppressed and finally in August 1937 even the most moderate movement of the right wing organizations, the purpose of which was the reform of local government, was dissolved on the claim that the government had already realized this reform.

This, of course, does not mean that all these movements were eradicated; they went underground, and continued their struggle, but the government suppression made even moderate groups more radical than they were before. In 1931 Taiwanese in Shanghai reorganized their Taiwan Youth Party into the Anti-imperialist League. It had close

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -2
116, 467, 656, 668, 177.66 Japan
636.66

connections with Taiwan, where its members from time to time were rounded [179] up by the police."

15: U.S. Navy--31-32 (no date) 1944 Formosans
116, 467

"During the 1920's, the period of relative liberalism in Japan Proper was reflected in Taiwan. In May, 1924, the first peasant organization was allowed to be formed at Inrin, Taichu province, among the employees of the Rin Hongen Company's sugar plantation workers. In 1925 this union presented three demands to the company. They demanded that prices be announced before the harvest, that a control committee be created to supervise the weighing of the cane and that prices be increased for sugar cane and [32] lowered for fertilizers. An armed clash occurred when the company refused to meet these demands, and as a result fifty union members were sentenced to hard labor."

15: U.S. Navy--32 (no date) 1944 Formosans
116, 467

"In June, 1925, the Ch'en Ch'ung-ho Company in the Takao area rented some of its land to fifty peasants from Shinchiku province, and then rented it again to the Shinko Sugar Company. This latter firm demanded that the peasants either move or take up the cultivation of sugar cane for the company. A union was formed at Hozan, in Takao province, to meet this challenge. This was soon followed by the formation of another union at Taiko in Taichu province. The unions formed at Inrin and Hozan soon influenced workers throughout the island. In 1926 the Hozan and Taiko unions merged to form the Taiwan Nomin-kumiai (Taiwan Peasants' Union). By October 31, 1927, it had branches throughout the island, with four provincial committees, twenty-three branch offices and 24,000 members. It ventured to send a delegation to Japan to petition the Diet on matters of interest and to make contacts with Japanese peasant unions."

15: U.S. Navy--32 [2] (no date) 1944 Formosans
116, 467

"In December 1927 a first Congress of Formosan Peasant Unions was held. Delegates from unions in Japan were present. Proclamations were drawn up stating that the unions intended to be guided by Marxist theory and policies.

In 1927 labor unions were organized among metallurgical, building, mechanical and masonry workers. On February 19, 1928, a Taiwan Federation of Labor (Taiwan Koyusorenmei) was formed by the affiliation of 29 trade unions, having a total membership of 6367. Much was said of Sun Yat-Sen's Three People's Principles, and attempts were made to obtain betterment of labor conditions, liberalization of labor laws and general political improvement of the status of Taiwan."

15: U.S. Navy--32 [3] (no date) 1944 Formosans
116, 466, 467, 656, 177.46 Japanese
636.46

"In 1931 the upsurge of reactionary power at Tokyo made possible the outbreak of the Manchurian Incident and the stage was set for the war program. Labor leadership, labor organizations and union programs came to an end much more quickly in Taiwan than in Japan Proper. By the end of 1931 everything which smacked of opposition had been suppressed. The employers in the strategic industries, transportation and communications are official or semi-official bodies. Hence there can be no dispute over labor questions."

15: U.S. Navy--32 [4] (no date) 1944 Formosans
116, 177, 467, 369

"No contact appears to have existed between peasant and labor groups. Actually they were in conflict with each other on a number of issues. Peasant unions were closely tied up with the Japanese peasant unions, which had a strong Marxist element motivating them. The urban organizations--the Taiwan Minshuto and various trade unions--accepted the principles of Sun Yat-Sen of China, but were not connected with any organization outside of Taiwan."

15: U.S. Navy--32 [5] (no date) 1944 Formosans
116, 467, 668, 871, 177.87 Japanese
636.87

"Formosan peasant and trade unions were not organized along class lines, owing perhaps to the essential democracy of the Chinese guild system. Members of the middle and well-to-do classes actively supported the peasants and workers in their agitation for better working conditions and attempted to work for legislation to that end. The biggest handicap to any such movement has been the lack of education for peasants and workers, especially of education which could be gained outside of the Japanese 'National Schools.'"

474 ruthless means of suppression were adopted
in the name of internal consolidation. The
427 cases of farmers opposing landlords dropped
668 sharply to 23 cases in 1929, 28 cases in
1930, and 16 cases in 1931. However, the
671 influence of the movement on Formosan
society, especially on social relations between
landlords and tenants was undeniable. The
government sponsored landlord-tenants
associations after 1924 were a means to
mitigate the tense situation of the time.

• 467 3. Labor Unions: The new social currents
also reached factory workers. Labor unions for
various trades were organized, and in 1927,
29 local unions were federated into the
Taiwan Federation of Workers Unions. At
the end of the year participating units
increased to 65, and the number of members
amounted to 7,861. In 1928 the League of
Taiwan Mechanical Workers was organized
under separate leadership. Several strikes
were directed by the leagues. Both the
farmers associations and the worker's unions
received co-operation from associations and
unions in Japan. Generally speaking, because
of the backwardness of Formosan industry
at that time, the activity of labor unions was
not as conspicuous as that of the farmers.
The activity of the union also faded out under
the pressure of government suppression in
1929 and 1931. In 1932 almost all labor
leaders were arrested, and in 1937, the year

467 Japan started its invasion into North China, even the conservative and harmless Taiwan League for Local Self-Government was ordered disbanded by the government.

III. SOCIAL ORGANIZATION AFTER THE RESTORATION

575 Since the restoration of Formosa to China in 1945, the people have been free to form associations of various kinds, provided these associations do no conflict with the anti-Communist policy of the government. Many new organizations have come into being. In the village, the traditional folk associations for religion and for mutual financial aid still exist. Most of the associations established during the Japanese period have been reorganized, with Chinese members replacing the Japanese and the Chinese government assuming control formerly in the hands of the Japanese colonial government. All associations are registered with the Provincial Department of Social Affairs, which supervises their activities. An association may be dissolved or may be compelled to re-elect its officers if found guilty of violating national laws or ordinances.[6]

For administrative purposes, associations

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6. In 1953, 247 organizations were ordered to re-elect their officers, 9 to be reorganized, 8 to suspend their activities, and 1 to be dispersed. Chung-hua Min-kuo Nien-chien

(continued next page)

•467 Labor Unions were considered revolutionary and banned under the Japanese administration. Upon the restoration of the island to China, labor unions on the Mainland helped the local workers to form unions. Labor unions are of three kinds, occupational, industrial and special. Workers in each trade organize the local units. The locals in a hsien or a municipality unite to form a local labor union. In large-scale industries, which are mostly operated by the government, the staff members and the workers organize a union in each industry. The occupational labor unions and the industrial labor unions unite at the provincial level to form the provincial general labor union. A few occupational unions such as the postal union and the railroad workers unions maintain their own local and provincial organizations. They are the special labor unions. The number of labor unions and their membership at the end of 1954 were as follows:*

	Number of Units	Total Membership
Occupational labor unions	401	111,657
Industrial labor unions	219	231,431
Postal Union	14	2,542

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Railroad workers union	13	22,265
Highway workers union	13	5,121

* The China Annual 1954, Vol. 3, Feb. 1955, p. 89.

Labor unions in Formosa are generally directed by members of the Kuomintang and are subsidized in part by the government. Their main functions are to seek improvements in wages and working hours, to look after the welfare of the workers, and to participate in patriotic activities. The most noteworthy service offered are social security measures which include accident insurance, maternity and life insurance, pensions at retirement, and low-cost housing for workers. Some unions also operate clinics, day nurseries, and co-operative groceries for the benefit of their members.

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Formosa has a long seacoast and over seventy islets. Over 232,000 people are engaged in fishing. The fishermen's associations were formerly controlled by fishing-boat owners and owners of the fish ponds, and funds used in welfare work were derived from a surcharge of the price of fish.

467 Labor Organizations. Labor organizations include trade unions, farmers' associations, and fishermen's associations. Trade unions are weak and cannot be called unions in the real sense of the term, because the law does not provide for effective collective bargaining and also prohibits strikes, shut-downs, and walkouts of any kind during the present emergency period. The trade unions are organized under government supervision and tend to be used for carrying out government policies with respect to the workers. However, the educational and welfare activities performed by the unions should not be overlooked.

461 The Outlook of the Workers. Most of the farmers, as a result of the recent land reform, have become owner-cultivators and are looking forward to owning their own houses, sending their children to school, and enjoying better living conditions. On the other hand, because of limited employment opportunities and low wage levels, the non-agricultural laborers do not appear to face a very promising future.

464 The Future Labor Force. In 1950, the entire male labor force was estimated at 2.1 million. George Barclay states that the male labor force 25 years from now (1980) could amount to about 4 million, assuming that the

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208 The reason for the "worse" answers were found to be overpopulation, more competition, more unemployment, and low income. More United States aid, possible reconquest of the Mainland, and more employment were given as reasons why conditions might improve.

V. LABOR ORGANIZATIONS

467 The Limited Role of Trade Unions. Although Article 5 of the Labor Union Law (revised) of January 7, 1949, states: "The functions of a labor union are as follows: (A) to conclude, revise, or abolish any agreement or contract on behalf of the members...," the trade unions in Formosa function principally as a medium of political education and undertake limited welfare activities on behalf of their members.

During the Japanese occupation unionization was banned by the Government-General. At that time most of the workers were not sufficiently educated or aggressive enough to form unions. Despite the National Government's attempts to encourage unionization, in view of the existing emergency conditions, trade unions are not permitted to exercise their bargaining power. The government has undertaken to train union officials. At the same time, government promotional and

467 supervisory personnel and labor-relations specialists are sent to the unions. Consequently, trade unions tend to be used for carrying out government policies among the workers.

The Organizational System. The administrative hierarchy of trade unions in Formosa consists of the Chinese Federation of Labor at the national level, the Taiwan Federation of Labor at the provincial level, and hsien federations and city general labor unions. As basic level units, there are the city and hsien locals, which make up the city general labor unions and hsien federations respectively. The locals are classified into industrial unions, occupational unions, and special unions. At the beginning of 1943, there were 288 occupational locals and 57 industrial locals in the whole province.[26] As of 1953, occupational unions included 58 trades, such as printing, trucking, painting, baking, pedicab operators, mechanics, dockworkers, canning, electricity, barbers, tea-processing, etc. The membership of industrial unions primarily comprises workers,

26. China News Press, T'ai-wan Ching-chi Nien-pao, 1953 [Annual of Taiwan's Economy, 1953], Taipei, 1953, p. 174.

467 from large factories and mines. Special unions include railroad workers, postal workers, and salt miners; each of these has a federation at the provincial level in addition to the locals.

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The income of the trade unions, derived mainly from membership fees, has been limited

27 Ibid.

467 because of the low income of the workers. For this reason welfare work carried out by the unions has not been able to meet the workers' needs. Although some government-owned enterprises provide satisfactory welfare facilities, generally speaking, most employers lack the financial means to make satisfactory provisions.

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45:Stanford U. S-4, 5 1956 AD1 Formosa
AD1

NUMBER OF PERSONS ENGAGED IN MANUFACTURING AND MINING AS OF DECEMBER 1951 IN FORMOSA*

Hsien	Manufacturing	Mining
Taipei (incl. Yangmingshan Adm)	67,963	40,686
Yi-lan	5,449	-
Tao-yuan	5,800	941
Hsin-chu	8,382	2,363
Miao-li	8,797	4,465
Tai-chung	17,880	66
Nan-tou	3,148	-
Chang-hua	8,909	-
Yun-lin	6,568	-
Chia-yi	11,743	-
Tai-nan	24,027	256
Kaohsiung	28,109	-
Tai-tung	2,615	-
Hua-lien	1,117	39
Peng-hu (Pescadores)	1,343	-
Total	206,740	49,756

45:Stanford U. S-4, 5 1956 AD1 Formosa
AD1

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* Taiwan Provincial Government, The Structure of the Taiwan Economy, Taipei, 1953.

4: Grajdanzev--44 S-4 (no date) 1942 Formosans
116, 161, 433, 464, 471

"Two thousand yen per ko (2.4 acres) is an apalling [sic] price where the daily wages of a worker are about one yen per day, and it prevents the landless from having a chance to become owners of land. However, the phrase 'population pressure' is not used here in the Malthusian sense. The question is not one of food--the island produces twice as much as the islanders consume--but of employment. Openings in industry are few; independent industrial enterprise is almost impossible because a plant worth a few hundred or thousand yen cannot compete with a modern factory. The only occupation left is that of the farmer--a customary occupation for the majority of the islanders. The rise in land values is a symptom of the growing difficulty of finding employment, and not of a growing scarcity of food."

4:Grajdanzev--45 S-4 (no date) 1942 Formosans
116, 312, 471, 655, 177.31 Japan
636.31

"In any case the success in irrigation should be recognized as conspicuous, and it is not less striking that it was achieved with the relatively modest investment of about fifty million yen by the state since 1908. But the state has gradually withdrawn from the field, leaving irrigation works to private enterprise and to special irrigation associations. In 1937 the irrigated area was divided among three groups as follows: 140,500 ko were irrigated from the public canals, 132,000 ko from canals belonging to private persons, 259,000 ko from those of irrigation associations. The last are under the influence of landowners and of the owners of enterprises processing agricultural products."

4:Grajdanzev--61 S-4 (no date) 1942 Formosans
116, 249, 423, 471, 177.47 Japan
636.47

"The old type of sugar cooperatives dominating the industry before 1895 disappeared with the advent of capitalistic forms of enterprise in Taiwan. Production of sugar is now carried on in modern mills which are the property of the Japanese sugar companies possessing tremendous amounts of capital (several hundred million yen). Step by step these companies acquired a huge area of cultivated land——from 3.2 thousand ko in 1925 this area increased to 93.2 thousand ko in 1935. The latter figure amounts to more than ten per cent of the cultivated area of the island, but in the regions where sugar cane is cultivated the companies own more than twenty per cent of the area under cultivation (1).

1. Actually their influence is greater than these figures suggest because they rent about 20,000 ko of land.

However, it would be a mistake to think that this huge area is used by the manufacturers for sugar cane plantations. They plant only about 18,000 to 25,000 thousand ko with cane, while all other sugar cane is bought by them from the small farmers, i.e. about three-quarters of the total sugar cane production is supplied by 127,000 to 130,000 farmers, each planting on the average only half a ko."

4:Grajdanzev--62-63 S-4 (no date) 1942 Formosans
116, 241, 312, 471, 177.24 Japan
636.24

"By putting irrigation works at the service of the farmers (at a price) the government, the local bodies, and the companies [63] impose a condition that a certain part of the newly-irrigated area should be devoted to sugar cane. This stipulation may be to the advantage of the farmer or to his disadvantage, but it is clear that he is not free to decide."

4:Grajdanzev--66-67 S-4 (no date) 1942 Formosans
116, 245, 255, 464, 471, 177.24 Japan
636.24

"Pineapples were cultivated in Taiwan before the occupation of the island by the Japanese, but only after the introduction of canning did the industry begin to expand rapidly. The fruit is raised on the hill slopes and thus does not compete with [67] cereals or sugar cane. The authorities estimate that more than 20,000 ko can be used for pineapple plantations, but the area under cultivation is now only 9,000 ko. Data on production are given below.

Pineapple Production in Taiwan

	1921	1935	1936	1937	1938
Area under pineapples (1,000 ko)	1.3	7.0	8.0	8.9	9.9
Crop (1,000,000 kin)	8.9	87.1	110.2	107.8	116.0
Value (1,000 yen)	367	2,626	3,129	3,115	...
Value of exports of (¥1,000) canned pineapples	865	7,306	5,857	7,600	10,620*

* Exports of canned and fresh pineapples.

Sources: Nogyo Nenkan; for 1938, Taiwan Jijo.

Production, chiefly of the plantation type using hired labor, is chiefly in Japanese hands."

4:. Grajdanzev--68 [2] S-4 (no date) 1942 Formosans
116, 241, 471, 656, 177.65 Japan
636.65

"These examples--the cotton plan and horse-breeding plan--are extremely significant. The government officials work out plans which can hardly be called realistic and yet the successes of agriculture in Taiwan are very frequently ascribed to the government's efforts and plans."

4:Grajdanzev--85 S-4 (no date) 1942 Formosans
116, 221, 226, 433, 471, 177.22 Japan
636.22

"Fishing, which did not demand an elaborate equipment, was an important auxiliary occupation for the Chinese farmers, especially in slack seasons. The sea around Taiwan is rich in fish and the Chinese are expert fishermen. It is natural, then, that fishing has become an important element in the economy of the coastal farmers. But at the time of their conquest of Taiwan the Japanese were not interested in the fisheries because at that time the seas around Japan proper and near Kamchatka had not been sufficiently utilized. Petty regulations, the taxing of fishermen, and other measures brought a decline in this ancient Chinese occupation and only recently, when the Japanese felt a need for more fisheries, and when their huge corporations with their mechanized equipment turned to the South, did the government become interested in fishing. The results were the same as in all other spheres of the economic life of Taiwan: Japanese fishing grew at the expense of Chinese."

4:Grajdanzev--86 S-4 (no date) 1942 Formosans
116, 226, 228, 471

"Gross Value of Fisheries' Products
(1,000 yen)

	1919	1923	1928	1931	1934	1936	1937	1938
Value of catch	5,058	9,031	12,670	8,483	11,453	14,934	14,513	15,671
Value of manufactured products	1,424	3,304	2,706	1,525	2,291	2,500	2,324	2,359
Value of products of fish ponds	2,422	1,944	3,402	3,047	2,890	4,207	4,545	5,525
Total	8,904	14,279	18,778	13,055	16,634	21,641	21,382	23,555"

4:Grajdanzev--86 [21 S-4 (no date) 1942 Formosans
116, 228, 471, 473, 563

"As to the other fishing enterprises, their relative strength may be presented in the following manner:

Fishing Enterprises in Taiwan

	Number of firms	Nominal capital (1,000 yen)	Paid-up capital (1,000 yen)	Average paid-up capital per company (1,000 yen)
Japanese corporations with offices in Japan	2	101,500	65,500	32,750
Japanese corporations with offices in Taiwan	28	5,972	3,044	109
Other firms (mostly Chinese)	21	429	399	19

In this field the Chinese can hardly compete with the Japanese because of their lack of capital (1).

1. It is interesting to note that, according to the last census, out of 82,338 Chinese fishermen 16,382 were employers, while among 5,045 Japanese only 101 were employers. Evidently, the Chinese 'employer' had one to three workers, while the Japanese employer was a person or firm of considerable means."

4:Grajdanzev--94-96 S-4 (no date) 1942 Formosans-1-3
116, 454, 471, 472, 473

"Finally, we may compare these industries from the point of view of the amount of capital invested in them: (1) [95]

1. Only paid-up capital is included because data for the reserves of smaller corporations could not be found.

Capital Invested in Taiwan's Industry in 1937
(million yen)

	Corporations	Limited partnership	Unlimited partnership	Total
Textile industry	2.7	0.1	0.1	2.9
Machine	3.9	0.9	0.1	4.9
Ceramics	3.3	0.2	0.1	3.6
Chemical	9.6	0.3	0.2	10.1
Lumber	1.5	1.1	0.1	2.7
Food	113.1	4.6	0.4	118.1
Printing	0.5	0.1	...	0.6
Gas and Electricity	47.0	...	...	47.0
Others	1.0	0.3	0.3	1.6
Total	182.6	7.6	1.3	191.5*

Footnote on next page.

* The official estimate of the total capital of industry on Dec. 31, 1937, was ¥258.5 million but it is not clear whether this figure includes nominal capital or only paid-up capital and, whether it includes other investments, government enterprises etc.

Source: Taiwan Jijo, 1939.

Again the food industry is in first place. Actually its position is much more important because it has accumulated considerable reserves. Next in importance is gas and electricity because here investments play a greater part than the number of men occupied while ceramics and printing are poor in capital. It may be of interest to compare the average investment per enterprise for the same year:

Paid -Up Capital per Business Unit
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Textile	671	60	120	477
Machine	353	38	45	123
Ceramics	276	21	33	155
Chemical	387	37	115	289
Lumber	163	93	23	106
Food	1,509	78	44	832

Paid-Up Capital per Business Unit Cont.
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Printing	101	12	...	41
Gas and electricity	7,836	10	...	6,718
Others	76	13	68	38
All industry	1,127	51	54	578

[96] We see from this table that in Taiwan there are very large enterprises in the electric power, food, and textile industries, where capital per enterprise is relatively large, while enterprises in the printing, machine, lumber, ceramics and 'other' industries are very small in size. It should be pointed out that individual enterprises are not included here, (2) but both their capital and the value of their products are insignificant

2. The number of individual enterprises in 1934 were reported as follows: 62 in textiles, 91 in metals, 173 in machinery, 588 in ceramics, 428 in chemicals, 3,960 in foods, 256 in lumber, 126 in printing and 381 in others, a total of 6,065, almost all of them Chinese (Takahashi, op. cit., p. 438).

in comparison with those of the companies."

4:Grajdanzev--96-97 S-4 (no date) 1942 Formosans-1-2
116, 171, 454, 471, 473, 177.47 Japan
636.47

It is also interesting to compare the size of the companies in Taiwan as regards capital with those in Japan proper and in Korea.

Industrial Companies, their Total and Average Capital in the Japanese Empire, December 31, 1937.

	Companies, number	Total paid-up capital and investments (million yen)	Capital per enterprise (1,000 yen)	Capital per capita of population (yen)
Japan proper	30,518	9,396.9	308	132
Korea	981	246.2	251	11
Taiwan	335	191.5	572	34
Kwantung	358	96.9	271	81
Karafuto	88	33.6	382	103

Source: Dainippon teikoku tokei nenkan, 1939.

It is clear that Taiwan and Korea are poorly supplied with capital per capita of population, but there is an important difference between them: the average capital per company in Taiwan is higher than in any other part of the Japanese Empire, including Japan proper. These are averages and include small as well as large companies, but behind them one may see the silhouettes of big corporations dominating the economic life of Taiwan,

corporations which have few equals even in industrially developed Japan (1).

1. By size of total paid-up capital the corporations and partnerships in industry in Taiwan were distributed as follows: [97]

Size	Number of companies	per cent of total	Total paid-up capital (1,000 yen)	per cent of total
Less than ¥10,000	50	14.9	253	0.1
¥ 10,000- 49,000	111	33.1	1,922	1.0
¥ 50,000- 99,000	34	10.2	1,276	0.7
¥ 100,000- 199,000	48	14.3	3,020	1.6
¥ 200,000- 499,000	40	11.9	4,878	2.5
¥ 500,000- 999,000	20	6.0	4,694	2.5
¥1,000,000- 4,999,000	25	7.5	24,077	12.6
¥ 5,000,000- 9,999,000	2	0.6	5,700	3.0
Over ¥ 10,000,000	5	1.5	145,316	76.0
Total	335	100.0	191.1	100.0

Thus, 32 companies—9.6 per cent of the total number—had 91.6 per cent of the total capital of companies."

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-1-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

"Our analysis of industry and mining must not be limited to a survey of present conditions and the plans of the government, etc. Properly speaking it should only begin here. The population of Taiwan is about five per cent Japanese and about ninety-five per cent Chinese and aborigines. In order to evaluate the place of these two groups in industry and mining we should know wage levels and working conditions as well as the all-important question of who are the entrepreneurs and who the wage earners. Unfortunately, some of these questions cannot be answered because of the absence of information.

The latest available report concerning the nationality of capital in Taiwan's companies refers to the years 1929.

Distribution of Corporate Capital in Taiwan by Nationality in 1929
(1,000 yen)

	Japanese	Chinese	Other*	Total
Agriculture	4,434	4,962	4	9,399
Industry	180,497	16,786	1,658	198,941
Commerce	23,128	28,082	2,033	53,242
Communications	3,186	2,571	25	5,781
Fisheries	2,258	1,190	20	3,467

Distribution of Corporate Capital in Taiwan by Nationality in 1929 [Cont.]
(1,000 yen)

	Japanese	Chinese	Other*	Total
Mining	12,243	3,441	1,422	17,107
Total	225,745	57,033	5,161	287,939

* Chiefly Chinese from the mainland, citizens of the Chinese Republic.

The share of the Japanese was therefore 90.7 per cent in industry and 71.6 per cent in mining, while the corresponding shares for the Chinese were 8.5 per cent and 20.1 per cent. It is true that these figures do not include individual enterprises, which are chiefly Chinese, but it is quite evident that their inclusion would not greatly change the picture because the average capital of such enterprises is very small. On the other [111] hand this table does not include government enterprises which should be considered for all practical purposes as Japanese enterprises (the managerial staff is Japanese and the profits may be transferred to Japan at any time), and the capital of these government enterprises is huge. As is seen from the table, the capital of all corporations was about ¥288 million in 1929, yet in the same year the capital of the state railways alone was ¥122 million. Beside railways the government has many enterprises of all kinds. Since 1929 the situation has further changed to the disadvantage of the Chinese group for in the

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

last few years, as was shown above, huge new companies have been established and the capital of old ones increased. The new companies are Japanese. In 1929, for example, the capital of the Japanese companies occupied in the fisheries was ¥2,258,000; in 1939 two Japanese companies with headquarters in Japan proper, whose capital is ¥65,500,000 were operating in Taiwan. Of course, only a part of this capital is sunk in their Taiwan enterprises, but it is clear that the situation in 1939, in this as well as in many other respects, is less favorable to the Chinese than it was ten years before.

The same thing has occurred in mining, where the total capital is now ¥46.6 million, instead of ¥17.1 million as in 1929. The increase is due to the activities of the Japanese Koyo Kogyo, Taiwan Kogyo, and Keelung Tanko corporations."

4:Grajdanzev--111-112 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 477

"A similar expansion [similar to that in mining--analyst] has taken place in industry, where all large new enterprises are owned by Japanese who make up only five per cent of the population, but now own at least ninety-five per cent of the capital in Taiwan's industry and more than ninety per cent of the capital in mining. But if one takes into consideration the fact that the Japanese enterprises are modern, while those of the Chinese are small and have more primitive equipment, (1) it becomes clear that the share

1. Compare the data on sugar mills given above.

of the Japanese enterprises in production is even greater than comparison of the respective holdings would indicate. Furthermore, the shares of corporations in Taiwan are not subject to free purchase and sale. These are monopolistic [112] organizations, and shares in them are not offered on the open market but are held by the big corporations of Japan."

4:Grajdanzev--112 S-4 (no date) 1942 Formosans -1-2
116, 171, 471, 563, 477, 655, 177.47 Japan
636.47

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:-

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929 Per cent	Korea 1938 Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital. and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

4:Grajdanzev--112-113 S-4 (no date) 1942 Formosans
116, 171, 563, 471

"According to Takahashi, (1) industry in Taiwan [113] is chiefly in Japanese hands because

1. Op. cit. p. 434 et seq.

(1) the Japanese are able to organize modern enterprises; (2) the Chinese are chiefly concentrated in domestic industry; (3) the national characteristics of the Chinese are such that they are unable to organize corporations; (4) any accumulations of capital which they may have are small because they came to the island recently and their chief occupation is agriculture; (5) they cannot compete in the Japanese market with the Japanese because they do not know the market; (6) in those cases where they do organize a corporation their aim is to get profits quickly, and this brings ruin to the corporation. This is a familiar argument in colonial countries. We make only a few comments below.

It is argued that the Chinese do not have the accumulation of capital necessary for modern industry, that they came to Taiwan recently (!) and that their chief occupation is agriculture. But in 1900-05, when the Japanese began to build up the industrial enterprises of Taiwan, the chief occupation of the Japanese in Japan was also agriculture. It would be a mistake to suppose that they exported a huge amount of capital to Taiwan. This question will be touched upon in the chapter on the external trade of Taiwan, where we shall show that the capital of corporations in Taiwan was 'created' chiefly in Taiwan itself."

4:Grajdanzev--113 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 177.47 Japan
636.47

"Our first question is now answered: the Chinese as a group receive very little from Taiwan's industry and mining in the form of interest on capital or entrepreneurs' profits. Any advantages which they may derive from these industries arise then chiefly from their position as workers. Let us see now what they receive in this capacity. In 1936, out of 81,589 workers occupied in industrial enterprises with five or more workers or having a prime-mover, 76,251 (93.5 per cent) were Chinese—almost the same percentage as in the population of Taiwan. The remaining 6.5 per cent were chiefly Japanese."

4:Grajdanzev--154 S-4 (no date) 1942 Formosans
116, 127, 471, 661

"We have now come to a point where some estimate may be made of what the Japanese are getting from Taiwan (1). It is important to emphasize that all that follows is based,

1. Such questions as how many among the Japanese receive benefits from Taiwan and whether these benefits are distributed equally among recipients, do not concern us here.

with few exceptions, not on more or less exact official figures, but only on estimates. All those who have worked on colonial problems know how difficult it is to get certain data. This does not mean, however, that we should give up the idea of forming an opinion concerning, for example, colonial profits, for many facts are available which help us to make estimates. These are not therefore based on intuitive guesses, but are all founded on certain facts supplied by official and unofficial Japanese statistics."

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

A. ECONOMIC DEVELOPMENT UNDER THE JAPANESE

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Japan's exploitation of Formosa falls into two periods: (1) from 1895 to 1936; (2) from 1936 to 1945. During the first period, Formosa's economy was geared to the demands of the Japanese homeland. The island was developed to export sugar, rice, salt, and other primary products in exchange for Japanese manufactured goods and fertilizers. Japan took between 90-95 per cent of the exports and supplied 85-90 per cent of the island's imports.[43] To facilitate transportation, a network of excellent railroads and highways was constructed, and the harbors, especially those at Keelung and Kaohsiung, were modernized. Industries were owned and operated either by the government or by large Japanese corporations, with very little participation by the local people. Chinese workers were paid wages 50 per cent lower than those paid Japanese workers on a similar job.[44]

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43. Taiwan, A geographical Appreciation, compiled by the Dept. of Mining and Technical Survey, the Canadian Government, Ottawa, 1952, p. 15.

44. Grajdanzev, op. cit., p. 116.

565 time of inheritance, so the contrast between the rich and the poor was not striking. In effect, except for the political and ethnic class lines between the ruling Japanese and the ruled Formosans, social stratification was not clearly marked during the Japanese rule.

After the restoration of Formosa to China in 1945, political and ethnic class lines disappeared with the abolition of the colonial system. With the implementation of the Land-to-the-Tiller policy, inequality in land proprietorship was greatly reduced. When the China Mainland was lost to the Communists in 1949, tycoons transferred their capital to other parts of the world, so that there are no extremely wealthy people in Formosa. New industrial development after the restoration may cause economic differentiation in the future, but for the time being, social stratification is not a serious problem in Formosa. This is the general outline. Some specific topics will be considered on the following section.

2. Primary and Secondary Ownership of Land

471 425 Until the early years of the Manchu rule the land in the southern part of the island was agriculturally exploited under the protection of the government. When people began to farm the northern and middle part of the island,

•471 they had to rely on themselves. Usually rich
425 and influential people received land grants from the government. Then they hired farmers, supplied them with capital, and organized self-protection forces against bandit and aborigine raids. In return, the owner received rent from the cultivators. Legally he was the proprietor and landlord. When a cultivator was assigned a large patch of land, he could rent some parts of it out to other cultivators, and thus in a sense he also became a landlord. In this case there were two proprietors for the same patch of land. This is the origin of primary and secondary ownership of land in Formosa. The original proprietor held the first title, the second proprietor held the second title to the land. The cultivator paid rent to the second proprietor, and the second proprietor paid rent to the first proprietor. The first proprietor, as the nominal owner of the land, paid the land tax to the government. Sometimes with the connivance of officials, an influential man could get the first title to certain land without any investment and collect the rent.

423 This complicated system of land ownership resembled somewhat the Oberhoheit and Unterhoheit of medieval Germany, and the landlords' control of the self-protection forces tended toward a kind of feudal system. Moreover, this system made the transfer of

Stanford U. S-4, 5 1956 ADI Formosa Atl

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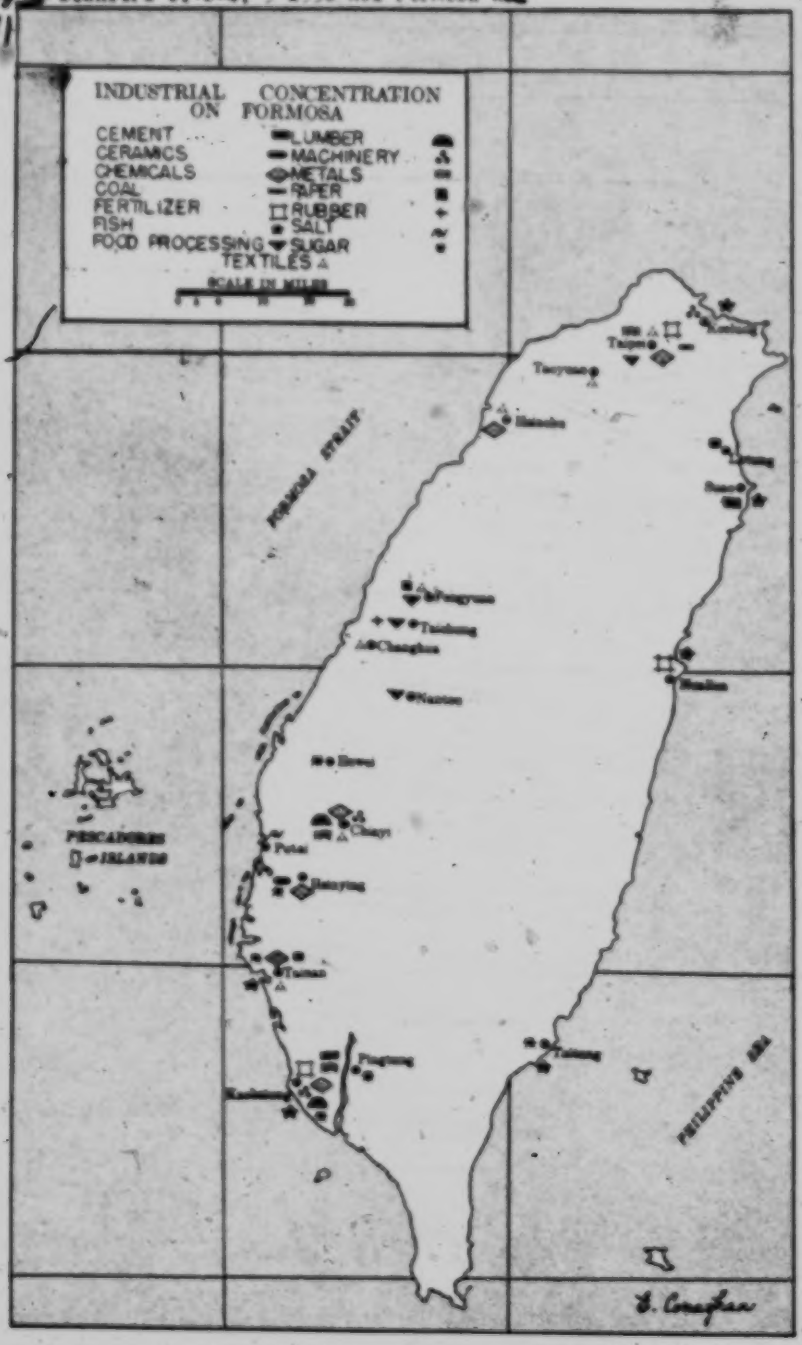

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177 were rapidly worn out. After 1943, Allied
178 aerial attacks dealt them a further crippling blow.

At the time of Japan's surrender it was found that thirty-four of the forty-two sugar mills in Formosa had been reduced to ruins by American bombing. The oil refinery at Kaohsiung suffered 800 bomb hits. The generating capacity of the Western Power System at Sun-Moon Lake was reduced from 308,000 kilowatts to 32,000 kilowatts. The mills of the Taiwan Pulp and Paper Corporation were damaged -- 50 per ent of the buildings and 30 per cent of the machinery -- by Allied aerial bombings.[5]

•471 On August 14, 1945, Japan surrendered to the Allies, and Formosa was restored to China. The Chinese government took over all the industrial enterprises previously owned by Japanese nationals. Some of these, including printing houses, match and food

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5. Industrial Enterprises of National Resources Commission in Taiwan -- General Information, National Resources Commission, Taipei, 1951.

471 factories, and some sixty coal mines, were sold to private owners. The rest were grouped under the management of eighteen public corporations, operated either by the National Government or by the Provincial Government, or by the two jointly.[6]

Industries that were operated by the National Government were:

(1) Chinese Petroleum Corporation
(2) Taiwan Aluminum Works
(3) Taiwan Gold and Copper Mining Administration
(4) Chinese Salt Corporation
(5) Hsinchu Coal Mining Administration
(6) Taiwan Steel Works

The industries operated jointly by the National and Provincial governments were:

(7) Taiwan Power Company
(8) Taiwan Sugar Company
(9) Taiwan Fertilizer Company
(10) Taiwan Cement Company

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6. Han, Lih-wu, Taiwan Today, Taipei, Hwa Kuo Publishing Co., revised edition, 1952, pp. 106-07.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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(11) Taiwan Pulp and Paper Corporation
(12) Taiwan Shipbuilding Company
(13) Taiwan Machinery Manufacturing Corporation
(14) Taiwan Alkali Company

Those operated by the Provincial Government were:

(15) Taiwan Industry and Mining Corporation
(16) Taiwan Camphor Bureau
(17) Taiwan Tobacco and Wine Monopoly
(18) Taiwan Agricultural and Forestry Development Corporation

These public trusts replaced the government monopolies and the government-backed corporations under Japanese control. The preponderance of public enterprise on Formosa often amazed visitors, but the economic structure was dictated by circumstance rather than by choice. The editor of Industry of Free China[7] gave the following explanation for the existence of the huge government corporations:

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7. Industry of Free China, a monthly published by the Industrial Development Commission, ESB, Vol. I, No. 4, Taipei, April, 1954.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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•471 1. During the Japanese occupation, all modern industries on Formosa were owned by the Japanese, and, as enemy property, they passed under the control of the Chinese government.

2. Many public enterprises on the Mainland were evacuated to Formosa with the withdrawal of the Nationalist Government to the island.

3. Allied bombings had caused the widespread destruction of industrial plants. Extensive repairs were necessary. Only the government with immense resources was able to undertake such extensive rehabilitation.

4. Formosans had been given only secondary positions in industries by the Japanese. They had neither the experience required to manage large-scale enterprises nor the capital needed to finance operation.

178 With the economic and technical assistance provided by the United States, systematic repairing and reconstruction of the damaged industries in Formosa were carried out by the concerted efforts of the Nationalist Government. By 1950 most of the plants have been put back into production. Since 1950 the industrial advance has been

45:Stanford U. S-4, 5 1956 AD1 Formosa
AD1

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Table 3. Number of Registered Factories in Formosa*

Industry	1950 Public	1950 Private	1950 Total	1953 Public	1953 Private	1953 Total
Food	88	3,971	4,059	79	5,405	5,484
Textiles	8	200	208	17	1,228	1,245
Chemicals	38	552	590	41	1,031	1,072
Ceramics	25	712	737	24	1,224	1,248
Metals	8	188	196	10	184	194
Machinery	21	707	728	28	1,026	1,054
Lumber	18	492	510	23	552	575
Printing	3	184	187	4	215	219
Electricity & Gas	34	-	34	34	2	36
Others	2	223	225	4	1,308	1,312
Total	245	7,229	7,474	264	12,175	12,439

* Provincial Department of Reconstruction.

[433] timber, and is also rich in oil and a favorable climate.
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2. It has abundant power and good means of communication.

3. A great deal of dismantled equipment has been imported from the Mainland.

4. As a result of the massexodus from the Mainland, Formosa has many trained personnel

5. Labor supply with experience of mechanical operations is plentiful.

472 It should be noted, however, that 90 per
471 cent of the private factories are of very small size, operated by a single owner. More than half have less than 5 hired workers, one-sixth from 6 to 10, and a fifth from 11 to 30 workers. Ninety-five per cent have capital of less than NT $50,000 (US $3,000). Twenty-six per cent depend entirely on manual labor, 67 per cent use a motor under 15 horsepower, and only 7 per cent use motors of 15 horsepower or more.[10] On the other hand, the government

10. Arthur F. Raper and others, Urban and Industrial Taiwan, Crowded and Resourceful, published by FOA/MSM to China and National Taiwan University, Taipei, 1954, pp. 122-23.

472 factories, though much fewer in number
471 (2.1% of the total), are far larger than the private enterprises. The contrast in size of government-owned and private factories is indicated by the value of their products, as shown in the table below.

45:Stanford U, S-4, 5 1956 AD1 Formosa
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Table 4. Approximate Percentage Distribution of Value of Major Industrial Products from Government and from Private Factories, Enterprises, and Mines on Formosa, 1953*

Type of Production	Government Enterprises	Private Enterprises	Total Value of Industrial Production
Percentage distribution of value of all industrial production	65%	35%	100%
Sugar and by-products	98	2	18
Transportation	86	14	13
Textiles	37	63	10
Mining	15	85	7
Alcoholic beverages and tobacco	100	-	6
Metal Products	16	84	6
Edible oil	3	97	6
Timber	52	48	6
Petroleum products	100	-	5

45:Stanford U. S-4, 5 1956 AD1 Formosa
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(continued)

Rubber goods	6	94	4
Electric power	100	-	4
Fertilizer	100	-	4
Machinery	24	76	3
Cement	100	-	2
Paper	61	39	2
Chemicals	82	18	1
Canned pineapples	62	38	1
Salt production	100	-	#
All others	53	47	2

* Raper and others, ibid., p. 118.
\# Less than 1 per cent.

471 Despite the fact that private enterprises surpass in number public enterprises in the ratio of 48:1, two-thirds of the total industrial output of Formosa are controlled by the government. The dominant position of government enterprises has elicited much criticism. Private industries are in no position to compete with the government corporations, especially when the latter are accorded many special privileges, such as liberal bank credit, special rates of foreign exchange, and raw material at low cost. Besides, possessing monopolistic power, bureaucracy overtakes public enterprises. Nepotism is rampant. It is found that "in many government-owned enterprises there is an excess of management and worker personnel."[11] K. Y. Yin, former Minister of Economic Affairs, expressed the view that industries can attain a higher level of efficiency only when operated by private individuals with profit incentives.[12] Early in 1953 the Chinese government in connection with the Land Reform program decided to offer four public enterprises for sale. On November 12, 1953, Premier Chen Cheng in his administrative report to the Third Plenary Session of

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11. Raper and others, ibid., p. 4.

12. K. Y. Yin (former Minister of Economic Affairs) My Views on Taiwan's Economy, Taipei, China Culture Publishing Foundation, 1953, p. 9.

471 the Kuomintang's Seventh Central Committee, said: "We are of the opinion that whatever enterprises are capable of being run by the people should be finally transferred to private ownership. This is not only a basic principle in the development of national economy but also one of the best means to uproot bureaucratic capital."[13] In pursuance of this policy, the Taiwan Pulp and Paper Corporation and the Taiwan Cement Corporation have been transferred to private ownership. The other public properties under consideration for sale are 15 brick-kiln yards, 12 coal mines, 11 ice storage plants, 4 metal factories, 4 jute-washing factories, 2 tanneries, and about 30 miscellaneous plants.[14] Even when

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13. Quoted in Industry of Free China, April 1954, p. 1.

14. The Taiwan Pulp and Paper Corporation and the Taiwan Cement Corporation were transferred to landowners whose land had been purchased by the government for redistribution. The other public properties belong to the Agricultural and Forestry Development Corporation and the Industrial and Mining Corp. It is provided in the Rules Governing the Transfer of Public Enterprises to Private Ownership under the Land-to-the-Tiller Act that any government stocks that should still remain after allocation in payments to landlords will be sold by tenders until such stocks are sold.

471 the transfer transactions are completed, the government will still control 60 per cent of the total value of industrial output.

656 Another adverse factor affecting the development of private enterprise is the multiplicity of government controls. The prices of coal, cement, fertilizer, and many other goods are regulated by the government. "The government also operates a supply bureau, through which small private manufacturers secure much of their imported raw materials. Banks, foreign exchange, and import and export licenses are controlled by the government; the sale of exports is permitted by the government only at prices above fixed floor prices."[15] In the field of taxation, inequities are widely reported. The discrimination in favor of public enterprises and the vexatious government controls seriously hamper the 178 growth of private industry. Formosa is 472 emerging from a colonial economy into a self-sufficient economic unit. The need for the production of goods and services is tremendous. The creation of new employment opportunities is also imperative on account of the enormous increase in population in recent years. In future industrial expansion, private enterprise

15. Raper, op. cit., p. 10.

249 defeated the Dutch, annual production rose to
433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require-
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills came under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
252 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brown Sugar Association produce brown sugar for domestic use and foreign export.

257 The milling capacity of the 26 mills controlled
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is about 12 per cent. These mills operate an average of 150

C. The Production of Flour

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433 It has been estimated that, as of 1953, Formosa required 108,000 metric tons of flour in order to meet civilian and military requirements.[19] Demand for flour has greatly increased as the result of the influx of refugees from the China Mainland, most of whom choose flour in preference to rice as the main staple of their diet. At present the island can produce only about 17,000 metric tons of wheat. Of this amount, and apparently far short of the island's requirements, only about 10,000 metric tons is available to be milled as flour; the remainder is utilized in brewing, for seed, and so forth. Natural conditions are believed to limit Formosa's optimum wheat production to 30,000 metric tons a year, and in consequence the island has found it necessary to import either flour or wheat. It was believed that the importation of wheat for domestic milling was most economical, in view of foreign exchange. The Foreign Operations Administration has been of aid in the importation of wheat and its distribution to local mills. As a result, the number of flour mills in Taiwan has increased in recent years, to the point where the milling capacity exceeds the requirements of the island.

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433 The provincial government owns two flour mills, and there are 33 relatively large private

19. James E. Auburn, "Taiwan Wheat and Wheat Flour Requirements," Chinese-American Economic Co-operation, Taipei, Mutual Security Mission to China, Vol. 1, No. 12, pp. 25-30.

[47] mills and 80 smaller mills scattered over the
256 island. Their combined productive capacity is
453 reported to be approximately 1,227 metric tons a day. If the mills were in operation only 250 days a year, their total capacity would be some 306,750 metric tons a year, far exceeding the estimated annual consumption requirement of 108,000 metric tons. The annual consumption requirement may have increased as the population increased in the past two years. The production goal for 1955 was set at 160,000 metric tons of flour, to be processed from 208,000 metric tons of imported wheat in addition to 8,000 metric tons of domestic wheat.

It should be noted that Formosa's production of flour is vitally dependent upon the importation of wheat. Delay or discontinuation of import would immediately affect local markets.

D. <u>The Production of Edible Oil</u>

388 Peanut oil and soybean oil are the most im-
453 portant types of edible oil produced in Formosa. The oils are used in domestic cooking. What remains after the oil has been extracted is used to feed animals or as fertilizer. Although enough peanuts are produced to meet domestic requirements, about one-third of the soybeans needed are imported. Approximately 500 producers of edible oil were reported in 1954. Most use cottage-type pressing mills, operated by human and animal labor. There are only 24 modern oil-pressing mills on the island. The production of peanut oil, peanut cake, soybean oil, and soybean cake is

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discourage innovation in agricultural technique, and to keep at low levels the output per person working in agriculture. An economy in this condition requires important modifications when "economic development" is desired. Farming must be made more productive, and radical progress is necessary in other pursuits. Barring some curtailment of consumption, such a change always implies expanding production faster than what is immediately consumed.

One of the keys to the Japanese colonial program in Taiwan, and to its demographic consequences, was how they set out to induce this saving. They chose the course of concentrating the additions to income from production in a few corporate business structures, instead of relying on the savings of individuals in Taiwan. Presumably this has been a goal in the management of most colonies, since indigenous sources have rarely been relied upon for large-scale investments. Its corollary—policies to suppress gains in individual native incomes—has been the chief source of hostility against colonial powers. But while most other nations have had only moderate luck in pursuing this objective, with the Japanese it was an outstanding success.

They took care that the formation of capital proceeded rapidly and from internal savings alone. Even in Japan, which in some respects is closely comparable, the whole pattern and purpose were different. While the Japanese were leading their own economy toward self-sufficiency in manufactured commodities, economic change in Taiwan was being contrived with a still surer hand to move in an opposite direction, toward complementarity with Japan. The output of the island was gradually shaped so as to furnish a net contribution of agricultural and semi-processed food and related commodities every year to Japan. These were items which Japanese felt to be essential for their more ambitious plans at home, and which for various reasons they wished to avoid purchasing outside Japan in ordinary world markets.

All the while, they mounted an impressive program of building up physical equipment in the island itself. Thus earnings were being reinvested on a large scale at the same time that they were also being drained off at a considerable pace by exports to Japan. This feat had to be accomplished in only one way—by raising the output of the island sharply while not greatly changing the levels of consumption for the population at large.[2] In this respect the Japanese managed

[2] The alternative—of gains by depressing popular consumption—should probably be ruled out. It cannot be conclusively demonstrated either that levels of living rose or

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471 the process of capital formation in Taiwan in basically the same way as at home, by prodding the economy at critical points with innovations and developing special social policies to divert the gains from consumption to investment. The success of domestic saving in Taiwan is simply accentuated by the steady flow of commodity shipments to Japan, whereby Taiwan as an enterprise did more than pay its own way.

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This success is best summed up in the yearly figures of trade with the outside world. From 1909 on, with the sole exception of 1913, there was an export balance every year in the value of Taiwan's external trade. Most of its entire trade was carried on with Japan—over 90 per cent after 1930 if Manchuria and Korea are included.[3] Related to the total value of exports, the balance amounted to a steady share of about 30 to 40 per cent of all exports to Japan, 25 to 30 per cent of all exports to the entire world, that were not paid for in the form of imports of commodities (see Table 4). It is not proper to infer from these figures that Taiwan occupied a "favorable" position, since apparently the balance was merely carried on the books of a few companies with home offices in Japan. This being the case, such figures probably even understate the amounts taken out.[4]

The Role of Government Policy

648 By implication, the foregoing account reveals that colonial rule yielded quick and gratifying results in Taiwan. These were not

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that they fell for Taiwanese. It does seem certain that on the average they must have risen somewhat, but that they did not move very far one way or the other. Undoubtedly some Taiwanese who took part in the new developments became richer, and many who did not became poorer. Agricultural output per farmer definitely increased, as the next chapter will show. There are figures (see Ch'en Cheng-hsiang, 1950, p. 151) that suggest a slight falling off of rice consumption per person, but they must be computed in a way that weakens their reliability. However, the large additions to Taiwan's economy under the Japanese were the new productive facilities, fixed equipment and market organization, which it is the purpose of this chapter to document. There is no way of showing how these improvements were shared by the Taiwanese, though we know that the Japanese took steps to keep the major shares to themselves.

[3] It is fairer to consolidate the "Yen Bloc" as a whole in computing these balances. To some extent imports from Manchuria and Korea were used to offset the account with Japan; this combined account shows a smaller balance than the account with Japan alone in most years. Separate data for Manchuria were not available in preparing Table 4. Aside from their monetary value on a balance sheet, the articles imported from Manchuria and Korea had a special importance, for they consisted mainly of fertilizers that were indispensable to Taiwanese agriculture.

[4] Grajdanzev (1942), p. 157, claims that the export balance cannot be materially reduced by taking account of hidden items; many of these, such as cash remittances to Japan, would actually increase it.

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648 achieved through the efforts of private individuals in a free investment market. The Government-General of Taiwan was given a free
471 hand by Tokyo in most internal affairs, and displayed great interest and vigor in regulating all areas of business activity that it could effectively control. A large part in the formation of capital in Taiwan can be attributed to official steps deliberately adopted with this end in view.

471 On the one hand, these measures consisted of widespread rationalizations in agriculture and large investments providing technical
654 economies to individual farmers; on the other, there were various devices to centralize the heavy investments in large blocs and thereby keep control over the entire venture. The former consisted mainly of improvements that could be initiated and carried out by Japanese without full participation by Taiwanese, and the latter of ways to guide the process and garner the returns. The one served to raise the average productivity of working Taiwanese without depending on them for inception; the other to avoid dissipating the earnings of the colonial enterprise as higher incomes among the Taiwanese, by confining them in the charge of a few Japanese.[5]

Although the Japanese treated their domestic agriculture in much the same way, they made use of their own farmers' earnings in furthering the growth of industry. The fiscal role of rural Taiwan corresponded to that of rural Japan, but in Japan the several lines developed together and were complementary. Fewer opportunities of this nature were exploited in Taiwan, for the complementarities were all external. This is shown in the other side of the picture of trade with Japan—that of imports and their composition. More than half of the value of imports from Japan during later years represented items that were clearly for current consumption.[6] There was surely nothing like the emphasis on heavy capital goods among the remainder that is found in the imports of Japan itself.[7]

Problems of Pacification

471 This study is concerned as much with broader aspects of organiza-
433 tion in economic life as with the economic activities themselves. Thus

[5] One of the organizational devices for diverting this income away from consumption was, as in Japan, to make it flow into corporate rather than individual hands, where its disposition was more easily regulated.

[6] I.e., articles such as food, clothing, paper, beverages, textiles, manufactured consumer commodities, and the like. One suspects that a large part of these went to maintain the comforts of the Japanese living in Taiwan.

[7] For example, see Reubens, Edwin P. (1950), pp. 109-112.

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it is pertinent to examine the stages by which the Japanese spread their influence over business affairs. Before the Japanese occupation, Taiwan was a busy farm area producing chiefly rice and other foodstuffs for itself and neighboring countries. It still held virgin lands that yielded well to the cultivation of Chinese farmers, and was known among Mainland Chinese as one of the few places where fortunes could be made or lost quickly. It was known elsewhere for other features not unrelated to these—foreigners established some renown for the island's production of marketable crops like tea and camphor, as well as for its beautiful scenery and adventure. Some early Taiwanese had always enjoyed years of prosperity, subject to the vicissitudes of weather,[8] warfare among powerful families or with the aborigines, and to the unpredictable greed of officials. 471 433

Although agriculture was the mainstay of livelihood, there were the subsidiary pursuits commonly found from place to place in China. Additional opportunities arose in connection with commerce, which was the most flourishing sphere of enterprise. The export trade in the few products shipped abroad was the only spot affected by foreign influence. A small number of Western traders had stayed in Taiwan, arranging for the sale and delivery of the island's produce to the outside world, but the scope of their business operations was limited to buying and shipping. Even tea-growing, which an Englishman had begun, was left entirely to the local population and Chinese middlemen, up to the stage of packing and sending the tea abroad.

The settled portion of the island, often down to the actual appearance of its villages, was a close replica of conditions on the mainland of South China, 100 miles away. The Manchu government adopted policies calculated to restrict rather than encourage any growth or diversification of economic activities. It abhorred the prospect of having the profits of any sponsored enterprise go to foreign merchants, and suffered an incapacity for such sponsorship inherent in its organization.[9] Observers of the period saw little likelihood of change.

Hence Taiwan when the Japanese acquired it was already a granary ready to function as a going concern, but with some impediments to being operated as such. In contrast to both China and Japan, it 471 433

[8] These hazards were many and frequent. Lack of systematic attention to irrigation had placed farmers at the mercy of floods, local droughts and destructive hurricanes, and severe earthquakes were common. 648

[9] This aspect of early political and business affairs in Taiwan is described at great length in Davidson, James W. (1903), Chs. 14, 15, and 17.

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471 was a newly settled land whose surface still showed little strain of intensive clearing and cultivation, and whose manifest possibilities 433 for wider exploitation in agriculture and other lines had scarcely 648 been tapped. Merely imposing public order and effective political administration could hardly have failed to ensure general prosperity, and the Occidental community at the time contemplated the experiment with great interest.

The new authorities did not leave much room for doubt about their intentions for the economy. Even while engaged in some dissension and maneuver for power between their own civil and military officers, they quickly set about constructing railroads as a state enterprise, reinstituting an official monopoly of camphor (amounting to a world monopoly since Taiwan with Japan was the sole important world producer), nurturing one large company for practical research and experiment in sugar production, reviving the former domestic monopoly of salt, and executing a complete and accurate land survey—Taiwan's first—in order to regulate some of the discordant relations of tenancy among farmers and landlords.

Most of the administrative changes were based on a notorious need for reform of pre-existing practices. But all of these reforms were two-edged. Besides regularizing commercial practices and "correcting abuses," the official monopolies and export associations slowly made it impossible for foreign concerns to remain in operation. The revenues from key lines of business soon became centralized in either the Government-General or corporations explicitly controlled by it. Those relations began to appear between state and business that determined the future course of the fields involved. The land survey [651] furnished a basis for levying a stiff land tax which brought forth a gratifying and dependable flow of revenue into the public treasury and helped to finance later development schemes.

648 If the overall design of economic expansion had been fixed in the minds of influential Japanese even before they took possession of Taiwan, and to some extent this seems likely, its timetable was not. They did not foresee, for example, that almost ten years of costly and arduous military campaign would be needed to subdue the aborigines and thousands of Taiwanese in the lowlands and foothills who had reverted to banditry. And it became apparent only after many Japanese lives had been forfeited to sickness that this "pacification" of the island had to be accompanied by full-fledged warfare against disease and a general sanitation program, in order that enough

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also maintained a zealous staff of workers to put new findings into effect. Taiwanese villagers were mobilized into compulsory associations to utilize the information, and the program was carried on with close cooperation by local authorities.

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In addition to these measures, certain of the large Japanese expenditures on outright heavy investment helped to modify agricultural productivity of Taiwanese. The building of railroads, large-scale facilities for irrigation and flood control, and in later years factories for processing agricultural produce all worked some radical changes in the relations between the farms and the markets abroad. But these reached down only occasionally to disturb the operation of individual peasant farming. What one Japanese writer has called the process of "capitalist development in Taiwanese agriculture" was not so much a matter of developing investment in agriculture itself as of surrounding agriculture with capital improvements.[14]

Many improvements were introduced directly by the Government-General. Usually a charge was levied on their use or the expense was defrayed by heavy taxation. The government matched each of these steps of its own by prompting the large private firms to carry on parallel works inside their corporate domains. This sort of extra-curricular investment was widely undertaken by Japanese companies, and led to the growth of giant integrated concerns, some larger than their counterparts in Japan.[15]

A remarkable set of inducements existed for engaging in this sort of corporate expansion. Taiwan in the first place had the reputation of being the most profitable locale for investment in the Empire.[16] In addition to this, the Government-General frequently offered subsidies, partial subscription of funds by itself, special legal privileges, a trifling burden of taxation, and in general more cordial relations with the state than were available elsewhere. The response to these terms was apparently more enthusiastic than had been anticipated. It rose at times to feverish speculation, followed by short depressions among Japanese financial circles,[17] and led the Government-General to impose restrictive schemes for fixing prices and output.

[14] Yanaihara, Tadao (1929), p. 140 ff. He points out that most Japanese held land as landlords, like the Taiwanese, not as capitalists. The exception to this rule—and it is a large exception—was the management of sugar-growing plantations by a few of the large sugar-processing companies.

[15] Grajdanzev, A. J. (1942), p. 96.

[16] Yanaihara (1929), p. 146.

[17] Price movements of rice and sugar in Japan intensified some of these effects, especially in the late 1920's and for several years after 1930. See Grajdanzev (1942), pp. 99-101.

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471 454 438 There was still another category, a somewhat subtler one, by which Japanese investment was injected into Taiwan's economy. This consists of what might be called organizational changes, like banking facilities and the formation of stable domestic markets for disposing of produce. Many such features had been notably absent before 1895, when most commodity markets were no more than local in scope, prices fluctuated widely, interest rates were usurious, and speculation was the principal business activity. This channel of influence was often not actually separate from others; some efficiencies of this sort appeared even as by-products of other more deliberate innovations. These advantages tended to flow from relations among the modern types of business organization. Hence such benefits went to Japanese businessmen, though they often opened up subsidiary avenues to wealth for a number of Taiwanese in commerce and in service enterprises.[18]

With no significant exceptions, the growth and spread of Japanese business activity in Taiwan served primarily to introduce capital into agriculture without greatly changing the operation of individual farms. It furnished a pattern of services between the fields and the markets in Japan through which to reap the economies of modern organization, and yet ensured that most of the proceeds were reinvested on the island in a pattern determined by official decision.

The Preparations for War

656 During the early or middle 1930's the Japanese Empire began to turn toward preparations for war. The colonies were called upon to increase the measure of their contribution in other lines of production besides Empire self-sufficiency in food. Taiwan was not abundantly endowed with the heavy stuff with which the war was to be made—metallic ores were lacking, and coal deposits were not plentiful—and so it was permitted to assume some of the burden of processing materials formerly supplied to Japan as agricultural and other primary produce. This decision did not issue entirely from military or strategic considerations, since in many cases it amounted to no

[18] Chartered banks were an exception. They harnessed funds for industrial investment, and were all owned and operated by Japanese. ". . . modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese [Taiwanese] have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay." Grajdanzev (1942), p. 126.

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654 services for themselves, in order to keep output in pace with their own milling capacities.[23] The industry had expanded, in fact, too
435 rapidly for its own good. It had suffered several crises, brought on by fluctuations in the demand for sugar in Japan, where its tariff preference led it to sell.[24] To "stabilize production," the important producers organized a cartel (under the Japan Sugar Association) with government permission and guidance.

Buying of cane from farmers had from the start been controlled by agreements among processing firms; the cartel opened a concerted effort to prevent cane prices from rising. The need for this step arose from the fact that sugar cane and rice both were grown in the same soils and more or less during the same seasons. In effect, the two crops competed for land. Japanese had always complained that the Taiwanese had a perverse tendency to cultivate rice when it was more profitable. Under the cartel agreements, sugar firms avoided competitive buying by strict agreements to allocate areas of cane purchase. Owing to their size and diversity, they were able to persuade many farmers to grow sugar instead of rice by withholding irrigation water from rice fields, and by making conditional cash advances to individual families.

By such means the sugar cartel accomplished what the government could never have done unaided: it ensured a steady output of sugar at fixed prices for which it would have been irrational for individual
654 farmers to produce cane.[25] Sugar acquired a place of high wartime priority as a source for industrial alcohol, and beginning in 1939 the Government-General assisted sugar concerns to construct distilleries and make alcohol on the island. Under these circumstances it is not surprising that the sugar processing industry tended to pass into fewer and fewer hands. After a merger in 1940 more than 95 per cent of the sugar in Taiwan was milled by five giant companies. Though more extreme, the history of the sugar industry was essentially that of all large-scale Japanese enterprise in Taiwan.

655 The Government-General itself began to promote industrial ex-
471 pansion during the 1930's by further participation in economic life.

[23] Privately owned and operated railroads attained a length of over half as great as the entire state system. Not all were built by sugar concerns; the largest belonged to lumber companies. Most were of narrower gauge than the main rail lines. See *Statistical Summary*, Tables 440-442.

[24] Costs were higher than in Java throughout the period, putting Taiwanese sugar at a serious handicap in markets outside Japan.

[25] The Government-General did its part to encourage sugar cultivation by putting rice paddies in a higher tax category than comparable sugar fields. And in 1939 it simply took over the entire cartel by issuing a set of detailed regulations to dictate its affairs.

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First, it controlled certain key sources of income and authority, as before, through the legal monopolies. Net receipts from these enterprises (including salt, alcohol, camphor, tobacco and opium) made up one of the largest classes of revenue. Public railroads, irrigation and generation of electricity were also government monopolies—unofficial but nonetheless actual—which were operated more for the sake of the power that could be wielded through their services than for profit. They were developed so as to assert what amounted to administrative control over the private sphere of production.

These were really little more than refinements of earlier devices. One of the important departures from previous government policy was to partake directly in more business activity. No data were ever published to show the extent of government investment side by side with that of private firms. It was thought to be at a level nearly as great as the whole private sector, but was mixed too thoroughly to be separated in any reliable fashion from the whole.[26]

Outright government holdings in corporations went beyond scattered blocs of shares in individual companies. Many of these official firms were diversified and enlarged so as to absorb parts of related fields. For example, the larger electric power companies, owned or dominated by the Government-General, helped to build the nucleus of Taiwan's metallurgy industry. Most of the wartime aluminum production was carried out by such integrated concerns. The government itself formed the Taiwan Development Company, in 1936, as a super-corporation to promote interrelated ventures of this nature. It speedily promoted a host of subsidiaries strategic for the war program.[27] Besides all of these extraordinary activities, the regular budgetary expenditures of the Government-General leaned increasingly toward injecting new state services into the economy, and probably contributed thereby to the inflation later in the war.[28]

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[26] Certain tables have been quoted many times that purport to show the amounts of these investments (see OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement*, 1944, pp. 97-98). We shall not reproduce them here, for none of the published data on corporate investment are very trustworthy. The publications never stated what criteria were imposed in their collection, and so it is impossible to know exactly what they represent in any given instance. They conceal the weight of government as opposed to private corporate holdings, and do not differentiate between large holding companies and their subsidiaries.

[27] Incomplete data on some of the known holdings of this and other of the larger firms are given in the OPNAV Civil Affairs Handbook, *Taiwan—Economic Supplement*, Appendix, p. 86 ff. Through omissions, these figures are known to understate grossly the extent of corporate concentration.

[28] These services stretched from research grants to larger funds allocated directly for new subsidies of business. *Ibid.*, p. 59.

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Land that was improved in this manner not only yielded more at each harvest: over a third of the paddy land yielded more than one harvest each year. Under schemes for rotation and inter-cropping devised by the Japanese, it was not unusual to take three separate harvests from many of these fields in a year. 244 433

The labor of preparing the land, of weeding, and of harvesting was not saved by these changes. They may have involved some net additions—irrigation became a more complicated process in some cases, and the aqueducts for transporting the water required special maintenance. Japanese were aware that the soil could not be farmed more intensively without losing some of its fertility, and encouraged the use of commercial fertilizers, much of which they required to be prepared on the island. The remainder comprised the largest single category of Taiwan's capital imports, greater in value than the iron and steel and machinery which are sometimes identified with the needs of agrarian countries. Importing fertilizers for sale in Taiwan proved to be a profitable line of business; it was reported to be firmly in the hands of a few large Japanese concerns, a fact which should occasion no surprise. It was shortage of fertilizers that brought on declines in average yields of crops after 1940 (see Table 6, above). [427] [471]

The shift in official plans for Taiwan after 1930 leads one to look for some indication of results in the composition of Taiwan's products. The search is not very rewarding. In terms of gross value of product, agriculture did not lose its place as the foremost line of production until 1940 and later. Then it exchanged ranks with "Industry"—because farm produce fell off momentarily rather than because of any sharp rise in manufacturing (see Table 7).[32] The steady but slow decline in the share of agricultural production in earlier years had indicated a tendency to submit more of the agricultural produce to processing before it left the island, and not a shift from farming to manufacturing. 433

It is when the category of "industrial" production is examined in detail that some of the more recent trends emerge. In Table 8, evidently industry in Taiwan had always been centered around food products. Until the mid-'thirties these had amounted to three-quarters of the value of all manufactures. Only from then on did the effects of new economic goals begin to appear. The largest advances were made in some of the fields that had been smallest, espe-

[32] The sharp rise in the numbers of Table 7 was largely a matter of currency inflation.

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supply of unoccupied land in Taiwan that could be drawn into cultivation, and so the needs of an expanding farming population and growing export demand had to be met by other means. The Japanese turned again to large investment to improve the effectiveness of the land that there was. The manner of constructing and upkeep of irrigation canals in Taiwan depended on mass labor. They were turned into an investment of labor, employed so as to produce an important form of capital equipment. The extent of irrigation more than kept pace with rural population growth while the Japanese were in control. Water for this purpose became indispensable in maintaining the output of farms. It was a hidden element in the improvement of rice and sugar yields, for the new varieties of seed that were developed were types that needed to be carefully irrigated.

Finally, the development of electric power was so closely related to the growth of Taiwan's newer industries that it should not be passed over without mention. Generation of electricity was one of the specialized heavy investments that formed the nucleus of the "industrial" progress after 1930. This is evident in a circumstantial way from the trends of capacity in generating power and the spread of factory employment (see Fig. 8). Factories in Taiwan came to depend on the cheap electricity that was developed at state instigation from water power. Judged from the size of their employment, the most important of the mechanized factories in the island were "food" (i.e., sugar) and metallurgical plants, which were the heaviest users of electricity.

As the next chapter will indicate, the Japanese broadened their objectives in Taiwan too late to put its human resources to best use in the new effort. Drawing the developed wealth of the island together into centralized control had turned out to be singularly advantageous. It had erected an entire structure of corporate organization from specialized financial services down to the coordinating of actual physical production of commodities. The Government-General had retained a close supervision over this structure, by licensing, regulation, and participation as a shareholder. As a program it quickly marshalled the production of Taiwan's farms into a profitable colonial enterprise.

When it came to pressing this development further, however, the Japanese made no real progress, for they had frustrated these aims in advance. Under agrarian conditions, industrial skills and experience in management are slower and more difficult to accumulate

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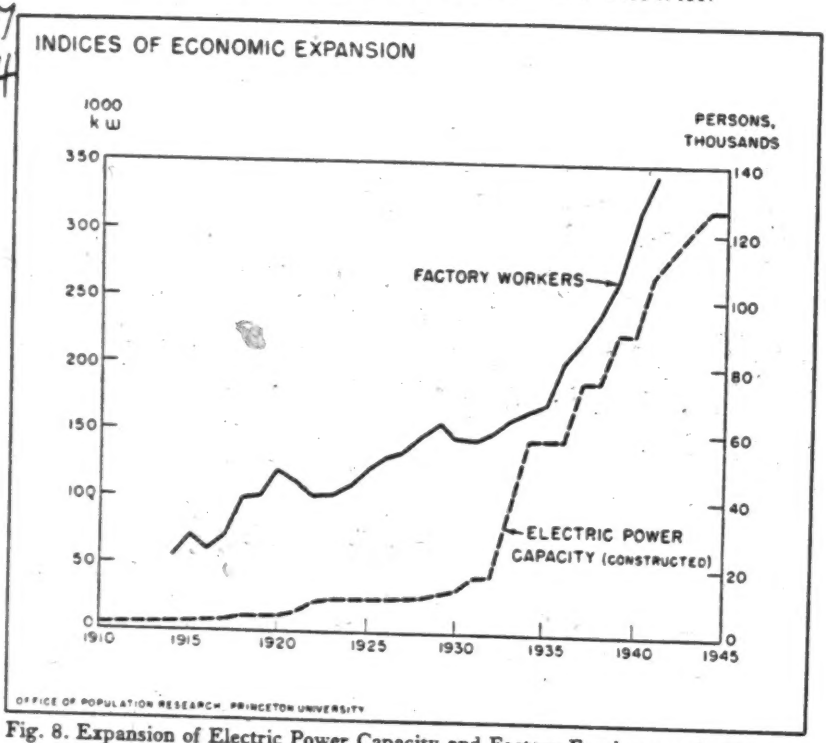

Fig. 8. Expansion of Electric Power Capacity and Factory Employment in Taiwan, 1910-1945.

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than material forms of capital. Japanese in the past had never cultivated an adequate fund of these among the Taiwanese. The same mechanisms which had served so well in channeling a large part of the total product each year toward desired uses had suppressed any opportunities for industrial employment that might attract Taiwanese who had administrative skills. What the Japanese themselves referred to as the "industrialization of Taiwan" was nothing but a corporate superstructure placed on an agrarian base. This was not capable of diffusing an industrial culture thoroughly among the general population, because it had been devised to prevent this very thing.

Since March 1948, a refining process has been instituted in the government-managed camphor industry.[37] In areas where Taiwan and Japanese economy complement each other, a trade agreement was signed with Japan on September 6, 1949 under which Taiwan sugar, salt, camphor, cement, and pears are to be exchanged for Japanese consumer and capital goods at an estimated annual volume of US$100,000,000.[38]

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Government-owned and -operated enterprises dominate Taiwan's industrial field. As of 1950, there were 79,058 publicly operated units employing 63,065 workers. Available statistics place privately owned industrial units at approximately 67,660 employing 53,310 workers. Production figure for public industries in 1949 is about NT$718,000,000 as against NT$600,000,000 for private enterprises.[39]

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This situation may be accounted for by the predominant position of Japanese-owned industries in Taiwan which were acquired by the Chinese Nationalist government following the Japanese surrender in September 1945. Since then, petroleum, aluminum, gold and copper mining, salt, coal mining, and steel works have been taken over by the National Government. Power, sugar, fertilizer, cement, alkali, pulp and paper, shipbuilding, and machine tools have been jointly operated by the national and provincial authorities on a capital division of 6 to 4. Some smaller mining units, camphor, tobacco and wine monopoly, and agricultural and forestry enterprises have been managed by the provincial government. The rest, being of smaller scale, have either been taken over by county or municipal govern-

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*Reconstruction**, Vol. 2, pp. 473–74, where the total 1948 demand was estimated to be 141,727 tons.

[37] For a general description, see *Taiwan Reconstruction**, Vol. 2, pp. 436–46.

[38] For detailed listings, see *Taiwan Reconstruction**, Vol. 2, pp. 357–61.

[39] *Taiwan Today*, pp. 121–22.

[p. 219(B)]

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655 ments or sold to private industrialists by
471 means of competitive bidding.[40]

Taiwan's industrial growth in recent years reflects mostly the development of government enterprises. Such state industries as gasoline, kerosene, and Diesel oil have registered considerable increase over the peak year production figures under the Japanese.[41] Other government-operated industries such as electric power, sugar, alcohol, cement, and camphor, though lower in production volume than in the prewar peak year, have made extensive recoveries in contrast to their chaotic conditions at the conclusion of World War II.[42] Augmented by ECA assistance, the over-all industrial picture may be described as one of steady growth.

Educational Policies

871 The Nationalist government inherited
177 from Japan an educational legacy which
comprises a mixture of salutary and dis-
[212] advantageous factors. Of the former is a more than 70 per cent literacy among the people.[43] A framework of primary and secondary schools scatters over the island. A fair foundation of vocational education has been laid. There are also several higher institutions of learning. A tradition of discipline, hard work, and thriftiness prevails among the students.

871 On the disadvantageous side is the
177 predominant position of the Japanese
language, both spoken and written, as a
197 medium of learning. Many island inhabitants can hardly read Chinese or speak their native Fukien tongue flu-

[40] *Taiwan Reconstruction**, Vol. 2, pp. 408–547.

[41] *Ibid.*

[42] *Ibid.*; also *Taiwan Today*, pp. 99–122.

[43] *Taiwan Reconstruction**, Vol. 1, p. 89; also for a general treatment of the subject, see Taiwan Provincial Government, *The Administration of Planned Education**, Taipeh, 1948.

[p. 220 (A)]

"Industry has expanded relatively rapidly, but even in 1935 there were only 67,255 workers in industrial enterprises employing more than four workers each or having a prime-mover. Nevertheless, according to the current official statistics which follow, 'agricultural population' of Taiwan formed only about fifty per cent of the population in 1938.

Changes in Agricultural Population in Taiwan

	1935	1937	1938
Total families (1,000)	897.6	...	...
Families occupied in agriculture (1,000)	419.9	427.4	...
Agricultural families as % of total	46.7	...	...
Total population (1,000)	5,212.4	5,609.0	5,747.0
'Agricultural population' (1,000)	2,790.3	2,880.4	2,896.4
'Agricultural population' as % of total	53.6	51.3	50.4

As early as 1935, according to this table, the families occupied in agriculture made up only 46.7 per cent of the total, while the agricultural population made up 56.3 per cent in that year and only 50.4 per cent in 1938. According to the census statistics, in the 25 years between 1905 and 1930 the Chinese population occupied in agriculture fell

only from 75.5 per cent to 73 per cent of the total Chinese population, while the current statistics show a fall of 3.2 per cent (of the total population) in three years. Even before 1935 the number of [74] agricultural families showed a definite lag as compared with the growth of total population, as may be seen from the following table.

Comparison of Changes in Total Population and in Agricultural Families in Taiwan*

Year	Total population (1,000)	Index of growth	Year	Agricultural families (1,000)	Index of growth
1905	3,039.8	100	1903	383.1	100
1925	3,993.4	131	1924	390.2	102
1930	4,592.5	151	1929	407.7	106
1935	5,212.4	171	1935	419.9	109
1937	5,609.0	185	1937	427.4	111
1938	5,747.0	189	1938	424.5	111

*The years given for each category do not always coincide because of absence of data: we have taken the years for which the information could be found.

In thirty-three years the population of Taiwan increased by eighty-nine per cent while on the basis of these figures the number of families engaged in agriculture, increased

by only eleven per cent. Such changes are of course quite possible. The agricultural population might send its 'surplus' to cities, where they may find employment in industry, commerce, public services and so on. But as was mentioned already, the number of workers in industry was very small in 1935 and there is no indication that it has increased considerably in the last three or four years. The difference between sixty-five and fifty per cent is, in absolute numbers, about 900,000 persons, or between 500,000 and 550,000 gainfully employed persons--quite a considerable figure for even a great country."

4:Grajdanzev--94-96 S-4 (no date) 1942 Formosans-1-3
116, 454, 471, 472, 473

"Finally, we may compare these industries from the point of view of the amount of capital invested in them: (1) [95]

1. Only paid-up capital is included because data for the reserves of smaller corporations could not be found.

Capital Invested in Taiwan's Industry in 1937
(million yen)

	Corporations	Limited partnership	Unlimited partnership	Total
Textile industry	2.7	0.1	0.1	2.9
Machine	3.9	0.9	0.1	4.9
Ceramics	3.3	0.2	0.1	3.6
Chemical	9.6	0.3	0.2	10.1
Lumber	1.5	1.1	0.1	2.7
Food	113.1	4.6	0.4	118.1
Printing	0.5	0.1	...	0.6
Gas and Electricity	47.0	...	...	47.0
Others	1.0	0.3	0.3	1.6
Total	182.6	7.6	1.3	191.5*

Footnote on next page.

* The official estimate of the total capital of industry on Dec. 31, 1937, was ¥258.5 million but it is not clear whether this figure includes nominal capital or only paid-up capital and, whether it includes other investments, government enterprises etc.

Source: Taiwan Jijo, 1939.

Again the food industry is in first place. Actually its position is much more important because it has accumulated considerable reserves. Next in importance is gas and electricity because here investments play a greater part than the number of men occupied while ceramics and printing are poor in capital. It may be of interest to compare the average investment per enterprise for the same year:

Paid -Up Capital per Business Unit
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Textile	671	60	120	477
Machine	353	38	45	123
Ceramics	276	21	33	155
Chemical	387	37	115	289
Lumber	163	93	23	106
Food	1,509	78	44	832

Paid-Up Capital per Business Unit Cont.
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Printing	101	12	...	41
Gas and electricity	7,836	10	...	6,718
Others	76	13	68	38
All industry	1,127	51	54	578

[96] We see from this table that in Taiwan there are very large enterprises in the electric power, food, and textile industries, where capital per enterprise is relatively large, while enterprises in the printing, machine, lumber, ceramics and 'other' industries are very small in size. It should be pointed out that individual enterprises are not included here, (2) but both their capital and the value of their products are insignificant

2. The number of individual enterprises in 1934 were reported as follows: 62 in textiles, 91 in metals, 173 in machinery, 588 in ceramics, 428 in chemicals, 3,960 in foods, 256 in lumber, 126 in printing and 381 in others, a total of 6,065, almost all of them Chinese (Takahashi, op. cit., p. 438).

in comparison with those of the companies."

4:Grajdanzev--107 S-4 (no date) 1942 Formosans
116, 315, 472

"There are also five companies engaged in gas utilization with capital above ¥500,000 each—Taiwan Gas, Tokokogyo, Taiwan Denka, Taiwan Kagaku, (chemicals) and Taiwan Menka (cotton), but it is not clear whether their capital is included in the ¥46.6 million mentioned above."

4:Grajdanzev--117 S-4 (no date) 1942 Formosans
116, 465, 472, 511, 563

"We saw previously that the development of modern industry in Taiwan did not benefit the Chinese as entrepreneurs. Now it becomes evident that it brought very little to them as workers. If we use Engel's ratio of sixty per cent as an estimate of the share of wages spent on food in low-wage countries, it appears that the wages of the unskilled worker in Taiwan can purchase about one pound of rice per day for each member of his family."

472 While the government was restoring and expanding the basic industries and services such as electric power, transportation, chemical fertilizer, and petroleum products, the growth of private industries has been no less remarkable. The number of factories increased from 7,474 in 1950 to 12,439 in 1953.

472 483 178 The increase from 1950 to 1953 was, for the most part, in private industries, manufacturing consumer articles, including textiles, soap, rubber goods, paints, matches, drugs, aluminum wares, bicycles, electric fans, and sewing machines. Among these, textiles, soap, and rubber goods have increased production most rapidly. Producing only 12 per cent of the textiles consumed locally in 1935, Formosa is now in a position now only to meet the expanding requirement of a growing population, but also to provide a substantial amount of cotton cloth for export. Except for automobile tires, nearly all the rubber goods needed on the island are manufactured locally. In 1939, the year of record soap production under the Japanese, 214,830 cases (5,115 metric tons) of laundry soap were produced. Today there are one government and ninety-three private producers, and the total production capacity of laundry soap is 125,000 cases (2,500 metric tons) per month.[9]

The rapid growth of private industries is attributed to the following factors:

1. Formosa has many basic raw materials, coal, salt, limestone, sulphur, ceramic clay,

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9. Economic Data Book, Part II, Vol. III, preopared by FOA Mission to China, Taipei, March 1955, p. 99.

[433] timber, and is also rich in oil and a favorable climate.
•472
178

2. It has abundant power and good means of communication.

3. A great deal of dismantled equipment has been imported from the Mainland.

4. As a result of the massexodus from the Mainland, Formosa has many trained personnel

5. Labor supply with experience of mechanical operations is plentiful.

472 It should be noted, however, that 90 per
471 cent of the private factories are of very small size, operated by a single owner. More than half have less than 5 hired workers, one-sixth from 6 to 10, and a fifth from 11 to 30 workers. Ninety-five per cent have capital of less than NT $50,000 (US $3,000). Twenty-six per cent depend entirely on manual labor, 67 per cent use a motor under 15 horsepower, and only 7 per cent use motors of 15 horsepower or more.[10] On the other hand, the government

10. Arthur F. Raper and others, Urban and Industrial Taiwan, Crowded and Resourceful, published by FOA/MSM to China and National Taiwan University, Taipei, 1954, pp. 122-23.

472 factories, though much fewer in number
471 (2.1% of the total), are far larger than the private enterprises. The contrast in size of government-owned and private factories is indicated by the value of their products, as shown in the table below.

45:Stanford U, S-4, 5 1956 AD1 Formosa
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Table 4. Approximate Percentage Distribution of Value of Major Industrial Products from Government and from Private Factories, Enterprises, and Mines on Formosa, 1953*

Type of Production	Government Enterprises	Private Enterprises	Total Value of Industrial Production
Percentage distribution of value of all industrial production	65%	35%	100%
Sugar and by products	98	2	18
Transportation	86	14	13
Textiles	37	63	10
Mining	15	85	7
Alcoholic beverages and tobacco	100	-	6
Metal Products	16	84	6
Edible oil	3	97	6
Timber	52	48	6
Petroleum products	100	-	5

(continued)

Rubber goods	6	94	4
Electric power	100	-	4
Fertilizer	100	-	4
Machinery	24	76	3
Cement	100	-	2
Paper	61	39	2
Chemicals	82	18	1
Canned pineapples	62	38	1
Salt production	100	-	#
All others	53	47	2

* Raper and others, ibid., p. 118.
\# Less than 1 per cent.

471 the transfer transactions are completed, the government will still control 60 per cent of the total value of industrial output.

656 Another adverse factor affecting the development of private enterprise is the multiplicity of government controls. The prices of coal, cement, fertilizer, and many other goods are regulated by the government. "The government also operates a supply bureau, through which small private manufacturers secure much of their imported raw materials. Banks, foreign exchange, and import and export licenses are controlled by the government; the sale of exports is permitted by the government only at prices above fixed floor prices."[15] In the field of taxation, inequities are widely reported. The discrimination in favor of public enterprises and the vexatious government controls seriously hamper the
178 growth of private industry. Formosa is
4D emerging from a colonial economy into a self-sufficient economic unit. The need for the production of goods and services is tremendous. The creation of new employment opportunities is also imperative on account of the enormous increase in population in recent years. In future industrial expansion, private enterprise

15. Raper, op. cit., p. 10.

472 must contribute a major share. The Chinese
178 government has promulgated regulations to attract capital investment by overseas Chinese and foreign nationals, but the result will not be encouraging until a healthy environment in favor of private investment is first created. To foster the growth of private industries the following conditions appear to be essential: (a) a relatively stable price level and reasonably cheap credit; (b) tax obligations must be clearly defined, and no price controls imposed abruptly and arbitrarily; (c) economic control should be reduced to a minimum; (d) and the virtual government monopoly in foreign trade should be modified to allow private initiative to find an outlet for surplus products. When a more favorable climate is created to insure the success of private capital, private industry will overtake public enterprises and assume an important role in the industrial revolution that is under way in Formosa.

249 defeated the Dutch, annual production rose to
433 18,000 metric tons, a large part of which was ex-
439 ported to the Philippines and to Japan. In 1870, total production amounted to 73,000 metric tons; 63,7000 metric tons were exported. During the Japanese occupation of Formosa, the island's sugar industry was developed to supply the require-
257 ments of Japan proper. Four Japanese companies
433 controlled Formosa' sugar industry. During the
471 1930's, 42 mills able to process a total of 65,000 metric tons of sugar cane were in operation. The sugar syndicate owned 117 hectares of land, a railway extending 2,800 kilometers, had a staff of 5,000, employed 19,000 workers, and generated its own power. After the war, all of the mills came under the control of the government-owned Taiwan Sugar Corporation. In 1947, six mills were incorporated, bringing the total number of mills in operation to 36. At present, only 26 mills are in operation; for reasons of economy, ten mills were shut in the period 1951-52, and production goals for 1954-55 were lowered.

472 In addition to the Taiwan Sugar Corporation,
257 which is the sole producer of refined sugar, some 52 private companies belonging to the Taiwan Brown Sugar Association produce brown sugar for domestic use and foreign export.

257 The milling capacity of the 26 mills controlled
433 by the Taiwan Sugar Corporation is 49,350 metric tons of sugar cane per day; sugar recovery is about 12 per cent. These mills operate an average of 150

4:Grajdanzev--86 [2] S-4 (no date) 1942 Formosans
116, 228, 471, 473, 563

"As to the other fishing enterprises, their relative strength may be presented in the following manner:

Fishing Enterprises in Taiwan

	Number of firms	Nominal capital (1,000 yen)	Paid-up capital (1,000 yen)	Average paid-up capital per company (1,000 yen)
Japanese corporations with offices in Japan	2	101,500	65,500	32,750
Japanese corporations with offices in Taiwan	28	5,972	3,044	109
Other firms (mostly Chinese)	21	429	399	19

In this field the Chinese can hardly compete with the Japanese because of their lack of capital (1).

1. It is interesting to note that, according to the last census, out of 82,338 Chinese fishermen 16,382 were employers, while among 5,045 Japanese only 101 were employers. Evidently, the Chinese 'employer' had one to three workers, while the Japanese employer was a person or firm of considerable means."

4:Grajdanzev--94-96 S-4 (no date) 1942 Formosans-1-3
116, 454, 471, 472, 473

"Finally. we may compare these industries from the point of view of the amount of capital invested in them: (1) [95]

1. Only paid-up capital is included because data for the reserves of smaller corporations could not be found.

Capital Invested in Taiwan's Industry in 1937
(million yen)

	Corporations	Limited partnership	Unlimited partnership	Total
Textile industry	2.7	0.1	0.1	2.9
Machine	3.9	0.9	0.1	4.9
Ceramics	3.3	0.2	0.1	3.6
Chemical	9.6	0.3	0.2	10.1
Lumber	1.5	1.1	0.1	2.7
Food	113.1	4.6	0.4	118.1
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Gas and Electricity	47.0	...	...	47.0
Others	1.0	0.3	0.3	1.6
Total	182.6	7.6	1.3	191.5*

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Source: Taiwan Jijo, 1939.

Again the food industry is in first place. Actually its position is much more important because it has accumulated considerable reserves. Next in importance is gas and electricity because here investments play a greater part than the number of men occupied while ceramics and printing are poor in capital. It may be of interest to compare the average investment per enterprise for the same year:

Paid -Up Capital per Business Unit
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Textile	671	60	120	477
Machine	353	38	45	123
Ceramics	276	21	33	155
Chemical	387	37	115	289
Lumber	163	93	23	106
Food	1,509	78	44	832

Paid-Up Capital per Business Unit Cont.
(1,000 yen)

	Corporations	Limited partnership	Unlimited partnership	Average (weighted)
Printing	101	12	...	41
Gas and electricity	7,836	10	...	6,718
Others	76	13	68	38
All industry	1,127	51	54	578

[96] We see from this table that in Taiwan there are very large enterprises in the electric power, food, and textile industries, where capital per enterprise is relatively large, while enterprises in the printing, machine, lumber, ceramics and 'other' industries are very small in size. It should be pointed out that individual enterprises are not included here, (2) but both their capital and the value of their products are insignificant

2. The number of individual enterprises in 1934 were reported as follows: 62 in textiles, 91 in metals, 173 in machinery, 588 in ceramics, 428 in chemicals, 3,960 in foods, 256 in lumber, 126 in printing and 381 in others, a total of 6,065, almost all of them Chinese (Takahashi, op. cit., p. 438).

in comparison with those of the companies."

4:Grajdanzev--96-97 S-4 (no date) 1942 Formosans-1-2
116, 171, 454, 471, 473, 177.47 Japan
636.47

"It is also interesting to compare the size of the companies in Taiwan as regards capital with those in Japan proper and in Korea.

Industrial Companies, their Total and Average Capital in the Japanese Empire, December 31, 1937.

	Companies, number	Total paid-up capital and investments (million yen)	Capital per enterprise (1,000 yen)	Capital per capita of population (yen)
Japan proper	30,518	9,396.9	308	132
Korea	981	246.2	251	11
Taiwan	335	191.5	572	34
Kwantung	358	96.9	271	81
Karafuto	88	33.6	382	103

Source: Dainippon teikoku tokei nenkan, 1939.

It is clear that Taiwan and Korea are poorly supplied with capital per capita of population, but there is an important difference between them: the average capital per company in Taiwan is higher than in any other part of the Japanese Empire, including Japan proper. These are averages and include small as well as large companies, but behind them one may see the silhouettes of big corporations dominating the economic life of Taiwan,

corporations which have few equals even in industrially developed Japan (1).

1. By size of total paid-up capital the corporations and partnerships in industry in Taiwan were distributed as follows: [97]

Size	Number of companies	per cent of total	Total paid-up capital (1,000 yen)	per cent of total
Less than ¥10,000	50	14.9	253	0.1
¥ 10.000- 49,000	111	33.1	1,922	1.0
¥ 50,000- 99,000	34	10.2	1,276	0.7
¥ 100,000- 199,000	48	14.3	3,020	1.6
¥ 200.000- 499,000	40	11.9	4,878	2.5
¥ 500,000- 999,000	20	6.0	4,694	2.5
¥I,000,000-4,999,000	25	7.5	24,077	12.6
¥ 5,000,000-9,999,000	2	0.6	5,700	3.0
Over ¥ 10,000,000	5	1.5	145,316	76.0
Total	335	100.0	191.1	100.0

Thus, 32 companies—9.6 per cent of the total number—had 91.6 per cent of the total capital of companies."

4:Grajdanzev--97 S-4 (no date) 1942 Formosans
116, 257, 377, 433, 473

"Our analysis has shown that in Taiwan only the electric power, chemical, and food industries are large-scale, and that among them the electric power and sugar industries tower far above the rest—in these the corporations would be huge even by the standards of industrially developed nations. We saw that in agriculture Taiwan is an island of contrasts—huge landholdings and poor 'independent' landowners and tenants. The same picture appears in industry and will become clearer on examination of some individual industries for which data are available. We saw that in Taiwan one should distinguish between the progress and prosperity of agriculture in general and of the agriculture of the small Chinese farmers. The same phenomenon appears in industry."

"Production of sugar in modern mills is concentrated in the hands of nine Japanese corporations, [99] and of these, six produce ninety-seven per cent of all the sugar produced in modern mills and ninety-five per cent of all that produced in Taiwan. In the table on page 100 information is given concerning each of these six largest corporations. Unfortunately this information is not complete. These corporations are closely connected with many other enterprises in Taiwan and also have enterprises in the Pacific Islands under Japanese mandate, in Java and in other southern colonies (1). Many of these enterprises have nothing to do with sugar. But even so, the information given is interesting because it does throw some light on their activities. The paid-up capital and reserves of three of these corporations is about ¥100 million each. The amount of reserves is explained by the remarkable rate of profit which they receive—34 to 40 per cent is 'normal' for them. A lower rate of profit, as in the case of Ensuiko Seito Corporation (20.2 per cent) may be explained by the fact that the corporation has recently doubled its capital, investing it in new enterprises which do not yet bring profit. Thus the rate of profit in the sugar industry is extraordinarily high for all companies. It was shown above that the farmers did not receive any benefits either from the increase of the sugar

1. They also have refineries in Japan proper. Sugar produced in Taiwan is not refined there.

content of the cane, nor from the increase of protection; it now becomes clear that these benefits fell to the manufacturers, for only in this way were these huge profits possible (2).

2. But a certain part of these profits is the result of higher prices paid by the Japanese population for the benefit of these companies, protected by the tariff wall."

4:Grajdanzev--100 S-4 (no date) 1942 Formosans
116, 257, 433, 473 417

INFORMATION CONCERNING THE SIX LARGEST SUGAR CORPORATIONS OF TAIWAN 1939

	Taiwan Seito	*Dainippon Seito*	*Meiji Seito*	*Fusaiko Seito*	*Tokoku Seito*	*Showa Seito*
Established	1901	1896	1908	1908	1910	1927
Paid-up cap. (1,000 yen)	43,080	56,332	45,000	36,938	22,050	11,250
Reserves (1,000 yen)	47,138	23,093	41,500	3,430*	8,081	1,112(1937)
Principal shareholders:	The Emperor of Japan Mitsui bussan Naigoku chokin Bank Mitsubishi-Shanghai	Toyama-Seimei* Meiji-Seimei Tokyo-Seimei Kaijo-Seimei Nippon-Seimei Yasuda	Daichi-Seimei*	Shinei-Sangyo Meiji-Seimei†	Yamaguchi Nippon-Seimei† Meiji-Seimei Yasuda Bank	not published
Landholdings in Taiwan (ko)	46,630	17,900	13,569	...	3,274	...
Sugar production in 1937/38 (1,000 tons)	256.7	238.6	176.5	150.4	70.6	42.6
Production of molasses, 1936/37 (1,000 tons)	52.4	47.9	33.5	29.5	11.6	...
Other interests	65.7 km. of railways Alcohol Refineries in Japan Etc., etc.	1,000 km. of railways Alcohol Etc., etc.	118 km. of railways Alcohol Refineries Rubber Pulp Etc., etc.	Alcohol Pulp Railways Agriculture Mining Lumber etc., etc.	30 km. of railways Roads Alcohol Etc., etc.	... Alcohol Forestry Colonization Etc., etc.
Rate of profit (%)	44.65	34.5	40.0	20.2	22.0	20.7
Dividend rate (%)	12	12	12	8	10	10

* Beside its own capital the company report mentions ¥40.6 million of borrowings.
† *Seimei* (life) are life insurance companies.
Sources: 1. *Kabushiki kaisha nenkan*, 1940; 2. *Toyo keizai, Kabushiki kaisha nenkan*, 1939; 3. Kono, R., *Seito kontsuerun*, 1938.

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FORMOSA

4:Grajdanzev--101-102 S-4 (no date) 1942 Formosans
116, 288, 473

"The composition of the textile industry in Taiwan may be seen from the following table showing gross value of production in 1937 in 1,000 yen.

Silk goods	845
Cotton goods	898
Hemp and jute goods	2,497
Others	788
Total	5,028

Production of hemp and jute goods is the most important branch. The chief article made is bags for the trade in rice and sugar.

It was shown above [p. 95. category 116--analyst] that the total capital of textile companies in Taiwan in 1937 was ¥2.9 million. Now, in the same year one company alone—Taiwan Seima (Jute Dressing Company)—had a capital of ¥1.4 million. Its rate of profits was 48.5 per cent but only eight per cent was distributed, the [102] balance going into reserves and investments. It had 2,844 spindles. It is worth noticing that almost half its shares were in the hands of the Anda Corporation."

"In 1937 the gross value of products of the metal industry was made up of the following items (in 1,000 yen):

Gold and silver refining	4,101
Gold and silver goods	2,588
Alloys	1,710
Foundry	1,081
Tin cans	3,175
Construction and household goods	623
Total	13,278

As may be seen, this group consists chiefly of gold and silver produced and refined on the island--a branch of industry which has a very close connection with mining--and of tin cans manufactured for Taiwan's export industries. We do not know whether Taiwan's statistical service puts the production of aluminum in the metal group or in the chemical group, but it will occupy an important place in the war industry of Taiwan in the near future. The Nippon Aluminum Company was established in June 1935 with a capital of ¥30 million. Its 600,000 shares were divided between the biggest concerns in Japan: 83,500 shares went to Mitsubishi Kogyo, 45,000 to Mitsui Kosan, 44,000 to Taiwan Denryoku (described below), 30,000 to Mitsui Gomei, 15,000 to Mitsui, etc. Besides the paid-up capital there were reserves of ¥733,000, and borrowed capital amounting to ¥2,300,000 on September 1, 1939. The plants in Takao and Karenko use bauxite ore

from the Netherlands Indies and electricity is supplied by Taiwan Denryoku. Data on production are not published, but in one Japanese publication (1) it was stated that the

1. Kogyo nenkan, 1939.

capacity in 1938 was 8,000 tons, but that after expansion it will be 10,000 tons. Judging by the distribution of profits it went into operation in the second half [103] of 1937 and in 1939 profits amounted to seventeen per cent, of which eight per cent was distributed."

4:Grajdanzev--104-105 S-4 (no date) 1942 Formosans
116, 289, 473

"Of the paper producers, the most important enterprise is the Taiwan Kogyo Corporation, established in 1935. Its paid-up capital amounts to ¥8 million and its bonded indebtedness to ¥9.5 million. The principal shareholders are Ogawa Gomei, Taiwan Shoken, and Matsumoto. The value of its production in 1938-39 was ¥3,538,000, and profits amounted to 12.5 per cent of its capital. Next in importance is the Taiwan Pulp Kogyo Corporation, established in February 1938, in Taichu. It has a capital of ten million [105] yen in shares and has borrowed about one million in bonds. Its shareholders are two sugar companies and the Kanefuchi Spinning Company. Up to 1939 the corporation had not paid dividends."

4:Grajdanzev--106 S-4 (no date) 1942 Formosans
116, 377, 473

"In February 1939 a large new station producing electricity from coal was put into action. There are now 158 private producers of electricity and 15 government stations on the island, but by far the most important producer is the Taiwan Denryoku Corporation, established in 1919, the capacity of whose stations is now 220,050 kw. Its paid-up capital is ¥45.8 million, its reserves, ¥15.1 million, and its debentures, ¥76.6 million. Its principal shareholders are the Taiwan government-general and Japan Life Insurance Company. Profits in the last few years have been seventeen per cent and it has paid seven per cent to its shareholders. The low rate of profits compared with other corporations is presumably to be explained by the fact that the company sells electricity to the armament plants, for example to the Nippon Aluminum Company, at a special reduced price of 0.5 sen per kwh. The same policy is pursued by Taiwan Denka Corporation, which sells electric current to a ferrosilicon plant at 0.6 sen per kwh. Another important company in this field is the Taiwan Dento Corporation, established in 1919, with paid-up capital of three million yen. It supplies electricity chiefly for domestic lighting and the capacity of its plant is 7,224 kw. Its rate of profit is about thirty per cent and it pays dividends of ten per cent (1).

1. Recent information from Taiwan (August 1940) tells of the merger of these companies, so that a huge monopolistic corporation will take their place."

7: Joest--55 [10] E-5 (no date) 1882 Formosans
116, 473

Three British and one German firm in China have branches in Takao and in Tamsui in the north.

4:Grajdanzev--57 S-4 (no date) 1942 Formosans
116, 249, 474, 177.24 Japan
636.24

"The culture of sugar cane and the development of the sugar industry is considered one of the most spectacular achievements of the Japanese administration in Taiwan. Here we shall discuss only the culture of sugar cane; the sugar industry as such will be examined later in the section on industry. Sugar cane is an indigenous culture and was not introduced into Taiwan by the Japanese. The Dutch found it there in the 17th century and encouraged it. Before the advent of the Japanese it was produced by Chinese producers' cooperatives, which well deserve a special investigation because of their original character. They not only raised sugar cane, but also extracted the sugar in their old-fashioned mills. The industry had so developed that in 1893, ninety-eight million pounds of sugar were exported and probably not less than that amount was consumed in Taiwan, so that total production may be estimated at about 200 million pounds. This amount was not reached again until twenty years later. (1) With the coming of the Japanese the guerilla

1. Japanese sources say that at the time of Japan's occupation of Taiwan the annual output was only about 80,000,000 kin (104 million pounds). This can hardly be true if in 1893 exports alone equalled 98,000,000 pounds. In 1880 exports equalled 141.5 million pounds.

war continued for several years and ruined the industry."

4:Grajdanzev--85-86 S-4 (no date) 1942 Formosans
116, 226, 474

"The growth was therefore slow. The part played by the fisheries in the occupations of the population is not great. The fishermen are either united into associations or are working for Japanese or Chinese entrepreneurs. There are no statistics showing the division of entrepreneurs into Japanese and Chinese, but the names of the firms serve as an unmistakable [86] guide. The various types of fishermen are united into sixty-two associations of 16,516 persons. The total products sold by these associations were valued in 1937 at ¥2,670,201 showing that for the members of these associations fishing is only an auxiliary occupation."

575 on Formosa are divided into (1) farmers' associations, (2) labor unions, (3) fishermen's associations, (4) trade associations, (5) professional groups, (6) social groups, and (7) co-operatives. Most of the associations are organized on a local basis and are generally patterned after the governmental administration, that is, directives and rulings are made at a single headquarter and disseminated to lower groups. A provincial organization establishes its branches in hsien and municipalities; the latter in turn organize sub-branches in towns and villages. Some associations have a national organization, which expects to extend its activities when the Mainland is regained.

•474 The Farmers' Association was first organized thirty years ago for the express purpose of protecting the rights of the farmers. Very often it came into conflict with the Japanese administration, which finally ordered its dissolution and replaced it with the Agricultural Association, a quasi-government agency. The activities of the Agricultural Association were confined to the promotion of agricultural production. In 1949, the

6. (continued) [Yearbook of the Republic of China], 1954, Taipei, p. 730.

474 Farmers' Association was reincorporated under the Chinese law. It is at present a private organization governed by a representative body, managed by a general manager assited by a board of 9 to 15 directors and supervised by a board of 3 to 7 supervisors.[7] In the rural areas, the Farmers' Association distributes fertilizers, extends credit, collects government taxes and repayment of land purchase loans in rice or in kind, and directs educational programs. In towns, the Farmers' Association offers facilities for wholesale purchasing, co-operative marketing, and warehousing. In the cities and larger towns, the Farmers' Association extends short-term loans to small merchants. The Farmers' Association is the only modern organization actively supported by the farmers, who form 52 per cent of the total population in Formosa. There are 4,121 sub-units of the Farmers' Association in rural areas with a total membership of 395,208. These sub-units combine to form 340 units at the town, hsien, municipal, and provincial levels.[8]

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7. Arthur F. Raper: Rural Taiwan -Problem and Promise, pub. by JCRR, Taipei, 1953, p. 183.

8. Chung-hua Nien-pao [China Annual], 1954, Vol. III, p. 83.

668 the remaining left wing of the association split again into the communistic and the social-democratic groups, and the latter was expelled from the association. The moderate Taiwan People's Party again split into the conservative rich landlord group and the more radical middle class group. The former group organized the Taiwan League for Local Self-Government in 1929, and in the meeting of the party in 1930, was expelled by the more radical group. But at the same time, the party was disbanded by the colonial government. Thus, by 1930, among the Formosans, there were (1) a communistic group, (2) a social-democratic group, (3) a more radical middle-class group, and (4) a conservative landlord group.

474 2. Farmer's Associations: The influence of
427 this movement could not fail to reach the
668 farmers. In 1924 a dispute arose between
671 sugar cane farmers and a sugar corporation. Under the leadership of a local doctor, the dispute was settled in favor of the farmers. This encouraged the farmers, and in next year the Association of Sugar Cane Farmers was organized. Some farmers had reclaimed government-owned land without permission. This was denounced as illegal, and in 1926 nearly four thousand hectares of this kind of land were distributed to 370 Japanese retired officials. This provided impetus for farmers

474 427 668 671

to unite and fight. Moreover, farmers were under the heavy yoke of the landlord, and most of landlords were local people. On Formosa, 53 per cent of the farm land was tenant land, and tenants had to pay about half of their harvest to the landlord as rent. Moreover, the tenant farmer has various other obligations toward the landlord. This situation was unbearable even to the most subservient tenants, and they often submitted complaints against landlords to legal arbitration. Under the threefold pressure of the sugar corporation, retired Japanese officials and landlords, the farmers were always ready to rebel at the slightest provocation. The sparks kindled in 1924 spread and many farmers's association were organized. It is interesting to note that the name of the association thus organized was not the "association for agriculture," but the "farmer's association." In 1926 these local associations were united into the Taiwan Farmers' Association. Campaigns against the landlord under the direction of the association rapidly increased. There were 5 such cases of disputes in 1924, 4 cases in 1925, 15 cases in 1926, in 1927 the number jumped to 431 cases (2,127 persons involved) and in 1928 dropped back to 134 cases (3, 149 persons involved) in 1928. The magnitude of the dissatisfaction stimulated the Japanese to action and suppression was begun in 1929. With the Japanese invasion of Manchuria in 1931

474 ruthless means of suppression were adopted
427 in the name of internal consolidation. The
668 cases of farmers opposing landlords dropped
671 sharply to 23 cases in 1929, 28 cases in 1930, and 16 cases in 1931. However, the influence of the movement on Formosan society, especially on social relations between landlords and tenants was undeniable. The government sponsored landlord-tenants associations after 1924 were a means to mitigate the tense situation of the time.

467 3. Labor Unions: The new social currents also reached factory workers. Labor unions for various trades were organized, and in 1927, 29 local unions were federated into the Taiwan Federation of Workers Unions. At the end of the year participating units increased to 65, and the number of members amounted to 7,861. In 1928 the League of Taiwan Mechanical Workers was organized under separate leadership. Several strikes were directed by the leagues. Both the farmers associations and the worker's unions received co-operation from associations and unions in Japan. Generally speaking, because of the backwardness of Formosan industry at that time, the activity of labor unions was not as conspicuous as that of the farmers. The activity of the union also faded out under the pressure of government suppression in 1929 and 1931. In 1932 almost all labor leaders were arrested, and in 1937, the year

467

Railroad workers union	13	22,265
Highway workers union	13	5,121

* The China Annual 1954, Vol. 3, Feb. 1955, p. 89.

Labor unions in Formosa are generally directed by members of the Kuomintang and are subsidized in part by the government. Their main functions are to seek improvements in wages and working hours, to look after the welfare of the workers, and to participate in patriotic activities. The most noteworthy service offered are social security measures which include accident insurance, maternity and life insurance, pensions at retirement, and low-cost housing for workers. Some unions also operate clinics, day nurseries, and co-operative groceries for the benefit of their members.

• 474
226

Formosa has a long seacoast and over seventy islets. Over 232,000 people are engaged in fishing. The fishermen's associations were formerly controlled by fishing-boat owners and owners of the fish ponds, and funds used in welfare work were derived from a surcharge of the price of fish.

•474 226 In 1954 the fishermen's associations were reorganized by the provincial government to give the workers a greater share of control.[9] There are at present seven local units and one provincial fishermen's association, with a total membership of 80,123. They construct and repair fishing boats, operate facilities for cold-storage, and offer emergency aid to the fishermen and their families.

474 Trade associations are formed by people belonging to the same trade. They combine to form either a chamber of commerce or an association of industries. The professional associations are organized by lawyers, accountants, journalists, and physicians. There are eleven such associations, some having a local organization in each hsien and municipalities, others with only a provincial organization. Social organizations, devoted to social welfare and relief work, are sponsored by the government, by religious groups, and by civic clubs. Their activities include the collection and distribution of comforts for the armed forces, aid to women in distress (unwed mothers, mistreated wives

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9. "Under the new set-up, two-thirds of the directors, officers, and inspectors of the association will be workers." Arthur F. Raper and others, Urban and Industrial Taiwan-Crowded and Resourceful, Taipei, Sept. 1954, p. 292.

474 and foster daughters), sewing for charitable purposes, and the operation of day nurseries, orphanages, and homes for the dumb and the blind. Wives of government personnel often take an active part in social organizations.

In order of size, the farmers' associations, the labor unions, and the co-operatives are the largest social organizations. There are at least 421 local co-operative units with a total membership of approximately 375,000 households, or roughly one-fifth of the island's population.[10] The most important of the co-operatives is the consumer co-operative which has over two hundred units in the larger cities of the province, and distributes the ration of daily supplies to the families of government employees, school teachers, and military personnel. There are at least 71 branches of the credit co-operatives. They accept deposits and extend loans to such small businesses as handicraft and family industries. At the end of 1953, deposits amounted to NT$176,092,000 and loans amounted to NT$119,316,000.

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10. Raper, ibid., p. 292. The Yearbook of the Republic of China of 1954 reports that there were 481 units and 398,681 members at the end of 1953.

474 Agricultural co-operatives help the farmers to transport and market special farm products such as fruits, tea, citronella oil, and straw hats and mattings. At present there are 81 agricultural co-operatives. Co-operative farms are organized with the help of the government. The co-operative farms are either operated on a community basis (their products distributed among the members according to individual contributions) or operated individually with co-operative purchasing of fertilizers and seeds and co-operative processing and marketing of products. There are 133 such co-operative farms in Formosa with a total membership of 18,000, but most of them do not have the equipment necessary for efficient operation.

000 Formosa has a vast network of social organizations, but most of these have had a short history; they were either founded or reorganized within the past five years. They are still in an experimental stage and not yet deeply rooted in the lives of the people. The Formosan people were given little opportunity to exercise initiative under Japanese rule, and in consequence they lack both the experience and the training to run efficient organizations. Moreover, most organizations rely on the government for financial support, which in turn gives the government undue control over their activities

4:Grajdanzev--171-172 S-4 (no date) 1942 Formosans-1-2
116, 452, 476, 563, 661, 177.47 Japan
636.47

"The growth of Taiwan's cooperative societies of all kinds is good testimony to the ability of the Chinese population to organize and to manage quite successful enterprises. The growth of the cooperative movement in Taiwan may be seen from the following table:

The Cooperative Movement in Taiwan

	1913	1918	1930	1935
Number of societies of all types	18	171	407	462
Number of members	2,760	70,428	265,248	342,122
Paid-up capital 1,000 yen	484	4,455	13,949	15,250

[172]

In 1936 the urban credit cooperatives had deposits of 20.7 million yen, while the rural cooperatives had 64.3 million yen. In May, 1940 the corresponding sums were 36.4 million yen and 122.7 million yen. All this is the more remarkable because the cooperatives were developed by the Chinese with little help from the Japanese or from the cooperative associations of Japan (1), and because the government put so many obstacles

1. This does not mean, of course, that the Japanese cooperative associations were unfriendly to the Taiwan cooperative movement. Quite the contrary. Throughout the history of the Taiwan cooperative movement the Chinese received every encouragement from the Japanese societies and from the certain Japanese individuals; but this help could not be great because of the conditions existing on the island. It is

important to emphasize that many individual Japanese physicians struggling with epidemics, teachers bringing education to far-away villages, political organizers helping the Chinese to organize their fight for freedom, and many others whose services to the Chinese were great and whose relation to the conquered people was that of sympathy and often of self-sacrifice, deserve the highest praise. However, it is not the individuals who count most, but the system, and however good the intentions of particular individuals might be, they could not and cannot change the governmental system existing on the island.

in the way of the development. The managerial and controlling staffs of the cooperatives in Taiwan must be approved by the government-general, so that 'undesirable' elements can be eliminated from the movement. The active members of the societies were often arrested and imprisoned and obstacles were put in the way of the creation of a powerful central body for the cooperative movement. But in spite of all obstacles the population of the island succeeded in building up a strong and useful organization."

4:Grajdanzev--172-173 S-4 (no date) 1942 Formosans
116, 452, 241, 476, 563, 177.47 Japan
636.47

"Since the start of the present war, however, through increasing supervision and various regulations, the government has turned the cooperatives into a piece of bureaucratic machinery, rather like the paochia. The chief function of the agricultural cooperatives, which form the backbone of the movement, has become the collection of rice and other products and their transfer to the government. According to the declared rations (1), the farmers in Taihoku province, for example, are to have only from two to

1. The ration figures are taken from the Ekonomisuto, Tokyo July 1, 1940.

two and half go of rice per day (0.6-0.75 lb.). But this is considerably below the usual consumption of [173] the farming population, so the farmers will not willingly surrender their 'surplus' and the cooperatives have been turned into organs for the compulsory collection of grain and other agricultural products. The only organization created by the islanders which had some semblance of independent existence is thus becoming a mere cog in the Japanese military machine."

4:Grajdanzev--61-62 S-4 (no date) 1942 Formosans-1-2
116, 241, 435, 452, 477, 655, 177.47 Japan
636.47

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--62 S-4 (no date) 1942 Formosans
116, 241, 477, 427

"More than 110,000 ko of land are under control of the companies which for the most part they lease to the tenants. As will be shown later there is strong competition between tenants in Taiwan, and if the company does not supply the tenant with land, he may be ruined. He must therefore get land from the company and raise sugar cane on the conditions dictated by it."

4:Grajdanzev--64 S-4 (no date) 1942 Formosans -1-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon.

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane Culture in Taiwan

	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4:Grajdanzev--98 S-4 (no date) 1942 Formosans -1-2
116, 257, 477, 563

"Before the Japanese occupation sugar production was carried on in small Chinese enterprises. But these enterprises with their primitive technique, animal power and low-quality products, were compelled to give ground step by step before the modern mills constructed and operated by the Japanese companies. The rapid extinction of these small enterprises and the growth of production of the modern mills may be seen from the following table.

Production of Sugar in Taiwan
(tons)

Year (Nov.- Oct.)	In modern mills	In improved mills	In primitive mills	Total
1905	4,535	385	44,659	49,579
1915	187,839	11,166	9,463	208,468
1917	409,165	26,560	22,367	458,092
1921	241,169	5,217	6,348	252,734
1925	467,264	4,824	7,451	479,539
1927	402,611	3,343	5,186	411,140
1929	777,931	5,776	5,621	789,328
1930	798,304	7,050	5,130	810,484
1932	977,239	6,744	5,065	989,048
1933	616,840	10,070	6,814	633,724

Production of Sugar in Taiwan [Cont.]
(tons)

Year (Nov.-Oct)	In modern mills	In improved mills	In primitive mills	Total
1934	634,403	4,721	7,919	647,043
1935	942,712	9,994	12,946	965,652
1936	880,552	10,402	10,725	901,679
1937	987,451	10,423	9,478	1,007,352
1938	...	...	...	989,778
1939	...	...	...	1,377,000

From this it appears that while in 1905 only nine per cent of the sugar was produced in modern mills, in 1937 these produced ninety-eight per cent of the total. Primitive mills and the so-called 'improved' mills had inevitably to lose the position they occupied."

4:Grajdanzev--100 S-4 (no date) 1942 Formosans
116, 257, 433, 473, 497

INFORMATION CONCERNING THE SIX LARGEST SUGAR CORPORATIONS OF TAIWAN 1939

	Taiwan Seito	*Dainippon Seito*	*Meiji Seito*	*Furuko Seito*	*Teikoku Seito*	*Showa Seito*
Established	1901	1896	1908	1908	1910	1927
Paid-up cap. (1,000 yen)	43,080	56,332	45,000	36,938	22,050	11,250
Reserves (1,000 yen)	47,138	23,093	41,500	3,430*	8,081	1,112(1937)
Principal shareholders:	The Emperor of Japan Mitsui bussan Naikoku chokin Bank Mitsubishi-Shanghai	Toyama-Seimei* Meiji-Seimei Tokyo-Seimei Kaijo-Seimei Nippon-Seimei Yasuda	Daichi-Seimei*	Shinei-Sangyo Meiji-Seimei†	Yamaguchi Nippon-Seimei† Meiji-Seimei Yasuda Bank	not published
Landholdings in Taiwan (ko)	46,630	17,900	13,569	...	3,274	...
Sugar production in 1937/38 (1,000 tons)	236.7	238.6	176.3	150.4	70.6	42.6
Production of molasses, 1936/37 (1,000 tons)	52.4	47.9	33.5	29.5	11.6	...
Other interests	65.7 km. of railways Alcohol Refineries in Japan Etc., etc.	1,000 km. of railways Alcohol Etc., etc.	118 km. of railways Alcohol Refineries Rubber Pulp Etc., etc.	Alcohol Pulp Railways Agriculture Mining Lumber etc., etc.	30 km. of railways Roads Alcohol Etc., etc.	... ... Alcohol Forestry Colonization Etc., etc.
Rate of profit (%)	44.65	34.5	40.0	20.2	22.0	20.7
Dividend rate (%)	12	12	12	8	10	10

* Beside its own capital the company report mentions ¥40.6 million of borrowings.
† *Seimei* (life) are life insurance companies.
Sources: 1. *Kabushiki kaisha nenkan*, 1940; 2. *Toyo keizai, Kabushiki kaisha nenkan*, 1939; 3. Kono, R., *Seito kontsuruun*, 1938.

4:Grajdanzev--101 S-4 (no date) 1942 Formosans
116, 433, 458, 477

"All this is mentioned here [see previous paragraphs--analyst] in order to remind readers that the development of Taiwan's sugar industry, as well as of industry in general, was not smooth and uninterrupted, but passed through booms, crises, depressions—phenomena well known from the history of other countries. Taiwan can now produce much more sugar than it actually does produce (as a comparison of figures for 1933 and 1939 indicates), but the small domestic market, combined with a desire to reap high monopoly profits, keeps production far below the level of capacity, while entrance into the international market for the protected Taiwan sugar is not easy. The manufacturers are organized into a cartel which regulates prices and production in order to avoid cut-throat competition and maintain monopoly profits."

4:Grajdanzev--111-112 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 477

"A similar expansion [similar to that in mining--analyst] has taken place in industry, where all large new enterprises are owned by Japanese who make up only five per cent of the population, but now own at least ninety-five per cent of the capital in Taiwan's industry and more than ninety per cent of the capital in mining. But if one takes into consideration the fact that the Japanese enterprises are modern, while those of the Chinese are small and have more primitive equipment, (1) it becomes clear that the share

1. Compare the data on sugar mills given above.

of the Japanese enterprises in production is even greater than comparison of the respective holdings would indicate. Furthermore, the shares of corporations in Taiwan are not subject to free purchase and sale. These are monopolistic [112] organizations, and shares in them are not offered on the open market but are held by the big corporations of Japan."

4:Grajdanzev--112 S-4 (no date) 1942 Formosans -1-2
116, 171, 471, 563, 477, 655, 177.47 Japan
636.47

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929 Per cent	Korea 1938 Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital. and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

"The money which the banks and credit cooperatives collect is lent to the business men and farmers, and here one finds a great difference in the position of the big firms and the small farmers or artisans. The banks serve chiefly Japanese firms, and their credit requirements differ little from those in Japan. Small business men secure their credit in urban credit societies which sometimes charge as much as thirteen per cent and usually ten per cent, while rural credit societies usually charge twelve per cent and in the worst cases seventeen per cent. (1) But both urban and rural credit societies grant

1. These rates are taken from Sangyo kumiai nenkan, 1938, Tokyo. K. Takahashi asserts that the usual rate for mortgages on real property is 15 per cent, op. cit. p. 601).

such credit only on good security, so that the demand of many farmers for credit remains unsatisfied and they are compelled to apply for loans to private individuals who charge twenty to twenty-five per cent, and as Takahashi remarks, cases where more than twenty-five per cent is charged are not rare.

This brief survey is sufficient to show that the modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay.

4:Grajdanzev--130 S-4 (no date) 1942 Formosans-2

116, 426, 453, 563, 477

The importance of this fact cannot be overemphasized. The Chinese enterprises are unable to compete with the Japanese, not so much because the Chinese are 'unable to organize corporations' on account of their 'national characteristics,' [rationalizations given by Takahashi for the domination of industry by the Japanese see pages 112-113 in category 116--analyst] but because their financing costs them two to five times as much as it does the Japanese enterprises."

4:Grajdanzev--146-147 S-4 (no date) 1942 Formosans -1-2
116, 439, 477, 563, 656, 177.47 Japan
636.47

"Independent trade and foreign business are at an end (1) and the handful of foreigners

1. Identical amounts of foreign trade may mean different things for a nation; thus if an American firm buys tea in Taiwan, transports it to the United States in an American ship and sells it to retailers, the net result for the United States is very different from the case where a Japanese firm buys tea in Taiwan, brings it to the United States in Japanese bottoms, and sells it to American retailers.

in Taiwan are in a precarious position. In his [147] book 'Taiwan under Imperialism' Tadao Yanaihara explains this in the following way (2): in their competition with foreign

2. Yanaihara, op. cit., pages 48-49.

and Chinese merchants the Japanese traders had great capital; they also entered the sphere of production; they had the advantage of the cooperation of the Taiwan Bank; they were helped by state monopolies; they enjoyed subsidies from the state; they were protected by the tariff wall. But nowhere in his book does Professor Yanaihara give proof that the Japanese merchants had greater amounts of capital when their enterprises were organized. The huge capital funds were not brought from Japan; they were created in Taiwan itself. Neither can any reason be found for combination of trade and production

as a cause of their success. According to his own statement (op. cit., page 48), the foreign traders and shipping were almost completely driven out (hotondo kuchiku serarete) by 1907. But at that time no Japanese took any part in the production of rice, whereas in tea production Mitsui Bussan Co. and Nozawa have participated only since 1907. As late as 1905 about 90% of the sugar was produced in primitive mills and only 4,535 tons in the mills of the newly-established Japanese enterprises, while the total exports of sugar for 1905 were but 42,600 tons. Pineapples and bananas were unimportant as articles of export in these early years: bananas appeared in the custom reports in 1907 (valued at only 44,129 yen), pineapples to the value of only 18,639 yen were exported in the same year. Since camphor became a monopoly, there is no question of competition with respect to it; while alcohol was practically not exported."

4:Grajdanzev--147 S-4 (no date) 1942 Formosans
116, 171, 477, 656, 177.47 Japan
636.47

"The establishment of a Japanese bank does not of itself mean that Japanese merchants would enjoy privileges in it in comparison with other clients. There remain then monopolies, subsidies, tariff walls and--we add--taxation policy, administrative pressure and other similar measures as causes of the Japanese commercial success. The same measures were applied in Korea, later on in Manchuria and are now being used in China."

4:Grajdanzev--158-159 S-4 (no date) 1942 Formosans
116, 171, 457, 477, 661, 177.43 Japan
636.43

"The usual explanation of Japan's ability to obtain year after year tens of millions of yen worth of goods over and above what is sent from Japan to Taiwan is that this balance represents the interest on Japanese capital invested in Taiwan and the profits of the Japanese businessmen there. But a closer analysis of the figures given above reveals that this explanation is not satisfactory. It is important to understand that we are concerned here with investments and the returns on them, not from the point of view of an individual, but from the point of view of two regions—Taiwan and Japan. From 1896 to 1908, [159] inclusive, Japan sent goods to the value of 31,655,000 yen over and above her imports from the island and this represents her real outlay in the colony. She now receives from Taiwan sums which in every year since 1914 have been greater than this original 31,655,000 yen; which in every year since 1924 have been more than twice as great; and which in every year since 1934 three times as great, and in 1939 were six times as great as the original sum. Is this the legitimate interest on capital and profits of the entrepreneurs which are due to their energy, foresight and managerial ability?

Of course, we know that high profits are made not only in Taiwan, but, say, in the United States as well. Does this fact refute our thesis of exploitation? In no way. The existence of monopolies in the United States is a fact known to all. However, these monopolies are not permanent. Some of them appear, some disappear, every year."

15: U.S. Navy--32 [11] (no date) 1944 Formosans
116, 482, 462, 464

"Hours are long and, because of the abundance of unskilled man-power, few draft animals and little machinery are used in transport. Women and children and men pull carts and furnish motive power for the narrow-gauge push-car lines. Only the women of the Hakka Formosan-Chinese work in the fields, however. Women and children are employed extensively in tea-picking and sorting and in the ubiquitous small household industries."

The actual ascent of Mount Morrison started from the village of Ling-ki-ho. It is surrounded by bare hills between which spread fields of rice and sweet potatoes. The little town has a population of about a thousand who initially showed themselves very hostile towards the Japanese; the ranks of the rebels included people engaged in the camphor trade. We had an extremely hard time finding porters in Ling-ki-ho and were completely unsuccessful in our search for guides. We had finally managed to engage twenty men who, when they learnt of our destination, promptly deserted us to the last man for fear of the aborigines, among whom individuals can distinguish themselves by capturing the heads of several Chinese. A youth of their group can think of marriage only after he has proved his courage by such an achievement. Once more twenty porters were hired; they were locked up overnight, examined by the doctor who eliminated four of them, and the next morning a load of about 24 kilograms was tied on the back of each one of them in the presence of armed soldiers, so that there was no opportunity for desertion. Our group included two officers with twenty-five men and their equipment and seven Japanese including a newspaper reporter, an interpreter, a doctor, geologist, and a topographer. I was not only supposed to be the leader of the expedition but was also entrusted with the task of studying the forest conditions in detail and of photographing everything of interest. Naturally we were well equipped with all kinds of scientific

26: Honda--470 N-3 (1896) 1897 Formosans-2
116, 122, 361, 482, 609

instruments and tools for clearing our way through the thicket, for building huts against the rain, etc.

31: Hofmann--614 N-3 (1909) 1912 Formosans
482

From Chikutoki we started to ascend the mountain; where the ground was fairly level we used sedan chairs made of two bamboo poles in which we sat in a squatting, half lying position. Four strong Chinese were able to carry my weight, 78 kilograms, with no difficulty. They were able to climb ascents of 20 to 30 at the same steady pace. The carriers in back change about every fifteen minutes.

31: Hofmann--605 N-3 (1909) 1912 Formosans
483

From Toyen we travelled for 14 kilometers on a small vehicle on tracks (52 centimeter gauge); two Chinese coolies served to propel the car.

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year——a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

11: Haguenauer--27 [4] T-3 (no date) 1929 Formosans
116, 484

The railroad running south to Takao from Tansui passes through Itabashi. Tourists usually stop at this station to go visit the Chinese garden of Li Pen-yuan.

15: U.S. Navy--22 [4] (no date) 1944 Formosans
116, 198, 484, 563, 177.19 Japanese
636.19

"By making use of the Japanese language necessary in business, education and communication, the administrators of the island have created the foundation of a unity unknown in pre-occupation days. The ease of travel throughout the island is tending to blur rapidly the lines of cultural differences among the educated Formosans. All three Chinese groups are represented among the settlements along the east coast, to which many have been encouraged to move by Japanese interests."

15: U.S. Navy --23 (no date) 1944 Formosans
116, 162, 609, 563, 484

"The Cantonese. The people of Cantonese origin have always remained rather distinct and have been considered as foreigners. They numbered 'about 100,000' in 1930. As a group they have become identified with small-scale banking and wholesale trading. They have maintained their contacts with the mainland, and, when travel was possible, many spent part of each year at Canton."

15: U.S. Navy --24 (no date) 1944 Formosans
116, 484, 493, 511

"Any tendency to move about within the island is held to a minimum because of limited rail and bus services, the absence of private motor vehicles, and the absence of incentives other than commercial interest. An agricultural population which has no surplus of cash finds little reason to move about from place to place. The tourist or sightseeing traffic is from Japan Proper or created by the Japanese upper class who are resident on the island. Commercial traffic along the main railway lines consists of agents travelling from centers of production to the ports and marketing centers."

15: U.S. Navy--24 [6] (no date) 1944 Formosans
116, 484, 788

"Few Formosan-Chinese have an opportunity to travel for pleasure or sightseeing, and that which is performed is often done as a pilgrimage to some well-known or favorite shrine or temple. Following the example of the Japanese, Formosans of the upper and middle classes have begun to frequent the hot-spring resorts (around Shirin and Hokuto in the north, near Giran on the northeast and north of Koshun on the southern peninsula)."

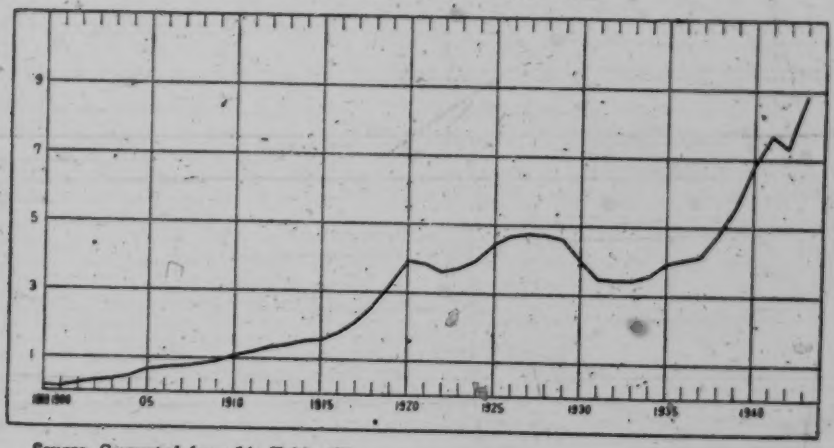
48: Chen E-4 (no date) 1955 AD1 Formosa AD1

15. *Change in the Way of Life*

In response to the various changes which took place during the Japanese era, the way of life of the Taiwanese had gradually changed. There is much data on this point, but we can only describe some of it in this limited space. The increase in the mobility of the people should be pointed out first. How many times each person has

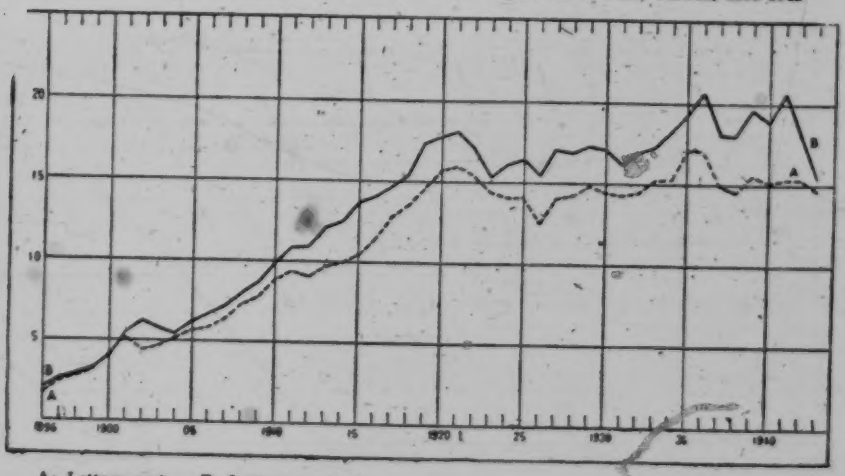
178
484

Fig. 7: Number of Times Traveled on Government Owned Railroads Per Capita Per Annum, Taiwan, 1899-1943



Source, Computed from 14: Table 433

Fig. 8: Number of Letters Received and Sent Per Capita Per Annum, Taiwan, 1896-1943



A: Letters sent B: Letters received
Source, Computed from 14: Table 412

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

178 484 traveled by train annually, and how many letters he has received and sent annually may be taken as an index of the mobility. The increase in the frequency of travel and the increase in the number letters received and sent are signs of the wider sphere of activity and higher mobility. The increase since 1920 was particularly remarkable (Fig. 7, Fig. 8).

Figure 7 was the number of times of travel per capita per annum on government owned railroads, and does not include travel on privately owned railroads and bus lines. When the latter is included, the figure rises as indicated in Table 7. During the later years of Japanese rule the mobility had increased markedly. In 1938, the number of times traveled per capita per anum was 17.19, but it had risen to 23.64 by 1942.

Table 7: Number of Passengers on Train and Bus Lines in Taiwan in Selected Years

	1938	1942
1. Government-owned Railroads	27,179,194	46,342,569
2. Privately-owned Railroads	2,002,456	1,962,017
3. Government-owned Bus Lines	8,207,474	9,413,577
4. Privately-owned Bus Lines	53,644,809	81,536,398
Total	91,033,933	139,254,561
5. Total Population	5,267,005	5,891,848
Average times travelled Per Capita Per Annum	17.19	23.64

Source: 14, 1: Table 433; 2: Table 446; 3: Table 458; 4: Table 459; 5: Table 64.

262 The consumption of food had also increased. Here we will take sugar and pork as an example (Table 8).

Table 8: Per Capita Per Annum Consumption of Sugar, Taiwan[11]

Year	Per Capita Per Annum Consumption
1903-1909	2.79 kilograms
1910-1920	5.26 kilograms
1921-1925	6.13 kilograms
1926-1938	8.87 kilograms
1939-1943	14.41 kilograms

In later years of World War II the transportation between Taiwan and Japan was hampered by the allied forces, and no doubt, the jump in the amount of consumption in the last period (1939-1943) of the table 8 includes some sugar which was actually stocked in warehouses in Taiwan. For comparision, the per capita per annumn consumption of sugar in other parts of the world in 1939 was as follows. Netherlands was the highest consumer: 81 kilograms. Denmark and Australia came to next, more than 50 kilograms. Britain, U.S.A., and Canada were nearly 50 kilograms, Italy and Portugal were about 9.5 kilograms. India was 6.7 kilograms, Java: 4.6 kilogram, China mainland: 1.8 kilograms. The average of 1939-43 in Tawian was 14.4 kilograms[12].

Note 11: Taiwan Sugar Yearbook, 1947, Taipei, Table 55.
Note 12: op. cit., Table 106. cf. 27: Table 144, Table 145.

15: U.S. Navy --24 [5]
116, 166, 486, 659, 177.48
636.48

(no date) 1944

Formosans
Japanese

"The movement of Formosan-Chinese or Japanese into the aborigine territory is supposed to be strictly regulated. Permits must be had for any forest operations which take laborers into the area for logging or for camphor extraction. Likewise, the movements of aborigines who wish to leave the territory for business or sightseeing (educational) visits to towns and villages is carefully checked by the Japanese police. The police stations are small centers for trade and local administration through which most such traffic must pass. Roads, paths and the pushcar lines converge on these centers.

Movement from the western and northern settled regions to the isolated East Coast is susceptible of complete control. The town of Suo is the last important settlement at the northeast. Koshun is the last important settlement at the extreme south. Through these two towns pass all round-the-island motor traffic. (A road crossing the southern peninsula from Shajo eastward may now cross above Koshun.) All persons entering the territory through these points are expected to be registered for police purposes.

Some foot traffic (confined largely to bearers of supplies and messengers for the interior police stations) passes across the island from the Taichu-Hori district over the Noko mountain ridge to Karenko. It is improbable that Formosan-Chinese, singly or in small groups, should attempt to cross the mountains on foot unless armed or escorted by armed police."

15: U.S. Navy--29 [5] (no date) 1944 Formosans
116, 486, 177.48 Japanese
636.48

"The movement of all persons into or out of a community is carefully registered and reported to the police. Every hotel or place of lodging, such as a temple along a mountain trail, must keep a registry open for inspection at all times. Regular nightly inspections of hotel registers are made by the police--in the towns by a special police detail.

A further special registration is required of each person crossing the border of the aborigine territory on the East Coast."

4:Grajdanzev--189-190 S-4 (no date) 1942 Formosans -1-2
116, 487, 724, 496

"A base of operations cannot be considered only as a port. It must have enough room for deployment of troops and for general defense purposes. Taiwan is excellent in this respect; its few defects will be mentioned later. Its system of communications permits the authorities easily to move troops to any threatened point. An attack on Taiwan can be only air-borne or sea-borne. The nearest place on the continent, Foochow, is 115 miles from Tamsui. Under existing conditions in China, (and they hardly can be greatly changed in the next two years) an air attack from this direction is unlikely. An airborne attack on a large island from an aircraft carrier cannot be decisive. Aside from long-range sporadic bombing, Taiwan may expect only a major seaborne attack, an eventuality foreseen by the Japanese and widely discussed on the island. To repel an invasion by sea a well-developed network of communications exists on the island. The state of railways and roads on the island was discussed earlier in this book. Here it is sufficient to point out one defect in the railway system of the island: the western longitudinal railway is not connected with the eastern longitudinal railway because of the prohibitive cost of construction in the mountainous districts. However the whole coastline is followed by a road and there are four good automobile roads connecting the east coast with the west, so that troops may be easily shifted to most of the points on the east coast. [190] The west coast of the island is largely flat and easy for debarkation, but on that side of the island the communications are best. The eastern shore presents a mountain barrier falling abruptly to the sea, except for mouths of some rivers where beaches are available. However, in one respect this mountainous character may be a help to the invading

4:Grajdanzev--189-190 S-4 (no date) 1942 Formosans-2
116, 487, 724, 496

party: in case of air superiority on its side the bombing of bridges, viaducts, etc., may prevent the arrival of reinforcements and will permit a landing party to consolidate its hold over some part of the shoreline."

6: Kirchhoff--36-37 U-4 (no date) 1895 Formosans
116, 311, 361, 487

To the northwest of Ki-lung the coastal village of Kimpaôli is of some significance because of the neighborhood of the solfataras of the Ta-tun Range. A road runs in a southwesterly direction from Kimpaôli and joins the so-called military road beginning opposite the harbor of Tam-sui, at the village of Pa-li-hun, and leading to Tai-nan and even farther along the coast to the southern point of the island.

In North Formosa the open place of Tiong-lek is situated on it, with heavy plantings of [37] rice, sweet potatoes, and turnips, and also the walled town of Teuk-tscham (now officially known as Sin-tschu). This is an important commercial center connected by water the nearby coast. Wide rice fields and luxuriant tea plantations surround it, but unfortunately it is not available for foreign trade, although an excellent market would be found here for materials and opium. Now loads of camphor are transported from here on the backs of bearers to Tam-sui, the nearest treaty port.

6: Kirchhoff--37 U-4 (no date) 1895 Formosans
116, 487, 493

The "military road" goes on from Shinchiku in a wide curve via the inland towns of Tschang-hua and Kia-y; in a sedan-chair the 300 km. separating Tam-sui and Tai-nan can be covered in 10 days, but it is hardly anything more than the linking of the ordinary field paths, on which the terribly creaky ox-carts bear home the rice harvest on their spokeless wheels, the fixed axle turning round also. There are no bridges at river crossings. In the rainy season this route cannot be used, for most of the stretches of road making it up turn into ditches of brackish water.

6: Kirchhoff--37 [3] U-4 (no date) 1895 Formosans
116, 205, 487.

A stretch of "military road" was at once built between Su-aô and the mouth of the Hua-lien, although malaria mowed down large numbers of the workmen. With this the arm of the Chinese Government, which had at once set up a postal service in this stretch, had already extended itself from the north to about the middle of the east coast. All that remained to be done was to establish contact with the east coast in the narrower southern part of the island. In the southern third of the east coast there lay the isolated coastal locality of Pi-lam. A route was laid down crossing the mountains and ending there. It begins 36 km. to the northeast of Ta-kaô on the Tsche-schan (i. e., at the Red Mountain), but it is very narrow and often uses the beds of streams, which naturally are more or less passable only in the dry season. Yet in the critical year of 1874 it proved very useful, when it was necessary to hold in check the native tribes during the Japanese invasion; for the route cuts through a number of the footpaths used by the natives.

12. Garnot--20 G-3 (1884-85) 1894 Formosans
116, 487, 493

In the vicinity of Kelung there is no road worthy of the name; instead you find narrow paths that are paved in some cases, and then staircases with hundreds of steps are used to cross some of the hills and ravines.

There is no need for winding roads because vehicles are unknown, and luggage is almost always transported on men's backs.

Three of these routes for pedestrians connect Kelung with its surroundings; to the east one goes to Port-Coal or Petao, to the west there is one to the Masou region and the third goes south to the Tamsui valley. Other paths which are more or less steep cut across the mountainous massif here and there but they are usually not permanent and are not kept in good condition. The winter rains make them impassible because the clay soil becomes so wet.

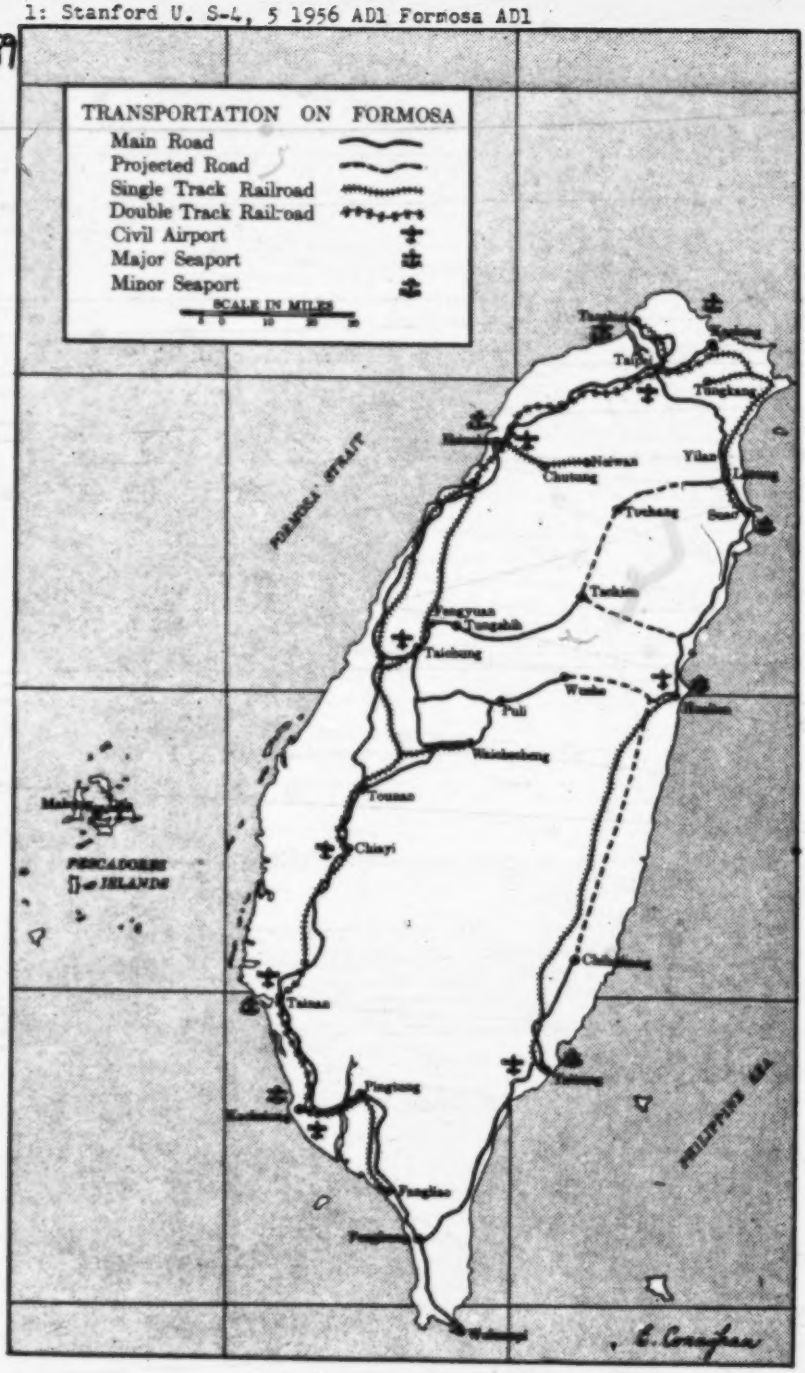
42: Schetelig--389 T-2 (no date) 1868 Formosans-1-2
116, 311, 361, 487

Starting from Manka, the point common to the three chief arms of the Tamsui River, I undertook a second expedition up the middle river to the interior. Chintamki, i.e., "the way to the indigo fields," is a small locality at the bend of this river arm where the river changes its southwesterly course for a north-northeasterly one. Up to this point the boats are forced through the rapids at the cost of some exertion, but then the river must be abandoned and the march to the interior must be undertaken on the roughest mountain paths, close to precipices and with the constant danger of plunging into the depths, into the swirling streams below. The traveler is richly compensated for all his labors and his dangerous slips by a delightful journey through the most remote cultural areas of Chinese colonization. On the highest mountain passes, at 2,000 feet and more, year in and year out the camphor trees and tree ferns are uprooted and, untiringly, Convulvulus edulis, the sweet potato, and the profitable indigo are planted; and although every summer terrific downfalls wash away the delicate plants from the very steep cliff walls, the industrious Chinese is not discouraged by the necessity of repeating his work.... It is clear at the first glance that there, along the upper course of the Tamsui River, the world of the primeval forest and the former haunts of the natives are disappearing more and more beneath the axe of the woodcutter. People who took the same path 5 or 6 years ago, in order to investigate the interior, still found primeval forest and natives living their undisturbed and unchanged lives in places where today

there are flourishing Chinese villages. The valley in which lies the village of Takau (this should not be confused with the port of the same name in the district of Fung-schân on the southwest coast), the terminus for our bearers and our assembly point, seems to have been taken in hand during the last few years only, for everywhere charred tree stumps may still be seen between the indigo plants. This valley is reached via a pass more than 2,000 feet high,. and one is surprised by the sight of the upper course of the river tumbling and winding in the depths below, and also by the view of the mountain chains, uncountable as they stretch out to the south. Our aim was soon reached, namely to determine the situation of this upper valley and to survey and to measure the mountain ranges round about.

1: Stanford U. S-4, 5 1956 AD1 Formosa AD1

●489



Reduce AC to BC

Transportation, facing p. 630

[Facing p. 658]

6: Kirchhoff--33 [7] U-4 (no date) 1895 Formosans
116, 439, 489

When four ports were thrown open in 1860 to foreign commerce (Tam-sui and Ki-lung in the northeast, Tai-nan and Ta-kaô in the southwest), in Europe excessive hopes were set on the commercial profits to be obtained from the natural wealth of the island. Nothing was known of the lack of communications in the interior, the utter absence of the canals which, in China, did so much to render easier the transport of goods, or of the poverty of the inhabitants. The sum at the disposal per day of the poor Chinese peasant for himself and his numerous family (the Chinese price of essentials being very low) is but 20 pfennigs! But since then many advances have been made in Formosa, and at least in some stretches the absence of roads has been made good. How much that has fostered commerce can be seen from the increase of total imports and exports for the two most important of these treaty ports. In the 15 years from 1868 to 1883, these figures rose from 7 to 18 million for Ta-kaô, and for Tam-sui from 5.6 million to 20 million.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

241 occupation in the first half of the seventeenth century, rice and sugar have been the staple products of the island.

241 245 Under Chinese rule in the eighteenth and nineteenth centuries, a constant influx of immigrants from the mainland reclaimed the extensive western plains of Formosa for the cultivation of rice and sugar. The foothills surrounding the plains were terraced for the growing of tea. Further in the mountains, 278 camphor was gathered from the dense forests. In the more isolated mountain region, aboriginal tribes practiced hunting and slash-and-burn agriculture. Coal mines were operated for a time by the government but were later abandoned.

•489 Except for a 60-mile stretch of railway between Keelung and Hsinchu, communications was primitive until the present century. Rafts, boats, and junks were used along the coast and on lakes and rivers. Overland, the inhabitants were obliged to travel either in man-borne palanquins[3] or ox-drawn carts. 439 Western merchants handled a small international trade, consisting of tea, camphor, and sugar.

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3. A closed litter commonly used as a conveyance in China.

Annex "A," Subparagraph 3f,
Economic Background

TRANSPORTATION

I. INTRODUCTION

489 Western Formosa is well served by a network of railways and highways. The mass of the people who have to travel relatively long distances, depend on the railroad; highway buses are utilized for shorter trips. Due to natural barriers, there are no railroad connections between the west coast and the east coast of Formosa. The transportation facilities on the east coast are relatively poor. There are no roads for vehicular traffic across the central mountain barriers. Plans to overcome the latter difficulty are now underway, however. With the exception of a gap between Chihshang, north of Taitung, and Hualien, highways now make a circuit of the island. Supplementing the railroad and highway lines are privately owned pushcar lines operating cars known as "daisha" or "T'ai vehicles" (Taiwan vehicles). Small flat cars are pushed manually along 18-20" gauge rails; they are used for passengers and the transport of sugar cane, coal, and lumber. In most instances they serve towns in the interior of the island and are often the only means of transport for a sizeable area. Pedicabs are used extensively in the cities, and ox-driven carts and man-pulled carts are used in both city and country.

491 poor condition. An arterial highway 404 kilometers long, linking the principal ports, runs from Keelung to Kaohsiung. It has a minimum width of 21 feet (6-1/2 meters) over most of its length and can support 9-ton trucks.[7] Gravel roads connect Suao with the arterial highway, and other roads serve the southern part of the island, passing through Taitung and ending at Chihshang. There is no highway between Chichshang and Hualien. Su-hua highway, running between Suao and Hualien, is a single lane of about 28 miles (45 kilometers), passing along the face of the sea-cliffs. Construction of this road was a major engineering feat. The road is sometimes blocked by landslides. Generally, the gravel roads in Formosa are very rough and the bridges very narrow.

Currently, surveyors are at work in preparation for the building of highways across the central mountains from Tungshih to Tachien. One branch will extend to Lotung by way of Tuchang and another will connect with the Su-hua highway through Kuanyuan and Taloko Gorge.

493 Formosa has a comparatively small number of motor vehicles. As of the end of 1954, there were 3,875 passenger cars (654 for public hire) to a 494 population of about 10.4 million. Almost all of the 495 population must depend on mass transport of one kind or another. In 1954 there were 1,774 buses on the island. The Taiwan Provincial Highway Bureau, together with seventeen private companies and five city bus services carried a total of 275 million

7. T'ai-wan Kung-lu Kung-ch'eng [Taiwan Highway Engineering], Vol. 2, No. 1, Nov.1,1953, p. 9.

494 passengers over an average distance of 9.4
489 kilometers in 1954. The increase in the total traffic volume in recent years has been remarkable -- 943 million passenger-kilometers in 1951 and 2,582 million passenger-kilometers in 1954. In the same period, railroad passenger traffic increased slightly, from 2, 154 million passenger-kilometers to 2,217 million passenger-kilometers.[8]

489 All highway truck services are operated by private concerns; in 1954 there were 455 trucking companies, with a combined total of 2,401 trucks. In that year the companies carried 4.7 million metric tons of goods over an average distance of 27.4 kilometers. However, the actual total volume of trucking on the island may be somewhat greater, since many factories and enterprises own trucks.

With improved roads and better highway facilities -- as in the case of the completion of a surfaced road between Taoyuan and Tainan, the completion of Silo bridge, and so on -- highway transportation systems will expand. The United States is furnishing bus chassis and motor assemblies for this purpose.

499 The completion of Silo bridge deserves attention. Before 1952, the north-south arterial highway was interrupted by the Cho-shui River at Silo. At this point, the river is about 1.3 miles (two kilometers) wide. In order to cross the river, traffic detoured some 53 miles (85 kilometers) With American aid, the government proceeded

8. Statistical Abstract of the Republic of China, 1955, Tables 126-28.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

759 177 162

In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

496 491 493

Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W. S. Thompson, who stayed some months in Nanking, China, in 1930-31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67-68).

489 731

Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation,

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Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparision of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1952, Taipei, p. 66.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

this nominal government policy existed within Taiwan's rural villages. The bulk of the population was made up of peasant farmers and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands. 177 438

The rural population led a settled existence. Taiwan being a small area, travel between places was not uncommon, but it was rare for families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island. 489 438

Local stability fostered local solidarities. The inconvenience of communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6] 621

Property institutions helped to buttress the stability in these small communities. In Taiwan, as in China, land ownership was the only durable form that substantial wealth could take. It was durable 423 556 631

[5] Takekoshi, Yosaburo (1907), pp. 252 and 269-270.

[6] The turbulent history of Taiwan has been carelessly represented as one of indiscriminate civil disorder, its early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

6: Kirchhoff--36 [3] U-4 (no date) 1895 Formosans
116, 133, 491, 493, 501

A much used road leads from Tam-sui to the most important port of Ki-lung. Although it is hardly half the distance as the crow flies, one travels 52 km. up the winding Ki-lung River on the flat-bottomed boats mentioned above (as in the Philippines the natives call them banka) manned by two rowers who are helped by a third for the stretch with rapids. A number of small localities border the river, whose lower course is so shallow that the rising of the tide in it can be distinctly seen. But then follows a series of rapids in the mountainous region. Travel by boat ceases where the river comes to within 5 km. of Ki-lung Port; one transfers to the sedan-chair used in Formosa, where there are no carriages, and via a pass 200 m. high one goes down the steep mountainside facing the sea to the ... bay with its coal-bearing surroundings. Here, by way of exception, the entry into this natural harbor is without danger even for ships of greater draught, in spite of its being hemmed in by coral reefs, and the protection against storms in this bay amidst mountains is almost complete on all sides. Nevertheless no steamer can reach the town of Ki-lung, for the shore in front of this locality, which is situated at the back of the bay, is extremely soft, forming a morass at low tide traversed only by a narrow channel leading from the anchoring place. This softening is steadily increasing, for here as in the other Formosan ports the Chinese Government is doing nothing to prevent the junks' evil practise of dumping their ballast right in the anchorage

6: Kirchhoff--38 [2] U-4 (no date) 1895 Formosans
116, 206, 491, 496

But the most recent and most important advance has to do with communications. At least a beginning is being made with the construction of more substantial roads to connect the interior, the posts are being put on a systematic and unified basis and, under the first Governor, Liu-ming-tschuan, who lent an ear with unusual readiness to the counsels of foreigners, the first railroad to be approved by the Chinese Government has been built. It runs from the harbor of Ki-lung to Sin-tschu, and a continuation running via Tai-uan to Tai-nan is being prepared by means of alinement surveying (Tracenvermessung). In 1887 and 1888 the telegraph line running from Ta-kao to An-ping was carried on to Tam-sui, Tai-pe and Ki-lung, and at Tam-sui Formosa was connected by cable with the mainland, and at An-ping with the Fisher Islands.

26: Honda--469-470 N-3 (1896) 1897 Formosans
116, 491, 499, 177.49 Japan
636.49

The roads on the whole island are nothing more than narrow paths extending irregularly with corners and curves through fields. Bridges are as good as non-existent. For that reason we had to cover the entire distance to Mount Morrison on foot. [470] When the Japanese started building wide roads, the Chinese farmers were not particularly pleased and expressed the opinion that it was rather wasteful to build wide roads at the cost of useful fields; they felt that narrow paths were perfectly sufficient for pedestrians. Thus it is easy to imagine what difficulties of transportation the Japanese militia encountered when it was sent out to subdue the rebels.

497 daily. There is an increasing need for additional freight cars.[5]

The erosive soil of Formosa, frequent typhoons and floods cause damage to roadbeds, bridges, and tunnels. This is especially true for the Eastern System of the TRA; services are frequently discontinued temporarily because of the damage done the lines by floods and earthquakes.

493 The TRA seeks the modernization of equipment as well as the rehabilitation and renovation of the equipment on hand. A drive to change motive power from steam locomotives to diesel engines is underway. Diesel cars are now operating on regular runs to the four major cities on the main line, namely, Taipei, Taichung, Changhua, and Chiayi. It has been reported that two diesel cars were to begin a regular express run between Taipei and Kaohsiung in early 1956 and are expected to make the run in 5-1/2 hours.[6] The administration plans to convert all passenger trains with diesel engines. Cushioned seats, at one time provided only in "first" and "second" class cars, are now replacing wooden seats in coaches. Manual signaling devices are being replaced by automatic block signals.

III. HIGHWAY TRANSPORT

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5. Ibid.
6. The Asia Foundation Bulletin, Nov. 17,1955.

491 poor condition. An arterial highway 404 kilometers long, linking the principal ports, runs from Keelung to Kaohsiung. It has a minimum width of 21 feet (6-1/2 meters) over most of its length and can support 9-ton trucks.[7] Gravel roads connect Suao with the arterial highway, and other roads serve the southern part of the island, passing through Taitung and ending at Chihshang. There is no highway between Chichshang and Hualien. Su-hua highway, running between Suao and Hualien, is a single lane of about 28 miles (45 kilometers), passing along the face of the sea-cliffs. Construction of this road was a major engineering feat. The road is sometimes blocked by landslides. Generally, the gravel roads in Formosa are very rough and the bridges very narrow.

Currently, surveyors are at work in preparation for the building of highways across the central mountains from Tungshih to Tachien. One branch will extend to Lotung by way of Tuchang and another will connect with the Su-hua highway through Kuanyuan and Taloko Gorge.

493 Formosa has a comparatively small number of motor vehicles. As of the end of 1954, there were 3,875 passenger cars (654 for public hire) to a 494 population of about 10.4 million. Almost all of the 495 population must depend on mass transport of one kind or another. In 1954 there were 1,774 buses on the island. The Taiwan Provincial Highway Bureau, together with seventeen private companies and five city bus services carried a total of 275 million

7. T'ai-wan Kung-lu Kung-ch'eng [Taiwan Highway Engineering], Vol. 2, No. 1, Nov.1,1953, p. 9.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

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In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

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Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W. S. Thompson, who stayed some months in Nanking, China, in 1930–31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67–68).

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Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation,

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Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparison of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1952, Taipei, p. 66.

4:Grajdanzev--68 S-4 (no date) 1942 Formosans
116, 231, 492, 177.23 Japan
636.23

"Although it has been said that Taiwan is well stocked with domestic animals and fowls, this requires some qualification. The animals bred are for draft purposes and for production of foodstuffs. In Taiwan either the water buffalo or some type of cow is used for draft purposes. Horses, donkeys and mules are almost entirely absent. The immigrant from Fukien had no place for the horse in his economy, but the Japanese government, in its efforts to supply the army with horses, worked out a ten-year plan and a thirty-year plan for Taiwan. According to the first, the number of horses was to be increased to 9,000; according to the second presumably to be applied simultaneously, the number of horses was to be raised to 110,000 head. In a region where rice occupies sixty per cent of the area, horses cannot be used for work and it is hardly conceivable that the poor farmers of Taiwan will begin to raise Arabian and Anglo-Norman horses as the plan foresees (1). The actual number of horses in 1938 was rather more than 300 while forty

1. Taiwan Jijo, p. 479; figures for the plans are taken from Sekai Nenkan, 1939.

years ago there were two hundred to three hundred horses."

4:Grajdanzev--68-69 S-4 (no date) 1942 Formosans -1-2
116, 231, 492, 171

"The draft animals in Taiwan are the water buffalo and, second in importance, the 'yellow cow'. The water buffalo [69] is a strong animal, slow in movement, which likes to wade in water, and is satisfied with coarse fodder. Its meat is not very palatable. The yellow cow is less powerful but more alert, and its meat is much better than that of the buffalo. Milch cows in Taiwan are few in number—in 1938 they were estimated at 1,275. No statistics of the number of cows and buffaloes of working age are available, but the following total figures will suffice to show the trend (in thousands):

	1921	1932	1933	1934	1935	1936	1937	1938
Water buffaloes	307.9	286.3	302.2	306.9	305.8	292.3	282.1	259.7
Cows of all kinds	113.6	80.4	84.0	88.0	84.7	78.6	76.3	65.4
Total	421.5	366.7	386.2	394.3	390.5	370.9	358.4	325.1
Cultivated area (1,000 ko)	773.8*	839.7	845.5	851.3	856.8	872.3	883.3	884.4
Area per head of draft animals (in ko)	1.83	2.29	2.19	2.16	2.19	2.35	2.46	2.72

*1922.

The average number of ko per head of draft animals is therefore increasing and unless the quality of the buffalo is improving remarkably, the situation is becoming less and less

favorable. (1) Though official sources speak about improvement in the quality of pigs and

1. It is important to note also that the number of females among the draft animals is falling sharply: in 1921 there were 158,000; in 1933, 140,000; in 1937, 127,000.

horses, they are silent concerning the buffalo. In this respect Taiwan is worse off than the Philippines or the Netherlands Indies. In the table only cultivated land was taken into consideration; the crop area is in fact larger, and was growing faster than the arable area, so that the situation is actually worse than the figures suggest."

4:Grajdanzev--69-70 S-4. (no date) 1942 Formosans
116, 231, 492, 427, 422

"Official sources say that there is about one animal per farming family. (1) But this

1. Taiwan Jijo, p. 478.

is inadequate. According to the official statistics for 1937, the number of farming families was 427,397. If we take this figure (it was mentioned above that the actual number of families should be larger) for 1938, then only 0.76 animal was available for each family, if only farmers had cows [70] and buffaloes. This figure includes calves, is also an average figure, and it will be shown later that the wealth of the farmers, at least as expressed in land, is not concentrated around the average. The important conclusion which follows is that at least half the farmers in Taiwan have no draft animals, but are compelled either to work without them or to hire them from the richer farmers. Those who are acquainted with rural life know that dependence on one's neighbour for plough animals is likely to create very serious problems."

6: Kirchhoff--36 [3] U-4 (no date) 1895 Formosans
116, 133, 491, 493, 501

A much used road leads from Tam-sui to the most important port of Ki-lung. Although it is hardly half the distance as the crow flies, one travels 52 km. up the winding Ki-lung River on the flat-bottomed boats mentioned above (as in the Philippines the natives call them banka) manned by two rowers who are helped by a third for the stretch with rapids. A number of small localities border the river, whose lower course is so shallow that the rising of the tide in it can be distinctly seen. But then follows a series of rapids in the mountainous region. Travel by boat ceases where the river comes to within 5 km. of Ki-lung Port; one transfers to the sedan-chair used in Formosa, where there are no carriages, and via a pass 200 m. high one goes down the steep mountainside facing the sea to the . . . bay with its coal-bearing surroundings. Here, by way of exception, the entry into this natural harbor is without danger even for ships of greater draught, in spite of its being hemmed in by coral reefs, and the protection against storms in this bay amidst mountains is almost complete on all sides. Nevertheless no steamer can reach the town of Ki-lung, for the shore in front of this locality, which is situated at the back of the bay, is extremely soft, forming a morass at low tide traversed only by a narrow channel leading from the anchoring place. This softening is steadily increasing, for here as in the other Formosan ports the Chinese Government is doing nothing to prevent the junks' evil practise of dumping their ballast right in the anchorage.

6: Kirchhoff--37 U-4 (no date) 1895 Formosans
116, 487, 493

The "military road" goes on from Shinchiku in a wide curve via the inland towns of Tschang-hua and Kiá-y; in a sedan-chair the 300 km. separating Tam-sui and Tai-nan can be covered in 10 days, but it is hardly anything more than the linking of the ordinary field paths, on which the terribly creaky ox-carts bear home the rice harvest on their spokeless wheels, the fixed axle turning round also. There are no bridges at river crossings. In the rainy season this route cannot be used, for most of the stretches of road making it up turn into ditches of brackish water.

11: Haguenauer--31 T-3 (no date) 1929 Formosans
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You have to take a lorry to go on to Kappanzan. [AN: Kakupanzan] This vehicle consists of a rattan chair, which is perched on a heavy mobile car, that runs along a narrow railroad track. The trip lasts for four hours, and yet the two Chinese who push it scarcely ever stop to rest.

12: Garnot--20 G-3 (1884-85) 1894 Formosans
116, 487, 493

In the vicinity of Kelung there is no road worthy of the name; instead you find narrow paths that are paved in some cases, and then staircases with hundreds of steps are used to cross some of the hills and ravines.

There is no need for winding roads because vehicles are unknown, and luggage is almost always transported on men's backs.

Three of these routes for pedestrians connect Kelung with its surroundings; to the east one goes to Port-Coal or Petao, to the west there is one to the Masou region and the third goes south to the Tamsui valley. Other paths which are more or less steep cut across the mountainous massif here and there but they are usually not permanent and are not kept in good condition. The winter rains make them impassible because the clay soil becomes so wet.

15: U.S. Navy --24 (no date) 1944 Formosans
116, 484, 493, 511

"Any tendency to move about within the island is held to a minimum because of limited rail and bus services, the absence of private motor vehicles, and the absence of incentives other than commercial interest. An agricultural population which has no surplus of cash finds little reason to move about from place to place. The tourist or sightseeing traffic is from Japan Proper or created by the Japanese upper class who are resident on the island. Commercial traffic along the main railway lines consists of agents travelling from centers of production to the ports and marketing centers."

15: U.S. Navy--24 [7] (no date) 1944 Formosans
116, 493, 788, 764

"Funeral ceremonies and wedding parties occasion the passage of large numbers of people into and out of the cities. Cars, rickshaws, and coolie-borne palanquins are used. The hours at which funerals are held are determined by divination. Hence it is not unusual to encounter many people moving rapidly and noisily along the road at any hour of the night. Police permission must be secured for such affairs."

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491 poor condition. An arterial highway 404 kilometers long, linking the principal ports, runs from Keelung to Kaohsiung. It has a minimum width of 21 feet (6-1/2 meters) over most of its length and can support 9-ton trucks.[7] Gravel roads connect Suao with the arterial highway, and other roads serve the southern part of the island, passing through Taitung and ending at Chihshang. There is no highway between Chichshang and Hualien. Su-hua highway, running between Suao and Hualien, is a single lane of about 28 miles (45 kilometers), passing along the face of the sea-cliffs. Construction of this road was a major engineering feat. The road is sometimes blocked by landslides. Generally, the gravel roads in Formosa are very rough and the bridges very narrow.

Currently, surveyors are at work in preparation for the building of highways across the central mountains from Tungshih to Tachien. One branch will extend to Lotung by way of Tuchang and another will connect with the Su-hua highway through Kuanyuan and Taloko Gorge.

493 Formosa has a comparatively small number of motor vehicles. As of the end of 1954, there were 3,875 passenger cars (654 for public hire) to a population of about 10.4 million. Almost all of the population must depend on mass transport of one kind or another. In 1954 there were 1,774 buses on the island. The Taiwan Provincial Highway Bureau, together with seventeen private companies and five city bus services carried a total of 275 million

7. T'ai-wan Kung-lu Kung-ch'eng [Taiwan Highway Engineering], Vol. 2, No. 1, Nov.1,1953, p. 9.

499 to erect 31 spans upon the existing concrete piers built by the Japanese in 1937. The completion of the bridges provides the railroad tracks of the Taiwan Sugar Corporation, and sugar cane and other agricultural products can be transported at much less cost than heretofore.

493 The comparatively few passenger automobiles are supplemented by the bicycles, pedicabs, and motorcycles. The extensive use of bicycles for short-distance transport, particularly within a city, is necessary where bus service is infrequent and buses overcrowded. It is reported that in 1955 in the city of Taipei alone there were over 120,000 bicycles and more than 100,000 pedicabs.[9]

Pedestrians on the highways and in the streets must exercise extreme caution to avoid recklessly driven vehicles. During the first nine months of 1955, there were 1,694 accidents caused by motor vehicles, resulting in 250 deaths and 1,837 injuries. Sixty-eight per cent of the accidents was attributed to reckless drivers and 13.3 per cent to the carelessness of pedestrians.[10]

IV. SHIPPING

505 Keelung in the north and Kaohsiung on the southwest coast are the island's two most important natural harbors. All exports and imports pass through these harbors, and they handle, in addition, approximately 10 per cent of coastal shipping. Keelung is able to accomodate at a single time up to twenty-five 3,000- to 20,000-ton

9. The Central Daily News, Nov.14,1955.
10. Ibid.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

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Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1952, Taipei, p. 66.

4:Grajdanzev--118 S-4 (no date) 1942 Formosans
116, 494, 496, 177.49 Japan
636.49

"All kinds of communications are in use in Taiwan—from the primitive sedan chair and jinrikisha (rickshaw) to the airplane, but modern means of communications are either in the hands of the Japanese government or of Japanese companies. There are 3,375 km. of improved roads. These play an increasingly important part in inland communications because the railroads do not link up the whole island in a complete network; the eastern part has no railroad connections with the rest of the island. The number of motor cars and buses is small (1). The buses on the roads are used by the government

1. No statistics are published by the government.

railways as feeders for the rail services."

15: U.S. Navy--30-31 (no date) 1944 Formosans
116, 494, 177.49 Japanese
636.49

"Ricksha men operate under license, and must maintain certain standards of dress and of vehicle maintenance set by the police. Indeed, the regulations are so precise that every [31] ricksha man changes from a winter blue costume to a summer white costume on exactly the same day, and vice versa."

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494 passengers over an average distance of 9.4
489 kilometers in 1954. The increase in the total traffic volume in recent years has been remarkable -- 943 million passenger-kilometers in 1951 and 2,582 million passenger-kilometers in 1954. In the same period, railroad passenger traffic increased slightly, from 2, 154 million passenger-kilometers to 2,217 million passenger-kilometers.[8]

489 All highway truck services are operated by private concerns; in 1954 there were 455 trucking companies, with a combined total of 2,401 trucks. In that year the companies carried 4.7 million metric tons of goods over an average distance of 27.4 kilometers. However, the actual total volume of trucking on the island may be somewhat greater, since many factories and enterprises own trucks.

With improved roads and better highway facilities -- as in the case of the completion of a surfaced road between Taoyuan and Tainan, the completion of Silo bridge, and so on -- highway transportation systems will expand. The United States is furnishing bus chassis and motor assemblies for this purpose.

499 The completion of Silo bridge deserves attention. Before 1952, the north-south arterial highway was interrupted by the Cho-shui River at Silo. At this point, the river is about 1.3 miles (two kilometers) wide. In order to cross the river, traffic detoured some 53 miles (85 kilometers With American aid, the government proceeded

8. Statistical Abstract of the Republic of China, 1955, Tables 126-28.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

like the railroad lines, were all built during the Japanese occupation.

The mountain ranges serve as a kind of climatic divide. The area north of the mountains, which includes the Taipei region, is known for its long rainy season and cold raw winters. In the area south of the divide, and especially around Taichung and the interior mountain region, the weather tends to be milder, with far less rain and many days of bright sunshine.

On the trip south from Taipei to Chang-hua City the train crosses several large rivers which originate in the interior mountains and flow west to the Strait of Formosa. The rushing torrents of water during and immediately after the rainy season dwindle to a trickle during the dry season, meandering through wide, sandy, and rocky river beds.

At Chang-hua City the traveler must leave the train for a bus headed southwest to the old port city of Lukang. Although the buses leave every fifteen minutes during the day, they are invariably crowded with people and their bundles of produce, fish, a chicken or two, or even building materials.

The thirty-minute trip in an old wooden Japanese bus is made entirely on dirt roads. The ride may be dusty or wet according to the season, but it is always bumpy and noisy. In the dry season strangling dust pours into the bus from all sides. During the wet season, there is always a possibility that the passengers will have to leave the bus and wade while the bus creeps slowly along over the flooded roadbed. Many menthol-distilling factories, brickworks, and small rice mills line the way. The bus must cross many small irrigation canals and maneuver around oxcarts. As the bus moves further away from Chang-hua City and approaches the seacoast area of Lukang, a change in the agricultural landscape, resulting from differences in irrigation systems, becomes more and more noticeable. In those places where there is still no irrigation system, there are large areas of dry fields.

After a half-hour wait in Lukang, the traveler boards another, similar bus for the trip to the village, which lies about three miles inland or southeast of Lukang. The uncomfortable fifteen-minute ride ends when the bus comes to a halt in front of the Hsin Hsing village store.

The houses in the village are constructed of bamboo, mud or fired brick, and plaster. The foundations and structural uprights are usually brick; the walls are a latticework of bamboo strips, filled in with plaster which is a mixture of mud and cow dung. The plaster filling is usually whitewashed. Sometimes the main supports are not brick but heavy bamboo poles. Newer houses, and the older houses of the wealthy, generally have roofs of cement tile, while the oldest and poorest houses have thatched roofs. Houses made of mud bricks are always thatched.

4:Grajdanzev--118 S-4 (no date) 1942 Formosans
116, 494, 496, 177.49 Japan
636.49

"All kinds of communications are in use in Taiwan—from the primitive sedan chair and jinrikisha (rickshaw) to the airplane, but modern means of communications are either in the hands of the Japanese government or of Japanese companies. There are 3,375 km. of improved roads. These play an increasingly important part in inland communications because the railroads do not link up the whole island in a complete network; the eastern part has no railroad connections with the rest of the island. The number of motor cars and buses is small (1). The buses on the roads are used by the government

1. No statistics are published by the government.

railways as feeders for the rail services."

4:Grajdanzev--118 [2] S-4 (no date) 1942 Formosans
116, 171, 496, 497

"Some Railroad Statistics of Taiwan and Japan for 1937

	Taiwan	Japan proper
Length of railroads (km.)	1,550	26,797
Same per 100 sq. km. (km.)	4.3	7.0
Passengers carried (1.000)	27,488	1,739,688
Trips per capita	4.9	24.1
Freight carried (1,000 tons)	8,187	130,813
Freight, per capita (tons)	1.5	1.8
Receipts from passengers (million yen)	11.2	391.1
Average cost per trip (yen)	0.41	0.22
Receipts from freight (million yen)	18.5	306.4
Average cost per ton (yen)	2.26	2.34"

4:Granjdanzev--118-119 S-4 (no date) 1942 Formosans
116, 454, 496, 655, 177.49 Japan
636.49

"In 1926 there were 950 km.(1) of government railroads in Taiwan; in 1938 there were

1. Taiwan, Its System of Communication and Transportation, 1929.

1,040 km. The lengths of private railways at the same dates were 525 km. and 521 km. respec-[119]tively—a slight decrease. In other words, in the last decade the construction of new railroads in Taiwan has almost stopped. At the end of 1938 the capital invested in the government railroads including expenditures on repairs and restorations was ¥172,499,691."

4:Grajdanzev--119 S-4 (no date) 1942 Formosans
116, 171, 496

"The table above [see preceding note page 118--analyst] compares railroad data in Taiwan and in Japan.

These figures may appear unimportant, but they are essential for our investigation because only in this way is it possible to discover certain important relationships. It was already mentioned that in the last eleven years the total length of the railways in Taiwan increased only slightly—by five per cent, while in Japan in the last nine years (1928-37) the increase was thirty-nine per cent. The network of railways in Japan is now almost twice as dense as that of Taiwan."

4:Grajdanzev--189-190 S-4 (no date) 1942 Formosans -1-2
116, 487, 724, 496

"A base of operations cannot be considered only as a port. It must have enough room for deployment of troops and for general defense purposes. Taiwan is excellent in this respect; its few defects will be mentioned later. Its system of communications permits the authorities easily to move troops to any threatened point. An attack on Taiwan can be only air-borne or sea-borne. The nearest place on the continent, Foochow, is 115 miles from Tamsui. Under existing conditions in China, (and they hardly can be greatly changed in the next two years) an air attack from this direction is unlikely. An airborne attack on a large island from an aircraft carrier cannot be decisive. Aside from long-range sporadic bombing, Taiwan may expect only a major seaborne attack, an eventuality foreseen by the Japanese and widely discussed on the island. To repel an invasion by sea a well-developed network of communications exists on the island. The state of railways and roads on the island was discussed earlier in this book. Here it is sufficient to point out one defect in the railway system of the island: the western longitudinal railway is not connected with the eastern longitudinal railway because of the prohibitive cost of construction in the mountainous districts. However the whole coastline is followed by a road and there are four good automobile roads connecting the east coast with the west, so that troops may be easily shifted to most of the points on the east coast. [190] The west coast of the island is largely flat and easy for debarkation, but on that side of the island the communications are best. The eastern shore presents a mountain barrier falling abruptly to the sea, except for mouths of some rivers where beaches are available. However, in one respect this mountainous character may be a help to the invading

4:Grajdanzev--189-190 S-4 (no date) 1942 Formosans-2
116, 487, 724, 496

party: in case of air superiority on its side the bombing of bridges, viaducts, etc., may prevent the arrival of reinforcements and will permit a landing party to consolidate its hold over some part of the shoreline."

6: Kirchhoff--38 [2] U-4 (no date) 1895 Formosans
116, 206, 491, 496

But the most recent and most important advance has to do with communications. At least a beginning is being made with the construction of more substantial roads to connect the interior, the posts are being put on a systematic and unified basis and, under the first Governor, Liu-ming-tschuan, who lent an ear with unusual readiness to the counsels of foreigners, the first railroad to be approved by the Chinese Government has been built. It runs from the harbor of Ki-lung to Sin-tschu, and a continuation running via Tai-uan to Tai-nan is being prepared by means of alinement surveying (Tracenvermessung). In 1887 and 1888 the telegraph line running from Ta-kao to An-ping was carried on to Tam-sui, Tai-pe and Ki-lung, and at Tam-sui Formosa was connected by cable with the mainland, and at An-ping with the Fisher Islands.

25: Plaut--32 U-4 (no date) 1903 Formosans
116, 206, 496, 654, 177.65 China
636.65

Liu-Ming-Chuan [EJ: the Chinese Viceroy appointed in 1884] was eager to make Formosa more progressive. So he built a railroad from Kelung to the capital T'ai-pei-fu, and from there on to Hsin-chu; he connected the capital T'ai-pei to T'ai-nan and the Pescadores with a telegraph line, and then he made Formosa a part of the world telegraph system by constructing a cable to Futchou. He also established a well-regulated postal system. Industry, including sugar, also received his support. Although Liu-Ming-Chuang's administration was very beneficial for Formosa, he aroused much dissatisfaction by raising the taxes and levying an inland duty, for the previous revenues were not sufficient to defray the costs of his innovations.

497 with the A-li-shan (阿里山) forestry area, link Fengyuan to Pahsien-shan forestry area, and unite Tuchang (土場) with Lotung westward for lumber from Mount T'ai-p'ing (太平). There are many other companies and various coal mines that operate short sections of narrow gauge railways.

496 The TRA is the largest and the sole publicly owned carrier on the island. Its western system comprises a network of main and branch lines of 42" gauge tracks approximately 472 miles (760) kilometers) long. The main line links Keelung with Kaohsiung while connecting major cities of Taipei, Hsinchu, Taichung, Chiayi, Tainan, and Pingtung. This line has four tracks between Keelung and Patu, double tracks between Patu and Chunan, between Minhsiung and Chiayi, and between Hsinshih and Fengshan, and single tracks for the rest. It forms a loop between Chunan and Changhua with one track along the coast and the other through the mountains. The Eastern System, of 30" gauge single track, connects Hualien and Taitung over a distance of 110 miles (176 kilometers).[2]

497 Traffic (both freight and passenger movements) has been on the increase in recent years due to the increase in population and the expansion of industrial activities. Railroad facilities are taxed to their limit in spite of the fact that new rolling stock has been added, some branch lines have been extended, and operational efficiency has been increased. In 1955, the number of passengers carried by TRA alone

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2. Ibid.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

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In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

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Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W. S. Thompson, who stayed some months in Nanking, China, in 1930-31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67-68).

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Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation,

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Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparision of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1962, Taipei, p. 66.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable. 175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan. 175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu. 464 369 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[2] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were 175 124 127 [161] [579] 241 312

4:Grajdanzev--118 [2] S-4 (no date) 1942 Formosans
116, 171, 496, 497

"Some Railroad Statistics of Taiwan and Japan for 1937

	Taiwan	Japan proper
Length of railroads (km.)	1,550	26,797
Same per 100 sq. km. (km.)	4.3	7.0
Passengers carried (1,000)	27,488	1,739,688
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Freight, per capita (tons)	1.5	1.8
Receipts from passengers (million yen)	11.2	391.1
Average cost per trip (yen)	0.41	0.22
Receipts from freight (million yen)	18.5	306.4
Average cost per ton (yen)	2.26	2.34"

4:Grajdanzev--119 [2] S-4 (no date) 1942 Formosans
116, 171, 497, 511, 563, 177.49 Japan
636.49

"From the table given above [see table on page 118 under category 116--analyst] we see that a Japanese makes almost five times as many trips a year as does a Taiwanese --whereas the movement of the freight appears relatively as large as in Japan. The movement of passengers reflects the conditions of life of the natives while the movement of freight in Taiwan is the movement of Japanese freight to and from ports--coal, sugar, rive, fertilizer, lumber, and sugar cane (1) (in the order of freight carried)--

1. Sugar cane is in sixth place because the bulk of its [sic] transported on special railroads.

which, as will be shown later in more detail, serve chiefly the Japanese economic machine. The statistics of revenue show that the average cost per ton of freight in Taiwan is less than in Japan (¥2.26 as compared with ¥2.34). It may be said that this is quite reasonable because in Taiwan average distance over which the freight is moved is less. On the other hand, the average passenger cost per trip in Taiwan is twice as high. In spite of the smaller scale of operation, the railways of Taiwan bring a net return of eight to nine per cent as compared with six per cent in Japan (1937)."

4:Grajdanzev--119-120 S-4 (no date) 1942 Formosans
116, 463, 497

"Besides these railroads there are in Taiwan special roads for transporting sugar cane from the fields to the mills, the total [120] length of which in 1938 was 2,098 km. There is also a unique system of communication on the island, 'light railways', or very narrow tracks of light rails on which run 'push-cars' propelled from behind by Chinese coolies. They are used for both passengers and freight, but their importance is declining: even at Taiwanese wages a coolie cannot compete successfully with a locomotive.

Taiwan's 'Light Railways'

	1929	1938
Length of roads (km.)	1,022	806
Cars	5,645	3,545
Passengers carried (1,000)	5,251	2,002
Goods (1,000 tons)	803	503
Total receipts (1,000 yen)	2,419	1,153 "

There are only two important natural harbors, Keelung and Kaohsiung. Almost all foreign shipping passes through these two ports. Coastal shipping is carried on largely through ports of secondary importance such as Hualien, Suao, Makung, Tanshui, Anping, Lukang, Tungkang, Taitung, and Hsinkang. These harbors with the exception of Hualien, are only capable of accomodating small vessels and fishing boats.

Domestic air transport is in its infancy. International air lines connect with the United States, Japan, Korea, Hong Kong, the Philippines, and Thailand.

II. RAILWAY TRANSPORT

The Formosa railway constitutes the foundation of the island's transportation system. However, its position is in process of being challenged by increasing activity in highway transportation. The government-owned Taiwan Railway Administration (TRA) operates an extensive network of lines called the Western System and the single-tracked line which forms the Eastern System. Taiwan Sugar Corporation also operates railroad lines totaling 1,543 miles (2, 649 kilometers). The 30" tracks of the sugar corporation extend over sugar-producing areas for the purpose of transporting sugar cane, supplies, and fertilizers.[1] In addition, this system offers passenger service. The Taiwan Forestry Administration owns, besides a number of small narrow gauge railways, three lines of 30"gauge, used for the transporation of lumber and a few passengers; these lines connect Chiayi with the

1. Foreign Operation Adm., Mission to China, Taiwan Economic Data Book, Part II, Vol. III, 1955, Taipei.

497 with the A-li-shan (阿里山) forestry area, link Fengyuan to Pahsien-shan forestry area, and unite Tuchang (土場) with Lotung westward for lumber from Mount T'ai-p'ing (太平). There are many other companies and various coal mines that operate short sections of narrow gauge railways.

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2. Ibid.

49 reached over 74 million; approximately 66.8 million passengers were carried by the same company in 1954. In terms of the average mileage covered by those passengers in 1955, the traffic was 2,272.9 million passenger-kilometers. Commuters account for an important portion of the total - 43 per cent. The remainder are ordinary passengers (46 per cent) and special passengers (i.e., military troops -- 11 per cent). Of the commuters, over 80 per cent are students, reported by TRA to be about 50,000,[3] who attend school in the cities and return to their village homes each day. There is, in consequence, a congestion problem in morning-evening rush hours, whereas some carriers are nearly empty during the slack hours of the day. Commutation tickets are sold at a considerable discount in order to help students who otherwise might not be able to attend distant schools.[4] In 1955, a total of 10 million metric tons of freight was carried; in terms of average distance covered, 157.3 million ton-kilometers. Movement of coal accounted for 12 per cent of the tonnage carried. Rice and sugar, respectively accounted for 6.7 per cent and 6.2 per cent. Other major freight hauled included fertilizer, cement, road building materials, lumber, and salt; military freight was 21.4 per cent of the total. It is reported that an average of 2,000 tons of freight are carried

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3. Ibid.

4. The Central Daily News, Jan. 5, 1956.

497 daily. There is an increasing need for additional freight cars.[5]

The erosive soil of Formosa, frequent typhoons and floods cause damage to roadbeds, bridges, and tunnels. This is especially true for the Eastern System of the TRA; services are frequently discontinued temporarily because of the damage done the lines by floods and earthquakes.

493 The TRA seeks the modernization of equipment as well as the rehabilitation and renovation of the equipment on hand. A drive to change motive power from steam locomotives to diesel engines is underway. Diesel cars are now operating on regular runs to the four major cities on the main line, namely, Taipei, Taichung, Changhua, and Chiayi. It has been reported that two diesel cars were to begin a regular express run between Taipei and Kaohsiung in early 1956 and are expected to make the run in 5-1/2 hours.[6] The administration plans to convert all passenger trains with diesel engines. Cushioned seats, at one time provided only in "first" and "second" class cars, are now replacing wooden seats in coaches. Manual signaling devices are being replaced by automatic block signals.

III. HIGHWAY TRANSPORT

491 The highways along the west coast of the island are well developed; those on the east coast are in

5. Ibid.
6. The Asia Foundation Bulletin, Nov. 17, 1955.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

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The Setting

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In any community study there is always the question of where to begin outlining the picture of village life: on what does one focus first? While the question is perhaps just as urgent during the actual fieldwork, in the field it is possible to observe and ask questions on many subjects at the same time and to move from one subject to another in the course of an interview. But in attempting to put the ethnography down on paper, the decision must be made where to begin.

I have chosen to begin this book as I began my fieldwork—with a general picture of village life that will provide a context which can give meaning to particular aspects of village life. This picture will be followed in Chapters 3 and 4 by a description of the village livelihood, although it has perhaps been more common to begin Chinese ethnographies with a discussion of family and kinship (here Chapters 5 and 6). The importance of the economic sphere in Hsin Hsing is explicit in the very purposes of this book as noted in Chapter 1 and the conclusions of Chapter 9; its importance was implicit throughout the fieldwork as it will be throughout this book. We now turn then to the setting of the village so that specific topical chapters which follow will have some contextual meaning.

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Travel to Hsin Hsing village from the capital city, Taipei, is neither easy nor brief. The approximately one hundred and seventeen-mile trip to Chang-hua, the closest major city, must be made mostly by train via the seacoast or by the interior route through Taichung City. This takes about three hours by diesel express or six hours or more by a local train. It is generally possible to find a seat on the diesel express, but on the local trains one must almost always stand a good part of the way.

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Once out of Taipei the countryside is almost all rice paddies and farmland. Even in the mountain area between Taipei and Taichung, terraced rice paddies form a part of the green and lush vegetation typical of Taiwan. The train goes through a series of tunnels in these rugged mountains, and if one happens to be traveling with a Taiwanese companion, he will probably point out that these tunnels, like the railroad lines, were all built during the Japanese occupation.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

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The mountain ranges serve as a kind of climatic divide. The area north of the mountains, which includes the Taipei region, is known for its long rainy season and cold raw winters. In the area south of the divide, and especially around Taichung and the interior mountain region, the weather tends to be milder, with far less rain and many days of bright sunshine.

On the trip south from Taipei to Chang-hua City the train crosses several large rivers which originate in the interior mountains and flow west to the Strait of Formosa. The rushing torrents of water during and immediately after the rainy season dwindle to a trickle during the dry season, meandering through wide, sandy, and rocky river beds.

At Chang-hua City the traveler must leave the train for a bus headed southwest to the old port city of Lukang. Although the buses leave every fifteen minutes during the day, they are invariably crowded with people and their bundles of produce, fish, a chicken or two, or even building materials.

The thirty-minute trip in an old wooden Japanese bus is made entirely on dirt roads. The ride may be dusty or wet according to the season, but it is always bumpy and noisy. In the dry season strangling dust pours into the bus from all sides. During the wet season, there is always a possibility that the passengers will have to leave the bus and wade while the bus creeps slowly along over the flooded roadbed. Many menthol-distilling factories, brickworks, and small rice mills line the way. The bus must cross many small irrigation canals and maneuver around oxcarts. As the bus moves further away from Chang-hua City and approaches the seacoast area of Lukang, a change in the agricultural landscape, resulting from differences in irrigation systems, becomes more and more noticeable. In those places where there is still no irrigation system, there are large areas of dry fields.

After a half-hour wait in Lukang, the traveler boards another, similar bus for the trip to the village, which lies about three miles inland or southeast of Lukang. The uncomfortable fifteen-minute ride ends when the bus comes to a halt in front of the Hsin Hsing village store.

The houses in the village are constructed of bamboo, mud or fired brick, and plaster. The foundations and structural uprights are usually brick; the walls are a latticework of bamboo strips, filled in with plaster which is a mixture of mud and cow dung. The plaster filling is usually whitewashed. Sometimes the main supports are not brick but heavy bamboo poles. Newer houses, and the older houses of the wealthy, generally have roofs of cement tile, while the oldest and poorest houses have thatched roofs. Houses made of mud bricks are always thatched.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

[2

The Setting

T 128

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15: U.S. Navy--28-29 (no date) 1944 Formosans
116, 346, 363, 499, 177.33 Japanese
636.33

"In many villages, especially the elongated type built between rivers and irrigation canals, the temples of the patron saints are constructed at corners or bends in the main streets, making them visible from some distance. These have proved a great obstacle in the construction of new streets for motor-[29]ized traffic. Public opinion strongly opposes drastic changes.

The Japanese have not always been considerate of popular sentiment in clearing lands adjacent to some Japanese enterprise. In road-building, Formosan cemeteries have frequently been disturbed and the owners of burial plots forced to move graves to land of little economic use. Many temples and large mansions obstructing government projects have been torn away with little effort to explain or to compensate."

26: Honda--469-470 N-3 (1896) 1897 Formosans
116, 491, 499, 177.49 Japan
636.49

The roads on the whole island are nothing more than narrow paths extending irregularly with corners and curves through fields. Bridges are as good as non-existent. For that reason we had to cover the entire distance to Mount Morrison on foot. [470] When the Japanese started building wide roads, the Chinese farmers were not particularly pleased and expressed the opinion that it was rather wasteful to build wide roads at the cost of useful fields; they felt that narrow paths were perfectly sufficient for pedestrians. Thus it is easy to imagine what difficulties of transportation the Japanese militia encountered when it was sent out to subdue the rebels.

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

36: Rowe S-4 (no date) 1955 AF1 China AF1
Formosa AD1

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use.

C F 433 [387] [251] 499

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak.

C F 377 433

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1952), cement (389,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures.

C F 257 433

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 630,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–52, the world market price began to rise, and sugar production is gradually returning to its previous high levels.

C F 433 [228]

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries.

C F 466

A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government.

C F 651

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes.

494 passengers over an average distance of 9.4
489 kilometers in 1954. The increase in the total traffic volume in recent years has been remarkable -- 943 million passenger-kilometers in 1951 and 2,582 million passenger-kilometers in 1954. In the same period, railroad passenger traffic increased slightly, from 2, 154 million passenger-kilometers to 2,217 million passenger-kilometers.[8]

489 All highway truck services are operated by private concerns; in 1954 there were 455 trucking companies, with a combined total of 2,401 trucks. In that year the companies carried 4.7 million metric tons of goods over an average distance of 27.4 kilometers. However, the actual total volume of trucking on the island may be somewhat greater, since many factories and enterprises own trucks.

With improved roads and better highway facilities -- as in the case of the completion of a surfaced road between Taoyuan and Tainan, the completion of Silo bridge, and so on -- highway transportation systems will expand. The United States is furnishing bus chassis and motor assemblies for this purpose.

499 The completion of Silo bridge deserves attention. Before 1952, the north-south arterial highway was interrupted by the Cho-shui River at Silo. At this point, the river is about 1.3 miles (two kilometers) wide. In order to cross the river, traffic detoured some 53 miles (85 kilometers) With American aid, the government proceeded

8. Statistical Abstract of the Republic of China, 1955, Tables 126-28.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

cially in chemical and metal manufacturing; their expansion did not have an appreciable effect in the production of all the island. 433

In other words, in spite of its expansion, industrial production had only begun to make headway in relation to agricultural output. Before 1940, manufactured commodities were still subordinate to Taiwan's farm products (and did not amount to much beyond processed sugar). Afterwards the Japanese did not have enough time to marshal the island's resources effectively in industry. We know this was not because they failed to make an effort—it was because they started too late.

Certain types of heavy investment had received their close attention ever since earlier years. Railway construction, for example, was pushed forward with enthusiasm from the very first. The time schedule of progress in expanding the public railroads was far ahead of their actual utilization (see Fig. 6). This was an investment which 655 449

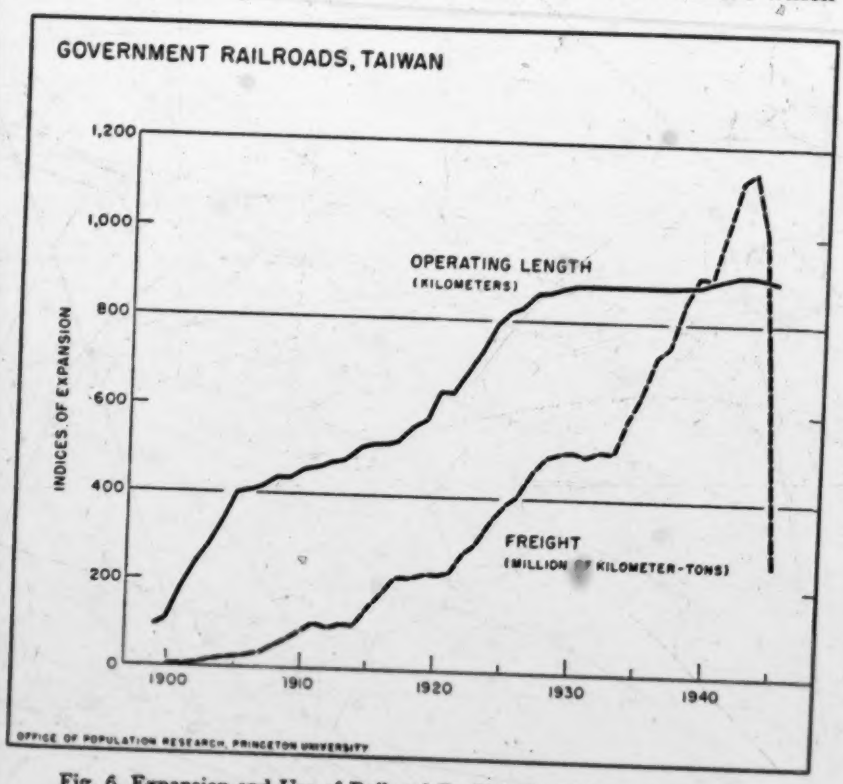

Fig. 6. Expansion and Use of Railroad Facilities in Taiwan, 1900-1945.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

655
499

the Japanese undertook primarily in anticipation of long-term benefit, without being able to justify its initial cost for many years. In terms of kilometer-tons of freight carried, the railroad made only partial use of its physical facilities until late in the colony's existence.[33] This sort of schedule was also followed in establishing a system of improved roads and trails over the island. In both cases, Japanese had to bear the burden of ambitious engineering projects when they could least afford it, for basic transportation networks are more valuable as networks than they are piecemeal.

312
653
[61]

Public irrigation was a project closely tied to agriculture, and followed a different timetable (see Fig. 7). After 1895 there was no large

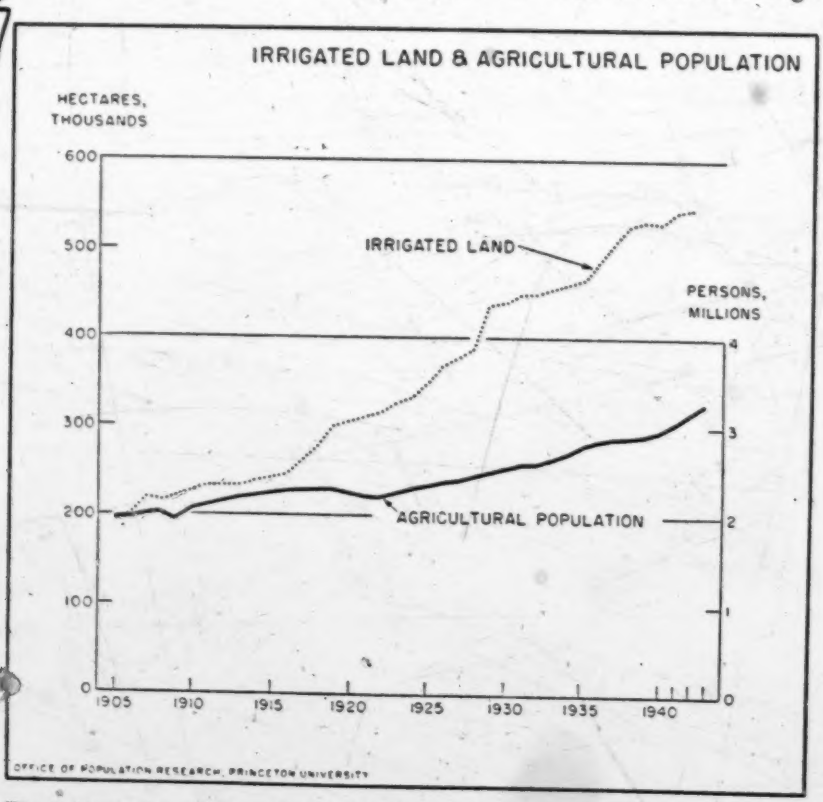

Fig. 7. Expansion of Irrigation and Agricultural Population in Taiwan, 1905-1943.

[33] Then it suddenly became overtaxed with cargo connected with the war, stemming from industrial growth and from Taiwan's role as a military base. See OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement* (1944), p. 60.

6: Kirchhoff--27 U-4 (no date) 1895 Formosans
501

The only better known river system is that of the Tam-sui, as Europeans say (in Chinese it is called Tan-tschui-ki, "Stream of Fresh Water"). It arises from the junction of the Tokoham and Sintiam Rivers and below this is navigable for larger junks; on the right it also receives the Ki-lung River, which has its source at the Ki-lung-schan and, in spite of its numerous rapids, is traveled on by curious boats with quite flat bottoms that are 10 m. long and 2 m. wide.

6: Kirchhoff--34 [3] U-4 (no date) 1895 Formosans
116, 501, 505

Although recently steamers have greatly limited the use of junks in Formosan commerce also, nevertheless the junks are able to maintain themselves against this superior competition for two reasons: the keelless junks of shallow draught are more easily able to enter and to leave the shallow harbors of Formosa, while on the other hand, in view of their smaller crews and the smaller cargo required, they can wait to load in the harbor without great expense. When the wind is favorable, the junks can cover the distance between Formosa and Fo-kiën or Ning-po in a surprisingly short time. The little junks of between 10 and 25 tons are also able to travel over very shallow regions of the coastal waters, and suspend service only in the most stormy winter periods. They are absolutely indispensable for transporting goods from the various coastal regions and from the interior of the island, by water, to the four large treaty ports.

6: Kirchhoff--36 [3] U-4 (no date) 1895 Formosans
116, 133, 491, 493, 501

A much used road leads from Tam-sui to the most important port of Ki-lung. Although it is hardly half the distance as the crow flies, one travels 52 km. up the winding Ki-lung River on the flat-bottomed boats mentioned above (as in the Philippines the natives call them banka) manned by two rowers who are helped by a third for the stretch with rapids. A number of small localities border the river, whose lower course is so shallow that the rising of the tide in it can be distinctly seen. But then follows a series of rapids in the mountainous region. Travel by boat ceases where the river comes to within 5 km. of Ki-lung Port; one transfers to the sedan-chair used in Formosa, where there are no carriages, and via a pass 200 m. high one goes down the steep mountainside facing the sea to the ... bay with its coal-bearing surroundings. Here, by way of exception, the entry into this natural harbor is without danger even for ships of greater draught, in spite of its being hemmed in by coral reefs, and the protection against storms in this bay amidst mountains is almost complete on all sides. Nevertheless no steamer can reach the town of Ki-lung, for the shore in front of this locality, which is situated at the back of the bay, is extremely soft, forming a morass at low tide traversed only by a narrow channel leading from the anchoring place. This softening is steadily increasing, for here as in the other Formosan ports the Chinese Government is doing nothing to prevent the junks' evil practise of dumping their ballast right in the anchorage

7: Joest--56 [3] E-5 (no date) 1882 Formosans
116, 501

The catamarans used for landing at Amping consist of 12 bamboo poles tied together; a board is inserted in the center to take the place of a keel. The passenger sits in a Chinese bathtub which is lashed to the float; strips of canvas are packed around him and he holds on to a rope which is attached to the aft end of the float in case the float turns over. One Chinese sailor stands on the fore end, one on the aft end of the float, their oars crossed. The float is so light that it is tossed by the surf over the sandbank to the coast.

9: Yamasaki--227 N-5 (1896-1897) 1900 Formosans
116, 133, 501

Farther to the north [MC: of Takao] the level coast has many dunes. The large town of Tainan also stands on an old dune. The sea bottom of the corresponding harbor, Anping, is not deep, as is usual in this region, so that wide stretches of the coast are dry at low tide. The large ships anchor 4 km. distant from the wharf and the bamboo rafts peculiar to South Taiwan, and called Katamaran or Teppai, provide for communication between the ships and the land. In addition, the harbor is quite open to the sea: consequently all landing is sometimes suspended at the time of the southwest monsoon. But since, nevertheless, it lies in the neighborhood of the large town and the fertile plain, its commerce has come to occupy the first place in southern Taiwan. This region was known to Europeans from early times.

9: Yamasaki--228 N-5 (1896-1897) 1900 Formosans
501

Only in the lower course of the Shūkoran-kei is some deep water to be found, on which there travel to and fro the curious little boats that can be carried on land by one adult.

9: Yamasaki--231 [3] N-5 (1896-1897) 1900 Formosans
116, 137, 313, 342, 501

As the name of Formosa shows, we find all over the island very heavy tropical vegetation.

Bamboo. This grows everywhere on inhabited plains and hills. The useful species become much thicker and larger than in Japan. It is used for many purposes. In the mountains the inhabitants build their huts of it, and in South Taiwan the fishermen build of it their boats and Teppai or Takamalan. These latter are curious sailing boats with raft-like bottoms of bamboo stems laid beside each other.

42: Schetelig--385-386 T-2 (no date) 1868 Formosans
116, 501, 503

The river system of the northern part of the island of Formosa has been put to most excellent use by the Chinese, so distinguished for their skill in canal building and irrigation. From Tamsui, in the conveniently fitted up river boats, the so-called rapid boats, one can easily make a whole day's journey into the interior in three directions: 1) on the so-called Kilung Canal to within half an hour of the town of Kilung; 2) on the Tamsui River, properly speaking, upstream to the southeast and 3) on the [386] southern arm region of the western slopes of the large Central Range.

42: Schetelig--386 T-2 (no date) 1868 Formosans
116, 135, 501, 505

I decided to visit Kilung first. On the journey thither by water we saw the now celebrated sulphur springs in the so-called Hell Valley. In addition to the plentiful sulphur springs, they have high pressure water vapor impregnated with SH, and also bring up a mass of clay similar to the contents of the mud volcanoes. From this the Chinese obtain large quantities of sulphur by simply boiling it off. The surroundings of the river become ever more beautiful once one has left the broader part of the lower Tamsui course and has passed through the so-called Manka Plain (Manka is the name of the chief town of the district of Tamsui-Ting). Gently rising and luxuriantly coated clay schist hills come down almost to the river bed, while in the distance picturesquely grouped and precipitous sandstone mountains offer a varied picture to the eye. But soon hard work is called for, for the rapids, which now occur in great numbers, can be passed only with difficulty and our crew stand up to their shoulders in water to shove the loaded vessel over the pebbles, while the traveler must also quite frequently jump out in order to lighten the boat and to help. Other boats sweep down past us at a great speed for the most part laden with hemp, indigo, potatoes or coal. On the seaward journey the force of the water does all that is necessary, and the skillful Chinese has equipped the boat only with a rudder at the back and, remarkably enough, in front also, in order to steer round the rocks without danger. Before coming to Kilung one crosses the watershed, a small height of some 200 to 300 feet, which sinks sharply towards Kilung and the sea.

Let us now cast a glance at the island's coasts. Taiwan is but little indented and consequently, in comparison with other parts of Japan, it has a modest circumference. For every 1 km. of coast in Taiwan there are 29.5 sq. km. of area (almost as much as in the case of the chief Japanese island, where the relationship is 1 km. to 29.7 sq. km.), while in Kiūshū, which is almost as large as Taiwan, there is a surface area of 10.8 sq. km. only for every one kilometer of coast. In order to consider the coast in a convenient way, we shall first travel from Kilung Harbor along the east coast, then round the southern cape and along the west coast back to the point of departure. The harbor of Kilung lies at the northern end of the island and is the most important for intercourse and trade between Taiwan and the rest of Japan. The harbor bay (Ria) of Kilung is surrounded by Tertiary sandstone hills, and the shore shows many curious small erosional formations, comparable to [226] earth pyramids, which are also formed by the ocean waves, for example the large cave near Image Point.* The harbor is about 3 km. long

*The name "Image Point was given it by an American voyager with the Perry expedition, because of the shape of the earth columns.

and is more than 18 m. deep in the middle. Here at least ten large ships of over 1,000 tons can lie unhampered. But, on the other hand, only small craft, and that only at high tide, can go on to the slimy bottom of the inner part, for at ebb tide this is

uncovered. Unfortunately the mouth of the harbor opens too widely towards the ocean in the north, and is thus not protected against the rolling sea waves, particularly at the time of the northeast monsoon. Apart from this, Kilung is the best harbor on the island, and a project for its improvement has already been submitted to the Government, great hopes being placed on the plan's execution.

9: Yamasaki--226-227 N-5 (1896-1897) 1900 Formosans
116, 133, 361, 503

When we proceed northwards from Hōryō, we find a harbor, Tōkō, at the mouth of the Tamsui-kei, a large river in southern Taiwan with a fertile basin. In the harbor, at least twenty large Chinese trading vessels always lie at anchor. Not very far to the north is a lagoon harbor, Takao, which is very famous, both because of its trade and also for the beauty and salubriousness of its location. Between the lagoon and the sea there stretches out a 12 km. long tongue of land, called Haisa ("sea sand"), on which are many fishermen's huts. At the northern end of the Haisa there rises up a crag, called Saracen's Head by the English, which was doubtless separated from the "Ape Mountain" opposite it by erosion of the sea waves. The Ape Mountain is joined by the higher Takao-san (327 m.), which is an important landmark for travelers. A narrow channel between these two hills forms the mouth of the bay and the harbor. Unfortunately the entrance to the lagoon, like the lagoon itself, is shallow so that only small steamers and junks can enter, while the [227] larger ships must anchor outside the harbor. All official buildings and foreign concessions lie beneath the Ape Mountain, while the shops of the natives are grouped opposite, at the foot of the Saracen's Head. This locality is usually called Kigo. Many mangrove trees can be found in the lagoon. They are not so large as those I later saw in Singapore. At some distance from the lagoon shore is the town of Hozan (Föngschan), in much the same position as Königsberg on the Danzig Haff. The two hills mentioned, Ape Mountain and Saracen's Head, consist of old coral reefs.

9: Yamasaki--227 [3] N-5 (1896-1897) 1900 Formosans
116, 133, 503

I have already referred to phenomena of elevation on the east coast; they are also to be seen on the west coast. Not only the presence of many old coral reefs and dunes in the Tainan plain, but other facts also offer proof of tectonic movement in quite recent times. On old Chinese maps we see that the harbor of Anping, which is now connected with the town of Tainan by a piece of level land, was situated on a small island almost until the beginning of the 18th century. It is also said that the Dutch ships, earlier, in the 17th century, lay to at the town wall of Tainan. This wall is now at least 8 km. from the actual anchorage.

12: Garnot--15 G-3 (1884-85) 1894 Formosans
116, 133, 503

Kelung is the center of a little coastal basin that has a radius of several kilometers. The watershed is very near the coast. Several more or less accurate maps that were drawn before the French occupation connected the Tamsui to the Kelung river at this point by a canal. As a matter of fact the watershed is more than 100 meters above sea level at its lowerst point near Loan-Loan.

42: Schetelig--385-386 T-2 (no date) 1868 Formosans
116, 501, 503

The river system of the northern part of the island of Formosa has been put to most excellent use by the Chinese, so distinguished for their skill in canal building and irrigation. From Tamsui, in the conveniently fitted up river boats, the so-called rapid boats, one can easily make a whole day's journey into the interior in three directions; 1) on the so-called Kilung Canal to within half an hour of the town of Kilung; 2) on the Tamsui River, properly speaking, upstream to the southeast and 3) on the [386] southern arm region of the western slopes of the large Central Range.

504

504 PORT FACILITIES--boathouses; piers and docks; facilities for mooring, loading, and unloading; storage facilities; supply services (e.g., ship chandlers, fueling stations); facilities for repair and overhaul; use of natural harbors; etc.

See also:

Construction 33
Ship repairs 396
Cranes 406
Weight moving 483
Warehousing 488
Trucking 494
Rail terminals 498

4:Grajdanzev--121-122 S-4 (no date) 1942 Formosans
116, 504, 177.50 Japan
636.50

"The development of shipping demands good ports, and Taiwan is poor in natural harbors. But the government did not spare money or effort in the improvement of harbors, the best of which are Keelung and Takao through which most of the island's external trade passes. In 1929 Keelung's wharves were able to accommodate fifteen ships of 3,000 to 10,000 tons each and in addition six ships could be moored within the harbor, which was capable of handling 1,650,000 tons of cargo a year. Since that time considerable improvements have been made, and a plan of reconstruction, which [122] should be finished in 1943, foresees accommodation for forty ships at one time. Up to 1939, ¥36.4 million had been spent on the improvement of the harbor. In 1929 Takao harbor could accommodate seven ships of 5,000 tons each in berths, with seven more in the narrow but long harbor; recent construction permits accommodation of vessels of 10,000 tons, and, when the program is completed, it will be possible to accommodate twenty-nine ships at once. The cost of construction up to 1939 was ¥33.5 million. The other important ports which have undergone improvements are Karenko (east)--cost of construction ¥7.4 million; Bako (the Pescadores)--¥850,000; Soo (northeast)--¥669,000; Shinko (a fishing port in the east)--¥860,000; Shinko (west), where the works are to be finished in 1942 at an estimated cost of ¥15 million."

4:Grajdanzev--122 S-4 (no date) 1942 Formosans
116, 504, 712

"Anpin, the port of Tainan, and the canal connecting it with Tainan were to be finished in March 1940 at a cost of ¥778,000. All this does not include the considerable expenditures on naval construction in Taiwan. There are three large fortified zones on Taiwan and the Pescadores, and entrance to these is prohibited."

4:Grajdanzev--190 S-4 (no date) 1942 Formosans
116, 504, 724

"The island has ten ports, some of which are very well developed (1). Large sums

1. There are also three ports on the adjacent islands, two of them of small capacity.

have been spent on improvements and installations. The military port is at Bako (Mako) on the outlying Pescadores Islands between Formosa and China, but this area has long been a prohibited area and no information concerning its facilities is available."

7: Joest--56 E-5 (no date) 1882 Formosans
116, 133, 361, 504

Unfortunately, there are no large harbors on Formosa, or rather, there are none in those places where the Chinese companies have trading posts. Taiwanfu is situated two miles from the coast; the harbor, Amping, is situated at that point where Nova Zelandia was situated formerly, but even there landing facilities for passengers and goods are very poor.

7: Joest--56 [4] E-5 (no date) 1882 Formosans
116, 504

Since the roadstead of Amping does not offer sufficient protection, the small steamer on which I had arrived took refuge in the Pescadores.

The bay and lagoon of Takao offer a beautiful sight. The lagoon is connected with the ocean by a narrow opening, hemmed in by coral reefs; large boats therefore cannot enter the bay. Work on harbor installations is still in progress; this is an ambitious and costly project, but it is a necessary step in establishing communication with the south. It will also be necessary to make the harbor safe, especially since the roadstead of Takao offers no protection even to large steamers during the frequent and violent typhoons. The most dangerous months for typhoons are June, July, and August. The direction of the wind, which may develop a velocity of 100 miles per hour, is from east to west. For those harbor installations which are made of wood, the Teredo navalis is extremely destructive. Pine wood may be destroyed by these worms within three months, while Chamaecyparis wood may last for one year. Timber which is used for buildings on land (for railways, telegraph poles, etc.) is destroyed by white termites, but if the wood is impregnated with tar, this forms a sufficint, though costly, protection. The bay within the lagoon is about 22 kilometers long and 5 kilometers wide at its widest point. Around the bay there are artificial sea gardens. Among the plants growing wild there are first of all pandanus groves, which probably form one of the most unusual features in the vegetation of Formosa; while in other regions of the island pandanus grows only in the form of shrubs here it is tree-like and forms a plant typical of coastal regions.

Another unusual form of vegetation of a purely xerophilous character is a species of

tropical Euphorbia Tirucalli (spurge); here it has hardly any leaves, since their place is taken by green branches. Its habitat is among the rocks on the beach, and it may grow as high as ten meters. [629] Finally, there are several species of mangrove along the level coast of the lagoon of Takao.

The harbor of Sawo has been repeatedly visited by warships and on some occasions by trading vessels, generally only for passing protection against wind and weather or in order to survey the coast. The transport "Elbe," belonging to the Prussian fleet, was also there in 1860 (1). Shortly before us the "Sylvia" had left the harbor, this being

1. This is a mistake, commited also by Dr. Hermann Maron, Japan und China, Berlin 1863, Vol. II, p. 73. The "Elbe" touched only at the south and southwest coasts of Formosa, but the Prussian frigate "Thetis" was involved in an incident with Chinese pirate junks in the neighborhood of Sawo Bay (see Die preuss. Edpedition nach Ost-Asien, Vol. II, 1866, pp. 112 ff.).

an English survey ship which, be it remarked in parenthesis, has just now finished the survey of the Formosan coast begun about one and one half years ago. This survey will considerably transform the shape of the west coast on the map.

42: Schetelig--387-388 T-2 (no date) 1868 Formosans
116, 133, 504

The harbor of Sawo is deep, in places 10 fathoms deep; It is protected on the south, west and north, but entry is rendered much more difficult by many sandstone rocks. The place itself appears to be hewn out of the rock, for on all sides the mountains sink precipitously into the sea, and even the small valley in which the village of Sawo is situated is only about 1/4 of a German mile long and much narrower. [388] Behind, in rapid succession, steep mountains rise up, the first chain already rising to a height of 2,000 feet.

Kaohsiung

504 712 Kaohsiung is the second largest city and is known for its harbor and large-scale industries. It has a population of 300,000. [439] Because of its warm and rather dry climate, this port handles a major portion of the island's sugar, salt, and cement exports. The naval base of Tsoying is located in the city and the military fort, Fengshan, another important military base, is about six miles north of the city limits.

Makung

712 633 Makung, located in the west of the main island of the Pescadores, is an important naval base and the seat of the Penghu hsien government. The fact that this port lies in the Formosa Strait and between the China Mainland and Taiwan gives it strategic importance.

45:Stanford U. S-4,5 1956 ADl Formosa ADl

504 There are only two important natural harbors, Keelung and Kaohsiung. Almost all foreign shipping passes through these two ports. Coastal shipping is carried on largely through ports of secondary importance such as Hualien, Suao, Makung, Tanshui, Anping, Lukang, Tungkang, Taitung, and Hsinkang. These harbors with the exception of Hualien, are only capable of accomodating small vessels and fishing boats.

506 Domestic air transport is in its infancy. International air lines connect with the United States, Japan, Korea, Hong Kong, the Philippines, and Thailand.

II. RAILWAY TRANSPORT

497 The Formosa railway constitutes the foundation of the island's transportation system. However, its position is in process of being challenged by increasing activity in highway transportation. The government-owned Taiwan Railway Administration (TRA) operates an extensive network of lines called the Western System and the single-tracked line which forms the Eastern System. Taiwan Sugar Corporation also operates railroad lines totaling 1,543 miles (2, 649 kilometers). The 30" tracks of the sugar corporation extend over sugar-producing areas for the purpose of transporting sugar cane, supplies, and fertilizers.[1] In addition, this system offers passenger service. The Taiwan Forestry Administration owns, besides a number of small narrow gauge railways, three lines of 30"gauge, used for the transporation of lumber and a few passengers; these lines connect Chiayi with the

1. Foreign Operation Adm., Mission to China, Taiwan Economic Data Book, Part II, Vol. III, 1955, Taipei.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

464 369 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[a] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

THE HISTORY OF THE VILLAGE AND AREA

The village seems to have been founded about 1785. This estimate is based on the five generations of ancestors listed on the ancestral tablets of the family considered by other villagers to be the oldest in Hsin Hsing. The first generation recorded on the master tablet, in each case, is said to be the founder of that particular descent line in the village.

The ancestors of the village, like much of the Taiwanese population, originally came from the Amoy area of Fukien. While the exact origin for the ancestors of most Taiwanese is either the Ch'uan Chou area north of Amoy or the Chang Chou area south of Amoy, almost all the ancestors of the people in the Hsin Hsing village area came from Ch'uan Chou.[2] Some informants believe that their ancestors came from the mainland directly to this village. Others think they might have first lived nearby and then moved into the village. There is almost complete agreement, however, that all the ancestors entered Taiwan through the port city of Lukang, only about three miles from Hsin Hsing, which has long played an important role in the life of the area.

Early in the Chinese history of Taiwan—beginning in the middle 1660's—Lukang was an important port city, second only to Tainan to the south. In fact, up to the time of the Japanese occupation of the island, Lukang was a major Taiwanese culture center. It reached its peak of activity from about 1786 to 1851, when it was the chief port of entry for many of the immigrants from the mainland and was of major importance to Taiwan's trade.

In this early period Lukang was a highly urban settlement. The city's prosperity was at its height during the Ch'ing dynasty in the late eighteenth century, when its population reached one hundred thousand. At that time a hundred ships (each ship under forty-seven tons) went in and out of the port every day, and the city's many narrow, cobblestoned streets were flanked by rows of shops selling such commodities as salted and dried fish, cloth, and other products.

In addition to its prominence as a port, Lukang also served as an important labor center and general marketplace for the surrounding area. Men from nearby villages who found that the low yield of the dry, non-irrigated land could not furnish an adequate income found ample opportunity for work in Lukang in the shops or as coolie laborers in the city's port facilities. The livelihood of many of the villagers of the area therefore depended in large part upon their labor in Lukang, and thus the city, only about three miles from Hsin Hsing, very early served as a source of urban influence.

4:Grajdanzev--120-121 S-4 (no date) 1942 Formosans-1-3
116, 439, 505, 705

"The products of Taiwan can be brought to Japan only by sea: it was pointed out above that air freight-transport is insignificant because it is too expensive. As will be shown in the next chapter, the external trade of Taiwan is chiefly with Japan. The following table gives information on the shipping line connecting Taiwan with Japan and the continent.

This table shows that coastal shipping in Taiwan is not developed. The only line of importance is Keelung--Karenko, which is a necessity because the eastern railroad is not connected with the railroad network of the island, freight being transported exclusively by ships. Information concerning the lines connecting Taiwan with Japan shows how close are the commercial relations between the two countries, ... Lines connecting Taiwan with Manchuria direct and via Korea (Takao--Seishin) are of recent origin, while it will be observed that there are many more lines connecting Taiwan with China and with Southeastern Asia than is commensurate with the trade of Taiwan with these regions. The lines connecting the island with China probably serve the army and organizations connected with it, for Taiwan is the supply base for the armies now operating in South China.

Taiwan's Shipping Lines in 1939

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Keelung--Kobe	6	84	8,000 tons or more
Takao--Tokyo	6	90	4,000 "
Takao--Tokyo*	2	24	2,500 "
Takao--Seishin (Korea)	2	12	2,000 "
Takao--Jinsen (Chemulpo) Korea	2	24	2,000 "
Takao--Dairen (Kwantung, Manch.,)	2	46	4,000 "
Takao--Tientsin	2	24	2,000 "
Takao--Shanghai	2	36	2,000 "
Keelung--Amoy	1	36	1,500 "
Keelung--Hongkong	2	48	1,500 "
Takao--Canton	1	24	1,500 "
Keelung--Java	2	12	3,000 "
Keelung--Philippines	3	24	3,000 "

Taiwan's Shipping Lines in 1939 [Cont.]

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Takao--Aparri (Philippines) since 1938	1	30	3,000 tons or more
Calls of Southern lines	2	24	5,000 "
Keelung--Karenko (Taiwan)	2	300	2,500 "
Coastal line, East of Taiwan	2	70	700 "
Takao--the Pescadores	1	156	700 "
Shinko--Koto†	1	60	50 "
Calls of European lines (Tokyo--London)	8	24	8,000 "

* Used for 'special purposes of the Army'

† Islands to the southeast of Taiwan, a part of the government-general. [Botel Tobago--analyst]"

6: Kirchhoff--34 [3] U-4 (no date) 1895 Formosans
116, 501, 505

Although recently steamers have greatly limited the use of junks in Formosan commerce also, nevertheless the junks are able to maintain themselves against this superior competition for two reasons: the keelless junks of shallow draught are more easily able to enter and to leave the shallow harbors of Formosa, while on the other hand, in view of their smaller crews and the smaller cargo required, they can wait to load in the harbor without great expense. When the wind is favorable, the junks can cover the distance between Formosa and Fo-kiën or Ning-po in a surprisingly short time. The little junks of between 10 and 25 tons are also able to travel over very shallow regions of the coastal waters, and suspend service only in the most stormy winter periods. They are absolutely indispensable for transporting goods from the various coastal regions and from the interior of the island, by water, to the four large treaty ports.

6: Kirchhoff-- 36 U 4 (no date) 1895 Formosans
116, 361, 505

Upstream [VMM: from Tansui] on the right bank also, there follows the populous town of Tua-tu-tia, the chief center for the preparation and export of tea, and farther along Mang-ka or Bang-ka, important because of the fact that larger junks come up this far on the Tam-sui (which should really be called the Sintiam at Bang-ka); this explains the dense crowds in the terribly filthy streets of Bang-ka, where humans and pigs fight for room. In particular, the small vessels bring down camphor from the mountain streams to be reshipped here.

9: Yamasaki--227-228 N-5 (1896-1897) 1900 Formosans
116, 133, 312, 505

The Tamsui-kei, which together with its two tributaries on the right-hand side, the Shinten and Kilung, flows through the fertile plain of Taihoku, is important not only for watering the fields but also in communications. At its mouth lies the harbor of Tamsui, already mentioned. From there there always travel many Chinese ships and river steamers 20 km. farther up the river to Tai-tō-tei (Tautuatea), which is the largest freshwater port of Taiwan and is quite close to the capital of Taihoku. The trading vessels [228] can travel another 20 km. to the southeast as far as Taikokan (Takoham), a small town on the border of the native territory. The surroundings of the town of Taikokan are well known for camphor and other forest products. So one can always see many small boats with these products traveling from there to Taitotei on the swift flowing Taikokan-kei. The largest tributary of Tamsui-kei is the Kilung-kei. It flows through a longitudinal valley in the Tertiary range of Sanshōrei, a famous battlefield and a difficult mountain pass. It is about 60 km. long and navigable over most of its extent. Along the upper course of the Tamsui-kei river there are gold fields and bituminous coal deposits. The port of Kilung also lies quite close to the side of a small hill on the river. Thus this small but voluminous river also has considerable importance for transport in this region, where the roads leading into the country are in a bad condition.

10: Schumacher--224 [4] T-1 (ca. 1896) 1898 Formosans
116, 175, 226, 505

The Chinese fishermen of Lokkang are born on their boats and probably have never set foot in a town. They must be the direct descendants of the dangerous and powerful pirates who even hundreds of years ago were forbidden to enter Chinese ports and rivers. Now they are poverty stricken and on the way to becoming extinct because it is not quite so simple to seize ocean liners made of iron and steel as it was to catch barges and galleys. Now they sail along the coasts with their junks and pick up freight which must be unloaded the next day if they are eager to make a business of freight transportation. Carried by the flood they continue these voyages until the storm throws them on the beach or casts them adrift on the open sea where the waves are more regular than near the shallow shores, but still high enough to embrace the junks and to crush them like rotten match-boxes.

42: Schetelig--386 T- 2 (no date) 1868 Formosans
116, 135, 501, 505

I decided to visit Kilung first. On the journey thither by water we saw the now celebrated sulphur springs in the so-called Hell Valley. In addition to the plentiful sulphur springs, they have high pressure water vapor impregnated with SH, and also bring up a mass of clay similar to the contents of the mud volcanoes. From this the Chinese obtain large quantities of sulphur by simply boiling it off. The surroundings of the river become ever more beautiful once one has left the broader part of the lower Tamsui course and has passed through the so-called Manka Plain (Manka is the name of the chief town of the district of Tamsui-Ting). Gently rising and luxuriantly coated clay schist hills come down almost to the river bed, while in the distance picturesquely grouped and precipitous sandstone mountains offer a varied picture to the eye. But soon hard work is called for, for the rapids, which now occur in great numbers, can be passed only with difficulty and our crew stand up to their shoulders in water to shove the loaded vessel over the pebbles, while the traveler must also quite frequently jump out in order to lighten the boat and to help. Other boats sweep down past us at a great speed for the most part laden with hemp, indigo, potatoes or coal. On the seaward journey the force of the water does all that is necessary, and the skillful Chinese has equipped the boat only with a rudder at the back and, remarkably enough, in front also, in order to steer round the rocks without danger. Before coming to Kilung one crosses the watershed, a small height of some 200 to 300 feet, which sinks sharply towards Kilung and the sea.

499 to erect 31 spans upon the existing concrete piers built by the Japanese in 1937. The completion of the bridges provides the railroad tracks of the Taiwan Sugar Corporation, and sugar cane and other agricultural products can be transported at much less cost than heretofore.

493 The comparatively few passenger automobiles are supplemented by the bicycles, pedicabs, and motorcycles. The extensive use of bicycles for short-distance transport, particularly within a city, is necessary where bus service is infrequent and buses overcrowded. It is reported that in 1955 in the city of Taipei alone there were over 120,000 bicycles and more than 100,000 pedicabs.[9]

Pedestrians on the highways and in the streets must exercise extreme caution to avoid recklessly driven vehicles. During the first nine months of 1955, there were 1,694 accidents caused by motor vehicles, resulting in 250 deaths and 1,837 injuries. Sixty-eight per cent of the accidents was attributed to reckless drivers and 13.3 per cent to the carelessness of pedestrians.[10]

IV. SHIPPING

505 Keelung in the north and Kaohsiung on the southwest coast are the island's two most important natural harbors. All exports and imports pass through these harbors, and they handle, in addition, approximately 10 per cent of coastal shipping. Keelung is able to accomodate at a single time up to twenty-five 3,000- to 20,000-ton

9. The Central Daily News, Nov.14,1955.
10. Ibid.

505 ocean-going vessels, and in 1954 handled imports amounting to 671,000 metric tons; exports from Keelung amounted to 235,000 metric tons. Kaohsiung, large enough to accomodate as many as thirty-seven ships of up to 20,000-ton capacity, handled 60 per cent of the island's total imports[11] and approximately 70 per cent of total exports in the year 1954. Major export commodities handled by the harbor at Kaohsiung include sugar, salt, and cement. The volume of export has fluctuated considerably in the past several years.[12]

Coastal shipping makes possible bulk transport between the western and eastern sections of the island, which might otherwise be delayed during certain seasons when typhoons damage or render the highways impassable. Shipping between the island proper and offshore islands such as Quemoy, Matsu, and the Pescadores is dependent upon small steamship and motor-powered sailing boats.

V. AVIATION

509 Formos'a most important international airport is situated at Sunghan, a suburb of Taipei. The airfields at Tainan, Makung, and Pingtung are designated as supplementary airports for emergency landings. The airfield at Sungshan is
507 equipped with four air-ground high frequency radiotelephone transmitters (3485 kc., 56125 kc., 8220 kc., and 13240 kc.), assuring communication

11. FOA, Mission to China, op. cit.
12. Industry of Free China, Vol. III, No.5, May 1955, Table 12.

45:Stanford U. S-4,5 1956 ADl Formosa ADl

There are only two important natural harbors, Keelung and Kaohsiung. Almost all foreign shipping passes through these two ports. Coastal shipping is carried on largely through ports of secondary importance such as Hualien, Suao, Makung, Tanshui, Anping, Lukang, Tungkang, Taitung, and Hsinkang. These harbors with the exception of Hualien, are only capable of accomodating small vessels and fishing boats.

Domestic air transport is in its infancy. International air lines connect with the United States, Japan, Korea, Hong Kong, the Philippines, and Thailand.

II. RAILWAY TRANSPORT

The Formosa railway constitutes the foundation of the island's transportation system. However, its position is in process of being challenged by increasing activity in highway transportation. The government-owned Taiwan Railway Administration (TRA) operates an extensive network of lines called the Western System and the single-tracked line which forms the Eastern System. Taiwan Sugar Corporation also operates railroad lines totaling 1,543 miles (2, 649 kilometers). The 30" tracks of the sugar corporation extend over sugar-producing areas for the purpose of transporting sugar cane, supplies, and fertilizers.[1] In addition, this system offers passenger service. The Taiwan Forestry Administration owns, besides a number of small narrow gauge railways, three lines of 30"gauge, used for the transporation of lumber and a few passengers; these lines connect Chiayi with the

1. Foreign Operation Adm., Mission to China, Taiwan Economic Data Book, Part II, Vol. III, 1955, Taipei.

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11. FOA, Mission to China, op. cit.
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507 with all aircraft flying within the Taiwan Flight Information Region (21°00'N, 117°30'E -- 21°00'N, 121°30'E -- 29°00'N, 123°00'E -- 29°00'N, 117° 30'E -- 21°00'N, 117°00'E). Furthermore, the airfield at Sungshan, Tainan, and Hualien have APN-2 radar for their runways. The Tainan field has two high frequency radio-telephones at 8515 kc. and 6557 kc.[13]

509 Currently, Formosa is served by Northwest Airlines (American), Thai Airways (Thailand), Korean National Airlines, and Hong Kong Airlines. Domestic air transport is the province of Civil Air Transport and Foshing Airlines. Civil Air Transport also fly China-Korea, China-Japan, China-Hong Kong, and China-Philippines routes.[14] A "round-the-island" route starts at Taipei and serves the airports of Makung, Tainan, Taitung, Hualien. Scheduled flights are available between Taipei and Hualien, and non-scheduled service is provided between Taipei and Quemoy.

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13. China Publishing Company, China Handbook 1953-54, Taipei, 1953, p.

14. Ibid.

4:Grajdanzev--122-123 S-4 (no date) 1942 Formosans
116, 509, 177.50 Japan
636.50

"Taiwan is connected by regular airline with Japan proper and there is one air line which encircles the island. The first line connects Fukuoka (between Nagasaki and Moji, the centre of the Japanese lines radiating from Kyushu) with Taihoku (1,610 km.). Flights are made every day and, in 1938, 8,706 passengers were carried and 144,005 ton-km. of freight and mail were flown. The line is however not remunerative, although the flights of the Taiwan and Osaka businessmen and Japanese officials are subsidized by the government-general at the expense of Taiwan's taxpayers to the extent of ¥325,000 (1939).

The length of the island air lines in 1938 was about 600 km. Flights are made daily (only every second day to Pescadores) and stops are made at all important cities of the island. The number of passengers for 1937 was 6,450, but the movement [123] of freight in the same year amounted to only 570 ton-km. A subsidy of ¥360,000 was paid to these lines by the government-general in 1939, which means that each passenger was subsidized to the extent of ¥60 per flight."

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13. China Publishing Company, China Handbook 1953-54, Taipei, 1953, p.

14. Ibid.

4:Grajdanzev--29 S-4 (no date) 1942 Formosans
116, 161, 511

"Native and Japanese Standards of Living as Reflected in Vital Statistics

The high absolute and relative rates of growth of population in Taiwan are extremely interesting and may be illustrated in the following way: in 1937 245,000 children were born in Taiwan—one-third the number of children born in Great Britain and one-fifth of those born in Germany, although the total population of Taiwan is but one-seventh and one-twelfth respectively as great as that of those countries. In other words Taiwan's future population will be much larger than the present figure suggests. If every year about 100,000 persons reach an age of eighteen now, in twenty years their number will almost double. If the islanders are to retain the same standard of life, agricultural and industrial production should increase at the same rate as population and if they are to raise this standard agricultural and industrial production should grow at an even greater rate. This rapid growth of population—more than 130,000 additional mouths each year—raises grave issues for the authorities. As we shall see later, this problem has not been solved and indeed is unlikely to be solved under conditions existing on the island."

4:Grajdanzev--56 S-4 (no date) 1942
116, 171, 262, 439, 511, 177.43
636.43

Formosans -1-2
Japan

"Taiwan is famous for its rice production of which it exports almost half. The opinion of Japanese economists is that exports of Taiwan's rice to Japan brought to the island such prosperity that some measures had to be taken to curb it. But the data presented in this table [See page 55--analyst] show quite a different picture. In 1905 the annual per capita consumption of rice in Taiwan was about 1.25 koku. Then it fell, but an increase in production brought it back to that level in 1925. At about that time the heavy exports of Taiwan's rice to Japan started: These exports brought a sharp fall in per capita consumption—it fell to 0.87 in 1935 and has remained on about the same level since that time. Now, 0.87 koku per year is about 0.8 pound per person per day. It was pointed out that the production of other cereals in Taiwan is almost nil. Only sweet potatoes form a significant addition to the diet (more than one lb. per person per day). Some wheat flour is imported but this amounts to only two to three per cent of the exports of rice (by weight).

These figures are for the total population. But the urban dwellers are probably better off than the farmers, so that the average for farmers should be less than 0.87 koku. Exports of rice from Taiwan to Japan cannot therefore be taken as a sign of Taiwan's prosperity, for they resulted in a fall in standards of living for the Chinese in Taiwan. Data for the last five years show that the annual average consumption of rice in Japan is about 1.10 koku, while in Taiwan it is 0.84. In other words, per capita consumption of rice in

4:Grajdanzev--56 S-4 (no date) 1942 Formosans-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

Japan is thirty-one per cent higher than in Taiwan, though the Japanese consume in addition considerable amounts of wheat, barley, and other cereals, which are almost entirely absent in Taiwan, to say nothing of sweet potatoes."

4:Grajdanzev--64-65 S-4 (no date) 1942 Formosans
116, 171, 263, 511

"As with rice it is interesting to note the per capita consumption of sugar in Taiwan. Although almost ninety-five per cent of the sugar output is exported, per capita consumption of sugar in Taiwan was 15.9 kin in 1938, as compared with [65] 23.5 kin in Japan. In other words Japan's consumption is forty-three per cent higher than Taiwan's (1).

1. These figures are taken from Keizai nenkan, 1940, of Toyo keizai shimposha, pp. 205, 206."

4:Grajdanzev--65-66 S-4 (no date) 1942 Formosans -1-2

116, 245, 439, 511

"Tea produced in Taiwan is chiefly of three sorts—black tea, oolong tea (famous for its aroma) and pouchong tea 'wrapped'—paochungch'a. Production is as follows:

Production and Exports of Tea in Taiwan

Quantity (1,000 kin = 600 kg.)

	1914	1934	1935	1936	1937	1938
Oolong tea	...	5,292	5,280	5,049	3,487	4,519
Pouchong tea	...	5,666	5,685	5,923	4,905	5,929
Black tea	...	6,021	5,490	6,508	10,562	9,835
Total production, incl. others	22,000*	16,997	16,468	17,486	18,955	20,285
Exports		16,641	15,768	16,741	18,604	19,057

Values in thousand yen

	1934	1935	1936	1937	1938
Oolong tea	3,562	3,538	3,571	2,871	3,715
Pouchong tea	3,075	3,086	3,394	3,163	3,677
Black tea	4,250	3,964	4,518	7,418	6,844
Total Incl. others	10,894	10,594	11,486	13,452	14,237
Exports	11,047	9,325	10,200	12,851	12,742

* Approximately

Sources: Keizai nenkan; Nogyo nenkan; Taiwan Jijo.

4:Grajdanzev--65-66 S-4 (no date) 1942 Formosans-2

116, 245, 439, 511

[66] Average production for the last five years was 18,038,000 kin, average exports 17,362,000 kin."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages may be considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

4:Grajdanzev--83-84 S-4 (no date) 1942 Formosans
116, 241, 427, 511, 556

"We have no recent figures of tenancy conditions but, according to an investigation made in 1927, the position of the average farmer-tenant appeared as follows (on land of average quality in paddy with two crops a year):

	yen
Value of crop from 0.75 ko	325
Rent	160
Balance	165

Thus his reward for his and his family's labor for the whole year was ¥165, minus the expenses of production apart from labor. From this sum house taxes, indirect taxes, etc. must be paid. This income of ¥165 may be compared with the income of a landowner who had 15.5 ko (the average for the upper group of landowners) and leased all this land to tenants. His yearly income would be ¥2,480.

These conditions may not exist now, since the above figures refer to 1927. Official sources do not give new figures, but a few calculations show that the situation has not greatly changed. As has been shown, the proportion of tenants to the total number of farmers has increased since that time, so [84] that competition among them must be stiffer, and there is no reason to expect that rents are lower. The value of two crops of rice from 0.75 ko of paddy in 1937 averaged ¥515 but prices general in 1937 were at least thirty per cent higher than in 1927. All this suggests conditions of poverty among the tenants and the position of even the majority of so-called owners may be not much better."

4:Grajdanzev--117 S-4 (no date) 1942 Formosans
116, 465, 472, 511, 563

"We saw previously that the development of modern industry in Taiwan did not benefit the Chinese as entrepreneurs. Now it becomes evident that it brought very little to them as workers. If we use Engel's ratio of sixty per cent as an estimate of the share of wages spent on food in low-wage countries, it appears that the wages of the unskilled worker in Taiwan can purchase about one pound of rice per day for each member of his family."

4:Grajdanzev--119 [2] S-4 (no date) 1942 Formosans
116, 171, 497, 511, 563, 177.49 Japan
636.49

"From the table given above [see table on page 118 under category 116--analyst] we see that a Japanese makes almost five times as many trips a year as does a Taiwanese --whereas the movement of the freight appears relatively as large as in Japan. The movement of passengers reflects the conditions of life of the natives while the movement of freight in Taiwan is the movement of Japanese freight to and from ports--coal, sugar, rive, fertilizer, lumber, and sugar cane (1) (in the order of freight carried)--

> 1. Sugar cane is in sixth place because the bulk of its [sic] transported on special railroads.

which, as will be shown later in more detail, serve chiefly the Japanese economic machine. The statistics of revenue show that the average cost per ton of freight in Taiwan is less than in Japan (¥2.26 as compared with ¥2.34). It may be said that this is quite reasonable because in Taiwan average distance over which the freight is moved is less. On the other hand, the average passenger cost per trip in Taiwan is twice as high. In spite of the smaller scale of operation, the railways of Taiwan bring a net return of eight to nine per cent as compared with six per cent in Japan (1937)."

4:Grajdanzev--128 S-4 (no date) 1942 Formosans -1-2
116, 453, 458, 511, 563

"The banks enumerated above [see page 127 in category 116--analyst] are Japanese, and the only institutions in which the Chinese have some measure of influence are the credit cooperatives, which will be discussed later. The table below summarizes information on deposits of all financial institutions of Taiwan.

Growth of Deposits of Financial Institutions in Taiwan
(1,000,000 yen)

	1926	1928	1930	1932	1934	1935	1939
Banks	102.9	111.9	101.2	133.2	152.2	173.0	270.3
Post office	9.1	13.3	16.5	18.1	21.4	23.7	34.8*
Credit cooperatives	28.0	34.9	34.6	47.7	65.5	77.9	118.2†
Total	140.0	160.1	152.3	199.0	239.1	274.6	423.3*†

* Post-office savings deposits on Dec. 31, 1938.

†Of which rural credit cooperatives accounted for ¥87,230,000 on Dec. 31, 1938.

The amount of deposits in Taiwan has thus trebled in thirteen years. In order to judge whether this is a sign of a sharp improvement of the economic position of the islanders, it is necessary to know (1) whether the increase in deposits comes chiefly from Japanese or from Chinese sources, (2) whether the increase in deposits of the Chinese is a real

increase, or whether it only reflects a change of habit (it is evident that the transition from subsistence to money economy is bound up with the increase of deposits at the banks), (3) how far this increase may be ascribed to war-time inflation.

We do not have complete data on the distribution of deposits between Japanese and Chinese, but what is available throws some light on the problem.

Distribution of Deposits in Banks and Post Offices
(million yen)

	Banks		Post offices	
	Chinese	Japanese	Chinese	Japanese
1926	33.0	69.8	2.6	6.6
1935	51.2	121.7	4.9	18.8
1938	...	...	6.9	27.9 "

"The remaining imports —— imports for consumption —— should be divided, wherever possible, into two parts —— consumption by Japanese and consumption by Chinese. Without attempting any detailed analysis we may make a few remarks on the basis of the material available. In 1939, for example, 2 million yen worth of condensed milk was imported, as well as 7 million yen worth of sake and 5 million yen worth of beer, not including local production of sake and beer. Neither sake nor beer are Chinese drinks; they are consumed chiefly by 100,000 Japanese male adults and by the troops stationed there. To take another example, in 1939 48.6 million yen worth of fabrics and clothing, including shoes, hats, gloves, buttons, pearls, combs, bracelets, laces, etc. were imported into Taiwan. From this amount 8.1 million yen worth of gunny sacks should be deducted, leaving a balance of 40.1 million. If Japanese residents were able in 1939 to spend 12 million yen on drinks (not including locally produced and consumed beverages), they probably spent not less than double this sum on clothing, shoes and other personal articles (1) which—with a [153] few unimportant exceptions—are imported from Japan.

1. That this is not an overestimate may be judged from the following figures: 77.2 yen per person per year or about 25 yen per family per month can hardly be considered as excessive for clothing (including shoes, etc.) in a country where, for example, one yard of muslin cost 1.34 yen. In a special investigation conducted in 1937-1938, which covered 355 Japanese families with 1,397 members, the average

monthly income of a family was 184.6 yen, of which 23.6 yen was spent on food, 16.9 yen on lodging, leaving an ample margin for clothing and other expenditures. (Data on budgets from the Toyo keizai tokei geppo, July, 1940). An investigation conducted in Japan proper in 1936-1937, only one year earlier than the investigation in Taiwan mentioned above, gives the average expenditure on clothing of 10.18 yen per month for persons with an average salary of 88.37 yen; for the low income brackets it was 3.43 yen, for higher (about 100 yen), 12.18 yen. In our case the average salary is 184.6 yen, so that an expenditure of 25 yen on clothing is quite probable. See Kakei chosa hokoku, (Naikaku tokei kyoku) Tokyo, March, 1938.

If this is true , then not more than 3 yen per capita were spent on imported clothing by the Chinese in 1939 (2). But, as was pointed out in the preceding pages, the Chinese

2. The correctness of our estimate is supported by the budget estimates made by the government officials in 1936 and quoted by Nasu (op. cit.). According to them, the per capita annual expenditure on clothing of a representative Taiwanese farmer was 6.02 yen in 1936. This figure includes imported and locally produced clothing (shoes, hats, etc.) whereas our estimate is for the imported textiles only.

society in Taiwan is not uniform. Its wealthier members spend on clothing many times more than the small farmers, workers, or tenants."

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans -1-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

8. Chen--441 [2] N-3 (no date) 1951 Formosans
116, 162, 241, 311, 511

"SIZE OF FARMS

The agricultural population of Formosa is constantly increasing, though the percentage has fallen a little. But the area of cultivated land cannot be extended; consequently, the farms are generally very small, as in the provinces of China proper; moreover, the inheritance system breaks up the farms and further reduces the average size. From 1936 to 1945 the total area of cultivated land in Formosa averaged 846,552 hectares, the number of farm families 448,474; thus each farm family had only 1.89 hectares of cultivated land. Although this seems larger than the average farm on the mainland of China, Formosan farm families average 6.7 persons, as compared with 5.4 persons on the mainland.

In 1939 more than 85 per cent of the farm families had less than the three hectares estimated necessary to maintain a comparatively reasonable standard of living (Table IV); and at present, because of the usurpations and annexations of the landlords, about 46 per cent operate farms of less than one hectare, of which 26 per cent are less than 0.5 hectare. The poverty in rural districts and the hard life of farm families are plain. Those who operate farms of more than 10 hectares are less than 1 per cent of the total number of farm families."

15: U.S. Navy--23 [10] (no date) 1944 Formosans
116, 167, 511, 609 Japanese
636.16

"Immigration of Japanese agricultural workers has been encouraged both by the Government, directly, and by the development companies in which the Government has large interests. Attempts have been made to establish agricultural villages here and there, in the hope that such settlements would help advance the assimilation and control program. These settlements have been a failure. Thirty-eight were projected, eight were actually established, and all had failed by 1910. The native Formosan-Chinese populace was too hostile and the competition in living standards too great for the Japanese immigrants to bear. A second colonization plan, begun in 1910, succeeded in establishing three villages with a total of 3,368 persons settled. These have not flourished, though they continue to exist. They now have fewer settlers than in 1910.

The Government has made several attempts to attract and establish Japanese fishermen, but with practically no success, despite the government subsidies granted to them."

15: U.S. Navy--24 (no date) 1944 Formosans
116, 484, 493, 511

"Any tendency to move about within the island is held to a minimum because of limited rail and bus services, the absence of private motor vehicles, and the absence of incentives other than commercial interest. An agricultural population which has no surplus of cash finds little reason to move about from place to place. The tourist or sightseeing traffic is from Japan Proper or created by the Japanese upper class who are resident on the island. Commercial traffic along the main railway lines consists of agents travelling from centers of production to the ports and marketing centers."

15: U.S. Navy--26 [12] (no date) 1944 Formosans
116, 511, 656, 177.65 Japanese
636.65

"The Japanese have immeasurably improved living conditions in Taiwan by systematically developing communications, public health measures, commodity distribution, agricultural planning and the like. Their efforts have been directed toward the improvement and control of the livelihood of the Formosan in order that he may better contribute to the total economic and strategic value of the island. Brigandage has been eliminated and the roads made safe. The whole organization of Formosan life has gone through much the same development and standardization that Japan has experienced since 1868, save that in Taiwan change has been an official policy executed methodically under police supervision with no regard to local opinion or tradition."

15: U.S. Navy--26-27 (no date) 1944 Formosans
116, 511

"With some compromises Caucasians find it possible to live in Japanese fashion and in better-class Formosan-Chinese [27] homes and temple hostelries, which are scattered among the foothills."

15: U.S. Navy--27 [2] (no date) 1944 Formosans
116, 556, 511, 596

"Among the Formosans there is little outward display although there are several notably wealthy families. The majority of Formosans are impoverished farmers, but the natural richness of the land, the favorable climate, the quality of the soil and the communal nature of the Chinese family system which permits the individual to share equally in the total goods of the family, combine to prevent such great extremes of destitution as are to be found on the China mainland only 90 miles away."

15: U.S. Navy -- 27 [6] (no date) 1944 Formosans
116, 454, 511, 556, 563

"As an indication of the relative wealth of individuals in Taiwan, it is notable that bank and postal savings deposits of Japanese in Taiwan are from seven to ten times larger than the average deposits of Formosans. It will be noted in the following table that per capita wealth increased rapidly until the outbreak of war between Japan and China in 1937.

Table 22: Average Savings per Depositor in Post Office Accounts

	1921	1929	1934
Japanese	¥33.3	¥51.0	¥146.5
	($15.98)	($23.96)	($44.27)
Formosan	¥8.2	¥16.6	¥14.2
	($3.93)	($7.63)	($4.29)"

15: U.S. Navy --27 [7] (no date) 1944 Formosans -1
116, 465, 511, 435, 556, 563

"Living conditions and the cost of living are intimately connected with the wage scale. Wages in Japan are two to three times higher than the wages of Formosans. For the skilled Formosan the average daily wage in the second half of 1938 was ¥1.13 ($.27) per day, and for the unskilled worker ¥.85 ($.17): figures based upon averages for sixty different categories. The Japanese official averages published for 1939 were ¥1.27 ($.33) for the Formosan-Chinese and ¥2.41 ($.625) for the Japanese laborer. The average Formosan family consists of five persons, who must depend upon these wages. As an indication of the cost of living and the standard possible, there is presented the retail prices of some commodities in Taihoku, in May, 1939, when the yen was worth $.2596:

Table 23: Retail Commodity Prices, Taihoku, 1939

Sweet potatoes per kin (1.3228 lbs.)	6.4 sen
Rice (first grade) " " "	11.0 "
Sugar " " "	29.0 "
Pork (av. quality) " " "	43.0 "
Fish " " "	18-22.0 "
Chicken eggs, each	6.0 "
Soap per piece	10-17.0 "
Matches, per box	1.4 "
Firewood (per 100 kin)	180.0 "

15: U.S. Navy --27 [7] (no date) 1944 Formosans -2
116, 465, 511, 435, 556, 563

Table 23: (cont.)

Miso (bean paste) (100 momme: 0.827 lbs.)	8.0 sen
Muslin, per yard	134.0 " "

15: U. S. Navy —27 [8] (no date) 1944 Formosans
116, 434, 511, 556

"The restrictions and rationing of food, clothing and fuel which have gone into effect throughout the empire, are felt more keenly by the Japanese because of their higher standard of living. A number of essential articles were unobtainable or only occasionally obtainable late in 1940 at Taihoku."

15: U.S. Navy--27 [10] (no date) 1944 Formosans
116, 465, 511

"The rapid advance in the cost of living and its adverse effect on living standards must be kept in mind when notice is taken of wages listed in the Economic Supplement."

15: U.S. Navy--27 [13] (no date) 1944 Formosans
116, 291, 511, 177.29 Japanese
636.29

"For years the Japanese have tried to encourage the wearing of Japanese clothing, or at least to abandon traditional Chinese dress for western style clothing. After the war with China began in 1937 the requirement was made mandatory, but had little or no effect. The population is generally too poor to change its entire wardrobe at the wish of the Japanese."

15: U.S. Navy--30 [7] (no date) 1944 Formosans
116, 565, 511, 105

"The worldly possessions of a coolie-class Formosan-Chinese, the day laborer of the towns and villages, consist of the blue cotton clothes on his back, and perhaps a change for special occasions, a loose smock-like upper garment and black trousers for his wife with an ornament and black headband to wear upon her head, similar clothes (though perhaps in white or light blue) for the younger members of the family, and the simplest of furniture in the house. A table, benches, one or two wooden springless beds, a brazier for cooking, together with chopsticks, bowls, a pot or two, some cups without handles, and the kitchen knives, make up the furniture. If the family can afford it, there may be a bicycle and a two-wheeled carry-all bicycle trailer called a 'riakka' (from the English 'rear-car'), which can be used for hauling an incredible number of objects, including the elders in the family, or livestock for the market. For those who cannot affort [sic] a bicycle, a simple shoulder pole with ropes and side baskets may suffice as professional equipment. For rainy weather, a coconut palm fiber raincape is worn, making the figure seem grotesque to unfamiliar eyes."

15: U.S. Navy--31 (no date) 1944 Formosans
116, 511, 177, 563, 342

"The Japanese have the highest average living standards. Insofar as their mode of living is concerned there is little to distinguish the Japanese here from the Japanese in the homeland, except that the wage scale of the former is higher. Without modification the Japanese retain their native style of architecture, which is admirably suited to a subtropical climate. A platform is raised about two feet over the ground. On it a layer of thick straw mats is laid. A tile roof is erected over this and the space between roof and floor enclosed by light planking and sliding panels of glass panes or paper."

15: U.S. Navy--32 [8] (no date) 1944 Formosans
116, 465, 511, 563

"The Formosan-Chinese can work at a lower wage-scale than the Japanese, but at the same time are supposed to be less efficient."

465 434 Roughly 85 per cent of the gross receipts of the laborers and self-employed are in cash, and 15 per cent in other allowances and payment in kind. For the civil servants, only about one-half is in cash. Payment in kind consists of rice, edible oil, salt, and charcoal. For instance, there is a monthly allowance of 66 pounds of rice to each laborer and each adult family member living with him, as well as one-half of that amount to each child under 10 years of age. The total rice allowance for each labor household, however, is restricted to 224 pounds per month.

511 The relatively low standard of living of the laborers is reflected by the pattern of household expenditures, of which food expenditure comprises the major portion. A breakdown of expenditures in 1952 for the 1,383 households surveyed is shown in the table below:

45; Stanford U. . S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

511

PERCENTAGE DISTRIBUTION OF EXPENDITURES ON SPECIFIC ITEMS - 1952*

	All Groups	Laborers
Clothing	8	7
Food	62	70
Medical	9	4
Religious and Social	14	11
Miscellaneous	7	7
Total	100	99#
Total NT $ of above items	5,484	3,712

* A. F. Raper and others, op. cit.

\# The percentage is given in nearest whole numbers; hence 99 instead of 100.

The above expenditures cover only a selected list of items and apparently do not cover expenditures for housing and various other items. When these money expenditures are deducted from the 1952 gross income, the residual amount would average NT $200 for all the groups, and NT $114 for laborers. The residual amount is not enough to provide for adequate housing for the workers whose employers do not provide free housing, to say nothing of taxes and other daily necessity items not covered in the survey list.

423 The benefits of the rent-reduction program
427 are noticeable in the improvement of the
511 tenant farmers' living conditions. The saving in rent payments, amounting 25-30 per cent of their gross income, can now be used to buy new clothing for their families, to send their children to school, to repair their houses, or to purchase farm land. They also work harder
423 because any inc reace in production accrues to
433 them. This factor contributed to the substantial annual increase of rice production from 1949 to 1954.

Production of Unhulled Rice*

Year	Metric Tons
1949	1,215,000
1950	1,421,000
1951	1,485,000
1952	1,570,000
1953	1,642,000
1954	1,695,000

* Taiwan Economic Data Book, compiled by FAO Mission to China, Part II, Vol. III, March 1955, Taipei, p. 5. The average production of rice per hectare increased from 1,624 kilograms in 1949 to 2,183 kilograms in 1954. Central Daily News, Oct. 22, 1955, p. 3.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER III

Economic Activities and Social Change

THE activities, interests, and aspirations of the Japanese community in Taiwan were things that existed apart from the indigenous population. These elements were never effectively communicated to the Taiwanese—partly through a design to withhold them, and partly through reluctance among the people of Taiwan to accept them. Consequently the conduct of Japanese residents is not of much help in understanding the accustomed modes of life among the island's people. It is the latter problem that has the more interest for demography, and makes it essential to consider the background of social order in Taiwan and the changes under colonial rule.

The Early Agrarian Order in Taiwan

The importance of agricultural pursuits in imposing a predominantly agrarian character on a society is not a thing that can be precisely measured. Short of perfect exactitude, a great deal can be learned with lesser devices, by describing the cultural setting of agriculture in Taiwan, and pointing out how it influenced the participation by Taiwanese in the island's economy. The basis of this setting lay in the conditions that prevailed before Taiwan became a colony of Japan.

By the mid-19th century, the lowland region of Taiwan was rapidly becoming fully settled. Piracy, which had made Taiwan a scourge to sea traffic along the China coast, gradually subsided into sedentary agriculture. Most of the Chinese population was already supporting itself by farming and the marketing of farm products. Since 1700 immigration had brought in a steady stream of Chinese from the mainland. In spite of sporadic prohibitions, hundreds of thousands of peasant farmers came to seek refuge from rural poverty in South China. Once arrived, they often reverted to this same condition, by reaching unfavorable terms with some of their countrymen already entrenched there as land speculators.

Poverty tended to reproduce itself among those who reached Taiwan, though there was also great wealth open to the few who rose from cultivation to commerce. Each settled family held an advantage over newcomers. This superior position placed new migrants in

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652 Thus far, the provincial budgets have been balanced in recent years. How long the improved financial outlook will continue depends on a number of factors. Undue strain on provincial resources has been avoided by using assets brought over from the mainland and by selling government properties. Indirect benefits derived from the Economic Co-operation Administration program, which for the fiscal year 1951 amount to approximately US$40,000,000, help to arrest the inflationary trend of commodities.[29]

Living Conditions

511 In the absence of comprehensive statistics establishing the trends of per capita income in Taiwan,[30] the Nationalist policy of improving the people's livelihood may be reflected by the measures which have been taken regarding agriculture, industry, food, and other government-operated productive services

Agriculture

[162] 427 Farming population in Taiwan is estimated to be around 3,800,000. Of this number, 70 per cent are under contract as tenant farmers. Prior to the enforcement of the rent reduction program in April 1949, which set a maximum rental ceiling of 37.5 per cent, the average rental ranged from 46 to 62.5 per cent of the total yield.

In administering the rent reduction program, the provincial authorities fix a standard yield per *chia* (less than 2.5

[29] "Economic Administration Program in Taiwan," an address by Raymond T. Moyer, chief, ECA, China Mission, before the Chinese Association for the United Nations, March 17, 1951.

[30] Premier Chen Cheng states that per capita income in Taiwan has risen 30 per cent since the termination of Japanese rule (Broadcast of the Voice of Free China, Taipeh, May 12, 1951). Also estimated income in Taiwan for 1950 is NT$1,276,000,000 and for 1951

[P. 218 (A)]

15: U. S. Navy--28 [4] (no date) 1944 Formosans
116, 342, 353, 513

"Certain features are common to the majority of country houses in Taiwan. The usual construction takes the form of three units, a main room or building, with two wings closely adjoining to form three sides of an open courtyard. The doors and windows opening on this court are larger than the few doors and windows opening on the outer side, and these latter are usually closely barred. The main room or building is open to the roof and contains the altar bearing the ancestral tablets and perhaps a small shrine. Immediately behind the altar or in rooms opening into the main room, the eldest members of the family sleep and keep their personal effects. Passages to right and left lead to kitchen rooms and the sleeping and living quarters of other members of the family."

744 trunk lines, which empty into open canals. Most
362 urban centers have a system of high-level canals bringing in fresh water, and another network of low-level canals carrying away waste water. However, it is a common sight to see children swimming and women washing clothes or vegetables in low-level canals. Often garbage, night-soil, and other refuse are dumped into the fresh-water canals. Some municipal authorities are now considering elimination of open sewage systems with all their disadvantages, but the enormity of the job and financial difficulties preclude any immediate fulfillment of such plans. For instance, the municipality of Taipei is contemplating the construction of an underground drainage system costing hundreds of millions of Formosan dollars and requiring more than ten years to complete.[12]

744 The scarcity of chemical fertilizers and the
514 average farmer's lack of financial resources necessitates the use of all organic refuse materials from human and animal sources to enrich the soil. The consumption of raw vegetables fertilized by unprocessed night soil is a primary cause of the spread of intestinal diseases. In addition the use of night soil presents problems of collection and disposal. In cities, human excrement from one or more households is often stored in water-tight vaults. The contents are periodically emptied by

11. E. A. Turner, "Environmental Sanitary Conditions in Taiwan," Chinese American Economic Cooperation, Volume II, No. 2, Feb. 1953, pp. 51-65.

12. Central Daily News, Jan. 11, 1955.

744 364 long-handled dippers into wooden buckets and carried to collectors' carts for transportation to reservoirs outside the city. There the night soil is sterilized before being distributed to rural areas. In the countryside, human excrement is usually taken directly from the privies and applied to the soil without processing.

744 364 Refuse of all kinds is extensively utilized. Private or municipal collectors of refuse carefully sort waste material to salvage and resell as much of it as possible. Organic waste is used for composting fertilizer; paper, rags, glass, and metals are sold for scrap. While waiting for disposal, the compost piles and junk heaps provide breeding places for disease, rats, and insects. Other breeding places for diseases and their carriers are provided by waste accumulation in the streets and back yards of cities; the number of workers engaged in the collection and disposal of night soil and refuse is insufficient for prompt waste disposal. In Taipei, for instance, while the population was doubling in the 1950-54 period, the number of night-soil collectors [13] increased only from 410 to 428. However, under the cooperative efforts of the American MSMC, the JCRR, and government agencies, more efficient and sanitary methods for the collection and disposal of waste materials are being adopted.

744 The problem of sanitation is complicated by public ignorance concerning it. Although the people

13. The Central Daily News, Jan. 21, 1955.

15: U.S. Navy--28 [3] (no date) 1944 Formosans
116, 515, 735, 744, 177.74 Japanese
636.74

"General standards of personal cleanliness are not high, but the universal shabbiness must be attributed to poverty rather than to sheer neglect. The principles of elementary hygiene are not widely understood. The Japanese have been making some progress in establishing habits of public cleanliness and have been trying to introduce new measures of household hygiene (careful disposal of waste, daily bathing). The problem is very great, however, among six million people. Although general standards are lower than the average in America, they are as high as standards maintained in backward districts in the South or in city slums, and are infinitely better than standards existing among Chinese villages on the China coast across the Straits of Taiwan."

31: Hofmann--605 [2] N-3 (1909) 1912 Formosans
116, 515

After visiting some Chinese farms, I cannot quite agree with the statement made by almost all observers that the Chinese are extremely dirty.

15: U.S. Navy--30 [8] (no date) 1944 Formosans
116, 241, 516

"There are many folkways and habits among the Formosan-Chinese which are of no importance administratively but which attract the attention of strangers on the island. These include the practice which farmers have of kneeling in the muck of the paddy fields and advancing through the rice rows on their knees, planting or weeding, instead of standing and bending or stooping to plant."

15: U.S. Navy --22 [5] (no date) 1944 Formosans
116, 517, 526, 547

"Except for sports sponsored as physical education at the schools, there can be said to be no formal recreational activities among the Formosan-Chinese. They are all too busy making a living. Amusement is found at the motion picture theaters and (for the men) in the cafes of the towns. Only a very few who have had advanced education are interested in or have opportunity for sports such as tennis, swimming, hiking, etc."

241 on the island work every day of the year. The
461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

177 A majority of city dwellers have running water and electric lights. Most families in the cities own sewing machines and bicycles. As the islanders acquire Western conveniences and possessions, their patterns of living take on the configurations common to the occidental world.

526 Sports -- soccer, basketball, and baseball -- are popular among the younger generation. A Formosan basketball team toured the United States and countries in Southeast Asia in 1955. A soccer team from Formosa is to participate in the Olympics in Australia.

524 Mah-jongg and chess, traditional games
517 of the leisured class, have retained their popularity among the older generation. The young favor motion pictures and dancing.
517 Government officials and wealthy persons of
529 other classes take their families to one of the numerous scenic resorts or hot springs in

517 northern Formosa for a country weekend.
529 Only the poor have little time, money, or leisure for these pastimes. But the workers
517 in the cities amuse themselves by playing upon the hu-ch'in, a two-stringed fiddle, or singing folksongs, as well as granting themselves a short holiday at the time of local festivals. For rural workers, a shopping trip to a nearby city affords the greatest pleasure and provides them with subjects for idle talk when they have opportunity to visit with neighbors.

E. Annual Festivals

527 The primary recreational outlet for the people of Formosa is active participation in public festivals. The majority of Chinese festival days are observed on the island, particularly in the rural districts. The New Year is a time of family reunion as well as a time to propitiate the gods and do reverence to the dead.[5] The festival lasts for fifteen days, and daily offerings are made to the household gods and to the family's ancestors.

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5. The festivals are celebrated according to the lunar calendar, which lags about one month behind the Gregorian calendar.

15: U.S. Navy--29 (no date) 1944 Formosans
522

"A good measure of ribaldry and earthy humor accompanies these [MC: marriage] feasts in proportion to the amount of alcohol consumed."

241 on the island work every day of the year. The
461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

177 A majority of city dwellers have running water and electric lights. Most families in the cities own sewing machines and bicycles. As the islanders acquire Western conveniences and possessions, their patterns of living take on the configurations common to the occidental world.

526 Sports -- soccer, basketball, and baseball -- are popular among the younger generation. A Formosan basketball team toured the United States and countries in Southeast Asia in 1955. A soccer team from Formosa is to participate in the Olympics in Australia.

• 524 Mah-jongg and chess, traditional games
517 of the leisured class, have retained their popularity among the older generation. The young favor motion pictures and dancing.
517 Government officials and wealthy persons of
529 other classes take their families to one of the numerous scenic resorts or hot springs in

15: U.S. Navy--30 [10] (no date) 1944 Formosans
116, 525, 565

"Coolies and rickshaw men indulge an inordinate fondness for gambling, and gather together in small groups to play a game with pebbles not unlike the game of 'craps'. The Japanese have attempted to discourage the pastime, but with little success. The stakes are very small but they frequently represent all of a day's wages."

15: U.S. Navy --22 [5] (no date) 1944 Formosans
116, 517, 526, 547

"Except for sports sponsored as physical education at the schools, there can be said to be no formal recreational activities among the Formosan-Chinese. They are all too busy making a living. Amusement is found at the motion picture theaters and (for the men) in the cafes of the towns. Only a very few who have had advanced education are interested in or have opportunity for sports such as tennis, swimming, hiking, etc."

15: U.S. Navy--22 [6] (no date) 1944 Formosans
116, 526, 177.52 Japanese
636.52

"There is a traditional form of Chinese boxing which has been discouraged by the Japanese because of its 'un-Japanese' character. It is in fact much like Japanese judo of which it is the ancestor."

40: Kirk--24 [2] S-2 (no date) 1941 Formosans
116, 207, 526

"Men, women, and children among the Japanese, wherever the radio is heard, follow the physical exercises which are designed to promote health and increase their stature. Morning, noon, and night the people are supposed to take advantage of setting-up drills. One of the most impressive sights in Taihoku, the capital, is the ten-to-fifteen-minute daily workout which employees of all ranks in the government offices take at twelve o'clock, just before eating their noonday meal."

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461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

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517 northern Formosa for a country weekend.
529 Only the poor have little time, money, or leisure for these pastimes. But the workers
517 in the cities amuse themselves by playing upon the hu-ch'in, a two-stringed fiddle, or singing folksongs, as well as granting themselves a short holiday at the time of local festivals. For rural workers, a shopping trip to a nearby city affords the greatest pleasure and provides them with subjects for idle talk when they have opportunity to visit with neighbors.

E. Annual Festivals

• 527 The primary recreational outlet for the people of Formosa is active participation in public festivals. The majority of Chinese festival days are observed on the island, particularly in the rural districts. The New Year is a time of family reunion as well as a time to propitiate the gods and do reverence to the dead.[5] The festival lasts for fifteen days, and daily offerings are made to the household gods and to the family's ancestors.

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5. The festivals are celebrated according to the lunar calendar, which lags about one month behind the Gregorian calendar.

527 Members of the family who live at a distance revisit the home. Poorer families, who seldom eat meat during the year, have feasts during the New Year's festival, even if it means slaughtering the family pig or a number of hens.[6] Formosans also celebrate the Dragon-boat Festival on May 5 and the Moon Festival on August 15. The birth of Confucius, the birthday of Dr. Sun Yat-sen, and the anniversary of the founding of the Chinese Republic are national holidays. Government offices and schools are closed and there are memorial ceremonies.

574 The family itself celebrates marriages and births with elaborate feasts for relatives and friends. Funerals are also a time for large gatherings; a feast is usually provided for those who walk with the procession and attend the rites of burial.

796 Many religious ceremonies provide additional opportunities for celebrations. A day devoted to Matsu, goddess of travel, is remembered. Her traditional importance to the Formosans may be attributable to the protection she offered those who made the

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6. Low-income groups eat little meat except at festival times. Raper, op.cit., p. 274.

465 Overtime is paid at time and a half. National holidays are observed.[4] Actual practice, however, diverges from the above provisions in some cases. National holidays are only generally observed. In government agencies and enterprises, banks, schools, and other public institutions the eight-hour-day principle stands. However, in most mines and factories 10 hours or more a day and 6, 5 to 7 days a week are usually the rule.[5] Low wages force employees to work long hours.

Wage payments include money wages, payment in kind, and in most cases free housing. However, the level of wages is low, and workers' receipts are generally inadequate to meet their necessary expenditures. A survey made by the FOA Mutual Security Mission revealed recently that nearly half of the workers in a coal mine were in debt, and 48 per cent of the money borrowed was spent on food.[6]

•527 4. National holidays include: January 1, Founding of the Republic of China; March 29, Martyr's Day and Youth Day; August 27, Birth Day of Confucius; October 10, "Double Tenth"--National Day; and November 12, Dr. Sun Yat-sen's Birthday.

000 5. China News Press, Chung-hua Nien-pao, 1953 [China Annual, 1953], Taipei, 1954, Vol. II, p. 115.

6. FOA Mutual Security Mission to China, Project Evaluation Office, unpublished pamphlets based on 1954 survey.

9: Yamasaki--224 [3] N-5 (1896-1897) 1900 Formosans
116, 133, 135, 529

In the valley of Kōkei, between the three volcanoes described above, there is a large solfatara. It is situated exactly on the border between the volcano and the Tertiary hill whose slopes rise very steeply opposite the former and rather gently on the other side. Here we are doubtless confronted with a break in the Tertiary range through which the solfatara made its way. It has a considerable area, and many people work there gathering sulphur. Not far off there is a bog from which many hot sulphur springs rise. These springs flow out through a gulley and form a cheerful brook with some water-falls, and here a spa has been built. The surroundings of the Hokuto spa are very pleasant and attractive, and it is now the favorite recreation center for the citizens of the capital of Taihoku, who can reach it after a journey of one and one half hours.

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461 growing industrial society, however, allows one day of rest each week, and office workers and shopkeepers are accustomed to a long lunch recess in the European fashion.

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Annex "A," Subparagraph 1i,
Sociological Background

ARTISTIC AND INTELLECTUAL EXPRESSION

53 In its course of change, Formosa has evolved from a primitive folk society to a comparatively modern society, and in the process, its artistic and intellectual expression, derived from traditional Chinese culture, has been strongly influenced by Western civilization. The most noticeable transformation occurred during the 1920's, following hard upon marked changes in Formosan economy and ways of life.

I. TRADITIONAL EXPRESSION

Before 1920, literary and philosophic thought, calligraphy, painting, music, and drama followed traditional patterns of artistic and intellectual expression brought to Formosa from the China Mainland. There are few examples of artistic or intellectual expression distinctive to Formosa.

Literary and Philosophy Thought. In Formosa as in China proper, literature and philosophy were the provinces of the scholar-official (mandarin) and scholar-gentry classes, who had sufficient education and the leisure to seek opportunities for the expression of ideal forms of culture

53 and good taste. Theirs remained private arts, practiced for pleasure, and had little to do with the common people, who may have respected these activities but did not understand their value.

Some scholar-officials of the Ming Dynasty (A.D. 1368-1644) came to Formosa during the rule of Koxinga (see chapter on Historical Setting). To provide diversion in this outpost of civilization, they formed literary groups and poetry associations. Some of their works have been preserved. During the Manchu Dynasty (A.D. 1644-1912), the mandarins continued to devote their leisure time to literary activities, and Formosans aspiring to the class of scholar-officials began to participate in the various intellectual movements. Of the chronicles that remain, a series of studies of the various prefectures, documents comparable to our present-day regional surveys, are of particular interest. Poetry associations continued to flourish until the later years of the Japanese rule in Formosa, when the scholar-official class began to lose its place in the modern community.

Fine Arts. The scholar-officials and scholar-gentry also made painting and calligraphy their provinces. There were no professional artists as we know them. Painters, sculptors, and architects skilled in building temples and mansions were looked down upon as artisans, gifted members of the lower classes.

Music. The gentry cultivated certain skills in music, composing and playing traditional instruments for private enjoyment or as a mark of accomplishment. Among the lower classes, the

• 53 the usual folk music, unwritten and passed from generation to generation, was extremely popular. Professional musicians formed a part of the Formosan society and were called upon to perform at funerals or entertained the guests following the marriage rites. They had a low social status. Sacred music as well as dances of a religious nature were performed at annual festivals and consecrated to the memory of Confucius.

Drama. Traditional Chinese drama, which flourished on Formosa, is akin to the Western opera. Songs and speeches were performed in mandarin Chinese, and although most native Formosans did not understand mandarin, they patronized the opera. More popular than opera was a kind of folk show, using local dialects and stemming from religious ceremonies in much the way Western drama developed from religious processions and the re-enactment of religious themes. Puppet shows, similar to those seen today in Java, also played a part in the island's entertainment. Actors and players were considered mountebanks, amusing and irresponsible members of the community.

Folklore. Myths, legends, folktales, folksongs, proverbs, and riddles popular on Formosa resemble those common in South China, which in turn have their equivalents in every culture. Local names and local heroes are substituted.

II. CONTEMPORARY EXPRESSION

• 53 Modern artistic and intellectual expression are carried on by professionals and semi-professionals who enjoy popular respect if successful. However, even as recently as the 1920's the young who wished to make a career of poetry, painting or music were dissuaded by their families or faced disapproval and strong opposition. It remained a distinction for the family if a young man chose to become a teacher.

Primary and secondary schools on Formosa have fostered an interest in the arts. Missionaries from the Western countries have sometimes encouraged artistic activities, and performers and exhibits from Japan and the Western countries sometimes came to Formosa. Advanced study in any of the arts usually required trips to Japan and China. Later, some centers of artistic and intellectual activity were formed on Formosa, and often they became an integral part of political and social movements. Politically speaking, the development of native centers was a protest against Formosa's status as a colony; socially, it was a criticism of traditional culture, and was stubbornly resisted by conservative elements. The young were attracted to the new culture which looked to the West for inspiration and guidance.

Literature. The magazine Taiwan Youth (later changed to Taiwan) was first published in July 1920 as an organ for literary and cultural

53 expression. Printed in Tokyo, it was subject to strict censorship. It continued monthly publication until May 1924. In 1923, a fortnightly journal, Taiwan People's Journal, began publication in Tokyo. Later, it became a weekly magazine, and in August 1927 the colonial government permitted the offices of the journal to move to Formosa. In 1932 it became a daily newspaper. These magazines were chiefly concerned with articles on current political, economic, and social problems, although space was allotted to literature and the arts.

A controversy over language and style was in progress during 1922-24. The magazine Taiwan included articles in Chinese and Japanese, but rising national sentiment urged the exclusive use of Chinese so that an increasing number of Formosans interested in the new cultural movement might benefit. However, because traditional Chinese style was antiquated and not suitable for the exact expression of the new culture, a popular style, which made no distinction between the spoken and the written word, came into vogue. "Popular Chinese" was already in use on the Mainland, and in 1923 the Taiwan People's Journal was published only in Chinese.

The "new style" demanded a change in concepts and values, and conservative intellectuals were not in favor of so radical a departure from established mores. Disputes continued through the 1920's, although by 1925 modern translations of Western and Japanese literary works had begun

53 to appear, and by 1927 many Chinese works in the new vernacular were read in Formosa.

Hitherto the Taiwan People's Journal and the magazine Taiwan had been the only outlets for literary works; after 1930, various literary groups were formed and a number of literary journals were published. In 1935, these groups were united under the leadership of the Taiwan Literary Federation.

When the Japanese invasion of North China began in June 1937, publishers in Formosa were forbidden to use the Chinese language. Censorship of all literary activities was strictly enforced. Expressions of national sentiment were forbidden, and artists were forced to confine themselves to minor themes involving local manners and customs.

Fine Arts. Japanese teachers in secondary schools encouraged an interest and talent for water colors and oil painting. In the 1920's, talented Formosans went to Japan to continue their training, and many associations of artists were formed. In 1927, the Taiwan Educational Association sponsored a semi-official art exhibition. In 1938, the government undertook sponsorship of the exhibition and continued it until 1943. Both Japanese and Formosans participated in these exhibitions under government sponsorship. A federation of artists was established in 1934 and continued the promotion of native arts until 1944.

Ideological content is less evident in the fine arts and in music than it is in works of literature, and for this reason censorship of paintings

• 53 was not strictly enforced. During the period of Japanese rule, and especially during the years of the Japanese invasion of Mainland China, when artists in other fields were silent, music, sculptur and painting flourished on the island.

Music. Talented young Formosans received their musical training in Japan during the 1920's. In 1934, a group of musicians banded together to give concerts. In 1936, for the relief of earthquake victims, a fund-raising concert team was organized to tour the island.

Drama. Stimulated by the activities of the Japanese on Formosa and by students who had observed the rise of new dramatic forms on the China Mainland, native troupes organized a drama movement in 1923. Members of the Taiwan Cultural Association gave equal emphasis to the artistic value and the enlightenment value of drama. The leader of the new dramatic movement, Wei-hsien Chang, went to Japan in 1928 for further theatrical training. Upon his return, he organized a dramatic school. In 1934, a drama festival open to both Japanese and Formosans marked the peak of dramatic activity on the island. Since that time, dramatic art has languished.

Dance. The performances of visiting Japanese and Western dancers in Formosa acted as a stimulus to the Formosans. Japanese teachers conducted classes in ballet, and many Formosans went to Japan for extensive training.

814 Intellectual Activity. The Japanese colonial government encouraged training in medicine, agriculture, and management in order to increase the number of technical personnel for local industry. Training in the humanities and the social sciences was not encouraged, since these endeavors might tend to awaken national consciousness. But many Formosans persisted, migrated to Japan and China for additional training, and returned to publish in various academic journals. Few positions were open to graduates in the humanities and the social sciences, and there is little evidence of collective activity in these fields, although some intellectuals formed small groups.

III. POSTWAR EXPRESSION

• 53 After Formosa was restored to China in 1945, artistic and intellectual activities received a new impetus from the abandonment of cultural restrictions imposed by the Japanese. They have continued to increase as the result of the great number of artists and intellectuals from the Mainland who have taken refuge in Formosa. Participation in various groups has grown steadily. This is particularly true in the fields of literature.

The revival of traditional drama, opera, and native music is underway, and all forms of artistic expression are studied. Motion pictures, particularly those imported from the United States are popular. A provincial orchestra has been forme and often broadcasts. An annual art exhibition has been established by the provincial government.

A02

•53 The China Literature-Arts Prize Committee awards cash prizes to writers and composers who show evidence of talent; prizes are apt to go to those who use anti-Communist themes or offer works encouraging the awakening of national consciousness. Prizes are awarded to poets, novelists, dramatists, and composers. One of the more important organizations for the promotion of literary and artistic activities is in the China Literature and Arts Association.

31: Hofmann--603 N-3 (1909) 1912 Formosans
116, 366, 543, 657, 177.65 Japanese
636.65

During my stay of one week in the capital and the neighboring regions, I was greatly impressed by the energy with which the Japanese had stimulated the culture of Taihoku. There were extensive government buildings, broad streets, water pipes, schools, barracks, hospitals, reformatories, railroads, telegraph and telephone connections; everything, in short, that is considered representative of western culture. Everywhere there are signs of Japanese patience, energy, and initiative which form a striking contrast to the confusion and negligence of the Chinese regime. There is a museum in Taihoku which is well worth seeing, with an extensive collection of the abundant fauna and flora of this island; it is because of the copious vegetation that Formosa for so many centuries has been the cynosure of all those nations who sought to expand their boundaries. There is also a botanical garden where a large number of useful and interesting plants has been systematically arranged and it is calculated to impress any visitor to the tropics. There is one hotel in Taihoku which, judged even by European standards, is excellent; it offers all the comforts of a tropical hotel.

11: Haguenauer--27 [2] T-3 (no date) 1929 Formosans
116, 545

If you leave the large arteries, [MC: of Taihoku] you hear the din of the restaurants and small theatres, and occasionally, in a side street, the monotonous chant of a singer who is accompanying herself on the p'i-pa.

207 The China Broadcasting Company, which manufactures inexpensive radio receivers from parts imported from Japan, estimates that the number of radios in Formosa is under 300,000. The reason for the small number of radios is twofold: the poverty of the people and the uneven distribution of electric power in rural areas. In a survey made in 1952 by the Joint Commission on Rural Reconstruction, it was found that the farmers could not afford to purchase radios costing over NT$150 (US$10), while only 25 per cent of the 800,000 farm families have electricity in their homes.[8] However, the value of radio as an educational medium is fully recognized. There have been various proposals to encourage the farm families and the people of moderate means to own radios. In 1954, the Joint Commission on Rural Reconstruction distributed 5,000 receiving sets to farmers.

MOTION PICTURES

• 546 Motion pictures constitute the greatest diversion for the populace on Formosa. On

8. Chinese-American Economic Co-operation, Taipei, U. S. Mutual Security Agency Mission to China, Vol. 1, No. 7, July 1952, pp. 46-51.

546 a day selected at random, fifty theaters were advertised in the Taipei Central Daily News.[9] There were twelve theaters in Taipei alone, of which one was showing a Chinese motion picture produced in Hong Kong, two were showing Japanese pictures, and the rest were showing American films. Among the educated class, American pictures are popular, but with the masses, as a result of the language difficulty, Japanese pictures are preferred. In 1954 motion pictures accounted for a remittance total from abroad amounting to $1,500,000 in American currency.[10]

There are three local motion picture studios. The China Motion Picture Company produces pictures for the armed forces, and the Taiwan Motion Picture Company is operated by the Information Department of the Provincial Government. Both of these studios are devoted to the making of newsreels and documentary films. The third company, The Central Motion Picture Company, produces a few features for local consumption as well as for showing in places where there is a

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9. The Central Daily News, Taipei, August 27, 1955.

10. China Annual, 1954, p. 93.

546 large Chinese colony. The information office of the Mutual Security Mission to China surveyed in 1952 the number of movie projectors in rural areas.[11] It was found that 212 primary schools, 23 middle (or secondary) schools, and 64 Farmers' Associations owned movie projectors. Most of these are designed to project 16 mm. silent films. It should be noted that, of those reported, 121 projectors are but rarely or never used.

208 A majority of the people on Formosa live
546 in rural areas where transportation facilities are poor and accessibility to public information is difficult. In view of the limited circulation of the newspapers and the small number of radio receivers owned by the villagers, greater use could be made of lantern slides and short films as media of public information. The Joint Commission on Rural Reconstruction made a few documentary and educational films in 1953 and 1954. It reports: "These films, which are shown free to the farmers throughout the island, constitute one of the most effective means of rural publicity and one of the most popular information services of the JCRR."[12]

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11. Chinese American Economic Cooperation, Vol. I, No. 7, Taipei, July 1952, pp. 51-52.

12. JCRR General Report IV, Taipei, 1954, p. 196.

208 Another useful medium of publicity is the
546 pictorial poster, which may be distributed by mail or by carriers. It is found that the rural people welcome these posters and use them to decorate the interior of their homes. Hence the posters possess more permanent propaganda value than either the newspapers or radio broadcasts.

15: U.S. Navy --22 [5] (no date) 1944 Formosans
116, 517, 526, 547

"Except for sports sponsored as physical education at the schools, there can be said to be no formal recreational activities among the Formosan-Chinese. They are all too busy making a living. Amusement is found at the motion picture theaters and (for the men) in the cafes of the towns. Only a very few who have had advanced education are interested in or have opportunity for sports such as tennis, swimming, hiking, etc."

4:Grajdanzev--174-175 S-4 (no date) 1942 Formosans
116, 164, 177, 548

"Before the coming of the Japanese, prostitution was practically unknown (1). In [175]

1 Franck, H. A., Glimpses of Japan and Formosa, 1924. pp. 178-181. The author quotes also the testimony of a Spanish missionary who spent many years in Formosa.

1938 out of 45,582 examinations of licensed prostitutes by the police 4.26 per cent were found to be victims of these diseases (2). Beside these licensed prostitutes (who do their

2. The officials mention that in Japan only 2.15 per cent of the prostitutes are infected.

part in contributing to the state treasury) there are an unknown number of unlicensed prostitutes who from times to time are caught and examined by the police. In 1938 more than one thousand of these were examined, 31.6 per cent of whom were infected. The difference between these two groups is explained very simply: those among the licensed who cannot be cured enter the ranks of the unlicensed."

15: U.S. Navy --21 [6] (no date) 1944 Formosans
116, 548, 563

"Japanese men very rarely legalize relations with Formosan women. So great is the antipathy toward intercourse with Formosans that the Japanese preferred to import girls from Japan Proper and Korea for the licensed quarters and cafes and dancehalls which once flourished."

15: U.S. Navy --26 [9] (no date) 1944 Formosans
116, 732, 759, 548, 874, 177.73 Japanese
636.73

"Schools for the blind, the deaf, and the dumb are maintained at Government expense at Taihoku and Tainan. In addition to instruction in Braille, pupils are taught various skills, of which the most important are weaving, chiefly of panama hats, and massage. Graduates of the school who have passed the required masseur's examination are licensed to practice, and are assigned districts or routes over which they go every evening from nightfall until midnight, with a whistle or pipe and a tune peculiar to each masseur. They travel, both men and women, in pairs or with a small child or elder person as a guide. Many are not wholly blind, but qualify to practice. Sometimes they work at home or in shops at various tasks during the day, making the evening work as a masseur a supplementary livelihood. Many Chinese hotels or lodging houses have masseurs regularly employed. A certain amount of illegal solicitation for prostitution is carried on by them as well as by the masseurs who travel a regular beat through the city streets."

587 Second marriages are usually looked down
586 upon, but in order to perpetuate the family line a childless widow may marry again. Divorce, although the rate has been increasing in recent years because of financial difficulties and the growing independence of women, is not as serious a problem in Formosa as it is in the United States. Formosa's divorce rate in 1953 was as low as 0.45 per 1,000 population, as compared with a rate of 2.48 per 1,000 population in 1951 in the United States.[15] For good or ill, a popular adage that a virtuous woman does not marry twice is often repeated, and a divorcee rarely finds opportunity for a second marriage.

582 The average age at which men and women marry is reported to be rising. Among young men of urban areas, marriage is often delayed because of financial difficulties. The adoption of daughters often poses a social problem.
597 The old notion that a daughter may be bought
548 or sold like a commodity remains among some uneducated people. Although the purpose of such adoptions may be that of securing a young companion or maintaining the family lines,

15. United Nations, Demographic Yearbook, 1953, New York, 1953, pp. 276-77.

597 many people adopt girls to be employed as
548 servants and, in a few extreme cases, adopt several girls in order to derive profit from their prostitution. A recent household registration indicates that there are about 135,000 adoped daughters on the island, of which abdut 100,000 are said to have been adopted for the purposes mentioned above. They are less
597 daughters than bonded servants, and may be sold or traded frequently and forced to serve in cafes or to engage in prostitution.[16] Many cases of incest and abduction and suicide pacts involve young women who have been "adopted" in this manner and innocently cause the disintegration of a household. Recommendations, however, are being made for correction of this abuse.[17]

V. FAMILIAL SETTING OF THE ABORIGINES[18]

596 Family cohesion within aboriginal families is probably as strong as that in Formosan families.

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16. Hsin-she-hui Yüen-k'an [New Society Monthly], VIII, 7, Taipei, July 1955, pp. 1-28.
17. Ibid.
18. Sainosuke Fujiksaki, Taiwan no banzoku [Savage Tribes of Taiwan], Tokyo, Kokushi kankokai, 1936, Part II, Chapter 4; Part IV, Chapter 4; Part V, Chapter 2; and Part IV, Chapter 3.

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-1-3
116, 553, 563, 723, 177.65 Japan
636.65

"In any case. the Japanese government understands the abnormality of the situation [i.e. the unexpressed and expressed hostility of the people of Taiwan toward the Japanese--analyst] and the dangers connected with [192] it. To this 'domestic' consideration a special consideration of grand strategy is added. The militarists of Japan realize that the successful management of the Eastern Asia Co-prosperity sphere cannot be realized without the goodwill of at least some groups of the local population. They plan to retain the semifeudal organization of the Dutch Indies, Thailand, Malaya, etc., but to supplement it on the one hand with direct control over rajahs, sultans, chiefs and so on, on the other hand with an indirect control through the Chinese. In each country of Southeastern Asia there are millions of Chinese, chiefly of Kwangtung and Fukien origin. Their numbers could be easily increased, because through administrative measures their immigration has been kept down. In some countries only a very small number were admitted annually; in other permits to immigrate were given more or less freely, but on condition of payment of a very high head tax. The Japanese can easily double or treble the number of immigrants, putting as the only condition of migration a guarantee of the 'political reliability' of the emigrant. The Chinese have played an extremely important part in the economic life of the countries of Southeastern Asia. This part would be greatly increased on the one hand through repeal of certain limitations upon the activities of the Chinese, on the other hand through the systematic financial assistance given by the Japanese banks to the Chinese businessman, especially to middlemen. Of

course, the activities of the Chinese would be controlled by the Japanese, and here the Chinese from Taiwan come into the picture. Many of them beside their own native language speak Japanese also. The number of such persons can be easily increased, especially if the youth of Taiwan knows that lucrative positions will be opened for them. Thus, two lines of control can be used: on the political side—local population—rajahs—the Japanese commissioners—Tokyo; on the economic side—local population—Chinese middlemen controlled by the Taiwanese or with the help of the Taiwanese—the Japanese monopolistic concerns. The local population will be then thoroughly con-[193] trolled by the Japanese; on the other hand it will be racially divided and unable to present a united front against its masters. The Chinese will know that their interests and privileges depend upon the favor of the Japanese, their economic interests will oppose the interests of the local population. The Japanese militarists hope in this way to reconcile the native population of the island to alien rule. They declare that the greatest immediate problem in respect to the Chinese population of the island is kominka or turning them into imperial people, or more simply, some kind of assimilation. A campaign for the spread of the Japanese language is being conducted; the Chinese are encouraged to change their names into Japanese; various patriotic and chauvinistic societies have been established in order to influence the mind of the Chinese youth. One should not conclude from these facts that the Japanese want to establish a racial equality in this

4:Crajdanzev--191-193 S-4 (no date) 1942 Formosans-3
116, 553, 563, 723, 177.65 Japan
636.65

'co-prosperity' sphere. The Japanese authorities complain that very few islanders change their names. Actually only a few hundred have used this privilege. However, this change of name is not so simple: each case has to be approved by the governor, and it is clear that approval is given only to those who can prove their complete fidelity to their masters."

40: Kirk --20 [3] S-2 (no date) 1941 Formosans
116, 178, 185, 553

"Beginning with 1940, the 2,600th anniversary year of the Empire, Formosans have been permitted to take Japanese names. It may be significant that in the eight months just prior to the writer's visit only 367 families had signified their willingness to change their Chinese names.

In striking contrast to this nonconformity in Formosa, the Koreans, who received the same invitation, have adopted Japanese names almost 100 per cent. A distinguished American religious leader explained to the writer that the Koreans are docile and easily led, while the Formosans are more stubborn in their resistance to change."

15: U.S. Navy —25 [3] (no date) 1944 Formosans
116, 191, 554, 662, 177.19 Japanese
636.19

"No information is available as to the standard used in determining knowledge of Japanese. Consequently the official figure of 45.6 percent may be an exaggeration. It is nevertheless true that the campaign to promote the use of Japanese has greatly intensified since the beginning of the China 'Incident' in 1937.

Various methods are used. Town and village police stations record the names of inhabitants considered conversant with Japanese. Periodical inspection of homes and oral questioning determines eligibility for the book. Whenever a Formosan needs recourse to the local authorities for licenses, business purposes, appeals, or other matters, reference is invariably made to the 'blue book'. If the applicant's name appears in the book, he is usually granted his request; if not, he is refused. Obviously there is room for graft and the shutting of official eyes in judging eligibility for the book. A foreigner with a wide acquaintance among Formosan-Chinese states that he knows of a number of instances where a man of some financial influence in the community is listed in the 'blue book' although his knowledge of Japanese is decidedly open to question. Nevertheless, it is understood that the system, only recently inaugurated, is producing results. Formosans have come to realize that without a listing in the book privileges and opportunities are denied."

15: U.S. Navy--25 [5] (no date) 1944 Formosans
116, 191, 208, 554, 177.19 Japanese
636.19

"Use of Japanese only is permitted in banks and government offices. Even though a Formosan speaks with a clerk who is also Formosan, the language must be Japanese. If the former is unable to converse, an interpreter is required. To stimulate language learning, insignia bearing the legend 'This household speaks the national language' are placed above the door of Formosan homes. Other signs such as 'Speak only the national language' are seen frequently in buses and public places.

A commandant of the Keelung Base said to the press, 'The basis of Japanization is dissemination of the national language. To do this, I believe we must immediately mobilize the motherhood of Taiwan under the slogan 'Raise our children in Japanese'. Even though one may know the national language, to use Taiwanese at all does not befit a 'soldier of the Imperial Army.'"

15: U.S. Navy --27 [5] (no date) 1944 Formosans
116, 591, 177, 554, 596

"As a usual thing Formosan-Chinese sons remain at home when they marry, bringing in their wives and rearing their children under the guidance of the eldest member of the family. Hence many individuals make up one family, living in patriarchal style. All members of the family share in the work and in the returns from the land, which is held in joint title. Some wealthy Formosans who have profited by cooperating with the Japanese have, as a matter of policy, added Japanese living quarters to their homes or attempt to live in Japanese fashion."

15: U.S. Navy--29 [11] (no date) 1944 Formosans -1
116, 585, 554, 591

"The marriage itself takes place in two ceremonies. The first consists of a solemn release of the bride from her home. In theory she ceases to be a member of her blood family. Her name is formally struck from the family records during a solemn gathering before the family altar and ancestral tablets. A last ceremonial cup of tea is drunk, a bit of rice is eaten, her name is removed and she is ready to be carried away.

If the wedding is carried out in full tradition, the bridegroom arrives at the bride's house with a suite of attendants and many colorfully prepared gifts. A closed palanquin, which is carried in over the threshold of the bride's house, is put down before her ancestral tablets. Sometimes the bridegroom sends an honored representative to act for him while he himself remains at his own home. The bride is placed in the palanquin and, in theory at least, is not expected to set foot to the earth nor be seen by anyone until she arrives at her new husband's home and is carried over the threshold. Usually one or more of the bride's family accompany her to her new home. The whole procession is strung out as long and impressively as possible along the road, with extremely noisy professional musicians to swell the numbers in the party. As many gifts as can be carried are decorated brilliantly in red paper and cloth and carried with festive cakes and other foods on open carts through the street. Great prestige is gained by a lavish display and no effort is spared to impress the neighbors with the economic well-being of both houses concerned.

15: U.S. Navy--29 [11] (no date) 1944 Formosans-2
116, 585, 554, 591

A second ceremony now is performed, during which the bride's name is entered upon the family register of the new house. Unless some disastrous thing occurs she is thereafter committed to complete obedience to the elders in the new household and to her husband.

Feasting follows, during which the bride and groom retire to their bridal chamber.

A good measure of ribaldry and earthy humor accompanies these feasts in proportion to the amount of alcohol consumed.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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TABLE 54 (continued)

B. Per Cent of Male Family Members Occupied	Households of All Types		Purely Family Households		Mixed Households	
	Including Head	Excluding Head	Including Head	Excluding Head	Including Head	Excluding Head
All Households	60.2	45.8	60.6	46.1	56.3	42.4
Households with Head Occupied	62.5	45.6	62.8	45.8	59.0	43.1
Households with Head Not Occupied	36.6	47.7	37.2	48.7	29.5	36.2
Head Occupied in Agriculture	63.0	48.0	63.4	48.2	58.3	45.7
Head Occupied Outside Agr.	61.2	38.4	61.3	38.6	60.4	36.4
Manufacturing	62.0	40.0	62.0	40.2	61.9	38.4
Commerce	58.4	35.5	58.7	35.9	57.0	33.0
Other	62.3	39.3	62.2	39.3	64.5	40.3

* Household heads with no occupation are of course not included. All figures of average persons per household have been rounded, and sometimes will not add to the totals that are shown in other tables; they also will not always produce the exact percentages shown in the lower section of this table.

† "Dependent" refers to persons reporting no occupation in the census.

‡ "Agriculture" includes Forestry.

Source: From *Census of 1920, Detailed Tables*, Table 36.

many of the unoccupied heads were widows who had not re-married, it may be surmised that these households probably had representatives in most occupational groups.

But the most pervasive distinction in engaging in work or leisure within families appeared in those that incorporated outsiders to assist in the work of the household—the mixed households—which made less use of labor by family members than households consisting of family members only. In all but one of the occupational classes of Table 54, employment was less common among members of the families living in mixed households, whether the heads are counted or not. Households with heads not occupied were no exception. Even their subordinate male family members were put to work less often—when not dependent solely on their own resources of manpower, such families supported the greatest amount of leisure that can be found in any of these groups.

Differences of Occupational Status

The variation that these data show in the composition of family groups was recorded at a date before any strong force of Japanese

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52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

592 554 government policy could have been felt in this sphere, and so it must have been a pattern of long standing among the Taiwanese. Though there is no way of knowing how much the variation amounted to between individual families, between various sources of livelihood it was of a very restricted nature. One of the principal features of the Chinese social order, however, is that there has been very little variation in the general notions that people in different stations hold about what forms of conduct are *desirable*—the standards of behavior within one's family, or with members of related families, have been remarkably similar from group to group, whether or not these ideals are completely fulfilled in fact. It has also been characteristic of this system through many historic periods that it has not given rise to rigid status and class distinctions that became hereditary and remained fixed over time. The commonest sources of prestige have been associated with symbols that leave some room for personal achievements, and not simply privileged birth, in their attainment—the adoption of genteel as apart from vulgar pursuits, a highly esteemed and arduous classical education, and observance of traditional forms of ritual that are inappropriate to commonplace affairs. Wealth, in almost any form of livelihood, has conferred a capacity (e.g., through leisure) to practice these ideals, in many ways that poverty denied to the greatest part of the society.

Status distinctions of this sort are lines that cut across most if not 592 all of the occupational divisions recognized in Japanese census prac- 463 tice, though they obviously were present in some more than others (commerce or government service, for example, more than agricul- 554 ture or fishing). There are further resources, however, to use in finding out the extent of variation within occupations. In the one master table published with the census of 1920, households were also classified by three additional categories of "occupational status"—"Owners" or "Independent Workers," "Officials," and "Laborers."[18] Each household, if the head was occupied, was assigned to one of these groups as well as to a regular occupation, so as to specify more fully the nature of the head's position. The classification is limited in value, for it is not certain that the terms signify anything that is

[18] The English terms are only approximations of the meaning in Japanese. The sense of "Independents" (*Yeh-chu* in the Chinese reading of the term) really is closer to the notion of "master" of an enterprise, somewhat like the term "self-employed" in Western census practice. "Officials" (*Yi-yüan* in Chinese, where it means a lowly and subordinate position) has an honorific connotation in Japanese. "Laborer" (read *Lao-wu* in Chinese) is relatively unambiguous, though it is not clear what line divides it from the others.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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consistent from one occupation to another. In agriculture, a person apparently was "independent" if he actually operated a farm (without distinction between landlords and others), and "laborer" if simply working for another. Agricultural occupations had hardly any positions that could be designated as "officials"; practically all of these were found as government officials or professionals of some kind. These terms are so vague that it is useless to be distressed over what they do not reveal. The service they *do* perform is to separate, within each broad occupational class, the more from the less successful families ("independent" as opposed to "laborers," based on the fortunes of the household head), and to distinguish a few of the cases that do not easily fall in either of these (the "officials," wherever they occurred).

The households of "laborers," in each of the main classes of occupations, were on the average smaller than those in the same occupations that were more prosperous, and smaller even than those of "officials" (see Table 55). The more prosperous ("independent") households were consistently larger than either of the others, whether they were composed solely of family members or included outsiders.[17] Mixed households of "independent" heads were the largest of all, and had smaller proportions of outsiders than mixed households of the two other "status" groups. In other words, the wealthier mixed households exceeded the lesser ones in the same manner that had marked the difference between mixed households and those composed of family relatives only—chiefly through the extension of their families rather than the incorporation of outsiders. Not merely in the families of farmers, but within any occupational category, the households of the well-to-do were larger than those of the poorer portions of the population, and in this same pattern.

Households whose heads were "independently" employed had the smallest proportions of their male family members engaged in full-time work. But while leisure, as measured by this standard, was especially common in "independent" households whether outsiders were present or not, it was greater in mixed households of this group

[17] Here, as before, persons living alone ("single-person households") have been excluded, and Table 55 represents co-resident households only. Therefore the actual number of persons per household is less important (e.g., for comparison with later dates in Taiwan or with other data), than the pattern of variation from group to group in Table 55. It happens in this case that most of the single-person households were of the "laborer" group, and so would make the contrast between the two more pronounced if included, by giving the "laborers" a still smaller figure for average household size.

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TABLE 55

AVERAGE SIZE OF HOUSEHOLD AND EXTENT OF MALE EMPLOYMENT IN FAMILIES CLASSIFIED BY "OCCUPATIONAL STATUS," 1920

By Occupation of Head and Type of Household

	Number of Households	*Households of All Types*	*Purely Family Households*	*Mixed Households*
A. Average Persons per Household, both Sexes, by Occupation of Head.				
All Occupations				
a. Independents*	388,635	6.4	6.2	8.7
b. Laborers	128,768	4.4	4.4	5.4
c. Officials	1,462	4.9	4.6	5.8
Agriculture				
a. Independents	309,158	6.6	6.4	9.5
b. Laborers	41,314	4.2	4.2	5.5
Outside Agriculture				
a. Independents	79,477	5.7	5.5	7.1
b. Laborers	87,454	4.5	4.5	5.3
B. Per Cent of Male Family Members Who Reported an Occupation				
All Occupations				
a. Independents		62.0	62.3	57.9
b. Laborers		65.1	65.0	69.2
c. Officials		54.0	52.5	60.9
Agriculture				
a. Independents		62.6	63.0	58.1
b. Laborers		67.6	67.6	65.2
Outside Agriculture				
a. Independents		58.8	59.0	57.3
b. Laborers		64.0	63.7	70.0

* For an explanation of the meaning of these terms, see text.
Source: From *Census of 1920, Detailed Tables*, Table 36.

than anywhere else (see Table 55, Section B). Apparently these more prosperous households also took in outsiders for different purposes. Though not shown in Table 55, the non-relatives in "laborers'" households were chiefly "lodgers" (whatever might be included under this term); the ones in "independent" households were mostly

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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listed as employees, who allowed family members to be released from regular work.

Changes Between 1920 and 1930

The decade between 1920 and 1930 produced little change in household or family structure as far as size or other observable features were concerned (see Table 46, above). Families on the average became slightly larger than before, but chiefly by additions to their dependent children and possibly older relatives. When the data for 1920 are put back into terms appropriate for comparison with 1930 (that is, by replacing the single-person households in the computation of averages), it appears that the growth of households was distributed almost uniformly in different portions of the population—it is necessary merely to add the figure of about 4/10 to the average size of households in each major occupational group in 1920 to approximate the size found in that group in 1930. The tables showing household composition were much abridged in 1930, and permit only restricted comparison. In many of the features already used to describe their structure in 1920, however, households in 1930 were practically the same. They were made up almost entirely of family relatives; and presumably the contrasts between mixed and purely family households were unaltered. The same uniformity in sex composition prevailed among the various classes of occupations, with the same exception in the case of households with non-occupied heads. Since these data contribute nothing to the discussion, they have not been reproduced here.

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There is more to be gained by comparing economic activities of family members. The burden of dependency was on the average slightly increased between 1920 and 1930, as we have seen (Table 46, above). By 1930, households representing all the main sources of support (i.e., occupations of heads) had smaller proportions of male family members occupied than 10 years before.[18]

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Agricultural households seemed to share less in this rise of family dependency than others (see Table 56). In part the divergence may be because peasant agriculture is better able to provide a secure livelihood for many who could not find steady employment elsewhere—especially young boys and older men. We have found, in

[18] How the added burden was shared between households of only family and mixed households cannot be ascertained, though the similarity of other patterns leads one to presume that this one remained nearly the same as in 1920. This was one of the items of detail omitted in publication of the 1930 census.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1
Taiwan AD6

and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:53; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

4:Grajdanzev--83-84 S-4 (no date) 1942 Formosans
116, 241, 427, 511, 556

"We have no recent figures of tenancy conditions but, according to an investigation made in 1927, the position of the average farmer-tenant appeared as follows (on land of average quality in paddy with two crops a year):

	yen
Value of crop from 0.75 ko	325
Rent	160
Balance	165

Thus his reward for his and his family's labor for the whole year was ¥165, minus the expenses of production apart from labor. From this sum house taxes, indirect taxes, etc. must be paid. This income of ¥165 may be compared with the income of a landowner who had 15.5 ko (the average for the upper group of landowners) and leased all this land to tenants. His yearly income would be ¥2,480.

These conditions may not exist now, since the above figures refer to 1927. Official sources do not give new figures, but a few calculations show that the situation has not greatly changed. As has been shown, the proportion of tenants to the total number of farmers has increased since that time, so [84] that competition among them must be stiffer, and there is no reason to expect that rents are lower. The value of two crops of rice from 0.75 ko of paddy in 1937 averaged ¥515 but prices general in 1937 were at least thirty per cent higher than in 1927. All this suggests conditions of poverty among the tenants and the position of even the majority of so-called owners may be not much better."

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans -1-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

4:Grajdanzev--155 S-4 (no date) 1942 Formosans
116, 434, 556, 177.43 Japan
636.43

"The amount of profits collected [by the Japanese--analyst] may be calculated more or less precisely. We know that the exports from Taiwan are greater than the imports into the island and there can be only one explanation: considerable real wealth is transferred from Taiwan to Japan each year, wealth which represents the profits and savings of the Japanese in Taiwan."

15: U.S. Navy --26 [13] (no date) 1944 Formosans
116, 625, 556, 744, 177.74 Japanese
636.74

"The Japanese policeman undertakes to instruct rural peoples in sanitation, house-building, religious observance and many other things elsewhere usually left to private initiative. Large-scale public works projects have raised the whole standard of health and public welfare. Extremes of wealth and poverty are not very apparent in normal times."

15: U.S. Navy--27 [2] (no date) 1944 Formosans
116, 556, 511, 596

"Among the Formosans there is little outward display although there are several notably wealthy families. The majority of Formosans are impoverished farmers, but the natural richness of the land, the favorable climate, the quality of the soil and the communal nature of the Chinese family system which permits the individual to share equally in the total goods of the family, combine to prevent such great extremes of destitution as are to be found on the China mainland only 90 miles away."

15: U.S. Navy -- 27 [6] (no date) 1944 Formosans
116, 454, 511, 556, 563

"As an indication of the relative wealth of individuals in Taiwan, it is notable that bank and postal savings deposits of Japanese in Taiwan are from seven to ten times larger than the average deposits of Formosans. It will be noted in the following table that per capita wealth increased rapidly until the outbreak of war between Japan and China in 1937.

Table 22: Average Savings per Depositor in Post Office Accounts

	1921	1929	1934
Japanese	¥33.3	¥51.0	¥146.5
	($15.98)	($23.96)	($44.27)
Formosan	¥8.2	¥16.6	¥14.2
	($3.93)	($7.63)	($4.29)"

15: U.S. Navy --27 [7] (no date) 1944 Formosans -1
116, 465, 511, 435, 556, 563

"Living conditions and the cost of living are intimately connected with the wage scale. Wages in Japan are two to three times higher than the wages of Formosans. For the skilled Formosan the average daily wage in the second half of 1938 was ¥1.13 ($.27) per day, and for the unskilled worker ¥.85 ($.17): figures based upon averages for sixty different categories. The Japanese official averages published for 1939 were ¥1.27 ($.33) for the Formosan-Chinese and ¥2.41 ($625) for the Japanese laborer. The average Formosan family consists of five persons, who must depend upon these wages. As an indication of the cost of living and the standard possible, there is presented the retail prices of some commodities in Taihoku, in May, 1939, when the yen was worth $.2596:

Table 23: Retail Commodity Prices, Taihoku, 1939

Sweet potatoes per kin (1.3228 lbs.)				6.4 sen
Rice (first grade)	"	"	"	11.0 "
Sugar	"	"	"	29.0 "
Pork (av. quality)	"	"	"	43.0 "
Fish	"	"	"	18-22.0 "
Chicken eggs, each				6.0 "
Soap per piece				10-17.0 "
Matches, per box				1.4 "
Firewood (per 100 kin)				180.0 "

15: U.S. Navy --27 [7] (no date) 1944 Formosans -2
116, 465, 511, 435, 556, 563

Table 23: (cont.)

Miso (bean paste) (100 momme: 0.827 lbs.)	8.0 sen
Muslin, per yard	134.0 " "

15: U.S. Navy —27 [8] (no date) 1944 Formosans
116, 434, 511, 556

"The restrictions and rationing of food, clothing and fuel which have gone into effect throughout the empire, are felt more keenly by the Japanese because of their higher standard of living. A number of essential articles were unobtainable or only occasionally obtainable late in 1940 at Taihoku."

15: U.S. Navy--28 (no date) 1944 Formosans
116, 301, 556

"The women of both groups [MC: Formosan Chinese of both Fukien or Cantonese and Hakka origin] wear bracelets and earrings which , if they can afford it, are of gold and jadeite and represent a considerable concentration of family wealth."

31: Hofmann--630-631 N-3 (1909) 1912 Formosans
116, 342, 423, 556

In Tainan I stayed in an old house which belonged to a member of the Chinese nobility; there I was able to observe the luxury with which the Chinese surround themselves. Many of the Chinese have accumulated considerable wealth on Formosa; there are several millionaires among them who had remained after the conquest of the island, while others fled to the mainland with all their possessions. In contrast to the Japanese, who throughout their history have looked down upon capitalists and traders, who even despise merchants and today still do not always accept them socially, the Chinese are all motivated by a desire for profit. The pioneers among them took large areas of the most fertile land from the natives; these were leased and subleased to later immigrants. Thus when the Japanese took possession of Formosa they encountered a complicated system of land ownership and tenure which yielded great profits to some individuals. In the management of real estate problems, [631] which resulted in the large-scale exploitation of tenants and subtenants, the new regime has constantly taken the side of the exploited and it has succeeded in bringing order into the system as a whole. There is still a wide field of activity for the Chinese capitalists, however, since they apply only to their compatriots for credit, never to the Japanese.

42: Schetelig--390-391 T-2 (no date) 1868 Formosans-1-2
116, 423, 556, 565

Formosa was not colonized by the government. The Chinese were, and are, too practical not to know the drawbacks of state interference in colonization in all its extent, and both on the mainland and here in Formosa [391] they have taken good care not to transfer the center of gravity of the Empire to the outside. Consequently... northern and western Formosa must be looked on as a colony of squatters who, however, in the course of the years, have received titles and documents from the mandarins for the land which they had often acquired by the sword. All this was done by means of contracts and compromise, and so it comes about that today, in the midst of a population already numbering millions, and who immigrated comparatively recently, we find a number of old families who, having lived here for centuries, have developed a power that far exceeds that of the Imperial officials, due to the great forces that the possession of land has always put at their disposal. But it is clear that these various parties lend each other support in view of the chaotic condition of a population that has come together from the most varied provinces of the Empire, and in view of the need of exploiting the camphor forests in their own interests both against the Europeans outside the country and the mountain-dwelling natives within. The rich and independent settler of long standing supported the mandarin in maintaining and extending Imperial rights, at least insofar as he himself was not included in them, and on the other hand the mandarin has always been intelligent enough to respect the traditional rights of such an independent leader,

42: Schetelig--390-391 T-2 (no date) 1868 Formosans-2
116, 423, 556, 565

exacting no transport tax for his merchandise and not even hampering him in his destructive war against the extensive camphor woods, although otherwise every infringement of the law concerning the sacredness of the camphor monopoly is looked on as a kind of high treason directed against the Crown.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

this nominal government policy existed within Taiwan's rural vil- 177
lages. The bulk of the population was made up of peasant farmers 438
and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands.

The rural population led a settled existence. Taiwan being a small 489
area, travel between places was not uncommon, but it was rare for 438
families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island.

Local stability fostered local solidarities. The inconvenience of 621
communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6]

Property institutions helped to buttress the stability in these small 423
communities. In Taiwan, as in China, land ownership was the only 556
durable form that substantial wealth could take. It was durable 631

[5] Takekoshi, Yosaburo (1907), pp. 252 and 269-270.

[6] The turbulent history of Taiwan has been carelessly represented as one of indiscriminate civil disorder, its early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

423 against climate and short-term deterioration in use, against destruction through violence, and against decline in the income that it produced. Since the farming population was increasing within a fairly 556 631 definite area, it had additional value in speculation. Land was also relatively safe against confiscation by the government; not only could its ownership be hidden from casual inspection, but the government itself depended on the obligations owed to landlords by tenants to uphold its authority. Under agrarian conditions of farming on a small scale it is impossible to cultivate large holdings of land under a single management. Hence, the only way to amass large wealth is to become a landlord—beyond some point, necessarily an absentee landlord. In early Taiwan, considerable concentration of landholdings was reported. Ownership tended to gravitate into the control of large and powerful families, whose influence was the only recourse of government officials in asserting their rule.[7]

565 On the economic side, this concentration of wealth was not given a chance to develop into industrial-type investment. The landed 426 gentry, often landed on considerable scale, were the only group of 427 persons who had access to sufficient income to become capitalists.[8] Practically, however, it proved more secure and profitable to let out their lands to tenant farmers. When they branched out into different enterprises, it was as an adjunct to their status as gentry. In South Taiwan, for example,

> ". . . sugar was manufactured from the cane grown upon the owners' plantations, or from that brought from elsewhere. The cane was grown by the tenants, or by those who through being heavily indebted to the landowner stood in the same relation as retainers . . . under it [this system] the master of the sugar factory secures a threefold profit.
>
> 1. As landlord, he claims from his tenants from 15 per cent. to 20 per cent. of the cane as rent.

[7] One might suspect that, as in China, members of these families *were* the officials at lower levels of administration. But there is no direct evidence on this point, aside from frequent references to the fact that *clan* solidarity, imported to Taiwan by the migrants from South China, was one of the few bases for organizing any kind of joint action by Taiwanese on a large scale.

[8] The government was unable to fill such a role itself for reasons already noted. Officials, who were not permanent fixtures in Taiwan, confined their acquisitive energies to foreign commerce, where returns were quicker and they did not need to make long-term commitments. For example, it is significant that the government almost never operated its own monopolies, but let them out to many private agents and taxed the products as they were exported.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the accent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1943, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1954b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

the land reform act, and used the money for additional investments.

Many former landlords have done poorly at business, and some have even failed because of their lack of experience and training. Others have maintained their economic investments in the villages. Several formerly large landholders in the two villages adjacent to Hsin Hsing continue their activities in their villages and the surrounding area very much as before. Although their landholdings were cut significantly by the land reform, they nevertheless retain their maximum three *chia* of land. Also, in some instances, a number of landlords prior to the 1953 act managed to retain control of more than the three *chia* limit by legally dividing their family and then transferring portions of their land to the names of other members of their family. By virtue of their positions many landlords, especially those who worked as minor officials or civil servants in the local administration or who were well acquainted with officials, became aware of the ins and outs of the proposed land reform laws and so knew exactly how to manipulate their landholdings legally in order to retain as much land as possible.

Even today landlords may, and do, buy land in excess of three *chia* and then hire laborers to till it for them. As long as they do not rent the land out they seem to be safe from legal action. A few landlords who manage to buy additional land are still doing so in the names of other members of their family and in such cases then actually rent the land out to tenants. But it appears that the fear of another Land Reform Program in the future, as well as the increased movement of the landlords' economic interests outside the rural area, serves to deter many landlords from attempting to reaccumulate landholdings, even by the devious but legal means.

Another frequent activity of landlords who have chosen to maintain their economic interests in the Hsin Hsing area is that of moneylending. The small farmer, having little to offer as security, still continues to resort to the local moneylender for cash or other loans. The local moneylender lends fairly large amounts for longer periods of time than any agency of the government or association but, of course, at extremely high interest rates.

The landlords will continue to engage in moneylending as long as the farmer has credit difficulty. If a good profit can be made from moneylending, it is evident that the wealthy landlords will not willingly transfer their economic interests into more productive economic activities.

Traditionally, the village landlord has played a major role in the leadership of his village and its immediate vicinity. During the Japanese period, such leadership roles were greatly reinforced by the Japanese, who preferred to handle village problems through the wealthy landlord class rather than by dealing directly with the "peas-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

ants." The Hsin Hsing villagers readily recall that the local Japanese police and officials showed respect only for the well-to-do landlords. Consequently, if the villagers were to get along successfully with the Japanese, they had to work through their landlords. They usually elected a landlord to handle local village affairs and to represent village interests in dealing with the Japanese authorities.

The arrangement was also to the landlord's advantage. As the official leader, he wielded greater power by which he could more easily manipulate the villagers, and even the tax collector, to his own advantage. His recognition as a leader by his fellow villagers and by the authorities also increased his prestige.

Not only was such a landlord the elected village political leader but he might often be an informal leader as well, a person who took an active part in most of the social and religious affairs of the village. He usually contributed money and time to help make these affairs a success. The efforts of the landlord helped to build up his reputation as a public-spirited citizen. Frequently, he assumed the role of mediator in discussions of village and intervillage problems and in disputes between his own villagers or even between members of other villages. When the landlord's efforts as a mediator extended beyond his own village, he enhanced his own reputation in the whole area and that of his village as well.

These conditions continued after the restoration into the post-land reform period. Today, the landlord class continues in the rural area and wields power in local grass roots politics as well as in socioeconomic affairs. In most villages the recognized leaders are still those who are rich, maintain big landholdings, and have had a fairly good education. Such people may also have influence—perhaps by virtue of a relative—in some government agency. It is still a great advantage to a village to have a wealthy representative of the landlord class to deal successfully with authorities. Many, if not most of the government officials, are drawn from this class, since they are educated and usually wealthy.

However, this picture is beginning to change. Village affairs are being profoundly affected as many former large landlords and traditional local leaders transfer their economic interests and activities away from the land to new business interests elsewhere. When a landlord gives up his major economic interests in the area, it is usually not long before village social, religious, and political activities become much less important to him. Because the personal advantage is gone, he is no longer concerned with maintaining his status or leadership role. He may even move his residence out of the village in order to be closer to his new economic interests.

Villages suffering such a loss of local leadership have reacted in two

40: Kirk--25-26 S-2 (no date) 1941 Formosans-1-2
116, 561, 575, 658, 883, 177.88 Japanese

"Youth movements. The Japanese are laying great stress upon the various youth movements which are actively sponsored in Taiwan by the Government General and the local provincial governments. There are young men's associations, young women's associations, and Boy Scouts. These organizations aim to

> train and drill youth spiritually and physically to inculcate loyalty, to improve character as loyal subjects, to instill a spirit of public service, to encourage self-help, self-control and initiative, to increase knowledge and skill necessary for practical life, to encourage diligence and thrift, and to improve general health conditions of the nation.

The specific purpose of the young women's association (Joshi Seinen Dan), especially among Formosan Chinese, is 'to encourage and propagate the use of the national language, to inculcate female virtue, to educate women in housekeeping, to improve home-life, to cultivate sentiments through recreation, to improve health conditions, and thus to train women in sound womanhood.' The young woman's movements, however, are far less active than the men's associations. The local territory covered by each association corresponds to a public school district. Young people under 20 years of age

who are graduates of [26] public schools may join the youth movement. The young Formosan Chinese members are particularly interested in spreading the use of the Japanese language and in raising the Formosan standards of living. The young men are called upon to assist the police in traffic control during celebrations, to serve on watch duty or to run errands, and even to do hard manual labor, on occasion, when additional workers are needed.

The geographical position of Formosa and the ethnic factors in the overwhelming non-Japanese population are largely responsible for the determined drive of the Imperial government to assimilate the Formosans as speedily as possible."

15: U.S. Navy --27 [4] (no date) 1944 Formosans
116, 592, 562, 304, 464

"As in China, the older women who have sons are allowed to wield great influence within the home. Unmarried women and girls have few rights. Footbinding has been forbidden by the Japanese. There has been no attempt to limit female and child labor under even the most extreme conditions."

15: U.S. Navy--29 [7] (no date) 1944 Formosans
116, 181, 178, 584, 562

"The general atmosphere of life on Taiwan has been always somewhat less conservative than on the Chinese mainland. Indeed, there are many evidences of the pioneer spirit at work. A girl still has very little to say concerning the choice of a husband, and the parents or eldest relatives on both sides actually carry out the negotiations leading to marriage. Still there is much less of the prenuptial seclusion of women in Taiwan. Marriages are frequently arranged after a young couple has had an opportunity to see one another in public (but not alone)."

596 no uncle, the mother, although this happened rarely, assumed authority. Household management, as well as external business affairs, was the responsibility of the male head.

596 The position of women was subservient; women had few property rights, and they them-
• 562 selves were the property of men. Confucian principles taught that woman's world was in the home, that a virtuous woman would obey her father before marriage, her husband after marriage, and her son after the death of her husband. Daughters at home were temporary members of the family who would someday marry and join their husbands' households. When a family estate was divided, all property was distributed among the males. Wives and daughters were their husbands' and fathers' heirs only in those cases where there were no males to inherit. Instances of women dominating men were not unheard of, but always at the sacrifice of the man's self-respect and as a subject of ridicule. As a daughter-in-law, a girl had to please her husband's parents, her husband being subordinate to his father in the family. A husband, out of filial piety, had to side with his mother if she happened to be harsh in her treatment of his wife.

584 Marriages were arranged by the parents.
596 Happiness of the couple was not a consideration,

45:Stanford U. S-4, 5 1956 AD1 Formosa
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596 369 Rural households retain many of the features of the traditional family. They are often made up of three or four generations with a goodly sprinkling of kinsmen, adopted children, and others. However, among the one hundred households which were the subjects of a survey conducted by the Joint Commission on Rural Reconstruction, 58 were termed nuclear families and included 48 per cent of the total population surveyed. The other 42 households were three- and four-generation households, and included the remaining 52 per cent.[10]

562 178 The influence of the West has greatly improved the position of women in Formosan society. Women today have equal elective franchise and the right of inheritance. They have not only become clerks and manual workers but also have entered the professions and have taken a role in politics. The Chinese Constitution stipulates that the number of women delegates to the National Assembly, as well as the number of women members of the Legislative and Control Yuan, shall be determined by law. The Electoral Law fixes the percentage at ten, and at present there are 60 women of a total

10. A. F. Raper, Rural Taiwan - Problem and Promise, Taipei, Joint Commission on Rural Reconstruction, 1953, p. 208.

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178

537 members in the Lesiglative Yuan.[11] The percentage of women delegates is also applied to the provincial and local councils. In Taipei alone, there are about one hundred full-fledged women doctors and a great number of qualified mid-wives, five chartered women accountants, thirteen women judges, and six women prosecutors.[12]

IV. FAMILY ORGANIZATION AND DISORGANIZATION

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Monogamous marriage is the rule in Formosa, although concubines and mistresses have not been eliminated. People of the same surname do not intermarry. Marriage remains a family affair as well as an affair of the parties concerned. When a son reaches adulthood it is a traditional obligation of the parents to see that he is married. Parents in most cases choose spouses for their children. But today the majority of men and women at least have some knowledge of their future spouses before marriage. It is stipulated by law that an

11. Chung-pei Hsu, The Position of Women in Free China, Taipei, China Culture Publishing Foundation, 1953, p. 2.
12. Ibid.

596 Marital customs among the tribesmen seem to indicate that their groupings include both nuclear and extended families. Bunun, Paiwan, and Yami tribes have nuclear families, and each son after marriage establishes his own household.

Aboriginal families are patriarchal, with the exception of those of the Paiwan and Ami tribes. The latter families are perpetuated through the female line; a man marries into the bride's family in both tribes and the newlyweds establish separate households after marriage.

• 562 428 The position of women in Ami and Paiwan tribes is superior to that of the men. Men have no rights of inheritance and have no say in the management of property in these tribes, although they represent their families at public meetings and in other social contacts. Women are sole heads of the family in matters which concern the family and its relatives. In other tribes, an inheritance is equally divided among the sons or goes to the eldest son who is the heir. When there are no sons in the family in the Bunun tribe, the family line is terminated, and the family property is given to the closest male relative. An interesting aspect of inheritance in the Ami tribe is that the youngest daughter remains at home to inherit the family property as well as to perpetuate the family line.

63/635 under a commissioner or a director. The provincial legislature, called the Provisional Provincial Assembly, is the representative body of the people.[5] In 1951 its members were elected by the hsien and municipality assemblies. In 1953 the law was altered to permit direct election by the people.[6] The present assembly, composed of 57 members, was elected by popular vote in April-May 1954. A hsien or municipality with a population of 150,000 or less is entitled to elect one member to the assembly. If it has a population exceeding 150,000, it is entitled to elect one additional member for each additional 150,000. If the remaining population exceeds 75,000, the hsien or municipality may elect another additional member. When a hsien or a [642] municipality elects four or more representatives, one of the members must be a woman. In the present assembly there are six woman members. The autochthonous tribes living on the plains elect one representative, those living in the mountains elect two representatives. The tenure of office of the present assembly is three years.[7]

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5. So called because the provincial government is under the direct control of the central government, and the provincial council does not exercise full power.

6. Regulations governing the organization of the Provisional Provincial Assembly, promulgated by the Executive Yuan on August 22, 1953.

7. The tenure of the First Provincial Assembly, elected in 1951, was two years.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

TABLE 52

"OUTSIDERS" IN TAIWANESE HOUSEHOLDS, 1920

592 Per Cent of All Members Who Were Not Relatives of the Head, by Sex, and by Occupation of Head.

(Heads of Households Are Included, Persons Living Alone Excluded)

	Males	*Females*
A. Households of All Types		
All Households	2.6	0.9
Households with Head Occupied	2.7	0.8
Households with Head Not Occupied	2.5	1.1
Head Occupied in Agriculture	1.8	0.5
Head Occupied Outside Agriculture	4.8	1.7
Manufacturing	7.4	2.2
Commerce	7.3	2.7
Other	2.1	1.1
B. Mixed Households		
All Households	26.8	10.3
Households with Head Occupied	27.0	10.0
Households with Head Not Occupied	25.2	12.3
Head Occupied in Agriculture	21.0	6.2
Head Occupied Outside Agriculture	37.1	18.1
Manufacturing	40.5	17.4
Commerce	36.0	17.3
Other	34.2	20.4

Source: From *Census of 1920, Detailed Tables*, Table 36.

not family members, whereas outsiders usually were at least twice as frequent among the men.

Participation by Women in Household Roles

592 562 The Chinese are notable in not allotting to women a status of any particular prominence or responsibility in the society at large. As a result, their participation in non-familial activities is very restricted, and the evidence of previous chapters has not often shown them to be engaged in affairs outside of their family groups. Since they are not found anywhere else, it is of some interest to discover what is possible about the position of women in the household.

Significantly, in the households of various types shown here, women were distributed almost everywhere in about the same pro-

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

TABLE 53

PROPORTIONS OF FEMALES IN TAIWANESE HOUSEHOLDS, 1920

By Type of Household and Occupation of Head

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	Households of All Types	*Purely Family Households*	*Mixed Households*
A. Per Cent Female:			
Family Members*			
All Households	49.6	49.6	50.1
Households with Head Occupied	49.0	49.0	49.3
Households with Head Not Occupied	54.7	54.6	56.4
Head Occupied in Agriculture†	49.0	48.9	50.2
Head Occupied Outside Agriculture	49.1	49.3	47.3
a. Manufacturing	50.0	50.4	46.9
b. Commerce	49.4	49.6	47.9
c. Other	48.5	48.6	46.6
B. Per Cent Female:			
Head of Household			
All Households	11.2	11.3	10.6
Households with Head Occupied	7.1	7.2	6.5
Households with Head Not Occupied	45.1	45.1	45.7
Head Occupied in Agriculture†	7.4	7.3	7.3
Head Occupied Outside Agriculture	6.4	6.5	5.5
a. Manufacturing	12.8	13.5	7.5
b. Commerce	3.8	3.7	4.3
c. Other	4.6	4.6	4.8

* The head of the household is included as a family member.
† Includes Forestry.
Source: From *Census of 1920, Detailed Tables*, Table 38.

portion to men (see Table 53). Slightly less than half of the membership of most households was female, and it made almost no difference what was the family's source of support.[14] Despite the association between sex composition and household size found in Table 48, the degree of subordination of women apparently did not vary as between any of the principal lines of employment—women did not gain their positions in Taiwanese households through independent achievement, but chiefly through their attachment to men.

[14] The proportions of *all* household residents who were women is not shown in Table 55. Since women were nearly all members of the family, their percentages among *family* members is practically the same thing, except in mixed households.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

592 This uniformity was due in large measure to the fact that almost all women were members of their households by virtue of kinship, 562 and hardly any of them stayed as non-relatives in the families of others. True, slightly over 20 per cent of all persons who were counted as outsiders were women; but this still did not amount to a large *number*, and it has already been pointed out that many must have been wives or children of men in this status.

Though on the average they were found in nearly equal numbers with men, there is no chance that women occupied the same positions in their families. Chinese ideas of propriety in behavior are never more consistent than in creating a distinction in familial roles based on a person's sex. The patriarchal ideal of authority in Taiwanese families is illustrated by the infrequency with which women became heads of households. Among those of the household heads who were employed (that is, practically all of them), men exceeded women by nine to one; in all but seven per cent of these households it was reported that the affairs were managed by men. In the minority of families where the head was not employed, this responsibility fell almost as often on women as on men—45 per cent of these households were managed by women. The only way for most women to accede to this position was through the death of their husbands. Therefore the concentration of female heads of households among the households with no apparent source of family support most likely represents those widows who were not taken in by their husbands' relatives.

Family Membership and Employment

592 Questions of livelihood, which are important to all peoples, are treated with a particular seriousness by Chinese. They are usually 464 regarded as questions of household management, and thereby become closely interlocked with the ideas and values of the family system itself. When this happens, a large part of a society's economic life is likely to be sealed up in self-sufficient family units, and to lack the aspect of inter-dependence that characterizes the activities of individuals in the industrial regions of the world.

The households of Taiwan were the scene of most of the effort that went into providing support for the population, and hence are the most appropriate place to look for traces of its organization. A good indication of the contribution to household support in different classes of households is given by the extent of regular work by

4:Grajdanzev--11-14 S-4 (no date) 1942 Formosans-1-6
116, 175, 563

"Special circumstances contributed to the transformation of Taiwan into a Chinese island. In 1644 China was invaded by the Manchus. The Ming Dynasty was overthrown in the north, but the struggle continued for many years in the south and the population suffered all the horrors of the war. As a consequence more than 100,000 Chinese, according to some reports, fled to Taiwan, which by that time was well known to the inhabitants of Fukien and Canton as the base of operations by Japanese and Chinese pirates alike. This mass emigration to Taiwan changed the character of the island. The newcomers were resolute people, ready to fight aborigines and Manchus, and in their wake thousands of other Chinese followed annually from the densely populated southern provinces.

During the 16th and 17th centuries European Powers laid the foundations of their present Asiatic colonial possessions. Java became a Dutch colony, the Philippine Islands Spanish, and the Portuguese succeded [sic]in acquiring a base at Macao. Rivalry was keen and, after unsuccessful attempts to drive the Portuguese out of Macao, the Dutch established a base on the southwestern shore of Taiwan in 1624, near the present town of Tainan. They began to extend their control over the adjacent territory, to convert the aborigines to Protestantism, to tax the people, to encourage the planting of sugar cane and to develop the production of camphor. Dutch mastery over the island was contested by the Spaniards who in 1626 built Fort San Salvador at Keelung, in the north of the island, and three years later Fort San Domingo at Tamsui, in the northwest. At the same time Spanish missionaries also started preaching the Gospel, trying to convert the

natives to Catholicism. But the Dutch drove out the Spanish soldiers (1) by military force

1. The following correspondence between the Dutch and Spanish commanders is of interest, because it aptly illustrates the spirit of the time:
To Gonsolo Portilio,
Governor of the Spanish fortress in the island of Kelung.
Sir.
I have the honor to communicate to you that I have received the command of a considerable naval and military force with the view of making me master by civil means or otherwise of the fortress Santissima Trinidad in the isle of Kelung of which your Excellency is the Governor. [12]
In accordance with the usage of Christian nations to make known their intentions before commencing hostilities, I now summon your Excellency to surrender. If your Excellency is disposed to lend an ear to the terms of capitulation which we offer and to make delivery to me of the fortress of Santissima Trinidad and other citadels, your Excellency and your troops will be treated in good faith according to the usages and customs of war, but if your Excellency feigns to be deaf to this command there will be no other remedy than recourse to arms. I hope that your Excellency will give

careful consideration to the contents of this letter and avoid the useless effusion of blood, and I trust that without delay in a few words you will make known to me your intentions.

May God protect your Excellency many years.
The friend of your Excellency
Paulus Tradenius.

Fort Zelandia, August 26th, 1641.
To the Governor of Taiwan.
Sir,

I have duly received your communication of August 26th, and in response I have the honor to point out that as becomes a good Christian who respects the oath he has made before his king, I cannot and I will not surrender the forts demanded by your Excellency, as I and my garrison have determined to defend them. I am accustomed to find myself before great armies, and I have engaged in numerous battles in Flanders as well as other countries, and so I beg of you not to take the trouble of writing me further letters of like tenor. May each one defend himself as best he can. We are Spanish Christians and God in whom we trust is our protector.

May the Lord have mercy upon you.
Written in our principal fortress
San Salvador the 6th of September 1641.
(Signed) Gonsalo Portilis.

[12] and to all appearances became the sole masters of Taiwan. Had they retained the island, it might have become a base for further penetration into China and Japan. As has been mentioned, China was at that time in a turbulent state. As the conquering Manchus advanced southwards, many more Chinese fled to Taiwan. In the southwest resistance to the invading forces was carried on first by Cheng Chi-lung. Originally a tailor, he later migrated to Japan, where he married a Japanese girl. He then became a famous pirate and finally, as was often the case in China, a high official. His son Cheng Ch'eng-kung, better known as Koxinga, continued the struggle, but, being hard pressed by Manchu forces, decided to give up Fukien. On April 30, 1661, Koxinga, with a large fleet and an army of 25,000, appeared at Zeelandia, chief Dutch port in Taiwan, where he was supported by the discontented Chinese population. Only nine years before, there had been a serious uprising against the Dutch as a result of oppressive taxes and heavy export duties, and though the rebel-[13]lion had been crushed, the resentment remained. Koxinga besieged the fortress, which was garrisoned by 2,200 Dutch soldiers and a few settlers, and after a long siege the Dutch surrendered on February 1,1662, bringing to an end the attempt to secure a European base for an advance to the north. Within a few years all vestiges of Dutch influence had disappeared, the forts fell to ruins and the aboriginal converts returned to their old practices.

The reasons for the failure of both the Dutch and Spaniards are not far to seek. The purpose of colonial possessions was trade, whilst preaching the Gospel was only an

auxiliary method of subjugation and control. The needs of the local inhabitants were neglected—they were looked upon only as a source of income. The smallness of military forces stationed in the colonies and the great distance from bases prevented speedy reinforcement of the garrison, and the Dutch were compelled to give up in the face of the strong native force.

In 1683 the island fell into the hands of Manchu rulers, and for 212 years it was a part of the Manchu Empire. But little attention was paid by the rulers to the island, for it was made only a fu—a prefecture—of Fukien province, the governors of which did not trouble themselves with visits to a distant island.

The population was unruly and turbulent. The Chinese inhabitants consisted of two groups which did not easily mingle with one another. The earlier settlers were the Hakkas from Kwangtung province, the remnants of the native tribes which were sinified to some degree as they came under Chinese domination. Their name itself means 'stranger', and in China they were the pariahs of society. In the new possession they were able to secure better conditions, and it has been estimated that one third of the Hakkas in Kwangtung province emigrated to Taiwan. (2). Another group was made up of emigrants from the opposite

2. Davidson, J., The Island of Formosa, 1903, p. 8.

shore of Fukien province, called Puntis. Both groups of the Chinese population brought

with them the customs, beliefs, and superstitions which they had [14] known on the continent and thus reproduced on the island the life they had led in China. The Chinese in South China, for example, were organised into clans, and the population of Taiwan was likewise thus divided.

From the occupation of the island by Koxinga to the coming of the Japanese some 220 years later the Chinese were constantly at war with the natives who had once occupied the whole island, including the fertile plains of the west, and who were now forced to give up their lands. Some of the aborigines were absorbed by the Chinese, some annihilated, while the most indomitable were driven step by step into the mountainous regions. As a result of this cruel treatment, they developed a hatred for the Chinese and tried to kill them at every opportunity, raiding their villages or hunting the inhabitants down when they dared to penetrate the dense forests in search of camphor trees. The Chinese organized some kind of semi-volunteer guards, whose duty it was to keep the 'savages' within a pale. But the 'savages', composed of many tribes, were fighting not only against the Chinese, but also among themselves and as a result of these unfavorable conditions, their numbers either remained stationary or decreased, while the Chinese population on the plains, living if not a life of opulence, yet under comparatively easy conditions, was increasing by natural growth as well as by immigration from China. At the end of the period of Chinese sovereignty, the aborigines, who had once made up the whole population of the island, formed only about three to four per cent of the total, so that the island acquired an entirely Chinese character."

"The Chinese, however, were not a homogeneous group with identical interests. The difference between the Hakkas and the Fukienese has already been mentioned [see category 116 p. 13--Analyst] and this difference often found expression in bloody conflicts. Within each of these two groups clans were fighting one another, often for seemingly trivial reasons but most commonly for land and for influence in local affairs. There was also cleavage between the old settlers who possessed the land and the newcomers who had been compelled to rent it and borrow money at exorbitant [15] rates. Finally, there were frequent rebellions against the local officials of the Manchu government who ruled the island with the support of 10,000 to 15,000 poorly trained and badly paid soldiers.

At the time of conquest the Manchu rulers did not resemble the Chinese either in appearance or in language. The Manchus were a warlike Tungus tribe inhabiting North Manchuria and now almost completely assimilated by the Chinese. At least during the first century after the invasion they did not speak the Chinese language, far less the Fukienese dialect. The Hakkas hardly understood the Puntis, and both, as a rule, did not understand the numerous aboriginal dialects. The officials communicated with the population only through interpreters who often abused their position, a bribe being sufficient to change the interpretation of a case before the mandarin. These mandarins and their entourage, coming from distant Peking, looked upon Taiwan as a source of speedy enrichment, and at times their exactions and misrule became so oppressive that revolts followed. A Chinese saying of those days concerning Taiwan sums up the situation:

116, 175, 563

'Every three years a disorder, and every five years a rebellion.' (1) Indeed the history

1. Quoted by De Bunsen, 'Formosa,' Geographical Journal, 1928, p. 268.

of Taiwan is represented by some writers as a succession of rebellions."

4:Grajdanzev--20-21 S-4 (no date) 1942 Formosans
116, 175, 563, 177.65 Japan
636.65

"Thus Taiwan became the first Japanese colony. Many problems faced the new masters of the island, one being the aborigines and the territory occupied by them. About half of the island, sparsely populated by aboriginal tribes, was practically outside Chinese authority and the occupation of the western part by Japanese in 1895 did not bring them nearer to [21] the solution of the problem. It took decades of effort and even now is not finally solved. The Chinese part was easier to control, but several years were spent in the suppression of rebellions, and special measures were required to keep order among the population. Even the pacified population presented many problems. They were foreign in speech, in customs, outlook and allegiance, and no policy worked out in advance could be applied at once."

4: Grajdanzev--29-30 S-4 (no date) 1942 Formosans
116, 162, 563

"Now let us return to the ratios of births and deaths given in [30] the preceding pages. For 1937 the birth rate for the Chinese was 45.9, for the Japanese 28.5; the death rate for the Chinese was 20.4, for the Japanese 9.6. One possible explanation of this striking difference might be that the age and sex distribution of the Chinese and Japanese on the island is quite different, or that there were more Japanese men than women and that these were represented chiefly by middle-aged groups. But such an explanation breaks down in the face of the facts. There are in Taiwan 111 Japanese males per 100 Japanese females, as compared with 105 Chinese males per 100 Chinese females--too small a difference to account for the difference in birth rates. We have unfortunately no age statistics for Taiwan's population which distinguish between Japanese and Chinese population. However, the following calculation will throw some light on the age composition of the Japanese on the island: in 1937 the Japanese population of Taiwan constituted 0.41 per cent of the population of Japan proper, and Japanese children of school age in Taiwan amounted to 0.393 per cent of the children of school age in Japan proper. The proportion of Japanese juvenile population in Taiwan is therefore almost the same as in Japan. The only possibility of a significant difference in the age structure of the two groups may be that there are proportionately fewer aged Japanese in Taiwan than in Japan, but on the whole the age composition of the population approximates that of Japan."

4:Grajdanzev--30-31 S-4 (no date) 1942 Formosans-1-2
116, 162, 165, 171, 563

"The real explanation of the striking difference in birth and death rates is that the Japanese and the Chinese on the island form two separate groups, the living conditions and customs of which are completely different. But the figures reveal more than this. The birth rate of the Japanese in Taiwan is only slightly below that of the Japanese in Japan Proper, while the death rate of the Japanese in Japan is 17.0 (1937) and in Taiwan only 9.6 To some degree this may be explained by the fact that there are a smaller number of aged Japanese on the island, but this alone is not sufficient. It is well known that in the same population different social classes have different death rates. The social composition of the Japanese [31] on the island is such that they are better off than the Japanese in Japan, to say nothing of the Chinese in Taiwan, whose death rate is more than double that of the Japanese. The Japanese on the island live under better sanitary conditions, are better fed, have better medical treatment and more leisure than the masses of the Chinese. This does not mean, of course, that the death rate of the Chinese is stable: it is falling, and this fall, typical of all colonial countries similarly situated, is probably due to improved methods of combatting epidemic diseases.

4:Grajdanzev--30-31 S-4 (no date) 1942 Formosans-2
116, 162, 165, 171, 563

Death Rates In Some Tropical Colonies
(per thousand)

	1911-13	1921-25	1926-30	1931-35	1937
Taiwan	...	24.0	22.0	20.6	19.3
Palestine	...	23.7	24.3	21.0	15.0 (1938)
Philippines	19.1	18.9	19.7	18.5	18.8
Ceylon	31.8	27.8	25.1	24.7	21.7
Straits Settlements	40.0	28.9	30.7	24.7	21.3

As regards mortality, Taiwan is in about the same position as other colonies, a fact which suggests that living conditions are comparable to those in any other colony named above."

4:Grajdanzev--32-34 S-4 (no date) 1942 Formosans-1-5
116, 162, 171, 463, 563

"Even in advanced countries occupational statistics are not precise, and in the colonies they are far less reliable. Nevertheless, if one wants to determine only the general characteristics of the population, occupational statistics for Taiwan reveal something. The following table divides the population into such broad categories as 'occupied in agriculture and forestry', 'occupied in industry and mining', etc. The division is given for the whole population and also, for the Chinese and the Japanese separately. The year taken is 1930, because no later figures are available, but it will be shown later that no great changes have taken place since that time. Unlike Korea, where the members of the family who do not take part in work are included in the same occupational group as that of the head of the family, in Taiwan they are registered as having 'no occupation'.

Occupational Statistics For Taiwan, 1930
(in thousands)

	Agriculture and forestry	Fishing	Industry and mining	Trade	Communication	Public serv. & prof.	Others	No Occup.	Total
Japanese	4.4	1.6	15.2	18.1	9.1	37.6	4.5	137.7	228.2
Natives	1 191.7	26.8	144.2	151.0	49.8	37.4	67.6	2,645.1	4,313.6
Total (incl. others)*	1,197.1	28.6	173.6	178.3	63.1	76.0	73.4	2,802.4	4,592.5

* Includes 'foreigners', chiefly Chinese from China proper.

The same table is given below in percentages, taking the number of those occupied as 100 For the sake of comparison corresponding figures for Japan proper for the same year are given: [33]

Occupational Distribution Of Taiwan
(percentages, 1930)

	Agric. and forestry	Fish ing	Industry and mining	Trade	Com- muni- cations	Public serv. & prof.	Others	Total occu- pied
Taiwan								
Japanese	4.8	1.8	16.8	20.0	10.1	41.5	5.0	100.0
Natives	71.4	1.6	8.6	9.0	3.0	2.2	4.1	100.0
All, incl. others	67.0	1.6	9.7	10.0	3.5	4.2	4.1	100.0
Japan proper (1930)	47.7	1.8	20.0	15.1	3.7	6.9	4.5	100.0

In a condensed form this table indicates to us the most important problems of Taiwan. Taking the native population, we see that almost three-fourths are occupied in agriculture. Forestry as a rule serves only as subsidiary occupation to agriculture. At the same time only 8.6 per cent are occupied in industry and mining, and this also includes those occupied in domestic industries where the productivity of labor is almost as low as in Chinese agriculture. At the same time there are more persons occupied in trade in the broad sense than in industry (9.0 and 8.6 per cent respectively) while only three

per cent are occupied in transportation. This illustrates the low level of economic development of the country. In this respect comparison with Japan is interesting. Only a few decades ago Japan herself was at about the same stage of economic development as China. Now, we see that less than half of her population are engaged in agriculture and 20 per cent in industry and mining.

The occupational statistics prove once more that there are two distinct groups in the population; 41.5 per cent of the Japanese, as compared with only 2.2 per cent for the natives, are occupied in public service and the professions, i.e. they form the backbone of the administrative services of the island. We shall see later that only the lowest positions in these services are open to the Chinese. Almost 17 per cent of the Japanese are occupied in industry, and they occupy all the key positions. About 18 per cent of them are occupied in trade and 10 per cent in communications. Comparison with figures for 1905 indicates furthermore that no substantial changes have taken place since then. [34]

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Chinese					
1905	75.5	6.1	8.2	1.4	8.8
1930	73.0	8.6	12.2	2.2	4.1

	Agric. and forestry	Industry and mining	Commerce and communic.	Public service	Other occupations
Japanese					
1905	*	23.5	32.5	37.8	6.2
1930	*	16.8	30.1	41.5	11.6

* Included in 'other occupations.'

More than 75 per cent of the Chinese were occupied in agriculture in 1905, and 73 per cent in 1930; there was a slight rise in the number occupied in industry—from 6.1 to 8.6—and a more pronounced increase of those occupied in trade. As is well known, trade is the refuge of the unemployed and under-employed and its rapid growth as compared with other professions is hardly a sign of strength.

In twenty-five years the number of Japanese occupied in government administration rose from 37.8 per cent to 41.5 per cent. The fall in the percentage of those occupied in industry may be due to the fact that in the period from 1896 to 1905 very many Japanese were obsessed with the idea of making money in Taiwan in the shortest possible time. Since then the potentialities of the island have become better known, large business organizations have squeezed out the independent ventures. In any case these figures illustrating the changes in Taiwan in twenty-five years do not show that with the passing of time the occupational composition of the Chinese and of the Japanese of the island tends to become similar. If data were available for each occupation showing how many Japanese

and how many Chinese are in important executive positions and how many in subordinate positions, the gap would appear much wider. Unfortunately, direct data are not available, but we shall see later that there is no indication that the division is becoming less sharp."

4:Grajdanzev--86 [21 S-4 (no date) 1942 Formosans
116, 228, 471, 473, 563

"As to the other fishing enterprises, their relative strength may be presented in the following manner:

Fishing Enterprises in Taiwan

	Number of firms	Nominal capital (1,000 yen)	Paid-up capital (1,000 yen)	Average paid-up capital per company (1,000 yen)
Japanese corporations with offices in Japan	2	101,500	65,500	32,750
Japanese corporations with offices in Taiwan	28	5,972	3,044	109
Other firms (mostly Chinese)	21	429	399	19

In this field the Chinese can hardly compete with the Japanese because of their lack of capital (1).

1. It is interesting to note that, according to the last census, out of 82,338 Chinese fishermen 16,382 were employers, while among 5,045 Japanese only 101 were employers. Evidently, the Chinese 'employer' had one to three workers, while the Japanese employer was a person or firm of considerable means."

4:Grajdanzev--98 S-4 (no date) 1942 Formosans -1-2
116, 257, 477, 563

"Before the Japanese occupation sugar production was carried on in small Chinese enterprises. But these enterprises with their primitive technique, animal power and low-quality products, were compelled to give ground step by step before the modern mills constructed and operated by the Japanese companies. The rapid extinction of these small enterprises and the growth of production of the modern mills may be seen from the following table.

Production of Sugar in Taiwan
(tons)

Year (Nov.-Oct.)	In modern mills	In improved mills	In primitive mills	Total
1905	4,535	385	44,659	49,579
1915	187,839	11,166	9,463	208,468
1917	409,165	26,560	22,367	458,092
1921	241,169	5,217	6,348	252,734
1925	467,264	4,824	7,451	479,539
1927	402,611	3,343	5,186	411,140
1929	777,931	5,776	5,621	789,328
1930	798,304	7,050	5,130	810,484
1932	977,239	6,744	5,065	989,048
1933	616,840	10,070	6,814	633,724

Production of Sugar in Taiwan [Cont.]
(tons)

Year (Nov.-Oct)	In modern mills	In improved mills	In primitive mills	Total
1934	634,403	4,721	7,919	647,043
1935	942,712	9,994	12,946	965,652
1936	880,552	10,402	10,725	901,679
1937	987,451	10,423	9,478	1,007,352
1938	...	...	...	989,778
1939	...	...	...	1,377,000

From this it appears that while in 1905 only nine per cent of the sugar was produced in modern mills, in 1937 these produced ninety-eight per cent of the total. Primitive mills and the so-called 'improved' mills had inevitably to lose the position they occupied."

4:Grajdanzev--98-99 S-4 (no date) 1942 Formosans-1-2
116, 177, 257, 433, 473, 563

"Production of sugar in modern mills is concentrated in the hands of nine Japanese corporations, [99] and of these, six produce ninety-seven per cent of all the sugar produced in modern mills and ninety-five per cent of all that produced in Taiwan. In the table on page 100 information is given concerning each of these six largest corporations. Unfortunately this information is not complete. These corporations are closely connected with many other enterprises in Taiwan and also have enterprises in the Pacific Islands under Japanese mandate, in Java and in other southern colonies (1). Many of these enter-

1. They also have refineries in Japan proper. Sugar produced in Taiwan is not refined there.

prises have nothing to do with sugar. But even so, the information given is interesting because it does throw some light on their activities. The paid-up capital and reserves of three of these corporations is about ¥100 million each. The amount of reserves is explained by the remarkable rate of profit which they receive—34 to 40 per cent is 'normal' for them. A lower rate of profit, as in the case of Ensuiko Seito Corporation (20.2 per cent) may be explained by the fact that the corporation has recently doubled its capital, investing it in new enterprises which do not yet bring profit. Thus the rate of profit in the sugar industry is extraordinarily high for all companies. It was shown above that the farmers did not receive any benefits either from the increase of the sugar

content of the cane, nor from the increase of protection; it now becomes clear that these benefits fell to the manufacturers, for only in this way were these huge profits possible (2).

2. But a certain part of these profits is the result of higher prices paid by the Japanese population for the benefit of these companies, protected by the tariff wall."

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-1-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

"Our analysis of industry and mining must not be limited to a survey of present conditions and the plans of the government, etc. Properly speaking it should only begin here. The population of Taiwan is about five per cent Japanese and about ninety-five per cent Chinese and aborigines. In order to evaluate the place of these two groups in industry and mining we should know wage levels and working conditions as well as the all-important question of who are the entrepreneurs and who the wage earners. Unfortunately, some of these questions cannot be answered because of the absence of information.

The latest available report concerning the nationality of capital in Taiwan's companies refers to the years 1929.

Distribution of Corporate Capital in Taiwan by Nationality in 1929
(1,000 yen)

	Japanese	Chinese	Other*	Total
Agriculture	4,434	4,962	4	9,399
Industry	180,497	16,786	1,658	198,941
Commerce	23,128	28,082	2,033	53,242
Communications	3,186	2,571	25	5,781
Fisheries	2,258	1,190	20	3,467

Distribution of Corporate Capital in Taiwan by Nationality in 1929 [Cont.]
(1,000 yen)

	Japanese	Chinese	Other*	Total
Mining	12,243	3,441	1,422	17,107
Total	225,745	57,033	5,161	287,939

* Chiefly Chinese from the mainland, citizens of the Chinese Republic.

The share of the Japanese was therefore 90.7 per cent in industry and 71.6 per cent in mining, while the corresponding shares for the Chinese were 8.5 per cent and 20.1 per cent. It is true that these figures do not include individual enterprises, which are chiefly Chinese, but it is quite evident that their inclusion would not greatly change the picture because the average capital of such enterprises is very small. On the other [111] hand this table does not include government enterprises which should be considered for all practical purposes as Japanese enterprises (the managerial staff is Japanese and the profits may be transferred to Japan at any time), and the capital of these government enterprises is huge. As is seen from the table, the capital of all corporations was about ¥288 million in 1929, yet in the same year the capital of the state railways alone was ¥122 million. Beside railways the government has many enterprises of all kinds. Since 1929 the situation has further changed to the disadvantage of the Chinese group for in the

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

last few years, as was shown above, huge new companies have been established and the capital of old ones increased. The new companies are Japanese. In 1929, for example, the capital of the Japanese companies occupied in the fisheries was ¥2,258,000; in 1939 two Japanese companies with headquarters in Japan proper, whose capital is ¥65,500,000 were operating in Taiwan. Of course, only a part of this capital is sunk in their Taiwan enterprises, but it is clear that the situation in 1939, in this as well as in many other respects, is less favorable to the Chinese than it was ten years before.

The same thing has occurred in mining, where the total capital is now ¥46.6 million, instead of ¥17.1 million as in 1929. The increase is due to the activities of the Japanese Koyo Kogyo, Taiwan Kogyo, and Keelung Tanko corporations."

4:Grajdanzev--111-112 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 477

"A similar expansion [similar to that in mining--analyst] has taken place in industry, where all large new enterprises are owned by Japanese who make up only five per cent of the population, but now own at least ninety-five per cent of the capital in Taiwan's industry and more than ninety per cent of the capital in mining. But if one takes into consideration the fact that the Japanese enterprises are modern, while those of the Chinese are small and have more primitive equipment, (1) it becomes clear that the share

1. Compare the data on sugar mills given above.

of the Japanese enterprises in production is even greater than comparison of the respective holdings would indicate. Furthermore, the shares of corporations in Taiwan are not subject to free purchase and sale. These are monopolistic [112] organizations, and shares in them are not offered on the open market but are held by the big corporations of Japan."

4:Grajdanzev--112 S-4 (no date) 1942 Formosans -1-2
116, 171, 471, 563, 477, 655, 177.47 Japan
636.47

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929 Per cent	Korea 1938 Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital. and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

4:Grajdanzev--112-113 S-4 (no date) 1942 Formosans
116, 171, 563, 471

"According to Takahashi, (1) industry in Taiwan [113] is chiefly in Japanese hands because

1. Op. cit. p. 434 et seq.

(1) the Japanese are able to organize modern enterprises; (2) the Chinese are chiefly concentrated in domestic industry; (3) the national characteristics of the Chinese are such that they are unable to organize corporations; (4) any accumulations of capital which they may have are small because they came to the island recently and their chief occupation is agriculture; (5) they cannot compete in the Japanese market with the Japanese because they do not know the market; (6) in those cases where they do organize a corporation their aim is to get profits quickly, and this brings ruin to the corporation. This is a familiar argument in colonial countries. We make only a few comments below.

It is argued that the Chinese do not have the accumulation of capital necessary for modern industry, that they came to Taiwan recently (!) and that their chief occupation is agriculture. But in 1900-05, when the Japanese began to build up the industrial enterprises of Taiwan, the chief occupation of the Japanese in Japan was also agriculture. It would be a mistake to suppose that they exported a huge amount of capital to Taiwan. This question will be touched upon in the chapter on the external trade of Taiwan, where we shall show that the capital of corporations in Taiwan was 'created' chiefly in Taiwan itself."

4:Grajdanzev--113 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 177.47 Japan
636.47

"Our first question is now answered: the Chinese as a group receive very little from Taiwan's industry and mining in the form of interest on capital or entrepreneurs' profits. Any advantages which they may derive from these industries arise then chiefly from their position as workers. Let us see now what they receive in this capacity. In 1936, out of 81,589 workers occupied in industrial enterprises with five or more workers or having a prime-mover, 76,251 (93.5 per cent) were Chinese—almost the same percentage as in the population of Taiwan. The remaining 6.5 per cent were chiefly Japanese."

4:Grajdanzev--116 S-4 (no date) 1942 Formosans-1-2
116, 171, 435, 465, 563

"As is well known, Japan is not a country of high wages. Yet wages there are from two to three times higher than the wages of the Chinese in Taiwan and do not seem to have been an obstacle to the development of industry. The wage level is closely connected with the level of retail prices and this we give below.

Retail Prices in Taihoku, May 1939

		(sen)
Sweet potatoes	(per kin)	6.4
Rice, horai	(per kin)	11
Sugar	(per kin)	29
Pork, average quality	(per kin)	43
Miso, per 100 momme	(0.827 lb.)	8
Fish	(per kin)	18-22
Eggs, each		6
Soap, per piece		10-17
Matches, per box		1.4
Firewood, per 100 kin		180
Muslin (per yard)		134

Now, let us take two workers—one skilled and one day laborer. For the skilled workers the average daily wage in the second half of 1938 was ¥1.43 per day, (1) for an

1. This is a simple arithmetic average of 60 different

categories of workers in Taihoku; in so far as highly paid categories are small in numbers, the weighted average would be lower. The official estimate of the average wage for Taihoku is ¥1.27.

unskilled worker ¥0.85. The average family in Taiwan consists of five to six persons. According to the prices given above, the skilled worker can buy with his daily wages, for example, either 17.2 lb. of rice or 4.4 lb. of pork, or 6.5 lb. of sugar. An unskilled worker can make such purchases as 10.2 lb. of rice, or 2.6 lb. of pork, or 3.9 lb. of sugar. By whatever standards, it is evident that the wages of the workers are very low.

The wages of Japanese workers, on the other hand, are at least double those of the Chinese for the same job. For Taihoku the official estimate of the average wage for the Chinese is ¥1.27, for Japanese, ¥2.41 (2). It is thus not profitable for the Japanese

2. A simple arithmetic average for 25 occupations of the Japanese in Taihoku gives ¥2.65.

entrepreneurs to use Japanese workers extensively."

4:Grajdanzev--117, S-4 (no date) 1942 Formosans
116, 465, 472, 511, 563

"We saw previously that the development of modern industry in Taiwan did not benefit the Chinese as entrepreneurs. Now it becomes evident that it brought very little to them as workers. If we use Engel's ratio of sixty per cent as an estimate of the share of wages spent on food in low-wage countries, it appears that the wages of the unskilled worker in Taiwan can purchase about one pound of rice per day for each member of his family."

4:Grajdanzev--119 [2] S-4 (no date) 1942 Formosans
116, 171, 497, 511, 563, 177.49 Japan
636.49

"From the table given above [see table on page 118 under category 116--analyst] we see that a Japanese makes almost five times as many trips a year as does a Taiwanese --whereas the movement of the freight appears relatively as large as in Japan. The movement of passengers reflects the conditions of life of the natives while the movement of freight in Taiwan is the movement of Japanese freight to and from ports--coal, sugar, rive, fertilizer, lumber, and sugar cane (1) (in the order of freight carried)--

> 1. Sugar cane is in sixth place because the bulk of its [sic] transported on special railroads.

which, as will be shown later in more detail, serve chiefly the Japanese economic machine. The statistics of revenue show that the average cost per ton of freight in Taiwan is less than in Japan (¥2.26 as compared with ¥2.34). It may be said that this is quite reasonable because in Taiwan average distance over which the freight is moved is less. On the other hand, the average passenger cost per trip in Taiwan is twice as high. In spite of the smaller scale of operation, the railways of Taiwan bring a net return of eight to nine per cent as compared with six per cent in Japan (1937)."

4:Grajdanzev--124-125 S-4 (no date) 1942 Formosans-1-2
116, 162, 205, 563

"On several occasions it has been pointed out that in Taiwan there are two groups of the population, Japanese and Chinese, with quite different levels of income. Let us compare these.

Use of Communication Facilities by the Japanese and the Chinese in Taiwan in 1938

	Total sent (1.000)		Per capita	
	By Japanese	By Chinese	Japanese	Chinese
Letters etc.	50,879	30,957	165.0	5.7
Parcels	681.2	174.0	2.20	0.032
Telegrams	1,736.2	366.1	5.560	0.068
Telephones	15,510 (units)	6,741 (units)	0.05010	0.00125

Source: Taiwan Jijo, per capita figures calculated.

It is clear that the average used in the table on page 123 are misleading, for the bulk of the letters, parcels, and telegrams are sent by the small group of Japanese living in the island, just as most of the telephones are used by them. On the average a Japanese sends 29 times as many letters, 69 times as many parcels, 82 times as many telegrams and has 40 times as many telephones as does a Chinese. An important [125] part of the letters, telegrams and telephones naturally serve official functions. It is now clear why the net-

work of post offices and telegraph offices is growing so slowly--65.4 per cent of all the Japanese on the island live in nine cities and 83 per cent in 57, all of which are well supplied with these facilities."

4:Grajdanzev--125 S-4 (no date) 1942 Formosans
116, 167, 171, 205, 563

"It is also noteworthy that the Japanese in Taiwan send on the average many more letters, parcels, telegrams and have better telephone facilities than the Japanese in Japan proper. This is an indirect proof that they are much better off than the average Japanese at home, a fact to be kept in mind when one is considering the causes for the failure of mass Japanese emigration to the island. The Japanese come to the island in order to secure a better living in Taiwan than they had at home, and not to compete with the low-paid Chinese."

4:Grajdanzev--126 S-4 (no date) 1942 Formosans
116, 453, 563

"The banking system collects the liquid funds of the inhabitants and transfers them to those who can put up security and are willing to pay a certain rate of interest. Besides the deposits which are brought to them the banks may to a certain degree 'create' deposits. These operations place them at the centre of economic activity and give them power far beyond that which their own capital could otherwise confer. All banks in Taiwan are in Japanese hands. On page 127 we give in tabular form some information concerning each of the banks operating in Taiwan."

4:Grajdanzev--128 S-4 (no date) 1942 Formosans -1-2
116, 453, 458, 511, 563

"The banks enumerated above [see page 127 in category 116--analyst] are Japanese, and the only institutions in which the Chinese have some measure of influence are the credit cooperatives, which will be discussed later. The table below summarizes information on deposits of all financial institutions of Taiwan.

Growth of Deposits of Financial Institutions in Taiwan
(1,000,000 yen)

	1926	1928	1930	1932	1934	1935	1939
Banks	102.9	111.9	101.2	133.2	152.2	173.0	270.3
Post office	9.1	13.3	16.5	18.1	21.4	23.7	34.8*
Credit cooperatives	28.0	34.9	34.6	47.7	65.5	77.9	118.2†
Total	140.0	160.1	152.3	199.0	239.1	274.6	423.3*†

* Post-office savings deposits on Dec. 31, 1938.

†Of which rural credit cooperatives accounted for ¥87,230,000 on Dec. 31, 1938.

The amount of deposits in Taiwan has thus trebled in thirteen years. In order to judge whether this is a sign of a sharp improvement of the economic position of the islanders, it is necessary to know (1) whether the increase in deposits comes chiefly from Japanese or from Chinese sources, (2) whether the increase in deposits of the Chinese is a real

increase, or whether it only reflects a change of habit (it is evident that the transition from subsistence to money economy is bound up with the increase of deposits at the banks), (3) how far this increase may be ascribed to war-time inflation.

We do not have complete data on the distribution of deposits between Japanese and Chinese, but what is available throws some light on the problem.

Distribution of Deposits in Banks and Post Offices
(million yen)

	Banks		Post offices	
	Chinese	Japanese	Chinese	Japanese
1926	33.0	69.8	2.6	6.6
1935	51.2	121.7	4.9	18.8
1938	...	...	6.9	27.9

4:Grajdanzev--129-130 S-4 (no date) 1942 Formosans-1-2
116, 453, 458, 563

"Deposits in cooperatives belong chiefly to the Chinese, but no data are available either on the exact composition by nationality of the depositors or on their number. The table given above shows that between 1926 and 1935 the growth of Japanese banking and postal deposits was more rapid than that of the Chinese and that in 1935 about seventy-two per cent of all deposits in the banks and post offices belonged to the Japanese. But in order to see whether there is a real gain we should know the number of the depositors or the average deposit. We have such data only for the post offices.

Average Amount of Savings per Depositor in Post Offices
(in yen)

	1921	1929	1934	1938	
Japanese	33.3	51.0	146.5	89.5	(1937)*
Chinese	8.2	16.6	14.2	13.8	

* Data for the Japanese beginning with 1936 show a strange change: the number of depositors rises sharply without a corresponding increase in the total amount of the deposits. For 1938 the number of non-Chinese depositors is shown as 394,000, while the whole Japanese population in Taiwan is only 308,000. It may be that the increase of more than 100,000 Japanese depositors with a very small increase in deposits reflects the stationing of a larger number of troops in Taiwan.

Calculated from data given in Taiwan Jijo.

Comparison of the deposits of the Japanese and the Chinese shows (1) that the Japanese deposits are from seven to ten times larger on the average than the deposits of the Chinese; (2) that the average size of the Chinese deposits has not shown any increase since 1929, especially if we take the rise in prices into consideration; (3) that the absolute amount of Chinese deposits is so small that it hardly indicates any great prosperity. When the farmer buys fertilizers and sells a larger and larger part of his produce on the market, he will not keep his savings in the form of silver but will prefer to keep it in the bank where it is safer. This is, however, not necessarily a sign of economic improvement.

On the other hand, a comparison of the note issue and the index of wholesale prices suggests that a large part of the increase in deposits in the war years is purely illusory. If a [130] business man is compelled by the conditions obtaining in his business to have in his account a certain sum of money, then with the rise of wholesale prices he has to increase his deposits in order to be able to satisfy his needs to the same extent as before. But this again can hardly be considered as a sign of 'prosperity', at least for the society as a whole."

"The money which the banks and credit cooperatives collect is lent to the business men and farmers, and here one finds a great difference in the position of the big firms and the small farmers or artisans. The banks serve chiefly Japanese firms, and their credit requirements differ little from those in Japan. Small business men secure their credit in urban credit societies which sometimes charge as much as thirteen per cent and usually ten per cent, while rural credit societies usually charge twelve per cent and in the worst cases seventeen per cent. (1) But both urban and rural credit societies grant

1. These rates are taken from Sangyo kumiai nenkan, 1938, Tokyo. K. Takahashi asserts that the usual rate for mortgages on real property is 15 per cent, op. cit. p. 601).

such credit only on good security, so that the demand of many farmers for credit remains unsatisfied and they are compelled to apply for loans to private individuals who charge twenty to twenty-five per cent, and as Takahashi remarks, cases where more than twenty-five per cent is charged are not rare.

This brief survey is sufficient to show that the modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay.

4:Grajdanzev--130 S-4 (no date) 1942 Formosans-2

116, 426, 453, 563, 477

The importance of this fact cannot be overemphasized. The Chinese enterprises are unable to compete with the Japanese, not so much because the Chinese are 'unable to organize corporations' on account of their 'national characteristics,' [rationalizations given by Takahashi for the domination of industry by the Japanese see pages 112-113 in category 116--analyst] but because their financing costs them two to five times as much as it does the Japanese enterprises."

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-1-2
116, 563, 659, 723, 177.65 Japan
636.65

"The expenditures on the government apparatus, including police, courts, prisons, and pensions are chiefly, in some cases [139] exclusively, expenditures on the Japanese staff and for the benefit of the Japanese. All important government positions are occupied by Japanese and their salaries are much higher than those of the Chinese. Expenditures on roads, railroads, and communications, of course, benefit the local population as well as the Japanese, but as was shown in preceding chapters, these improvements are used chiefly by the Japanese or for commerce with Japan which brings little net gain to the islanders. Expenditures on ports are out of all proportion to the needs of the island. Their function is, as the Japanese openly announce, to serve as a base for the advance to the South, and such expenditures have little to do with the welfare of the islanders. Expenditures on rice control are again expenditures in the interest of Japan proper for this system has in view simply the interest of Japanese. In the war expenditures we have included expenditures on airfields, on Red Cross activities, on air defense and contributions to the war chest of Japan. These expenditures grew from the modest figure of 287,000 yen in 1935 to 21,150,000 yen in 1939; thus Taiwan contributes to the conquest of China by the Japanese. In the war expenditures should be included expenditures on meteorological stations. Their remarkable growth from 73,000 yen in 1935 to 900,000 yen in 1939 is explained not by any interest in meteorological phenomena, but by the

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-2
116, 563, 659, 723, 177.65 Japan
636.65

needs of the Japanese military aviation. Taiwan lies in the path of typhoons and information on weather conditions there is of extreme value to the Japanese forces in China."

4:Grajdanzev--140 S-4 (no date) 1942 Formosans
116, 563, 656, 177.47 Japan
636.47

" 'Encouragement of industry', on which the government planned in 1939 to spend 11.5 million yen from the general budget and 6.5 million from local budgets, consists of subsidies to Japanese industrialists and entrepreneurs in general. The budget for 1939, for example, provided for the following grants to Japanese companies: 1,743,000 yen to oil companies, 1,447,000 to shipping lines, 1,640,000 to airlines, 72,000 to private railways, 629,000 to gold producers. It is clear that these expenditures enriching the Japanese entrepreneurs give at best, as was shown above, low-paid work for the Chinese."

4:Grajdanzev--140 [2] S-4 (no date) 1942 Formosans
116, 346, 563, 659, 177.65 Japan
636.65

"The shrines and temples mentioned above are not Chinese temples, but Japanese shrines, including a shrine to the spirits of the war-dead on which 100,000 yen was expended in 1939. It may be interesting to note that construction of Japanese shrine in Taito (1937-1939) was to cost 1,078,000 yen, while the appropriations for the Chinese temple of Confucius in Taihoku (1935-1936) amounted to only 20,000 yen."

"Independent trade and foreign business are at an end (1) and the handful of foreigners

1. Identical amounts of foreign trade may mean different things for a nation; thus if an American firm buys tea in Taiwan, transports it to the United States in an American ship and sells it to retailers, the net result for the United States is very different from the case where a Japanese firm buys tea in Taiwan, brings it to the United States in Japanese bottoms, and sells it to American retailers.

in Taiwan are in a precarious position. In his [147] book 'Taiwan under Imperialism' Tadao Yanaihara explains this in the following way (2): in their competition with foreign

2. Yanaihara, op. cit., pages 48-49.

and Chinese merchants the Japanese traders had great capital; they also entered the sphere of production; they had the advantage of the cooperation of the Taiwan Bank; they were helped by state monopolies; they enjoyed subsidies from the state; they were protected by the tariff wall. But nowhere in his book does Professor Yanaihara give proof that the Japanese merchants had greater amounts of capital when their enterprises were organized. The huge capital funds were not brought from Japan; they were created in Taiwan itself. Neither can any reason be found for combination of trade and production

as a cause of their success. According to his own statement (op. cit., page 48), the foreign traders and shipping were almost completely driven out (hotondo kuchiku serarete) by 1907. But at that time no Japanese took any part in the production of rice, whereas in tea production Mitsui Bussan Co. and Nozawa have participated only since 1907. As late as 1905 about 90% of the sugar was produced in primitive mills and only 4,535 tons in the mills of the newly-established Japanese enterprises, while the total exports of sugar for 1905 were but 42,600 tons. Pineapples and bananas were unimportant as articles of export in these early years: bananas appeared in the custom reports in 1907 (valued at only 44,129 yen), pineapples to the value of only 18,639 yen were exported in the same year. Since camphor became a monopoly, there is no question of competition with respect to it; while alcohol was practically not exported."

"The remaining imports —— imports for consumption —— should be divided, wherever possible, into two parts —— consumption by Japanese and consumption by Chinese. Without attempting any detailed analysis we may make a few remarks on the basis of the material available. In 1939, for example, 2 million yen worth of condensed milk was imported, as well as 7 million yen worth of sake and 5 million yen worth of beer, not including local production of sake and beer. Neither sake nor beer are Chinese drinks; they are consumed chiefly by 100,000 Japanese male adults and by the troops stationed there. To take another example, in 1939 48.6 million yen worth of fabrics and clothing, including shoes, hats, gloves, buttons, pearls, combs, bracelets, laces, etc. were imported into Taiwan. From this amount 8.1 million yen worth of gunny sacks should be deducted, leaving a balance of 40.1 million. If Japanese residents were able in 1939 to spend 12 million yen on drinks (not including locally produced and consumed beverages), they probably spent not less than double this sum on clothing, shoes and other personal articles (1) which—with a [153] few unimportant exceptions—are imported from Japan.

1. That this is not an overestimate may be judged from the following figures: 77.2 yen per person per year or about 25 yen per family per month can hardly be considered as excessive for clothing (including shoes, etc.) in a country where, for example, one yard of muslin cost 1.34 yen. In a special investigation conducted in 1937-1938, which covered 355 Japanese families with 1,397 members, the average

monthly income of a family was 184.6 yen, of which 23.6 yen was spent on food, 16.9 yen on lodging, leaving an ample margin for clothing and other expenditures. (Data on budgets from the Toyo keizai tokei geppo, July, 1940). An investigation conducted in Japan proper in 1936-1937, only one year earlier than the investigation in Taiwan mentioned above, gives the average expenditure on clothing of 10.18 yen per month for persons with an average salary of 88.37 yen; for the low income brackets it was 3.43 yen, for higher (about 100 yen), 12.18 yen. In our case the average salary is 184.6 yen, so that an expenditure of 25 yen on clothing is quite probable. See Kakei chosa hokoku, (Naikaku tokei kyoku) Tokyo, March, 1938.

If this is true , then not more than 3 yen per capita were spent on imported clothing by the Chinese in 1939 (2). But, as was pointed out in the preceding pages, the Chinese

2. The correctness of our estimate is supported by the budget estimates made by the government officials in 1936 and quoted by Nasu (op. cit.). According to them, the per capita annual expenditure on clothing of a representative Taiwanese farmer was 6.02 yen in 1936. This figure includes imported and locally produced clothing (shoes, hats, etc.) whereas our estimate is for the imported textiles only.

society in Taiwan is not uniform. Its wealthier members spend on clothing many times more than the small farmers, workers, or tenants."

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans -1-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year—a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

4:Grajdanzev--156 S-4 (no date) 1942 Formosans
116, 453, 457, 563

"We have statistics of domestic and foreign postal money orders for Taiwan. Without exception each year the amount of money orders issued in Taiwan is above the amount of money orders paid in Taiwan. The difference indicates approximately the net remittance by the Japanese in the case of domestic money orders (an order on Japan is regarded as a domestic order in Taiwan), and by the Chinese in the case of foreign money orders. The average amounts for the last 5 years (1933/34-1937/38) are as follows:

	Issued	Paid	Balance
Domestic money orders (1,000 yen)	32,207	19,880	—12,327
Foreign money orders (1,000 yen)	467	96	— 371

Source—Financial and Economic Annual of Japan, 1938.

For the last 5 years the average balance of postal money orders in favor of Japan was 12,327,000 yen while that to the advantage, presumably, of China (1) was only 371,000 yen. There is nothing astonishing in this because the Chinese working in Taiwan who are the citizens of China are either workers or petty traders and, of course, none of them are employed in governmental service. These are statistics of postal money orders, not of bank remittances, but there is no reason to suppose that the situation with respect to the latter is different."

1. We say 'presumably of China' because it is difficult to find any other foreign country to which an average of 16,000 remittances are made annually from Taiwan.

4:Grajdanzev--158 S-4 (no date) 1942 Formosans
116, 457, 563, 661, 177.43 Japan
636.43

"Of course, some part of the [trade--analyst] balance is made up by the remittances of the Japanese on the island to Japan-proper, remittances which may be presented as 'earned income' and not an income from investment. However, the thousands of Chinese citizens who reside on the island remit home to China only paltry sums. They are unable to earn as much as the Japanese, mainly because the privileged position of the Japanese is the result of the colonial status of the island. The services performed now by the Japanese in most cases could be as well performed by the islanders, but their part is to be servants of the ruling nation. It should be clear than that this 'earned income' can be considered as a special form of the general income from the colonial exploitation of the island."

4:Grajdanzev--160-161 S-4 (no date) 1942 Formosans
116, 563, 646, 177.64 Japan
636.64

" 'For the consulting of the people's opinions' there is an advisory body to the governor-general, Hyogikai (1), established in June 1921. Only government-general

1. Usually translated 'council.'

officials, civil and military, and those private persons 'rich in knowledge and [161] experience' whom the governor-general choses to appoint have a right to represent the people's opinions; but all high officials, civil or military, are Japanese, and, as was mentioned, they are appointed as well as dismissed at the representation of the governor-general. This advisory body, consisting of a chairman, vice-chairman, and forty members is thus made up of persons whom the governor-general finds it convenient to appoint. The chairman is the governor-general himself, and the vice-chairman is his secretary-general. Each member is appointed for a two-years period, but with the permission of the governor-general may be released from duty before the expiry of that period. Clearly, this is a purely bureaucratic institution."

4: Grajdanzev--162 S-4 (no date) 1942 Formosans
116, 563, 642, 177.64 Japan
636.64

"The officials of the Japanese Empire are divided into three groups--chokunin, appointed by the Emperor, sonin, highest officials, appointed with the Emperor's approval and hannin, lower officials, for whom the sanction of the Emperor is not necessary. In the government-general there were in 1938 7 chokunin officials, 119 of sonin rank, and 648 of hannin rank, while in the provinces and districts five persons were of chokunin rank, 94 of sonin and 1,523 of hannin.

These numerous high officials are exclusively Japanese and in the counties and municipalities there are hundreds more. Lower positions are occupied not only by Japanese, but also by Chinese, but as it is pointed out in Sekai nenkan, 'from the political point of view all administrative organisations are almost exclusively (hotondo zembunga) staffed with Japanese, while from the economic point of view everything is under the domination of the Japanese economy' (1).

1. P. 179."

4:Grajdanzev--163-164 S-4 (no date) 1942 Formosans-1-2
116, 563, 625, 177.62 Japan
636.62

"Besides having this regular police force the whole country is organized for police purposes through the revival of the old Chinese system of paochia. As we saw, the Chinese of the island have no voice in the government of the island, but they [164] are widely used for police purposes through the paochia system, which is obligatory for the Chinese, but from which the Japanese are free. Ten Chinese families form a chia and ten chia a pao, so that a pao comprises one hundred families or about 500-600 persons. At the end of 1938 there were 53,876 heads of chia and 5,648 heads of paochia (called paocheng in Chinese or hosei in Japanese). All these persons are elected by the members of the chia or pao, but they must be approved by the governor (or the chief of the district). It should be noted, however, that although they have no right to elect their own representatives for the self-government, the members of the pao and chia have the right to elect their own policemen. This paradox is due to the fact that the duties of the chiachang (the head of the chia) and the paocheng are heavy, unpleasant, sometimes dangerous, and completely unpaid, while any expenditures which may be incurred are covered by a tax on the members. Only relatively prosperous men can afford to do this work and even they do it for the most part unwillingly. They police their community under the guidance of the professional policemen, report the number of residents, new arrivals and departures (very severe punishments follow failure to

report), organize groups to pursue 'bandits', take precautionary measures in case of epidemics, repair the roads and bridges, fight insect pests, collect the taxes, etc., etc. If a crime is committed or the chiachang neglects his duty, he is the first person to be held responsible, but he along with the whole group is also held jointly responsible. This system was established by the Japanese government at a time when in spite of all governmental efforts, the island was not pacified, and some extraordinary measures were necessary to bring peace. But now, after more than forty years have passed since its inception, the system is a sign of weakness on the part of the government; it shows its distrust of a people conquered so many years ago and a belief among the rulers that only through this system can peace and order be maintained on the island."

4:Grajdanzev--165 S-4 (no date)1942 Formosans
116, 208, 563, 658, 871, 177.87 Japan
636.87

"In the sphere of education the island has passed through two periods, one before 1919 and another since that year. Before 1919 the policy of the government with respect to the Chinese of the island was vacillating. It was ready to recognize the existence of the Chinese in the Japanese Empire as a separate entity, and was ready even to help them preserve their Chinese character. A special society was created to investigate Chinese customs and habits and these were to be taken into consideration in court practice. Later, the failure of this policy was recognized and the avowed end became the japanization of the inhabitants of the islands in order to make them loyal subjects of the Empire. The elementary school was to become the chief instrument in this japanization. While before that period the education of the Chinese was completely neglected, since then school expenditures have grown and the number of pupils has increased from year to year. But this does not mean that there is any equality between the Japanese and Chinese as regards education. A literate population is necessary for the japanization of the islanders. Knowledge of the Japanese language is indispensable for workers, policemen, for the paocheng, for clerks, for all who work for their Japanese rulers. It does not mean, that there is any intention of raising the Chinese to an equal position with the Japanese."

4:Grajdanzev--166-167 S-4 (no date) 1942 Formosans-1-2
116, 563, 872, 177.87 Japan
636.87

"The growth in the number of pupils in elementary schools may be seen from the following table:

Primary Schools in Taiwan

	1935	1936	1937	1938	1939
Number of schools	781	783	789	796	812
Number of teachers	6,255	6,659	7,239	7,888	8,718
Number of pupils, 1,000	373.9	407.6	450.0	505.5	557.1
Number of pupils as percentage of children of school age	41.5	43.8	46.7	49.8	...
Graduates, 1,000	42.3	45.7	50.3	59.0	...

Source: Taiwan Jijo.

From this it appears that in five years the number of pupils in primary schools increased from 373.9 thousand to 557.1 thousand. About half the Chinese children of school age (8-14) are now in primary schools. This increase is partially due to the absorption of new pupils by schools, and partially to the fact that the schools have been increasing the length of the courses they offer from four to six years. If one takes into consideration the fact that during these six years the pupils must master thousands of characters as well as a foreign language and that most of the teachers are foreigners

(to them), it is clear that a six-year course is not a long one. These statistics do not include the schools for Japanese children. Theoretically there is complete equality in Taiwan and there are no special schools for the Japanese, but there are schools where instruction is carried on in the Japanese language. With the permission of the governor of the province Chinese may also be admitted to such schools, even if they do not know the Japanese language, but this permission is not given willingly. Many parents among the lower groups of Chinese [167] officials want to send their child to a Japanese school so that he or she will have a thorough knowledge of the language of the rulers and a better chance to get a higher paid job. But in 1936, out of 42,576 pupils in these schools, there were only 2,975 Chinese. There is another important fact with respect to the Japanese pupils; while in 1938 only fifty per cent of the Chinese of school age were in school, 99.4 per cent of the Japanese of this age were attending school in 1936."

4:Grajdanzev--167 [2] S-4 (no date) 1942 Formosans
116, 563, 873, 177.87 Japan
636.87

"A further important test of any system of education is the number of students in secondary schools and in universities. As was mentioned, literacy is a necessity under modern conditions, even in the colonies. But to give a secondary education and especially a university education to the colonial peoples en masse is quite a different proposition. On April 1, 1939, there were 5,125 Japanese and 4,117 Chinese in the Taiwan secondary schools for boys. It will be recalled that the number of Chinese on the island is almost twenty times as great as the number of Japanese, and the proportion between the children of the two groups is even greater. In the girls' secondary schools the situation is even less favorable to the Chinese—5,312 Japanese pupils as compared with only 2,541 Chinese (1939)."

4:Grajdanzev--167 S-4 (no date) 1942 Formosans
116, 563, 875

"Whether or not the Japanese and Chinese children in their respective schools receive the same kind of education may be inferred from the following fact. In 1936 the maximum monthly salary of teachers in the schools for Japanese children was ¥82 for men and ¥70 for women and the minimum, ¥40 for men and ¥30 for women. But in the public schools (i.e. for the Chinese) the maximum salary was ¥50 and minimum ¥10, and this difference was not due chiefly to nationality, for the majority of teachers in the public schools are also Japanese, but to the calibre of the teachers (1).

1. On the average the expenditure per pupil in 1936 was twice as high in schools for the Japanese as it was in schools for the Chinese."

4:Grajdanzev--167-168 S-4 (no date) 1942 Formosans
116, 563, 874

"In the specialized schools the situation is similar—[i.e. proportionally fewer Chinese than Japanese students--analyst] in the industrial schools there are 963 Japanese boys and 460 Chinese; in the commercial schools, 1,791 Japanese [168] boys and 724 Chinese. The agricultural schools form the only exception, but even here there are 588 Japanese to 1,426 Chinese pupils though there are at least 300 times as many Chinese farmers as Japanese."

4:Grajdanzev--168 S-4 (no date) 1942 Formosans
116. 563. 873

"The fact that in 1936, for example, there were 5,576 applications for entrance to secondary schools, but only 1,622 boys were admitted (29.1 per cent of the applicants) and most of those were Japanese shows that there is an ardent desire to study on the part of Taiwanese youth. In 1936 there were 985 Japanese students and 384 Chinese in the teachers' colleges (which prepare teachers for the Chinese schools)."

4:Grajdanzev--168 [2] S-4 (no date) 1942 Formosans
116, 563, 658, 873

"In discussing the public finances of Taiwan, it was noted that the expenditures on the only university in Taiwan. which is in Taihoku, cannot be considered as expenditures purely for the education of the Chinese population. In 1939 there were 192 Japanese and 90 Chinese students in this university."

4:Grajdanzev--168 [31 S-4 (no date) 1942 Formosans
116, 563, 871

"School Enrolment in Taiwan, April 1, 1939

	Japanese	Chinese
Youth of school and college age (8-22)	88,000*	2,000,000*
Pupils in primary schools	44,000*	557,135*
Pupils in secondary schools	10,437	6,658
Pupils in special secondary schools	3,343	2,610
Students in teachers' colleges (1936)	985	384
Students in the university	192	90
School Enrolment per Thousand Children of School Age		
Pupils in primary schools	500*	278*
Pupils in secondary schools	118	3.3
Pupils in special secondary schools	38	1.3
Students in teachers' colleges	11	0.2
Students in the university	2	0.05

* Approximate figures."

4:Grajdanzev--168-169 S-4 (no date) 1942 Formosans -1-2
116, 177, 563, 873

"It may be thought that the figures of students in secondary schools and colleges[see table on page 168, category 116--analyst] are not complete because they do not include those who are studying in schools and colleges in Japan proper. It is quite natural that those who have the means prefer to send their children to Japan to get their education at the centre of the Empire. We know that many Japanese from Taiwan are studying in Japan; probably their number far [169] exceeds the number of those who study in Taiwan, but unfortunately, we have no statistics. However, we have complete statistics of the Chinese from Taiwan who are students of Japanese colleges and universities. In 1936 there were in Japan 1,113 Chinese pupils from Taiwan in secondary schools of all types and 952 students in colleges and universities. These students studied: law 204 persons, medicine 507 persons, literature 27 persons, political science and economics 66 persons, commerce 71 persons, music 3 persons, art 7 persons, religion 6 persons, housekeeping 13 persons, physical culture 3 persons, all other subjects 45 persons, or a total of 952 persons.

These figures reflect the views of the students as to their future chances in life. The corresponding figures for the university in Taiwan are not so instructive because there the choice is very limited, while in Japanese they may choose in accordance with their future plans. The great majority of the students select courses leading to liberal professions—law, medicine, etc. They do this because they know that all other roads in

Taiwan are closed to them. These figures show also that the inclusion of those who study in Japan in the number of pupils and students in Taiwan does not materially change the picture."

4:Gra danzev--169-170 S-4 (no date) 1942 Formosans
116. 171. 217. 346. 563

"Let us now consider briefly other cultural institutions in Taiwan. Below we give the data on libraries in Japan and in Taiwan.

Libraries in Japan and in Taiwan, 1936

	Japan	Taiwan
Number of Libraries	4,730	86
Books	12,647,973	369,961
Readers	24,124,344	886,084
Readers per year per capita of population	0.34	0.16

Source: Dainippon teikoku nenkan.

The libraries in Japan are not visited very often—on the average only one out of three persons visits a library once a year—but in Taiwan only one out of six persons finds his way to a library once during the year. There is nothing astonishing [170] in this when we recall that there are only eighty-six libraries for a country with a population of six millions; it means that only the cities, where the Japanese are concentrated, are supplied with them."

4:Grajdanzev--170 [21 S-4 (no date) 1942 Formosans-1-2
116, 204, 563, 656, 177.20 Japan
636.20

"Now let us turn to another important sphere of cultural activities—newspapers. In Taiwan no newspaper can be published without the permission of the government-general, and the government-general has established a 'custom' of permitting only one newspaper to a city, so that up to 1932 there were only four newspapers in Taiwan, all in the Japanese language, though they sometimes carried a column in Chinese (1). Five

1. In 1937 a fifth one was permitted for Takao.

million Chinese in Taiwan had no newspaper of their own. In 1932 permission was granted to a Chinese weekly to appear as a daily, so that for the first time since the Japanese conquest the Chinese could read their own newspaper—Taiwan Shin-minpao. However, this experiment was short-lived. In 1937 it was decided that the people now know the Japanese language so well that no obstacles should exist to the japanization of the islanders. On March 1, 1937, all Japanese newspapers and the Chinese one carried a notice to the effect that after April 1 (for the Chinese newspaper, after June 1,) they were to cease publication of columns in Chinese (2).

2. Information on the newspapers is taken from Nippon shimbun nenkan, 1939, pp. 143-145. It is confirmed also by Sekai nenkan, 1929.

4:Grajdanzev--170 [21 S-4 (no date) 1942 Formosans-2
116. 204. 563. 656, 177.20 Japan
636.20

Thus after 1937 five and one half million Chinese could not read a newspaper in their own language, though most of them do not know Japanese."

4:Grajdanzev--171-172 S-4 (no date) 1942 Formosans-1-2
116, 452, 476, 563, 661, 177.47 Japan
636.47

"The growth of Taiwan's cooperative societies of all kinds is good testimony to the ability of the Chinese population to organize and to manage quite successful enterprises. The growth of the cooperative movement in Taiwan may be seen from the following table:

The Cooperative Movement in Taiwan

	1913	1918	1930	1935
Number of societies of all types	18	171	407	462
Number of members	2,760	70,428	265,248	342,122
Paid-up capital 1,000 yen	484	4,455	13,949	15,250

[172]

In 1936 the urban credit cooperatives had deposits of 20.7 million yen, while the rural cooperatives had 64.3 million yen. In May, 1940 the corresponding sums were 36.4 million yen and 122.7 million yen. All this is the more remarkable because the cooperatives were developed by the Chinese with little help from the Japanese or from the cooperative associations of Japan (1), and because the government put so many obstacles

1. This does not mean, of course, that the Japanese cooperative associations were unfriendly to the Taiwan cooperative movement. Quite the contrary. Throughout the history of the Taiwan cooperative movement the Chinese received every encouragement from the Japanese societies and from the certain Japanese individuals; but this help could not be great because of the conditions existing on the island. It is

4:Grajdanzev--171-172 S-4 (no date) 1942 Formosans-2
116, 452, 476, 563, 661, 177.47 Japan
636.47

important to emphasize that many individual Japanese physicians struggling with epidemics, teachers bringing education to far-away villages, political organizers helping the Chinese to organize their fight for freedom, and many others whose services to the Chinese were great and whose relation to the conquered people was that of sympathy and often of self-sacrifice, deserve the highest praise. However, it is not the individuals who count most, but the system, and however good the intentions of particular individuals might be, they could not and cannot change the governmental system existing on the island.

in the way of the development. The managerial and controlling staffs of the cooperatives in Taiwan must be approved by the government-general, so that 'undesirable' elements can be eliminated from the movement. The active members of the societies were often arrested and imprisoned and obstacles were put in the way of the creation of a powerful central body for the cooperative movement. But in spite of all obstacles the population of the island succeeded in building up a strong and useful organization."

4:Grajdanzev--172-173 S-4 (no date) 1942 Formosans
116, 452, 241, 476, 563, 177.47 Japan
636.47

"Since the start of the present war, however, through increasing supervision and various regulations, the government has turned the cooperatives into a piece of bureaucratic machinery, rather like the paochia. The chief function of the agricultural cooperatives, which form the backbone of the movement, has become the collection of rice and other products and their transfer to the government. According to the declared rations (1), the farmers in Taihoku province, for example, are to have only from two to

1. The ration figures are taken from the Ekonomisuto, Tokyo July 1, 1940.

two and half go of rice per day (0.6-0.75 lb.). But this is considerably below the usual consumption of [173] the farming population, so the farmers will not willingly surrender their 'surplus' and the cooperatives have been turned into organs for the compulsory collection of grain and other agricultural products. The only organization created by the islanders which had some semblance of independent existence is thus becoming a mere cog in the Japanese military machine."

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans -1-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

"Political Movements (1)

1. The information concerning these movements is taken chiefly from Yanaihara, op. cit., and from Sekai nenkan, 1939.

As was shown in the historical section of this book, the island was not actually acquired by the treaty of Shimonoseki, but was conquered by the Japanese. This conquest took seven years and the Japanese recognize that the island was pacified only about 1902. However, in 1907 the Peipu rebellion broke out, the immediate cause being an attempt on the part of the officials to use the paochia in the subjugation of the savages. In 1912 the Linchi rebellion broke out in connection with the felling of the bamboo forest by Mitsui interests, and in 1915 [177] there was a new rebellion at Hsilaian. All these rebellions were suppressed by the government. These and other spontaneous movements, the information concerning which was withheld by the government, are classified by the Japanese as rebellions of the old type, to distinguish them from newer movements guided by persons with modern education and ideas. The first of these movements was led by a Japanese, Taisuke Itagaki, who came to Taiwan in November 1914 and organized Dokakai, the Assimilation Society. The purpose of Itagaki was not a revolutionary one; he wanted to see the Chinese of the island assimilated by the Japanese. He realized however, that this assimilation could not take place unless the Chinese of the island

were given equal treatment and equal opportunities in education. But such ideas appeared too dangerous to the government-general and the movement was suppressed in February 1915. Another stimulus to the awakening of political consciousness in the Chinese was given by Lin Hsien-t'ang, a wealthy Chinese who petitioned the government to permit him to open a private middle school in Taichu for the Chinese. The idea was evidently so strange and radical to the Japanese that they consider this application an important stage in the political development of the island. In 1918 the Chinese from Taiwan who studied in Tokyo organized the Domeikai, an organization the primary purpose of which was to effect the abolition of some especially harsh laws in Taiwan. In 1919 this organization started a monthly publication Taiwan Youth, which a few years later was changed into a weekly. At that time the attempt to transfer its publication to Taiwan failed, but the organ became the spearhead of the educational movement and in the 'liberal' years of 1927-30 this publication succeeded in moving to Taiwan and turned into a daily newspaper, the fate of which has already been described."

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress. The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-1-3
116, 553, 563, 723, 177.65 Japan
636.65

"In any case. the Japanese government understands the abnormality of the situation [i.e. the unexpressed and expressed hostility of the people of Taiwan toward the Japanese--analyst] and the dangers connected with [192] it. To this 'domestic' consideration a special consideration of grand strategy is added. The militarists of Japan realize that the successful management of the Eastern Asia Co-prosperity sphere cannot be realized without the goodwill of at least some groups of the local population. They plan to retain the semifeudal organization of the Dutch Indies, Thailand, Malaya, etc., but to supplement it on the one hand with direct control over rajahs, sultans, chiefs and so on, on the other hand with an indirect control through the Chinese. In each country of Southeastern Asia there are millions of Chinese, chiefly of Kwangtung and Fukien origin. Their numbers could be easily increased, because through administrative measures their immigration has been kept down. In some countries only a very small number were admitted annually; in other permits to immigrate were given more or less freely, but on condition of payment of a very high head tax. The Japanese can easily double or treble the number of immigrants, putting as the only condition of migration a guarantee of the 'political reliability' of the emigrant. The Chinese have played an extremely important part in the economic life of the countries of Southeastern Asia. This part would be greatly increased on the one hand through repeal of certain limitations upon the activities of the Chinese, on the other hand through the systematic financial assistance given by the Japanese banks to the Chinese businessman, especially to middlemen. Of

course, the activities of the Chinese would be controlled by the Japanese, and here the Chinese from Taiwan come into the picture. Many of them beside their own native language speak Japanese also. The number of such persons can be easily increased, especially if the youth of Taiwan knows that lucrative positions will be opened for them. Thus, two lines of control can be used: on the political side—local population—rajahs—the Japanese commissioners—Tokyo; on the economic side—local population—Chinese middlemen controlled by the Taiwanese or with the help of the Taiwanese—the Japanese monopolistic concerns. The local population will be then thoroughly con-[193] trolled by the Japanese; on the other hand it will be racially divided and unable to present a united front against its masters. The Chinese will know that their interests and privileges depend upon the favor of the Japanese, their economic interests will oppose the interests of the local population. The Japanese militarists hope in this way to reconcile the native population of the island to alien rule. They declare that the greatest immediate problem in respect to the Chinese population of the island is kominka or turning them into imperial people, or more simply, some kind of assimilation. A campaign for the spread of the Japanese language is being conducted; the Chinese are encouraged to change their names into Japanese; various patriotic and chauvinistic societies have been established in order to influence the mind of the Chinese youth. One should not conclude from these facts that the Japanese want to establish a racial equality in this

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-3
116, 553, 563, 723, 177.65 Japan
636.65

'co-prosperity' sphere. The Japanese authorities complain that very few islanders change their names. Actually only a few hundred have used this privilege. However, this change of name is not so simple: each case has to be approved by the governor, and it is clear that approval is given only to those who can prove their complete fidelity to their masters."

6: Kirchhoff--31 U-4 (no date) 1895 Formosans
116, 144, 162, 563

Already, there can be no doubt, the Chinese constitute the larger part of the population, for since the 17th century ever new droves have immigrated from Fu-kien and Kung-tung, and these have greatly increased, owing to the early marriages and the large numbers of children. The vigorous and enterprising tribe of the Hakka, from the latter province, has preserved its individuality on Formosan soil; its members are distinguished by their fine ironwork, and provide the natives with their knife blades and long flints. In North Formosa the Chinese settlers' wide open, sparkling black eyes attract attention, in contrast with the narrow slit eyes of the Chinese which are here quite general, otherwise; this is the result of unions of Chinese immigrants with native Malay women.

An important third element must still be mentioned. This is the Pepo-huan (also called Sek-huan or Schek-huan, i. e. "half savages"). The Pepo-huan are those Formosan Malays who accepted the fate of dependence on the Chinese intruders and gradually became Chinese in customs and outlook, without there being any mixture of blood. Yet they are distinguished physically as well as culturally from free natives living in the mountains (probably as the least numerous of the three elements making up the population of Formosa), the Tsche-huan or Tschin-huan, i. e. "complete savages," as they are called by the Chinese, who greatly fear their passion for hunting Chinese heads.

6: Kirchhoff--33 [4] U-4 (no date) 1895 Formosans
116, 314, 563

Camphor is obtained in a curious way. It is the result of a never ceasing guerrilla warfare on the forest border, where the region inhabited by the Tsche-huan begins. Risking his head in the process, the Chinese frontiersman either sets out at random with his axe into the woods or he deceives the unsuspecting savage, after having intoxicated him with Sam-schu, by swindling out of him a certificate or authorization to fell wood in his district. The greater part of the camphor tree is then used as a building wood and the rest is hacked up into chips, from which commercial camphor is obtained by moist distillation.

6: Kirchhoff--37 [4] U-4 (no date) 1895 Formosans
116, 175, 563

So, at this time, the coasts of Formosa are practically in Chinese hands. About 2/3 of the whole island has become subject to China, and the fate of the native Tschehuan [MC: savage] appears to be sealed. Either their freedom disappears, for with their unceasing feuds, they are unable to protect it or like the proud camphor trees of their native woods they themselves fall beneath the murderous blows of the Chinese, who press them ever closer.

9: Yamasaki--225 [6] N-5 (1896-1897) 1900 Formosans
116, 162, 361, 563

The Capsiulan plain is naturally not so heavily populated as the western plain, yet on its fields and meadows the more cultivated Amis, a branch of the Malayan race, enjoy an unclouded existence.

15: U.S. Navy --21 (no date) 1944 Formosans
116, 177, 563

"In pursuing the assimilation program which they have announced to be one of the two basic policies of government, the Japanese have not been notably successful. They have carried out a negative program, destroying non-Japanese institutions and customs, making an active attack upon local practices which have no political significance. The result has been the arousing of antagonism which is neutralized, to some extent only, by the obvious and manifest economic benefits which the Japanese have brought to the rural peasant class. There is a feeling of mutual suspicion and distrust among the three ethnic groups, Japanese, Formosan-Chinese and aborigines. The Japanese minority is, of course, the ruling class, socially and politically, and treats the Formosan-Chinese with open discrimination and ill-disguised contempt. Few of the natives have wealth, but all of them live in much greater general security of life and property than they did under Chinese administration. This the educated Formosan will admit. Recently the Japanese have begun to publish formal programs regarding the assimilation of the subject people."

15: U.S. Navy--21 [2] (no date) 1944 Formosans
116, 167, 563

"Two to three hundred Japanese live in each of the scattered small towns having district offices. A few, who are classed as farmers, live on the sugar plantations. A few cultivate rice as ordinary country people. They have emigrated under Government sponsorship and settled at designated places. Three East Coast villages, Yoshino, Toyoda, and Hoshina, have a total population of 3,136 Japanese. Near Taito (on the east coast) 473 individuals (79 households) have been settled. Fifty-six households (256 individuals) have been settled at Shasen-sho in Taichu Province. Twenty-five households (111 individuals) have been settled as tobacco-growers at Hinode-mura on reclaimed land along the Shimo-Tamsui River, near Heito."

15: U.S. Navy --21 [3] (no date) 1944 Formosans
116, 186, 563, 177.66 Japanese
636.66

"The first generation of Japanese in the island came as adventurers who hoped to get rich quickly in the wake and under the protection of an occupying army. A domineering and ruthless attitude toward the native population has persisted, although the second or younger generation is beginning to identify itself with the island. It has been bred away from a strong homeland (Japan Proper) tradition. Although the essence of home and school training is emphasis on 'true Japanese spirit,' in practice the lives of these young Japanese are governed by the colonial situation in which they find themselves. They have a strongly developed 'exploitation' and imperialist outlook which prevents them from learning anything of the language or customs of the people among whom they live. Very few Japanese can speak elementary Formosan-Chinese."

15: U.S. Navy --21 [4] (no date) 1944 Formosans
116, 177, 867, 563

"Social life among the younger generation of Japanese of both sexes is more liberal than in the homeland and their outlook less traditional. Improved educational opportunities, local temples, cemeteries and other social institutions now tend to lessen the attraction of the homeland for the middle-aged."

15: U.S. Navy --21 [6] (no date) 1944 Formosans
116, 548, 563

"Japanese men very rarely legalize relations with Formosan women. So great is the antipathy toward intercourse with Formosans that the Japanese preferred to import girls from Japan Proper and Korea for the licensed quarters and cafes and dancehalls which once flourished."

15: U.S. Navy --21 [7] (no date) 1944 Formosans
116, 563, 565

"There is a noticeable social line drawn between the commercial Japanese community and the higher ranks of administrative officials and educators. Social distinction between Japanese and Formosans has no sanction in law but in practice there is a minimum of social intercourse."

15: U.S. Navy --21 [8] (no date) 1944 Formosans
116, 361, 563

"At Taihoku, where almost one-half of the entire Japanese population of the island have their homes, there is a distinct difference in the residential areas. The Formosans live north, west and southwest of the old administrative city area. The higher Japanese officialdom lives within the administrative center, together with the Japanese tradesmen whose retail shops are on the principal commercial streets. A distinctly Japanese housing development is spreading to the east of the administrative center. In other cities there is the same tendency toward voluntary segregation, but to a less marked degree. Although the Government maintains various relief agencies for the poorer people, there is little evidence of individual good feeling between classes. While generous among their own large families, both the Formosans and the Japanese are conservative in extending charity through impersonal channels."

15: U.S. Navy --21 [9] (no. date) 1944 Formosans
116, 563, 177.18 Japanese
636.18

"Many Japanese are sincere in their effort to raise Formosan-Chinese living standards and honest in their desire to have the island become a real part of the Empire in spirit as well as in political name and military bondage. Hundreds of Japanese doctors, teachers, and minor officials have devoted their lives to the welfare of Taiwan. Unfortunately they have been a minority and have had little influence on the makers of overall policy."

15: U.S. Navy --21-22 (no date) 1944 Formosans
116, 177, 304, 563

"The Formosan-Chinese are divided into three main groups, the Hakka Chinese, the Cantonese Chinese, and the Fukien Chinese. In addition to differences in dialect between the three divisions, there are differences in costume and folkways. The Hakka women, for instance, have never bound their feet, and are notable for the [22] work they do in the fields and woods with the men. The Fukien women, on the other hand, formerly submitted to foot-binding, which the Japanese have forbidden. It is now rare to observe any woman under forty years of age so crippled. Many who have had bound feet now attempt to treat the foot normally. The Fukien women have never worked in the fields regularly, although they assist with the harvest and in other special circumstances. In the cities both men and women of the lowest economic classes do exceedingly heavy work."

15: U.S. Navy--22 [8] (no date) 1944 Formosans
116, 181, 175, 362, 563

"The Hakka Chinese people. The ancestors of the Hakka people came to the island from the hinterland of Fukien and Kwangtung provinces. They remain distinct from other Formosans in dialect, dress and some ways of village life. They were an audacious and bellicose people when they arrived, and in the southern part of the island particularly they had to push through earlier Chinese settlements along the coast to the marginal land beyond, between the settled Chinese and the aborigines who were gradually and forcefully being dispossessed. As a consequence, even today the Hakka settlements are among the foothills rather than on the plains. This sequence of immigration has caused the Hakka to intermarry more freely with the aborigines."

15: U.S. Navy --22 [4] (no date) 1944 Formosans
116, 198, 484, 563, 177.19 Japanese
636.19

"By making use of the Japanese language necessary in business, education and communication, the administrators of the island have created the foundation of a unity unknown in pre-occupation days. The ease of travel throughout the island is tending to blur rapidly the lines of cultural differences among the educated Formosans. All three Chinese groups are represented among the settlements along the east coast, to which many have been encouraged to move by Japanese interests."

15: U.S. Navy--22 [9] (no date) 1944 Formosans
116, 186, 668, 563, 177.66 Japanese
636.66

"It is evident from an analysis of election returns that the greatest interest in politics and representative government is shown in the districts where the Hakka people are predominant, notably in Shinchiku Province. It is also notable that many of the leaders of fierce resistance to the initial Japanese invasion of the island were Hakka people or people from areas in which the Hakka predominate. Not only is government -processed opium said to be more easily accessible in Shinchiku Province, but it is in this district that the Japanese have taken greatest pains to destroy local religious cults, and to press the Japanization program."

15: U.S. Navy --23 (no date) 1944 Formosans
116, 162, 609, 563, 484

"The Cantonese. The people of Cantonese origin have always remained rather distinct and have been considered as foreigners. They numbered 'about 100,000' in 1930. As a group they have become identified with small-scale banking and wholesale trading. They have maintained their contacts with the mainland, and, when travel was possible, many spent part of each year at Canton."

15: U.S. Navy --23 [6] (no date) 1944 Formosans
116, 563, 582, 609 Japanese
636.58

"Fusion of ethnic groups. Special permission must be obtained from the government before a marriage between a Formosan-Chinese and a Japanese can be made legal. There are a few notable cases of marriages arranged between wealthy Formosan men and Japanese women, (as between a son of the wealthy Ko family in Taihoku, for instance, and the daughter of an impecunious Japanese nobleman). As a general rule the antipathy which one race holds for the other inhibits even casual sexual intercourse between the two. This, plus the fact that the Formosan-Chinese birth rate is much higher than that of the Japanese, precludes any hope for gradual fusion of the two peoples on the island."

15: U.S. Navy -- 27 [6] (no date) 1944 Formosans
116, 454, 511, 556, 563

"As an indication of the relative wealth of individuals in Taiwan, it is notable that bank and postal savings deposits of Japanese in Taiwan are from seven to ten times larger than the average deposits of Formosans. It will be noted in the following table that per capita wealth increased rapidly until the outbreak of war between Japan and China in 1937.

Table 22: Average Savings per Depositor in Post Office Accounts

	1921	1929	1934
Japanese	¥33.3	¥51.0	¥146.5
	($15.98)	($23.96)	($44.27)
Formosan	¥8.2	¥16.6	¥14.2
	($3.93)	($7.63)	($4.29)"

15: U.S. Navy --27 [7] (no date) 1944 Formosans -1
116, 465, 511, 435, 556, 563

"Living conditions and the cost of living are intimately connected with the wage scale. Wages in Japan are two to three times higher than the wages of Formosans. For the skilled Formosan the average daily wage in the second half of 1938 was ¥1.13 ($.27) per day, and for the unskilled worker ¥.85 ($.17): figures based upon averages for sixty different categories. The Japanese official averages published for 1939 were ¥1.27 ($.33) for the Formosan-Chinese and ¥2.41 ($625) for the Japanese laborer. The average Formosan family consists of five persons, who must depend upon these wages. As an indication of the cost of living and the standard possible, there is presented the retail prices of some commodities in Taihoku, in May, 1939, when the yen was worth $.2596:

Table 23: Retail Commodity Prices, Taihoku, 1939

Sweet potatoes per kin (1.3228 lbs.)	6.4 sen
Rice (first grade) " " "	11.0 "
Sugar " " "	29.0 "
Pork (av. quality) " " "	43.0 "
Fish " " "	18-22.0 "
Chicken eggs, each	6.0 "
Soap per piece	10-17.0 "
Matches, per box	1.4 "
Firewood (per 100 kin)	180.0 "

15: U.S. Navy --27 [7] (no date) 1944 Formosans -2
116, 465, 511, 435, 556, 563

Table 23: (cont.)

Miso (bean paste) (100 momme: 0.827 lbs.)	8.0 sen
Muslin, per yard	134.0 " "

15: U.S. Navy--31 (no date) 1944 Formosans
116, 511, 177, 563, 342

"The Japanese have the highest average living standards. Insofar as their mode of living is concerned there is little to distinguish the Japanese here from the Japanese in the homeland, except that the wage scale of the former is higher. Without modification the Japanese retain their native style of architecture, which is admirably suited to a subtropical climate. A platform is raised about two feet over the ground. On it a layer of thick straw mats is laid. A tile roof is erected over this and the space between roof and floor enclosed by light planking and sliding panels of glass panes or paper."

15: U.S. Navy--31 [2] (no date) 1944 Formosans
116, 563, 262, 463, 457

"The Japanese diet is simple. Rice is the staple with a garnish of pickle or fish and bean paste soup. Most Japanese are managers of large enterprises, government officials or wholesale businessmen, settled in and around the large cities. They have created a large number of hotspring and recreational resorts. There are few Japanese of great wealth with permanently established residences in Taiwan, for the work of the majority is the creation and transfer of wealth from Taiwan to absentee proprietors in Japan Proper."

15: U.S. Navy--31 [6] (no date) 1944 Formosans
116, 563, 464

"In 1936 there were 81,589 workers employed in industrial enterprises having more than six workers or having a prime-mover. Of these 76,251 (93.5 percent) were Formosan-Chinese. The others were a few aborigines, a few Chinese nationals and Japanese overseers."

15: U.S. Navy--32 [8] (no date) 1944 Formosans
116, 465, 511, 563

"The Formosan-Chinese can work at a lower wage-scale than the Japanese, but at the same time are supposed to be less efficient."

15: U.S. Navy--33 [4] (no date) 1944 Formosans
116, ~~563,~~ 463, 465, 177.46 Japanese
636.46

"Formosan-Chinese furnish almost all labor. Japanese are generally employed as foremen or skilled labor, or in particularly vital operations. For instance, they provide the personnel on the moving stock of the Government Railway system. This accounts for the difference in wage scales whereby the Japanese laborer receives from 80 to 150 percent more than Formosan-Chinese who do the same work. A Japanese tailor, for instance, at one time received two yen a day as against 1.20 yen per day for a Formosan-Chinese; a worker in a pineapple cannery 1.50 as against the Formosan-Chinese wage of 70 sen."

20. Alvarez--250 (no date) 1927 Formosans-1-2
116, 162, 101, 563

"The races who share among themselves the whole of the hilly parts and plains of Formosa are three in number:

(I) The Japanese, new-comers, intruders, yet the masters of the island to-day, number about a hundred thousand souls.

(II) The Chinese, owners of the island for more than two centuries, constitute the main part of its population. They call themselves hok-lo (2), viz., 'good' 'plain', and

2. This name is applied by the Khe-lang to other Chinese of Formosa. It seems to take its origin from the fact that when the Hak-kas, persecuted everywhere in the Celestial Empire, arrived at the South of Fokien, they were welcomed there. Henceforth they appear under the name of 'thankfulness' that had been given to them by the inhabitants of that province. This, indeed, did not prevent at all the fact that until the arrival of the Japanese the Khe-lang and Hok-lo were living in continuous shie [sic] with each other. The Hok-lo of southern Fokien, whose dialect, with slight differences, is the same as that spoken in Formosa, call Khe-lang, viz., guests, those, to whom, in the dialect of Canton, in China, is applied the nickname Hak-kas, viz., terrible guests.

this name is applied also to the Chinese born and brought up in the 'Prefecturas' of Chiang-chin, Choan-chin and Anke, in southern Fokien. They number more than two

millions. They call Khe-lang their neighbours, who proceed from Canton and the 'Sub-Prefecturas' of Chiau-an and Tin-chiu, likewise situated in Fokien, where their ancestors are still living and their brothers well known under the name of Hak-kas. The terrible civil war that followed the downfall of the Ming Dynasty in China compelled most of the partisans of the Mings to leave their native soil. The Hak-kas, who had suffered most from persecutions, crossed the strait and established themselves in Formosa. At present they constitute the third part of the population of the island. They number about 800,000 souls.

(III) Finally, there are the genuine aborigines, who were masters of the island for many centuries before the Chinese and Japanese made their way from their native countries and reached Formosa. They are divided into two classes, viz., Pepo-huan and Che-huan. The former once occupied the vast plains which at present are inhabited by the Chinese invaders. Subdued by them, the tribes now called Pepo-huan in time adopted not only Chinese fashions, but also the Chinese language. Several northern branches still retain their mother-tongue, the old customs, manners and traditions. But their number is very limited to-day. They are named Che-huan, viz., 'savages' by the Chinese. They are hillmen, with their own peculiar language, and number about 121,500 souls, according to the official report of December, 1910."

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

31: Hofmann--631 N-3 (1909) 1912 Formosans
116, 563, 609

Japanese industrial products do not sell well among the Chinese. Most of the Japanese on Formosa are high or low officials. While in view of the large population it might be expected that the Japanese would develop an active and extensive retail trade, the relations between the Chinese and Japanese so far have made this impossible; this may be due to the fact that the Chinese isolate themselves intentionally as well as to an inherent antagonism between the two groups and a lack of confidence on both sides.

35: Collingwood--136 D-2 (1866) 1867 Formosans
116, 563

"We found nothing remarkable in this village, [MLB: The large Chinese village of Sano on the east coast of Formosa.] which was essentially Chinese in its dirt, its pigs, and its inhabitants—closely resembling in character the other towns of Formosa; but our attention was arrested by a woman, whose handsome and European-looking features, and peculiar voice, at once marked her as non-Chinese, and shewed her to be one of the aboriginal inhabitants. How she came thus domesticated among the Chinese we could not learn, but we heard from various quarters that a system of petty warfare is kept up between the two races, and that occasionally some of the women are carried off by the opposing parties."

40: Kirk--20 [2] S-2 (no date) 1941 Formosans
116, 563, 759, 871, 177.56 Japanese

"Theoretically, Japanese and Formosans may attend the middle and high school as well as the university, but in practice the Formosans find many difficulties in their path. The more important positions in business and the professions, with one exception, seem to be held by Japanese exclusively. Medicine is the one profession open to educated Formosans on equal terms with the Japanese."

Annex "A," Subparagraph 1c,
Sociological Background

POPULATION OF FORMOSA

I. INTRODUCTION

161 The population of Formosa [Taiwan] in 1955 is estimated[1] at about 10,400,000, including about 7,500,000 Formosa-born Chinese (hereafter Formosan Chinese, as distinguished from Mainland Chinese), about 2,000,000 Chinese civilians from the Mainland, 700,000 military personnel and troops, and about 200,000 non-Chinese tribes of aborigines. The latter are composed of seven linguistically distinct tribes believed to have come originally from Malaya, the Philippines, New Guinea, and Kwangtung Province. The Formosan Chinese are descendants of Mainland Chinese who migrated from Fukien and Kwangtung provinces chiefly during the eighteenth and nineteenth centuries.

II. ETHNIC GROUPS

162 The population of Formosa may be divided into two distinct ethnic groups: the aborigines and the Chinese.
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A. Aborigines

Prior to 1600, Formosa was sparsely populated by so-called aborigines, referred to by the Japanese as "savages" and by the Chinese government as "mountain tribes" or "brethren of the mountains," whose habitations ranged

[Footnote 1 next page.]

162 over most of the island. However, an increas-
563 ing number of Chinese immigrants, with their superior civilization, pushed these natives into mountainous areas and thereafter occupied the fertile lowlands of the island.

563 According to language, custom, and phys-
105 ical characteristics, the aborigines are commonly divided into seven tribes: Taiyal, Saiset, Bunun, Ami, Paiwan, Tsou, and Yami. Although physical characteristics may vary, they are generally brave warriors and can run long distance or climb steep mountains and cross swift streams with skill and speed. Their short stature, light-brown skin, and straight black hair, as well as their language and customs, suggest a close resemblance to the Malays of the South Seas. They are independent in nature, passionate in temperament, and show respect for the aged and love for the young. They live in villages and build huts made of wood and stones. Some 70,000 aborigines are called Pepohuan, meaning assimilated savages. Their customs and activities are similar to those of the Formosan Chinese who had assimilated them in the lowlands. Tribesmen who were not able to bear the economic and cultural pressures exerted upon them fled to the mountainous interior.

1. This estimate is the result of reconciling various estimates offered by writers on Formosa's population. The analyses in this chapter, however, will be based on the total registered population because the household registry system provides the only statistics available on the population. The total registered population in 1953 was 8,438,016.

A. The Rural Family

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The patriarchal, extended family common to the Mainland is the pattern of the family for the majority of people on Formosa. In rural communities, the father and sons work in the fields, the mother and the wives of married sons look after the hogs, fowl, and cattle and do the work of the household. Daughters care for the younger children, help in the preparation of meals, and wash the clothes. Boys and girls attend school until twelve years' of age; schooling continues after that age only if the child is talented and the family is able to afford tuition and the loss of the child's labor at home. Generally speaking, women of Fukienese descent are not given as many laborious duties as the Hakka women, who raise hogs, cattle, and fowl, and tend vegetable plots even in non-farming communities. Fukien children are more apt to prepare for city jobs than to continue work on the farms.

Since World War II, farm rents have been reduced and farmers are encouraged to farm more intensively in order to secure larger yields. As a result, women now do more farm-work than before. It is reported that women in Chihu are responsible for at least

369 40 per cent of the district's agricultural
596 production; in 1937, they accounted for only
563 17 per cent of the total yield.[1]

The aborigines in the mountainous regions of Formosa make a living from slash-and-burn agriculture and hunting. Some of the aboriginal tribes (the Bunun, the Tsou, the Paiwan, and the Yami) follow the patriarchal, extended family pattern. Others (the Atayal and Saisett) have a nuclear family organization -- each member of the family fulfills a definite role fixed by tribal custom. Aborigine women ordinarily do more farm work than Chinese women. Until recently few children from native tribes attended school, and until recently few aborigines ventured outside their tribal regions.

B. The Urban Family

369 The population of Formosa has been
161 increasing rapidly. The rate of increase is greatest in the urban areas. Each of Formosa's four largest cities -- Taipei, Kaoshiung,

1. Arthur F. Raper, Rural Taiwan - Problem and Promise, Taipei, 1953, p. 120.

Annex "A," Subparagraph 1r,
Sociological Background

ATTITUDES AND REACTIONS

I. COMPOSITION OF POPULATION

•563 Ninety-eight per cent of the population of Formosa are of Chinese origin. Two per cent of the population are aborigines whose origin, although generally conceded to be Malayan, remains a subject for academic dispute. Among the Chinese, approximately eighty per cent are the descendants of early Chinese settlers, whom we call Formosan Chinese, or often simply Formosans. The early settlers came to the island from the southern part of Fukien Province and the eastern Part of Kwangtung Province between 1600 and 1895. In 1895 the island was ceded to Japan and immigration from the Mainland was restricted.

During the half century of Japanese occupation, Chinese tradition and culture were preserved by the Formosan people, the family remained the center of most social and economic activities, and Formosan Chinese, anxious to maintain a sense of solidarity, kept in touch with their relatives on the Mainland.

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In 1937, the Japanese launched a campaign to destroy the spritual affiliation of the Formosan Chinese with their ancestral land. The Japanese language was used in the classrooms, and Shintoism was introduced to replace the traditional polytheistic religion of the Formosans. But before these efforts could take effect, World War II ended and Japan was forced to relinquish its rule in Formosa.

Approximately twenty per cent of the curren Chinese population on the island immigrated to Formosa after 1945. The greatest number arrived in 1949-50 when the Communists seized control of the Mainland. Most of the recent immigrants, former government employees and commercial workers, have settled in the larger cities. Racially and culturally they resemble the Formosan Chinese, although many speak a different dialect. They regard their residence in Formosa as tempo rary, since most of them were forced to leave family and property on the Mainland.

The aborigines, who constitute two per cent of the population, lead a primitive life in the mountainous regions of the island. Those tribesmen who lived on the plains, have been assimilated by the Chinese and have accepted Chinese customs and preoccupations.

648 cent of them involved Mainland men and Formosan women, and 0.3 per cent involved Formosan men and Mainland women. Among the 1790 court marriages in Taipei in 1955, 1074 brides were Formosans and 714 were Mainlanders, while 1709 bridegrooms were mainlanders and only 81 were Formosans.[20] However, the majority of the civilian Mainlander population belong to the higher age group.[21] Most of them are married, but their families were broken up at the time of their exodus to Formosa. The strong attachment of the Chinese individuals to their families and their ancestral homes makes it impossible for them to forget the liberation of the Mainland, however remote such an eventuality may appear. "It was quite obvious to all but the blind and the bigoted that the Nationalists want nothing more than to be back in China and to leave Formosa as a loyal and prosperous province with a liberal degree of local autonomy."[22]

IV. ATTITUDE OF THE ABORIGINES

563 The aborigines were the victims of ruthless persecution under Japanese rule. The whole aboriginal population was placed under rigid police control. A 316-mile picket line with electrified wire fences and guard houses girdled the districts where the "savages" dwelt. Yet the Japanese failed to subjugate them. As late as 1930, 190

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20. Pan-Asia News Alliance, Taipei, dispatch of Jan. 10, 1956.

21. More than three times as many males as females in the 40-49 group.

22. H. Maclear Bates, Report from Formosa, London, Eyre & Spottiswoode, 1952, p. 120.

563 Japanese lost their lives in the attempt to subdue a revolt staged by the aborigines. After 1936 the Japanese colonial government tried to assimilate the aborigines: (a) by removing them from their remote mountain homes to small plots of land on the plains where they could be more easily watched and where they might settle down as farmers; (b) by establishing schools within the aborigines' territory. A four-year primary school and some vocational courses were set up for them by the Japanese. This accounts for the fact that a small percentage[23] of the aborigines can speak the Japanese language.

563 After the restoration of the island to
667 China, the aborigines are no longer called "savages" They are referred to as "mountain tribesmen" and addressed as "mountain brethren." The administration of the mountain areas has been transferred from the Police Department to the Civil Affairs Department of the Provincial Government. The areas are divided into 30 hsiang (groups of villages) and 192 ts'un (villages).[24] The chiefs

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23. About 30 per cent. "In the east coast town like Hualien, the bus conductresses make their announcements in Japanese, so that even the aborigines will know where to get down." Manchester Guardian, op. cit., p. 12.

24. T'ai-wan Ti Shan-ti Hsing-cheng [Administration of Mountain Areas], published by the Information Department of Taiwan Provincial Government, Taipei, 1952, p. 15.

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of the rural districts are all elected by the aborigines themselves. They are represented in the Provincial Assembly by three members, two elected by the tribesmen living in mountain areas and one by those living on the plains. One tribesman, Hua Ch'ing-chi, serves as a Commissioner in the Provincial Council. In the 144 elementary schools provided for the aborigines, 17,734 children and 6,032 adults were enrolled in the second semester of 1951.[25] It is said that 71.56 per cent of school age children are receiving education.[26] With the assistance of the Sino-American Joint Commission on Rural Reconstruction, the Nationalist Government is also improving the livelihood and economy of the tribesmen. The number of health stations has been increased. A total of 30 health stations and 120 substations have been set up since November 1949. Efforts have been made to improve the quality of the cattle and to increase the number of hogs in the aboriginal areas. A selected number of aboriginal girls are to be trained in sewing and sericulture.[27] The guarding of the mountain areas has been relaxed. In fact,

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25. Ibid., p. 22.

26. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China], 1954, p.818.

27. General Report of J.C.R.R., Vol. IV, 1954, p. 186.

563 many tribesmen are found patrolling the streets
657 in Taipei as members of the local police force. No noticeable friction has ever been reported between the aborigines and other groups. For this the Nationalist government should be given credit. The aborigines are at long last recognized as a part of the community, and some headway has been made to bring about their economic betterment. It is quite natural that they are satisfied with Nationalist rule.

642 organizations and professional associations are represented both in the National Assembly and the Legislative Yuan.[16] Political parties, if lawfully organized, are given equal status and are allowed equal opportunity to participate in elections. All organizations must be registered with the proper authorities by their sponsors. Whoever joins an association formed with the object of committing or inciting rebellion is subject to imprisonment.[17]

641 It is definitely stipulated in the Chinese 643 Constitution that all citizens of the Republic of China, irrespective of sex, religion, race, class, or party affiliation, shall be equal before the law. A minimum quota of seats are reserved for women delegates in all representative bodies.[18] And to insure the election of women candidates, votes cast for them are computed separately. There is no religious or racial discrimination in China. A quota of seats in the National Assembly and the Legislature is expressly reserved for "people living in the interior areas," i.e., the minority races.[19]

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16. Law of Election and Recall of National Assembly Delegates, 1947, Article 4; and Law of Election and Recall of Legislators, 1947, Article 4.

17. Criminal Code, 1935, Article 154, and Rebellion Act, 1950, Article 5.

18. Constitution, Article 134.

19. Constitution, Article 135.

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 376 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

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declined consistently from 33 per 1,000 total population in 1906 to 1909, to 20 in 1930 to 1937, with temporary setbacks only during World War I.

Life tables for the Japanese and the Chinese as of 1926 to 1930 place in sharp focus the low economic and health position of the native peoples as contrasted to the alien elite. The expectation of life at birth for males was 38.8 for the Chinese and 48.5 for the Japanese. The excess deaths of the Chinese were concentrated among children. Deaths during the first year of life amounted to 174 for each 1,000 boy babies among the Chinese and only 85 for the Japanese. Only 73 per cent of the Chinese boy babies lived to reach age 5.

The decline in the mortality of the Taiwanese under Japanese domination was appreciable but it did not approach the attainment of the standards deemed minimal in the West. At the end of the Japanese period the expectation of life at birth was perhaps 10 years greater than it was for the people of China or of India when there were no major epidemics or famines. The allocation of a larger portion of the production of the Island to the health, educational and cultural needs of the people could have produced sharp declines in the death rate and hence an even more rapid rate of population increase. An altered distribution of income within the existing technological

Taiwanese Children

matrix could easily have reduced death rates to 12 or 15 per 1,000 total population and, if birth rates had remained at 45, shot the rate of natural increase from 2.5 per cent per year to 3.0 per cent or more. 165 563

THE BIRTH RATE

Neither the extension of cultivation, the increase of yields nor the health and medical activities in Taiwan produced any major changes in the familial patterns of the peasants. The recorded birth rate of the Chinese remained above 40. There were some slight evidences of a lower birth rate in the more prosperous and urbanized provinces, but the social and occupational groups that might have adopted the modern individual and familial values, rather than the traditional Eastern values, were few in numbers. 163

The growth implicit in the maintenance of fertility at the level that existed in Taiwan during the last decade of Empire was indeed rapid. The gross reproduction rate for the entire population was over 3.2 and the net rate over 2.0.

It is obvious that no population dependent on agriculture and inhabiting a limited and already densely settled area could reproduce indefinitely at the rate implicit in these figures. Potential growth was more rapid than the actual growth of the thirties, though, for any social and economic changes that would improve levels of living and contribute ultimately toward a reduction in fertility would produce immediate and more rapid declines in the death rate.

THE PROSPECTS: PREWAR JAPANESE VIEW

The balance between the people and the land in prewar Taiwan may have appeared precarious to the Western student but the Japanese foresaw many decades of further expansion before the Malthusian pressures of the people on the food supply would limit either population growth or exportable surpluses. Rice production had increased from 2.1 million koku in 1900 to 4.9 million in 1923 and 9.7 million in 1940. In the latter year the export surplus amounted to five million koku. By 1950 rice production would amount to 12.8 million koku and the quantity available for export to Japan Proper would increase by almost a million koku. 433 241 439

The Japanese also realized that Asian hegemony implied a destiny beyond the agrarian for the once subject peoples and that Japan's own demographic

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER III

Economic Activities and Social Change

THE activities, interests, and aspirations of the Japanese community in Taiwan were things that existed apart from the indigenous population. These elements were never effectively communicated to the Taiwanese—partly through a design to withhold them, and partly through reluctance among the people of Taiwan to accept them. Consequently the conduct of Japanese residents is not of much help in understanding the accustomed modes of life among the island's people. It is the latter problem that has the more interest for demography, and makes it essential to consider the background of social order in Taiwan and the changes under colonial rule.

The Early Agrarian Order in Taiwan

The importance of agricultural pursuits in imposing a predominantly agrarian character on a society is not a thing that can be precisely measured. Short of perfect exactitude, a great deal can be learned with lesser devices, by describing the cultural setting of agriculture in Taiwan, and pointing out how it influenced the participation by Taiwanese in the island's economy. The basis of this setting lay in the conditions that prevailed before Taiwan became a colony of Japan.

By the mid-19th century, the lowland region of Taiwan was rapidly becoming fully settled. Piracy, which had made Taiwan a scourge to sea traffic along the China coast, gradually subsided into sedentary agriculture. Most of the Chinese population was already supporting itself by farming and the marketing of farm products. Since 1700 immigration had brought in a steady stream of Chinese from the mainland. In spite of sporadic prohibitions, hundreds of thousands of peasant farmers came to seek refuge from rural poverty in South China. Once arrived, they often reverted to this same condition, by reaching unfavorable terms with some of their countrymen already entrenched there as land speculators.

Poverty tended to reproduce itself among those who reached Taiwan, though there was also great wealth open to the few who rose from cultivation to commerce. Each settled family held an advantage over newcomers. This superior position placed new migrants in

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

167 some competition for the more desirable lands near the coast. In order to maintain their accustomed manner of farming, many were • 563 forced to move inland, where they gradually dispossessed aborigines and the earlier Hakka settlers and pushed eventually to the foothills 423 of the interior. These many-sided conflicts of interest gave rise to land tenures more complicated than those usually found in China. The result was a set of property customs that was to become confused and encumbering in later years.[1]

With agrarian land tenures, however, it is all too easy to mistake form for substance. The system of land tenures in Taiwan gained several features that are distinctive to itself, arising to incorporate new parties into an old system—the aborigines who first occupied the area, and Chinese who acquired land titles to profit from the arrival of immigrants. But, since these landed property relationships are of little interest to us from an antiquarian point of view, their lasting effects are more important: they contributed to a form of village organization that survived through the entire Japanese occupation down to the present.

(31) The flow of migrants is remarkable in that it populated Taiwan, with little variation over the years, closely after the model of the South China coastal area.[2] The resemblance to the mainland went beyond forms of settlement and land utilization. Politically, under Manchu control the island was supposed to be assimilated into the administration of the rest of China. It was governed as a regular political division—first as a prefecture of Fukien and later as a province itself—by officials appointed directly from Peking.

177 Taiwan inevitably presented special problems of control. In the first place, it could be separated from easy communication with the continent; eventually it grew almost as accessible to the Western powers as to Peking. The device most relied upon to tie the area to China was a weak one. The authorities tried, futilely, to isolate it from all external contact. From time to time, they went as far as to restrict the entry of Chinese from across the Straits, though even this had little success.

[1] See Ch'en Cheng-hsiang (1950), pp. 41-43, and Kawada, Shiro (1928).

[2] The instances of alleged "radical transformation" of land tenures (Kawada, Shiro [December 1928], p. 88) were primarily fiscal measures to reassert the central government's share in revenues from the land. Such reforms often are superficial from the standpoint of village organization. By way of illustration, one of the early official acts of the Japanese in Taiwan was to sweep away a whole section of these archaic land titles. While these reforms cleared the way to regulate rural areas from outside, they scarcely made an impression on property relations within the villages.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

by the annual registry of agricultural population (i.e., members of families dependent on agriculture).[26] The two major spurts in factory employment occurred during the first World War and just preceding the second. These were the only two periods of substantial slackening in gradual increments of farm population to the point of actual decline in the early 1920's. After 1940 this portion of the population resumed its usual rate of growth, suggesting that the opportunities for shifting the balance of employment had begun to disappear.

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Occupational Shifts: Taiwanese and Japanese

The data up to this point illustrate some of the redeployment of manpower in the economy. They give no basis for considering the social changes that were responsible, for they do not disclose who were the participants. To understand how manpower responds to altered environmental conditions, one must know some of the affiliations that have shaped its members' decisions. Moreover, "economic development" is of no great interest here for its own sake, but rather for the nature of its reception and use by peoples not yet under its full influence. Therefore the Taiwanese are the important group to observe, and in a different sense the Japanese in their role of aliens on the scene.

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Most of the apparent diversification in economic activities shown in Table 12 did not consist of movements in the Taiwanese population at all. It reflected primarily the special characteristics of Japanese in Taiwan. Though never more than one-twentieth of the total population, their nationals were so concentrated in certain special positions that they often outnumbered Taiwanese. Once this special group is removed (Table 14), Taiwanese appear to have contributed only a small amount to the total occupational shifts up to 1930. Separated from the presence of Japanese in these key posts, the part of Taiwanese in the modernized sectors of the economy was indeed a modest one.

[26] The total population and agricultural population have been reduced to one-hundredth of their size to fit into Fig. 10. They can consequently be used to show more than merely relative trends. Where either one intersects a trend line for factory employees, the ratio of the latter to the former is 1:100, or 1 per cent. (Of course, the scale being logarithmic, the same relation does not hold between points separated by larger intervals.) This circumstance helps to point out how small the total amount of work in factories was in relation to the entire population. At its peak, judged by these figures, it occupied less than 3 per cent of the population. It remained under 2 per cent for most of this period.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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TABLE 14

OCCUPATIONAL COMPOSITION OF TAIWANESE
Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	69.9	68.9	68.0
Fishing	2.8	2.2	2.1
Mining	0.5	1.4	1.3
Manufacturing	5.6	7.9	7.6
Commerce	7.4	7.6	10.2
Transportation, etc.	2.2	3.2	3.9
Gov't. & Prof.	1.8	2.2	2.7
Other	9.8	6.6	4.2
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	66.7	61.8	57.7

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.
Source: Data of Table 16.

As for the Japanese, most who were old enough to work had been born in the Home Islands. All of these had arrived in Taiwan as a result of some decision to move, and presumably had some purpose in being there. Theirs was a highly selective migration. It brought in the promoters and technicians, the industrialists and clerical personnel, the officials and minor functionaries to operate this first colonial venture. As in most colonies, they enjoyed facilities and perquisites of a superior type—better, if not to conditions generally prevailing in the home country, at least to the standards that they as individuals could have expected at home.[27]

Much of the migration was coordinated with economic policy.[28]

[27] On top of better vocational opportunities, Japanese commonly received special bonuses for service in Taiwan. Rates of pay for comparable wage labor in Taiwan were consistently higher for Japanese (see *Statistical Summary*, Tables 301-303).

[28] This had not always been the case. For most of the first decade after 1895, Japanese were permitted to go to Taiwan with little restriction. The freedom attracted an "undesirable" element to the island, whose business activities were so unbridled and uncoordinated as to call forth a stricter government policy to deal with incoming personnel. Japanese looked back from the later ordered development on this early chaotic period with horror. The unsatisfactory results of laissez-faire may also have contributed to the decision to centralize the most profitable opportunities in state hands. Through official monopolies in the major export lines, it was possible to regulate continuously the conduct of Japanese businessmen as well as to make substantial levies in these enterprises for revenue.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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Japanese drew lessons from the colonial experience of European powers in supplying the special skills and competencies that their program required. Government and private industry recruited their personnel from Japan, according to needs which they determined in advance. In one respect they learned the lessons of staffing their technical positions better than their teachers: they paid more attention to procuring lower levels of skills from their own ranks along with filling the top functions. Important implemental positions, like police, railroad technicians, and maintenance men, were heavily staffed with Japanese.

All Japanese nationals, regardless of whether specially recruited or not, were favored over Taiwanese when employed by Japanese concerns.[29] The best openings were in professional and official positions, as administrators in government and finance. Less coveted, but still bearing prestige over Taiwanese counterparts, were the jobs of technical and skilled workers in transportation and industry, and petty officials in the government bureaucracy. In every census Japanese appeared consistently in these occupations (see Table 15).

As a group, they were conspicuous in staying out of agriculture,

TABLE 15

OCCUPATIONAL COMPOSITION OF JAPANESE IN TAIWAN

Per Cents of Occupied Males Reported in Each Occupation,*
1905, 1920 and 1930

Occupation	*1905*	*1920*	*1930*
Agriculture	1.0	4.4	4.6
Fishing	0.6	2.0	2.1
Mining	5.0	1.9	0.5
Manufacturing	20.6	27.4	18.2
Commerce	16.5	15.0	14.6
Transportation, etc.	13.9	11.7	11.0
Gov't. & Prof.	41.3	37.2	45.6
Other	1.1	0.4	3.4
Total Occupied	100.0	100.0	100.0
Per Cent of Males Occupied	80.4	69.0	60.8

* Domestic servants have been excluded. Occupations are adjusted in 1905 and 1920 to be comparable with 1930.

Source: Data of Table 16.

[29] Notwithstanding, the colony had its failures. The census reports list a scattering of Japanese as day laborers, ricksha pullers, longshoremen, and in similar occupations.

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despite the fact that most were engaged in some capacity in helping the passage of farm products to Japan. Japan made almost no use of Taiwan as an outlet for its own growing agricultural population. From time to time the authorities announced projects for settling farmers from the Home Islands. These plans may have been designed to make a favorable impression among government circles in Japan itself; none ever proved feasible in Taiwan. Only a few thousand "colonists" of this type came to Taiwan and made a start in farming. In spite of manifold blessings of official support, subsidies, and special privileges, the settlements never managed to prosper. The families often left the countryside for better employment in towns and cities, and during the 1930's the whole idea was abandoned.[30]

Taiwan's economy was thus organized not only to export its narrow range of commodities to Japan, but to import its basic specialized skills in the persons of Japanese migrants. For the authorities this was an easy answer to the problem of staffing essential functions with people of appropriate training and experience. It avoided, among other things, the need to devise means for securing them from the human resources at hand in Taiwan. From the standpoint of Japan it was not an efficient solution. It drew upon types of manpower that the Japanese at home could not well afford to lose, and at the same time failed to make the best use of talents existing among the Taiwanese.[31] This anomaly in distribution of skills between the two areas is illustrated in Fig. 11. Japanese residents in Taiwan were a highly selected group even for Japan itself, where technical abilities were also scarce.

Possession of an external source of supply for specialized skills had

[30] Yanaihara, Tadao (1929), pp. 174-175, notes that it was already a failure before 1930.

[31] The founding of Taihoku Imperial University was an outstanding example of this policy. It was an institution of high caliber, well equipped and operated by men of repute in Japan. The University notably did *not* engage in training any considerable number of technical personnel among Taiwanese. It was organized to promote research rather than teaching, its classes were small, and Taiwanese students were not readily admitted. See Kerr, George H. (1942), p. 53 ff.

On a more practical plane, several technical schools were later established for limited training of Taiwanese. These, to use the common expression of educators in this country, were "vocational" rather than "professional" in that they taught manual instead of liberal skills. Enlargement of educational facilities came too late to provide the technical training needed for the war effort, though it did serve to advance literacy (in the Japanese language) among Taiwanese youth (see *Census of 1930, Statistical Tables*, Table 81). Once started, the spread of educational facilities made considerable headway. By 1943, 70 per cent of Taiwanese children of legal school age were attending some sort of school. In time this more liberal turn of policy might have paved the way for admitting Taiwanese into more responsible positions in the island's new industrial program.

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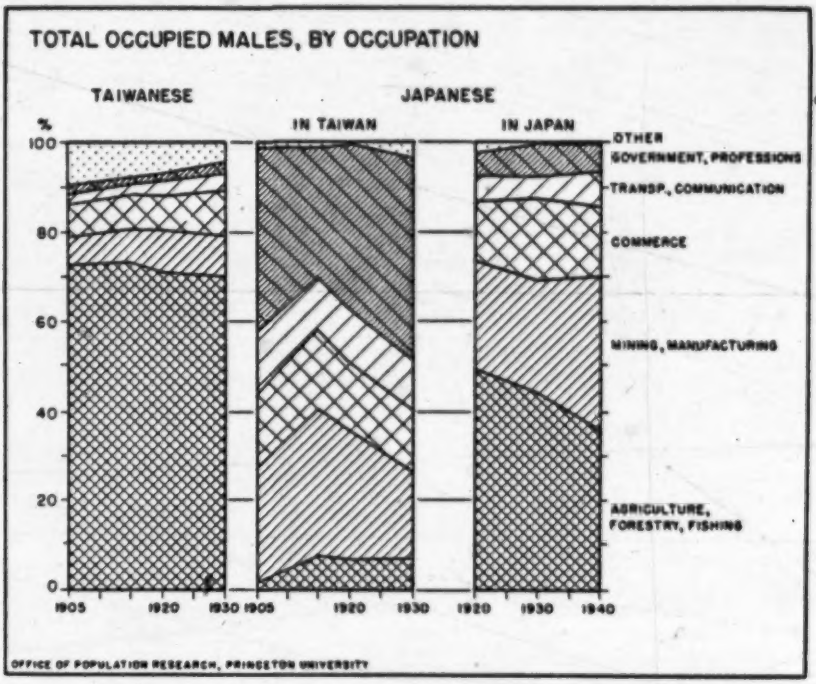

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Fig. 11. Trends in Occupations in Taiwan and Japan, 1905-1940.

certain cogent advantages. The alien status of Japanese nationals was useful in keeping high standards of responsibility and performance among members of the public and private bureaucracies. This personnel could be interposed to administer Taiwanese affairs without becoming susceptible to local pressures. Though the Japanese had gained access to the rural society by manipulating its traditional institutions, they had to guard against subversion of their administration by influence from the Taiwanese side.

They did not succeed, as no large organization has, in making their officials completely disinterested and honest. There were scandals and reports of self-enrichment on the part of several of their highly-placed nationals. When it came to collusion with Taiwanese, however, they were all but incorruptible. The instances of improbity that achieved publicity in Taiwan were mostly between government and business interests. Irregularities of this sort did not threaten the objectives of the regime, for these parties had more at stake together than at issue in the economic expansion. Much of what was lost in

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this wasteful scheme of recruiting from abroad therefore must have been regained in the form of security against the conservative influence of tradition from within.

In one respect, however, this policy proved to be an unqualified loss to the Japanese. They established a caste-like status for their own nationals, hedged about with favoritism in employment, education, and business opportunity. This widened the gulf that the general severity of their rule had made between themselves and the Taiwanese. The enmity that they had earned among the population left them unprepared to bring it effectively into the last-minute industrial effort called forth by the war.[22]

We know from the Japanese themselves that the latter 1930's were for them years of exceptional new decisions and vigorous efforts at expansion. Official policy began to assert itself more strongly in matters of industrial planning and investment. The previous success in aiding farm production, which had given official circles some occasion for complacency, suddenly became inadequate. The government began at a strenuous pace to mobilize Taiwan's economy for serving the broader purposes of the Empire.

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On very short notice they sought to transform Taiwan into a quasi-industrial appendage of Japan. The attempts to encourage new aptitudes and incentives among Taiwanese are as interesting to contemplate, in terms of their implications for manpower, as were the attempts to prevent this very development. The two objectives are of course incompatible, but they were fostered side by side by the Japanese under the stress of preparing for war. Yet by 1940, at the peak of all this energy, the portion of the working population employed outside of agriculture was scarcely greater than at earlier census dates—still only one-third, and this figure includes an undetermined number of Japanese residents (see Table 11). Only a tiny fraction of the people in Taiwan had taken up factory employment, and many of these were also Japanese. We are left with the conclusion that Japanese colonial policies and indigenous tradition had combined to restrict social change within a small segment of the population. Japanese comprised most of this segment. New activities were spread thinly among Taiwanese, and left the remainder engaged in the same pursuits as their ancestors for countless generations.

[22] During the quickened prewar mobilization of their resources in Taiwan, despite the crowded condition of agriculture, Japanese businessmen actually complained of a *shortage* of labor in industry.

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TABLE 16

Taiwan: Total Males, and Males with Occupation Distributed by Occupation, at Census Dates, 1905 to 1930. Total All Groups, Taiwanese, Japanese, and Others*

Occupation	*1930*	*1920*	*1915*	*1905*
TOTAL MALES				
Occupied	1,369,877	1,180,842	1,155,777	1,081,667
Agr. and Forestry	864,884	761,047	776,181	731,479
Fishing (Excl. Salt)	27,709	25,858	26,911	29,465
Mining	18,345	17,240	9,741	6,843
Manufacturing	122,066	112,063	94,338	67,526
Commerce	148,847	97,726	93,171	83,815
Transportation	61,323	45,645	38,901	29,138
Gov't. and Prof.	69,644	48,018	34,737	30,568
Other	57,059	73,245	81,797	102,839
TAIWANESE MALES				
Occupied	1,265,185	1,100,297	1,088,199	1,045,667
Agr. and Forestry	860,613	757,917	772,437	731,102
Fishing (Excl. Salt)	25,916	24,261	26,150	29,260
Mining	16,970	15,629	8,319	5,203
Manufacturing	95,832	87,314	72,444	58,833
Commerce	129,372	83,600	79,823	77,060
Transportation	48,677	35,428	29,505	23,186
Gov't. and Prof.	34,260	23,811	19,177	18,923
Other	53,545	72,337	80,344	102,100
JAPANESE MALES				
Occupied	75,812	63,853	53,403	27,835
Agr. and Forestry	3,474	2,815	3,430	285
Fishing (Excl. Salt)	1,617	1,310	611	170
Mining	411	1,187	1,113	1,380
Manufacturing	13,796	17,530	16,482	5,739
Commerce	11,043	9,567	9,498	4,592
Transportation	8,360	7,466	6,273	3,871
Gov't. and Prof.	34,511	23,751	15,328	11,502
Other	2,600	227	668	296
OTHER MALES				
Occupied	28,880	16,629	14,169	8,165
Agr. and Forestry	797	315	312	86
Fishing (Excl. Salt)	176	280	150	35
Mining	964	424	309	260

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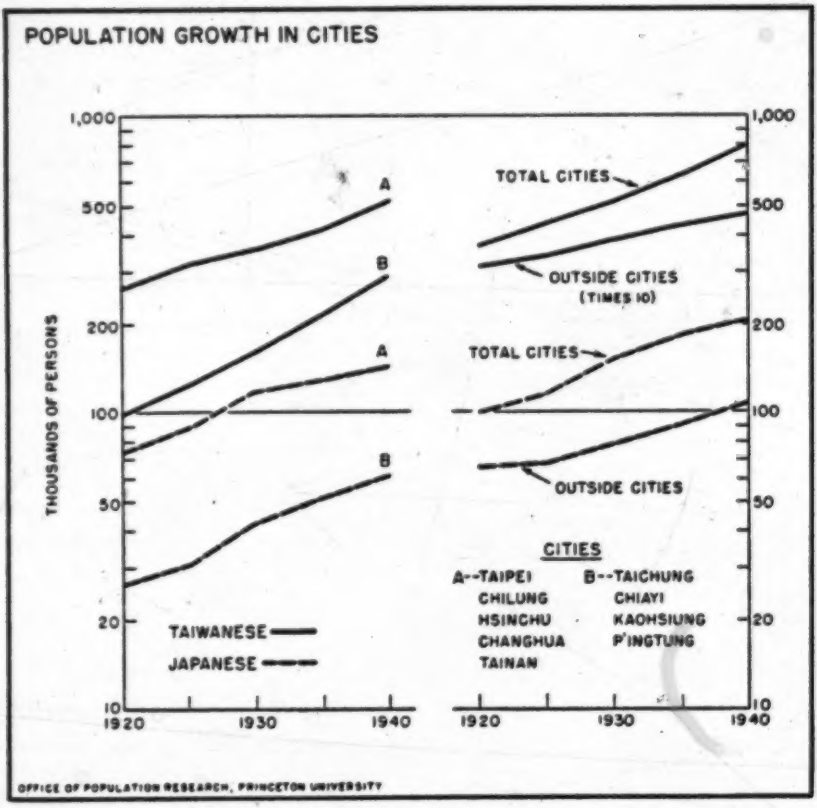

Fig. 19. Growth of Population in Major Cities of Taiwan, 1920-1940. Taiwanese and Japanese.

both places. They certainly esteemed urban more than rustic life; but work of a similar nature was also available to them outside the cities. For them the place of residence had less influence on their type of livelihood.

Ethnic Composition of Cities

The growth of cities depended on only a small part of all Taiwanese to supply the necessary migrants. It was not so with the Japanese. In a sense, the majority of them were migrants, having been born outside of Taiwan. More important, however, nearly two-thirds of all Japanese took up residence in cities and presumably stayed there (see Table 25). They found an urban setting most advanta- 563 162

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TABLE 16 (continued)

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Occupation	*1930*	*1920*	*1915*	*1905*
Manufacturing	12,438	7,209	5,410	2,954
Commerce	8,432	4,538	3,849	2,163
Transportation	4,286	2,727	3,122	2,081
Gov't. and Prof.	873	455	232	143
Other	914	681	785	443

* For comparability, Domestic servants are excluded at all dates; Ceramics workers are assigned to Manufacturing in 1905 and 1915; Salt workers are assigned to Manufacturing from Fishing in 1905, 1915, and 1920.

Sources: *Census of 1905, General Volume*, Table 25.
Census of 1915, Statistical Tables, Table 66.
Census of 1920, Descriptive Report, Appendix, Tables 51 and 52.
Census of 1930, Statistical Tables, Total Island, Tables 45 and 46.

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TABLE 25

PROPORTIONS OF TAIWAN'S POPULATION OF EACH ETHNIC GROUP Living Inside the Nine Major Cities in Taiwan, and in Taipei City

	1920		1940	
	Per Cent of Total Population	*Sex Ratios*	*Per Cent of Total Population*	*Sex Ratios*
Nine Cities Combined				
Taiwanese	10.5	106	14.7	104
Japanese	60.2	119	65.6	105
Other	68.4	345	59.8	175
Taipei City Alone				
Taiwanese	3.1	102	4.0	99
Japanese	27.5	117	29.3	100
Other	38.6	364	26.8	166

Source: *Census of 1930, Statistical Tables*, Table 1.

geous for conducting the new activities that they brought with them to Taiwan. Japanese proceeded to develop Taiwan's cities to provide an appropriate environment of modern banking facilities, centers of government administration, reservoirs of professional skills, and headquarters of private business.

Personal comforts, too, were not neglected. Running water, systems of sewage disposal, gas, electricity, and cinemas first appeared in these cities, and did not spread far beyond them. For those who could afford the time and expense, life in Taipei was graced by a nearby golf course and several fashionable vacation resorts. Japanese were energetic in constructing large public buildings conspicuously of Western architectural styles, thoroughfares and parks for their gratification and diversion. The section of Taichung City that was occupied by Japanese was referred to fondly as "little Kyoto."[13] Cities understandably were attractive places for Japanese to reside.

The Japanese affinity for urban life was exceeded only among the mainland Chinese that were found in Taiwan.[14] The explanation in their case is somewhat different. These people were admitted to the island as small merchants or as laborers in many of the modern enter-

[13] OPNAV, Civil Affairs Handbook (1944). *Taichu Province*, p. 149 ff.

[14] These made up almost all of the category "Other Nationalities" in Table 25 and in published census tables.

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prises that flourished wherever there were Japanese. In this respect they were distinct from Taiwanese, as their occupational composition indicates (see Table 16). Otherwise they merged in language, customs, and sympathies most closely with the urban population of Taiwanese.

The Chinese tended to remain in cities or commercial towns. The authorities held them under suspicion and close scrutiny, and often confined them by labor contract to menial positions. On the whole they did not become permanent residents of Taiwan; by their sex ratios they appear as a relatively transient group (though some of them intermarried with Taiwanese). Many were merely seasonal workers who remained in Taiwan for only part of the year.

The ethnic composition of the urban population was, like its increase, a product of migration from outside cities rather than growth from within. Different cities did not all exert the same attraction for people according to ethnic background. Variations between cities in ethnic composition (see Table 26) were scarcely a matter of *Taiwanese* being drawn less into some cities than into others, for they comprised the broad population base in every one. These differ-

TABLE 26

ETHNIC COMPOSITION OF MAJOR CITIES IN TAIWAN

Per Cent of Total Population in Each Ethnic Group

1920, 1930 and 1940

	Taiwanese			*Japanese*			*Others*		
*Cities**	*1920*	*1930*	*1940*	*1920*	*1930*	*1940*	*1920*	*1930*	*1940*
Taipei	66.4	64.1	67.9	27.8	29.4	28.1	5.8	6.6	4.1
Chilung	70.3	68.4	69.5	24.8	24.7	24.8	4.9	6.9	5.7
Hsinchu	90.7	87.4	86.3	8.3	11.3	12.7	1.1	1.2	1.0
Taichung	70.5	72.8	78.9	28.0	24.4	19.8	1.5	2.8	1.3
Changhua	97.0	93.6	94.0	2.3	4.5	5.1	.7	1.9	.9
Tainan	81.1	80.5	86.0	15.9	15.8	11.7	3.0	3.7	2.3
Chiayi	83.8	82.3	87.4	14.5	14.8	10.8	1.7	2.9	1.8
Kaohsiung	74.1	72.2	79.8	24.1	24.6	18.6	1.8	3.2	1.6
P'ingtung	84.2	82.8	85.8	14.2	13.8	12.3	1.6	3.4	1.9
Total	75.9	73.9	78.0	20.6	21.5	19.2	3.5	4.5	2.8

* Boundaries of all cities have been adjusted to those of 1935.

Sources: *1920 Population Register*, Table 2.
Census of 1930, Statistical Tables, Tables 1 and 2.
Census of 1935, Statistical Tables, Table 1.

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ences are to be explained primarily by the preferences of Japanese for certain cities as opposed to others.[15]

We may thus regard the proportion of Japanese in the population as the major element in the variation between cities. The ethnic composition of each city was remarkably stable from 1920 to 1940, though almost all doubled in population. Taipei, Chilung, Taichung, and Kaohsiung were all more than one-fifth Japanese at each census date. This is least surprising in the case of Taipei, for it was the administrative hub of the entire island, and a thriving center of foreign trade as well. Chilung because of its natural harbor became established early as the principal port of access to and from Japan. It kept this position even after the harbor no longer handled heavy traffic, by possessing some of the key industries intended to complement Japan's war effort. Taichung was in the fertile middle section of the island, and prospered enormously from the collecting, processing, and marketing of agricultural produce. Kaohsiung was the center from which the Japanese mounted their most extensive efforts at modernization: in the city itself and its immediate environs were concentrated the major processing industries of the island. Large sums were spent in improving its harbor to facilitate the passage of this new production out of the island.[16]

The remaining five Municipalities were more typically Chinese in atmosphere, with the alien features of Japanese presence kept more in the background. Whatever their types, these cities of Taiwan were the most important places where Japanese residents mingled with Taiwanese. Japanese nationals were scattered over the rest of the island in administrative and technical posts, public and private, but only in these cities did they associate regularly with Taiwanese. Only there did many Taiwanese who were non-farmers come into frequent contact with Japanese. Consequently, one would expect that the urban environment was the principal channel of modern influence.

Even in these cities there were certain obstacles in the way of such contact. The barrier was not entirely one of language, for Taiwanese soon acquired the rudiments of the Japanese tongue through school-

[15] Mainland Chinese varied almost as much as their share in the total population by city. But they were so few, and their stay in Taiwan so impermanent, that they cannot be considered a very important part of even the urban population.

[16] Kaohsiung City was also built up as a base for southward expansion in the Pacific Ocean, but did not have the opportunity to fulfill the promise of this investment.

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ing and practice. Japanese did many things to discourage free intercourse between the two groups, and raised exaggerated fears of animosity from the Taiwanese among their own kind.[17]

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The Japanese maintained high levels of living in Taiwan. Their wealth did not create the separation between the two groups, but helped to enlarge it. The opulence of Japanese was more than simply a matter of superior income (which the Taiwanese might have emulated); it was also founded on privilege.

For example, wherever possible they lived apart in special portions of each city. These sections were arranged so as to provide the facilities that they were in a position to command—Japanese shops, entertainment, and cleanliness, one of the greatest of all luxuries in Asia. Influential Japanese strove to put themselves in such surroundings, whereupon they allowed poorer sections to develop as Taiwanese residents could best afford. Owing to this combination of jealous care and neglect, the central districts of most cities were elaborately laid out with efficient street patterns and handsome landscapes—but with residential finery and modern public buildings concentrated in a few blocks and the indescribable slums that Asia often produces spread over the remainder.[18]

It is easy to see the nature of residential segregation in Taipei City, where it was carried farthest (see Fig. 20, based on 1935 census data). There were two large concentrations of Taiwanese, at the north and the southeast corners. These were the sites of the original pair of settlements that grew into the present city. The space in between had been gradually built up before 1895 as the seat of Manchu administration for the island. It was razed and replaced by the Japanese (following a destructive typhoon in 1912) to make way for new construction that they planned. The Japanese built this central area themselves, and therefore to their own design. It had a core in which almost none but Japanese eventually lived, surrounded by a

[17] One can say that these fears were exaggerated without implying that they were without foundation. By their repressive administration, Japanese invited widespread ill-will in the population. Much of this might have been allayed if they had not on the one hand advertised the benefits of their rule and, on the other, systematically cut off any opportunities for Taiwanese to compete with Japanese on equal footing. This ambivalent policy even undermined some of their foremost objectives by impeding their use of the local labor supply in the most effective ways for war production.

[18] The enforcement of health and sanitary regulations held the two groups in complete equality before the law. In looking back at the severity of these measures, Chinese have remembered them as instances of oppression by the Japanese. But by such means the authorities were able to avoid the unhealthful conditions usually associated with urban crowding in Asia. See Hsü Tze-wei (1946), p. 444 ff.

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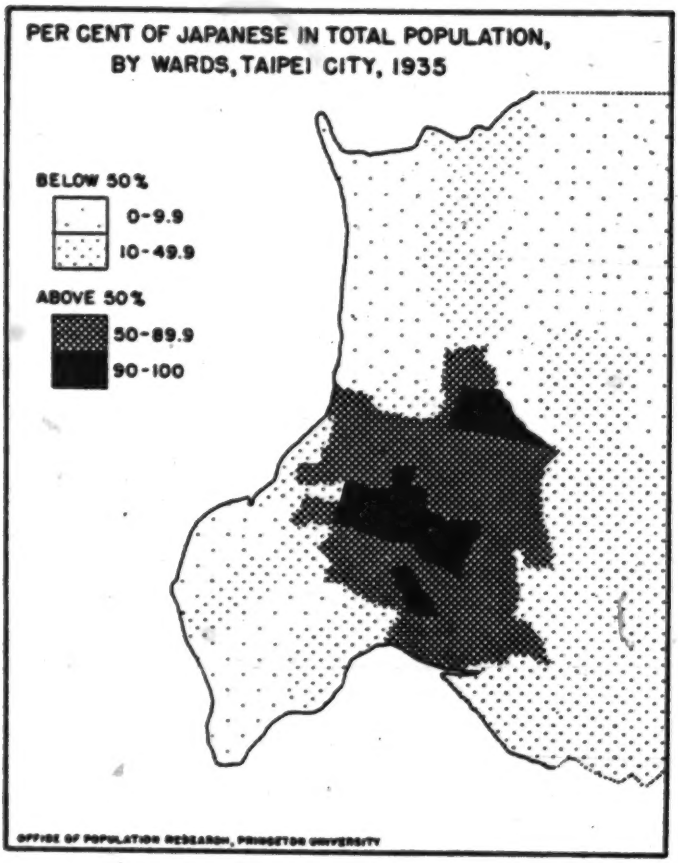

Fig. 20. Residential Segregation of Japanese in Taipei City.

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substantial area where Japanese residents predominated. Around the fringes of this modern district, other Japanese (reportedly those of lower income and social status[18]) lived more thinly mixed with Taiwanese. Almost one-half of the city's surface was taken up by poorer districts composed entirely of Taiwanese dwellings, shops, and open markets.

There is also another way to see how the separation of living quarters kept the two groups apart—in terms of persons rather than the space involved. Table 27 illustrates this aspect of segregation for

[18] OPNAV, Civil Affairs Handbook (1944), *Taihoku Province*, p. 133. A more comprehensive account of the growth of Taipei City, in relation to the surrounding region, is given in Ch'en Cheng-hsiang (1952).

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TABLE 27

RESIDENTIAL SEGREGATION IN TAIPEI CITY, 1925 AND 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese in Each "Ward"

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Per Cent Japanese in Each Ward	*1925*		*1935*	
	Number	*Per Cent of Total*	*Number*	*Per Cent of Total*
		Taiwanese		
0– 9.9	94,551	73.4	109,309	62.5
10.0– 49.9	25,681	19.9	48,815	27.9
50.0– 89.9	7,964	6.2	16,508	9.4
90.0–100.0	606	0.5	384	0.2
Total Taiwanese	128,802	100.0	175,016	100.0
		Japanese		
0– 9.9	3,069	5.8	3,640	4.5
10.0– 49.9	11,462	21.5	18,173	22.2
50.0– 89.9	24,926	46.7	48,775	59.7
90.0–100.0	13,884	26.0	11,116	13.6
Total Japanese	53,341	100.0	81,704	100.0

Sources: *Census of 1925, Statistical Tables*, Table 2.
Census of 1935, Statistical Tables, Table 2.

Taipei City in 1925 and 1935. Here both Taiwanese and Japanese have been grouped according to the degree of concentration of Japanese in each "ward." While the non-Japanese wards held the bulk of Taiwanese, there was some considerable area of overlap where the two groups were relatively mixed. From the evidence of this table, many Japanese who were arriving in Taiwan were forced to go to residential areas that contained some Taiwanese residents. This is shown by the relative gain of Japanese in the sections that were not purely Japanese, but where Japanese residents were in the majority. With its members increasing, the Japanese community eventually had to mix more widely with Taiwanese, since the areas that were already more than 90 per cent Japanese could not absorb any newcomers. They moved into wards with only the "better element" of Taiwanese, however, and managed to keep this mixture to a minimum. The proportion of Japanese living in predominantly Taiwanese wards actually fell off very slightly.

From the Taiwanese side, moving into mixed sections was carried somewhat further. Taiwanese were beginning to spread into wards that were not purely Taiwanese, sections closer to the center of the

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city which they had occupied together with Japanese. Because there were more of them, and because they had been more concentrated among their own kind before, the Taiwanese moving into these areas contributed more to the mixture than the Japanese. The data here do not signify that it was very extensive. But it makes some difference which of these two aspects of segregation we choose to use as a standard of comparison.

This trend in the segregation of urban residents was of some significance in the other cities during the years when they were growing rapidly, for the system was put under strain by the continuous arrival of new immigrants. On the whole, the Japanese were successful in housing most of their people in residential wards that were predominantly Japanese, and well-to-do Taiwanese were moderately successful in entering sections containing some Japanese, but not into the sections most prized by the Japanese.

For Japanese, no other city offered living quarters and facilities so exclusive as those of Taipei (see Table 28). In every one of these six other Municipalities they lived more widely intermixed with Taiwanese (though not necessarily at the same levels of comfort). Kao-

TABLE 28

RESIDENTIAL SEGREGATION IN SIX CITIES OF TAIWAN, 1935

Taiwanese and Japanese Population Distributed by the Proportion Japanese of Each Ward

Per Cent Japanese in Each Ward	*Chilung*	*Hsinchu*	*Taichung*	*Tainan*	*Chiayi*	*Kaohsiung*
			Taiwanese			
0– 9.9	56.6	68.5	52.7	50.0	58.2	56.1
10.0– 49.9	34.2	30.7	42.7	48.3	41.5	36.2
50.0– 89.9	8.9	0.7	4.5	1.7	0.3	7.7
90.0–100.0	0.3	0.1	0.1	0.0	0.0	0.0
Total Taiwanese	100.0	100.0	100.0	100.0	100.0	100.0
			Japanese			
0– 9.9	5.7	16.4	6.8	11.0	15.7	7.9
10.0– 49.9	35.6	54.3	53.0	69.9	80.0	38.6
50.0– 89.9	50.9	16.6	34.9	11.1	4.3	53.5
90.0–100.0	7.8	12.7	5.3	8.0	0.0	0.0
Total Japanese	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Census of 1935, Statistical Tables*, Table 2.

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hsiung and Chiayi had not a single ward with as high as 90 per cent of its population Japanese. For Taiwanese, on the other hand, Taipei consisted neither more nor less of mixed wards than the other cities. In all, at least nine-tenths of the Taiwanese population of every city stayed in districts in which less than a majority of the inhabitants were Japanese.

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The Taiwanese in Cities

Of all Taiwanese, so few went to cities that one is prompted to ask whether there were not some special factors present restricting the size of this migration. The effects of such a selective process over many years should produce differences in the characteristics of persons living in cities and of those living outside.

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Since few if any newcomers had an opportunity to take up agriculture in the cities, a prominent feature of cityward migration was a movement to new work. To the extent that it was, one would expect that the migrants were the types of persons who usually undertook new occupations in Taiwan—for example, men rather than women, primarily in the ages of young adulthood. If the migrant population had been limited to these categories, cities with large proportions of migrants in their populations must have had disproportionate numbers of young men as compared with the rest of the island. Such a tendency has characterized rapid urbanization elsewhere.

In addition, cities frequently offer opportunities for employment that are considered superior to those found in the countryside. This is especially true of many agrarian societies, where rural poverty sometimes reaches extremes that make the meanest of urban jobs seem attractive. Where such conditions exist, movement to cities very often serves to drain off large numbers of men in young working ages who have lost or overcome their attachment to farming.

In 1935, these effects of age and sex selection were hardly perceptible in Taiwan's urban population taken as a whole. The age composition of all their males combined was nearly the same as the rural population (Table 29). Surprisingly, urban females likewise had almost the same age structure as those outside of cities. Hence, there could have been no sweeping dislocation of persons of different age and sex groups as a result of urbanization in Taiwan.

There are special circumstances in which it is not hard to imagine some movement of single individuals in an agrarian society; this has

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52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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TABLE 31

INTER-CITY DIFFERENCES IN OCCUPATIONAL COMPOSITION

Per Cent of Occupied Males in Selected Types of Occupation in Each of Seven Municipalities, 1930

All Nationality Groups

Cities	*Manufacturing*	*Commerce*	*Transportation*	*Government*	*Agriculture*	*Other Occupations*
Taipei	26	30	10	18	6	10
Chilung	16	21	23	9	4	27
Hsinchu	21	25	10	13	20	11
Taichung	23	28	10	19	14	6
Tainan	28	28	13	18	5	8
Chiayi	22	29	10	12	20	7
Kaohsiung	24	19	20	11	13	13
Total Seven Cities	24	27	13	15	9	12

Source: *Census of 1930, Statistical Tables*, Table 40.

divisions from rural conditions. Nevertheless, large blocs of Taiwan's urban population still supported themselves by farming. Only three Municipalities in 1930 had as few as one-twentieth of their working males engaged in agriculture. It is small wonder that these cities had failed to show symptoms of advanced urbanism in other respects.

Other types of employment in these cities also had certain special features. Government administration in Taipei, transshipping of seaport cargoes in Chilung and Kaohsiung, and sugar processing in Taichung and Tainan were reflected as important activities in their share of all male employment. These figures, pertaining to 1930, reveal nothing of the intensified industrial activity in these cities in the succeeding decade. They are the only available indication in demographic terms of the peculiarities of individual cities. In any event, we are less interested in these peculiar elements than in the relations between types of employment and urban settlement among Taiwanese. Since Table 31 does not show Taiwanese separately, it is affected by differences in the proportions of Japanese and in their work among the various cities. Hence the information, while illuminating, is less useful than one might wish.

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More information is available for the population of all seven cities combined. By means of some estimation, we can find the occupational

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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TABLE 32

OCCUPATIONAL COMPOSITION IN CITIES OF TAIWAN BY ETHNIC GROUP, 1930*

Distribution of Occupied Males by Occupation and Nationality

	Taiwanese	*Japanese*	*Other Nationalities*
A. Per Cents by Occupation			
Agriculture	13.1	0.9	0.2
Fishing	2.1	2.2	0.5
Mining	2.1	0.2	1.1
Manufacturing	22.8	18.6	43.8
Commerce	29.1	19.6	27.8
Transportation	13.7	10.2	19.1
Govt. & Prof.	6.4	44.4	3.3
Other	10.7	3.9	4.2
Total Occupied	100.0	100.0	100.0
Per Cent Occupied of All Males	54.4	58.0	76.8
B. Per Cents by Ethnic Group			
Agriculture	97.5	2.4	0.1
Fishing	70.8	27.2	2.0
Mining	89.9	3.8	6.[illegible]
Manufacturing	65.0	19.0	16.0
Commerce	73.2	17.8	9.0
Transportation	69.1	18.5	12.4
Govt. & Prof.	28.2	70.0	1.8
Other	84.7	11.1	4.2
Total Occupied	67.4	24.0	8.6

* Includes the seven cities of Municipal rank in 1930.
Source: Estimated from *Census of 1930, Statistical Tables*, Table 39.

composition of each ethnic group separately (Table 32).[21] Taking account only of males with occupation, these data represent the urban Taiwanese at less of a disadvantage next to the Japanese than was true over the entire island. Of course, one must remember that Taiwanese (and Mainland Chinese) in the same type of work with Jap-

[21] The necessity to "estimate" arises because the occupational data *by ethnic groups* were given in "Occupation" units (i.e., persons with a principal occupation plus persons with a secondary occupation), and counted some persons twice. In the tables shown here, the ethnic composition of "Occupations" has been applied to the total of persons (males) in each occupation.

32:Barclay S-5 (nodate)1954 AD1 Formosa AD1

anese usually had subordinate positions. Nevertheless, it seems conclusive that by moving into cities Taiwanese were able to narrow the gap that separated their forms of livelihood from those of the Japanese.

The ethnic composition of occupied persons (appended to Table 32) indicates how the differences in occupational structure among these ethnic groups were weighted in the urban population. Taiwanese, of course, predominated in all lines except in government service and professional activities. Keeping these coveted positions in their own hands was one of the ways in which Japanese were able to live side by side with the rest of the population and avoid the pressure of competition.

Chinese nationals ("Other Nationalities" in Table 32) in these cities also appeared in a few types of work far more than in the working population as a whole. Their specialties were of an opposite kind: many worked as laborers in small manufacturing enterprises and as longshoremen, accounting for their large share of all "Manufacturing" and "Transportation" workers.

TABLE 33

OCCUPATIONAL DISTRIBUTION OF TAIWANESE MALES REPORTING AN OCCUPATION, INSIDE AND OUTSIDE MAJOR CITIES, 1905, 1920, 1930

	1905		*1920*		*1930*	
	*Inside**	*Outside*	*Inside†*	*Outside*	*Inside‡*	*Outside*
Agriculture	2.3	72.1	13.2	71.9	13.1	74.0
Fishing	.6	2.9	1.2	2.3	2.1	2.0
Mining	28.4	5.4	1.1	1.4	2.1	1.3
Manufacturing			27.1	6.9	22.8	5.9
Commerce	37.7	6.4	28.9	6.4	29.1	8.2
Transportation	10.4	1.9	11.2	2.8	13.7	2.8
Govt. & Prof.	5.6	1.7	6.7	1.9	6.4	2.3
Other	15.0	9.6	10.6	6.4	10.7	3.5
Total Occup.	100.0	100.0	100.0	100.0	100.0	100.0

* Comprises the cities of Taipei, Taichung, and Tainan. The boundaries for Taipei in this tabulation were smaller than the city as subsequently organized.

† Cities of Taipei, Taichung, and Tainan, with the same boundaries used at later census dates.

‡ Cities of Taipei, Chilung, [illegible], Taichung, Tainan, Chiayi, Kaohsiung.

Sources: *Census of 1905, Detailed Tables, Prefectural Volume*, Table 17.
Census of 1920, Prefectural Volume, Table 16.
Census of 1930, Statistical Tables, Table 39.

52: Barclay S-5 (no date) 1954 AD1 Formosa AD1

592 households were not keeping up with the increase of people, and
162 that family groups were therefore undergoing some change in their composition. Though some aspects of this change can be shown more satisfactorily below, the process is most easily seen in these figures, since they cover the complete span of the census administration.

162 As usual, the published results of these census materials did not
128 do justice to the care that went into their collection. Household tables were not always shown in useful form, and the figures of Table 43 do not convey very much even about the size of families in Taiwan. Obviously in order to draw reliable conclusions about families of Taiwanese it must be possible to separate them as a group in the statistics, and to make sure that the statistics employed are a fair representation of family groups. For exactly this purpose, the Japanese treated one kind of household as standard, the so-called "ordinary" household, to cover the "normal" types of living arrangements. People in certain special categories were excluded; residents of these non-family households, or "quasi-households," will be omitted from most of the tables that follow.[4]

162 Information about quasi-households is sketchy and hard to find.
592 The size of these establishments is unknown for separate nationality
563 groups, perhaps through a deliberate effort to conceal the military forces (though they would nearly all have been classified as Japanese anyway, according to the status of the person in charge). The figures can be pieced together for the entire population, and appear in Tables 44 and 45. Quasi-households were a very small part of the total, but accounted for a much larger portion of non-Taiwanese. Only one person in a hundred of all nationality groups lived in such circumstances; 6.6 per cent of Japanese and 20 per cent of Mainland Chinese lived in quasi-households in 1930, but relatively few of the Taiwanese were found outside of ordinary households. Since Taiwanese are the main source of interest in the problem, the few living in quasi-households are unimportant, and for the remainder of this chapter the term "household" will be used to refer to "ordinary" households only.

On the average, ordinary households of Taiwanese contained be-

[4] They comprise people counted in hospitals, prisons, schools, military barracks, police and other special dormitories, and hotels. Although they must be removed before the household data can be said to represent patterns of familial life, the line drawn between the two types of household is not entirely rigorous. Many of these people, especially the ones in hotels and schools, were only temporarily absent from their homes, and their family affiliations may have continued undiminished.

52: Barclay S-5 (no date) 1954 AD1 Formosa AD1

TABLE 44

PER CENT OF TAIWAN'S POPULATION LIVING IN "ORDINARY" HOUSEHOLDS, 1905-1930

Both Sexes

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Year	Persons Living in Ordinary Households	Persons Living in "Quasi-Households"	Per Cent Living in Ordinary Households
	All Nationality Groups		
1905	3,021,260	18,491	99.4
1915	3,461,282	18,640	99.5
1920	3,624,403	30,905	99.2
1930	4,546,970	45,567	99.0
	Taiwanese		
1920	3,454,956	11,551	99.7
1930	4,293,234	20,447	99.5
	Japanese		
1920	151,862	12,404	92.4
1930	213,314	14,967	93.4
	Other Nationalities*		
1920	17,585	6,950	71.7
1930	40,422	10,153	79.9

* "Other nationalities" consists almost entirely of Mainland Chinese.

Sources: *Census of 1905, General Volume of Statistical Tables*, Table 114.
Census of 1915, Statistical Tables, Table 109 and 116.
Census of 1920, Descriptive Report with Appendix, Appendix Table 149, 164, 165 and 169.
Census of 1930, Statistical Tables, Total Island, Table 5.

tween five and six persons during that portion of the census period when they can be observed separately. Because Taiwanese made up almost the entire population and because most of them lived in family groups, the initial approximation of Table 43 was fairly close to the actual size of their households. Differences begin to emerge when other nationality groups are listed by themselves; the households of both Japanese and Mainland Chinese on the average were smaller by a considerable margin than those of the Taiwanese, and remained that way (see Table 45).

Not only did Taiwanese follow the ideal of large households more closely than the other population groups in Taiwan, but they displayed a different pattern in approaching it. Distributed according to the number of persons in each, only the households of Taiwanese

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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TABLE 45

SIZE OF HOUSEHOLDS, BY TYPE AND NATIONALITY OF HEAD

Average Persons Per Household, "Ordinary" Households and "Quasi-Households"

All Nationality Groups, Taiwanese, Japanese and Other Nationalities 1905 to 1930

Year	*Ordinary Households*	*Quasi-Households*
	All Nationality Groups	
1905	5.19	6.2
1915	5.31	12.4
1920	5.30	20.6
1930	5.64	17.1
	Taiwanese	
1920	5.45	
1930	5.82	
	Japanese	
1920	3.37	
1930	3.74	
	Other Nationalities*	
1920	3.79	
1930	3.84	

* "Other nationalities" consists almost entirely of Mainland Chinese.

Source: From data of preceding table. Certain army and navy barracks were included as quasi-households in the Census of 1920 for the first time, accounting for much of the increase over 1915 and 1905 in the average size of quasi-households shown above.

were in a pattern that reveals a predominance of families with two or more generations, families of the sort that must be required to maintain a high rate of natural increase. Their households were found most commonly with four and five members, more rarely of smaller sizes. The process by which the average size of Taiwanese households rose from 1905 on was not a completely general shift toward larger units, but rather one of forming relatively fewer small households (with the exception of people living alone) and raising the proportion of very large ones (see Fig. 30). The sizes most often achieved remained very nearly the same as before, and the distribution simply became more skewed. (Expressed in terms of the numbers of persons involved, the effect of this change would, of course,

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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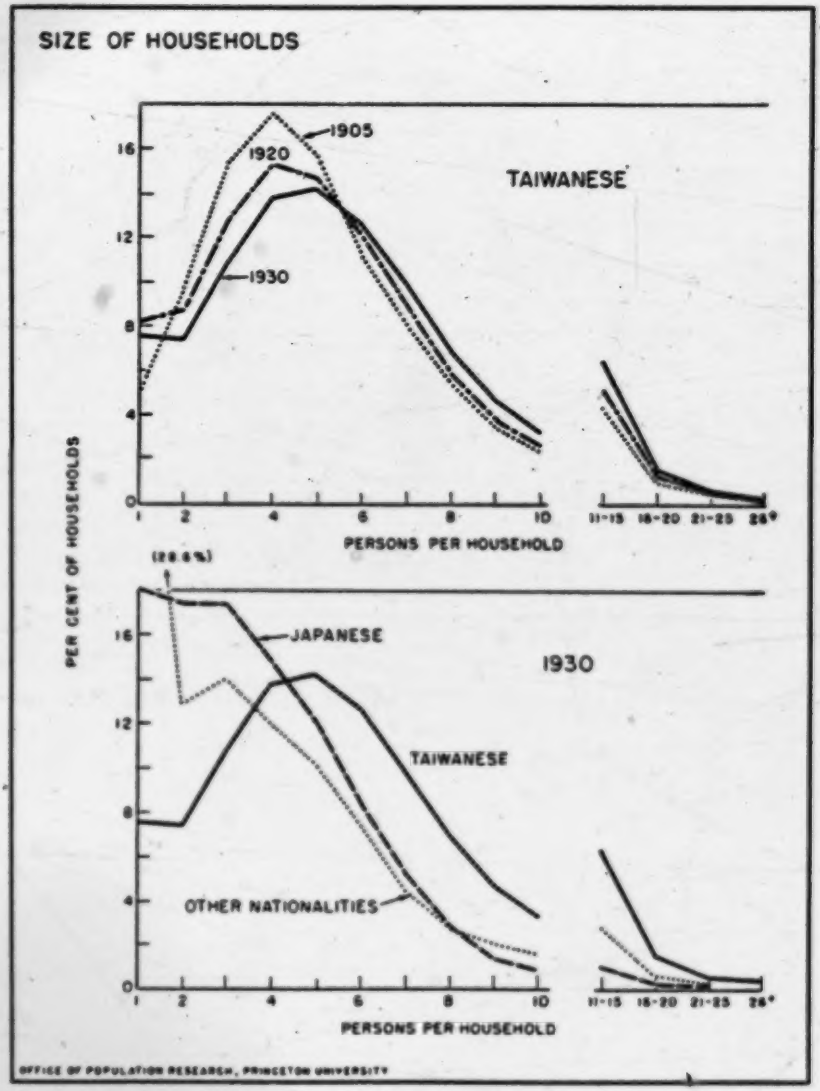

Fig. 30. Size of Households in Taiwan at Various Dates. Households Distributed by the Number of Persons in Each. Taiwanese, Japanese and Others.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

592 be multiplied in households of larger size, since they were larger by virtue of containing many people.)

563 A great many Japanese and Chinese nationals staying in Taiwan 162 obviously were separated from close family ties—for example, those who lived alone, and perhaps some of those in households of two or three persons, not to mention the ones who stayed in quasi-households. Few in either group maintained households in Taiwan as large as those that were usual among their countrymen at home. The Japanese gradually began to establish families in Taiwan, and to take up solitary living somewhat less frequently than at the beginning of their rule. In contrast, an extremely high proportion (29 per cent) of Chinese from the mainland by 1930 were still living alone in households of single persons, a result of the transient and impermanent status that they occupied in the island. It is interesting that in both of these minority groups, households of more than five persons, though not very numerous, had a distribution less unlike those of the Taiwanese. Apparently among the more settled and permanent non-Taiwanese in the population the ideals of the desirable family size were similar to those of the Taiwanese; but this attitude seems to have been more widely shared by Taiwanese, who as a group came closer to realizing it.

Composition of Taiwanese Households

592 It is not size in itself that distinguishes the Chinese family system from its counterparts in other countries. Nor does it mean a great deal to know about the size of family or household groups—even when we know their distribution from large to small—unless something can be discovered about their composition. Kinship would not be such a preoccupation in the minds of Chinese if it did not include other things that we have accustomed ourselves to regard as "non-familial." All that the factor of size indicates is the extent to which diverse familial roles can be encompassed within household units. In ascertaining these more diverse activities that were carried on in Taiwanese households, it will be helpful to find out some of the various kinds of members that were present.

The census schedules made inquiry into the family relationship of each household member, reckoned with reference to the head of the household. When the person was not a relative of the head, some further statement was still required—whether hired help, domestic servant, or simply a "lodger" in the house. The trouble is that the

52:Steiner S-4 (no date)1951
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647 ment employees was reduced to 81,006, while the percentage of indigenous citizens in government service had risen to 65.46. A more significant change, perhaps, is in the increase of indigenous personnel in positions of responsibility. Among the first-class officials, local personnel has increased from 0.92 per cent under the Japanese to 17.45 per cent under the Nationalists. During the similar period, the second-class officials of indigenous origin rose from 1.29 per cent to 25.02 per cent.

563 Of 113,900 aborigines in Taiwan, 91,-
657 070 of them live in the central mountainous region. Since 1946 they have been exempted from tax payments. Redistricted into a number of villages and subvillages, they have been developing local self-government through village assemblies. There are at present 159 free primary schools among them, educating some 20,000 of their children. In addition, 924 graduates have been awarded government scholarships to enter secondary schools. Among them are also 140 public health clinics serviced by 321 medical people.[18]

Finance

652 The people of Taiwan suffered much when their currency was linked with that of mainland China. From one Taiwan dollar for thirty Chinese dollars (*fapi*) in 1946, the rate climbed to T$1,835 for one Chinese "Gold Yuan" in August 1948.[19] By the time the Gold Yuan collapsed several months later, there was little purchasing power left in the Taiwan dollar worth salvaging. A fresh start was made in June 1949 when the

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nel figures on which this analysis is based, see *Taiwan Today*, cited note 11 *supra*, pp. 30–31.

[18] For figures in this paragraph, see *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 20–21.

[19] For a general description of Taiwan provincial finance, see *Taiwan Reconstruction**, pp. 33–77; also cf. *Taiwan Today*, cited note 11 *supra*, pp. 44–76.

[p. 216 (B)]

4:Grajdanzev--75-76 S-4 (no date) 1942 Formosans
116, 311, 421, 427, 565

"Let us now turn to the investigation of the problem of tenancy. Its economic importance lies in the fact that (1) a large portion of the farmer's income is paid out for rent on land, and (2) the farmer is less interested in preserving the fertility of the land and in making improvements, because the land does not belong to him and may be taken from him at or even before the expiry of the lease. From the social point of view the phenomenon of tenancy is important in that it often creates an idle class of landlords or rich farmer-owners and a class of poverty-stricken tenants. The widespread existence of tenancy makes average figures for the agricultural population meaningless because on the extreme there are rich landlords and on the other poor tenants. In order to be able to judge more or less correctly the importance of tenancy we should know: (1) the number of farmer-owners, part-owners (i.e. those who own some land, but are compelled to rent additional acreage), and tenants; (2) the area which is farmed and the amount owned of that farmed by each of these groups; (3) the division of each of these groups into at least three [76] sub-groups—large, medium, and small—in order to see whether each of these groups is uniform since, for example, the tenant who rents one ko and the tenant who rents 50 ko belong to quite different groups; (4) the conditions of the rent. The available statistics for Taiwan throw light on but few of these elements."

4:Grajdanzev--78-79 S-4 (no date) 1942 Formosans-1-3
116, 178, 427, 565

"As to the distribution of land between landowners by size of holdings, we have figures for 1930 and partial figures for 1932. We shall divide the farmers into four groups: (1) landowners with holdings of less than half a ko (less than 1.2 acre); (2) landowners with holdings of half a ko to one ko; (3) landowners with holdings of one ko to five ko; (4) those with holdings above five ko (above 11.9 acres).

Distribution of Landowners by Size of Holdings, 1930

Size of landholdings (ko)	0-0.49	0.5-0.99	1.0-4.99	5.0 and over	Total
Number (1,000)	172.9	86.7	122.4	23.1	405.1*
Percentage	42.7	21.4	30.2	5.7	100.0
Area (1,000 ko)	41.0	62.5	258.6	359.2	721.3
Percentage	5.7	8.7	35.8	49.8	100.0
Average area per holding (ko)	0.42	0.72	2.1	15.5	1.78

* It is important to note that the number of owners as given here is considerably greater than the number shown in more recent statistics. For 1932 the earlier figure was 340,674, whereas the current statistics (Takumu Tokei, 1938, published in 1940) give the number of owners and part-owners for 1932 as only 251,300; this is another indication of our point that the current official statistics probably understate the number of those occupied in agriculture.

Source: Ibid.

We see from this table that 42.7 per cent of the owners are decidedly small owners: their average holding is only 0.24 ko or less than 0.6 acre. They cannot exist on such a strip of land but must rent some land from rich landowners. In other words, almost half of the landowners are such in name only; they have enough land only for a house, a yard, and a kitchen-garden. Another 21.4 per cent of the owners are in a better position but not much better. Thus 64.1 per cent of the total number of landowners in Taiwan in 1930 had on the average less than 2.4 acres each. At the other end of the social scale, 5.7 per cent of the landowners owned 49.8 per cent of land, [79] or one-half of the total cultivated area. We may go farther and say that 126 persons (or corporations), 0.05 per cent of the total number of landowners possessed 94,072 ko—or 13.1 per cent of the total cultivated area. (1) Only thirty per cent of the owners are in the middle category. As regards

1. These figures are probably now out of date. In Kabushiki Kaisha Nenkan, 1940, five sugar companies and one canning company are listed as owning 81,634 ko of land in Taiwan.

the distribution of land among owners, Taiwan is a country of contrasts. Rich owners, although outnumbered eleven times to one by small owners, had nine times as much land. Thus on the average a rich owner had one hundred times more land than one in the first

two groups. This is extremely important for it shows that the farmers in Taiwan are divided into groups of unequal economic strength with extremes prevailing, so that the situation of the masses of the agricultural population is less satisfactory than the average figures calculated above would suggest. The Japanese government has not solved this question in Japan proper and it has not solved it during forty-five years of its administration in Taiwan."

116, 241, 311, 427, 565

"The figures given above refer to landownership. But the owners of small plots may increase their holdings by renting land. Some economists see the chief advantage of tenancy in the fact that it permits a capable farmer to get as much land as he is able to utilize. We give above the statistics of the size of the farms as actually operated in 1930 [See p. 79, category 116--analyst].

The picture is about the same as that of ownership. More than 30 per cent of the farmers till on the average less than 0.5 ko each (0.62 acres); 53 per cent till on the average less than one ko (less than 1.71 acre) and 77 per cent of the farmers till less than 2 ko (less than 3.39 acres). But 4.5 per cent tilled 30 per cent of the total area, while 579 farmers (or corporations) tilled 66,410 ko. There are therefore a considerable number of very large plantations in Taiwan, chiefly of sugar cane, bananas, pineapples, and tea. These are figures for 1930 and it is quite possible that even then the investigation did not cover all farmers. (1)

1. An indirect proof of this is that a similar investigation made in 1932 covered 340,000 farming families as compared with 405,000 in 1930.

Since 1930 the plantation area has increased sharply, so that the picture should be by now even less favorable. We have no statistics of land ownership by nationalities, but it is well known that all, or almost all, plantations belong to big Japanese companies.

4:Grajdanzev--80 S-4 (no date) 1942 Formosans-2
116, 241, 311, 427, 565

However, it is clear that among Chinese farmers too, there is a sharp division in respect to landownership—there are wealthy Chinese owners, who though few in number, are very important by virtue of the power they wield."

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-1-5
116, 434, 565, 651, 177.65 Japan
636.65

"Taxes may be of different types--some falling chiefly on the rich, whose ability to pay is, of course, greater than that of the average farmer. We do not have necessary information for a detailed analysis of how the tax burden is distributed between these two groups, but what is available gives clear indications. We have divided the taxes into two groups: (a) taxes on the recipients of large incomes; (b) taxes on the masses.

Taxation and Net Monopoly Receipts in 1,000 Yen

A. Taxes on the recipients of high incomes:

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Income Tax	3,873	5,285	9,538	13,024	12,395
Tax on capital		5	189	352	855
Mining Tax	200	203	291	353	327
Special profit tax	1,016	1,575	2,761	4,979	2,444
Tax on distribution of dividends		335	425	394	850
Inheritance tax			105	279	305
Total	5,089	7,403	13,309	19,381	17,176

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-2
116, 434, 565, 651, 177.65 Japan
636.65

B. Taxes on the masses of the population:

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Land tax	7,492	7,742	7,938	8,342	8,342
House tax					1,312
Business tax a)			2,931	3,290	2,726
Tax on sugar	3,320	3,461	4,050	6,702	5,215
Tax on alcohol b)	3,698	3,845	2,913	169	100
Taxes on other commodities	2	177	275	393	826
Customs duties and other duties connected with them	2,611	3,326	2,574	1,846	1,817
Stamp duty	5,107	7,271	7,220	7,653	5,926
Monopolies, net receipts	24,555	28,968	29,652	32,845	32,568
Net profits from text-book sales c)	103	29	75	74	24

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-3
116, 434, 565, 651, 177.65 Japan
636.65

[135]

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Profit on weights and measures d)	179	209	206	331	341
Fines and confiscations e)	1,091	529	224	362	224
Tax on railway fares				205	202
Admission ticket tax				116	124
Tax on construction					152
Amusement tax					188
Other taxes	731 f)	1,213 f)	1,200 f)	164	907
Total	48,889	56,770	59,258	62,492	60,994
The same as percentages of total					
Group A.	9.4	11.5	18.3	23.6	22.0
	90.6	88.5	81.7	76.4	78.0

a) We include business taxes in this group because it is legitimate to suppose that they are shifted by the business men to the population.

b) The fall of receipts from the tax on alcohol in the last two years is due to the introduction of a state alcohol monopoly.

c) Formally this is not a tax, but a surplus remaining after deduction of expenditures on printing of textbooks from receipts. However, state profits derived from the sale of textbooks to school pupils hardly can be considered otherwise than a tax.

d) As in the preceding item this represents a surplus from a form of fiscal monopoly.

e) Formally fines and confiscations are not taxes. But their regularity (they are foreseen in the budget) and their amounts show they are not 'casual' receipts. They fall, mainly, on the Chinese population.

f) Chiefly receipts from the taxation of surplus issues of Bank of Taiwan notes.

From this table it may be seen that about 80 to 90 percent of the taxes fall on the masses of the population and only 10 to 20 percent on the wealthier groups. The percentage of taxes contributed by the well-to-do rose from 9.4 in 1935 to 22.0 in 1939, but it would be a mistake to suppose that this implies a change of policy: the exigencies of wartime and the already oppressive burden of taxes on the masses make it more and more difficult to increase that burden. Under these conditions, heavier taxation of the rich is a necessity, but the government prefers to borrow from them, not to tax them: the loans amounted to six million yen in 1939 and are expected to amount to 17 million yen in 1941.

The actual tax-burden on the masses as compared with the wealthy is considerably

greater if we include provincial and [136] local taxes. We have no data on the exact distribution of local taxes, but provincial taxes can be measured. Provincial taxes are surtaxes, calculated as a percentage of the corresponding government-general taxes. Their rates are as follows:

Surtax on income tax	18%	of income tax
Surtax on land tax	90-100%	of land tax
Surtax on business tax	70-80%	of business tax
Surtax on house tax	120-150%	of house tax

These rates show that surtax on income tax (which falls chiefly on the recipients of high incomes) is only 18%, while surtaxes on taxes falling on the masses of population range from 70 to 150%."

4:Grajdanzev--136 S-4 (no date) 1942 Formosans
116, 171, 565

"We have no data on municipal taxes, but judging by those of the government-general and the provinces, the system is the same as in Japan, where municipal taxes in the budget of 1939 were distributed in the following way:

Land tax	11 %
House tax	17.3%
Business tax	11.7%
Miscellaneous taxes	11.9%
Special tax	42.5%
Other Income tax	5.6%
Total tax receipts	100.0%"

"The remaining imports —— imports for consumption —— should be divided, wherever possible, into two parts —— consumption by Japanese and consumption by Chinese. Without attempting any detailed analysis we may make a few remarks on the basis of the material available. In 1939, for example, 2 million yen worth of condensed milk was imported, as well as 7 million yen worth of sake and 5 million yen worth of beer, not including local production of sake and beer. Neither sake nor beer are Chinese drinks; they are consumed chiefly by 100,000 Japanese male adults and by the troops stationed there. To take another example, in 1939 48.6 million yen worth of fabrics and clothing, including shoes, hats, gloves, buttons, pearls, combs, bracelets, laces, etc. were imported into Taiwan. From this amount 8.1 million yen worth of gunny sacks should be deducted, leaving a balance of 40.1 million. If Japanese residents were able in 1939 to spend 12 million yen on drinks (not including locally produced and consumed beverages), they probably spent not less than double this sum on clothing, shoes and other personal articles (1) which—with a [153] few unimportant exceptions—are imported from Japan.

1. That this is not an overestimate may be judged from the following figures: 77.2 yen per person per year or about 25 yen per family per month can hardly be considered as excessive for clothing (including shoes, etc.) in a country where, for example, one yard of muslin cost 1.34 yen. In a special investigation conducted in 1937-1938, which covered 355 Japanese families with 1,397 members, the average

monthly income of a family was 184.6 yen, of which 23.6 yen was spent on food, 16.9 yen on lodging, leaving an ample margin for clothing and other expenditures. (Data on budgets from the Toyo keizai tokei geppo, July, 1940). An investigation conducted in Japan proper in 1936-1937, only one year earlier than the investigation in Taiwan mentioned above, gives the average expenditure on clothing of 10.18 yen per month for persons with an average salary of 88.37 yen; for the low income brackets it was 3.43 yen, for higher (about 100 yen), 12.18 yen. In our case the average salary is 184.6 yen, so that an expenditure of 25 yen on clothing is quite probable. See Kakei chosa hokoku, (Naikaku tokei kyoku) Tokyo, March, 1938.

If this is true , then not more than 3 yen per capita were spent on imported clothing by the Chinese in 1939 (2). But, as was pointed out in the preceding pages, the Chinese

2. The correctness of our estimate is supported by the budget estimates made by the government officials in 1936 and quoted by Nasu (op. cit.). According to them, the per capita annual expenditure on clothing of a representative Taiwanese farmer was 6.02 yen in 1936. This figure includes imported and locally produced clothing (shoes, hats, etc.) whereas our estimate is for the imported textiles only.

society in Taiwan is not uniform. Its wealthier members spend on clothing many times more than the small farmers, workers, or tenants."

4:Grajdanzev--153 S-4 (no date) 1942 Formosans
565

"The Chinese society in Taiwan is not uniform. Its wealthier members spend on clothing many times more than the small farmers, workers, or tenants."

15: U.S. Navy --21 [7] (no date) 1944 Formosans
116, 563, 565

"There is a noticeable social line drawn between the commercial Japanese community and the higher ranks of administrative officials and educators. Social distinction between Japanese and Formosans has no sanction in law but in practice there is a minimum of social intercourse."

15: U.S. Navy--29 [10] (no date) 1944 Formosans
116, 584, 565

"The period of probationary agreement is longer or shorter as the means of the families permit or the soothsayers direct. Among the poorest coolies and farmers it is very short or may be almost dispensed with because of the lack of funds or goods for fees and gifts and because of the necessity to get a new woman into the house for cooking, cleaning and working for the welfare of the new family."

15: U.S. Navy--30 [7] (no date) 1944 Formosans
116, 565, 511, 105

"The worldly possessions of a coolie-class Formosan-Chinese, the day laborer of the towns and villages, consist of the blue cotton clothes on his back, and perhaps a change for special occasions, a loose smock-like upper garment and black trousers for his wife with an ornament and black headband to wear upon her head, similar clothes (though perhaps in white or light blue) for the younger members of the family, and the simplest of furniture in the house. A table, benches, one or two wooden springless beds, a brazier for cooking, together with chopsticks, bowls, a pot or two, some cups without handles, and the kitchen knives, make up the furniture. If the family can afford it, there may be a bicycle and a two-wheeled carry-all bicycle trailer called a 'riakka' (from the English 'rear-car'), which can be used for hauling an incredible number of objects, including the elders in the family, or livestock for the market. For those who cannot affort [sic] a bicycle, a simple shoulder pole with ropes and side baskets may suffice as professional equipment. For rainy weather, a coconut palm fiber raincape is worn, making the figure seem grotesque to unfamiliar eyes."

15: U.S. Navy--30 [10] (no date) 1944 Formosans
116, 525, 565

"Coolies and rickshaw men indulge an inordinate fondness for gambling, and gather together in small groups to play a game with pebbles not unlike the game of 'craps'. The Japanese have attempted to discourage the pastime, but with little success. The stakes are very small but they frequently represent all of a day's wages."

42: Schetelig--390-391 T-2 (no date) 1868 Formosans-1-2
116, 423, 556, 565

Formosa was not colonized by the government. The Chinese were, and are, too practical not to know the drawbacks of state interference in colonization in all its extent, and both on the mainland and here in Formosa [391] they have taken good care not to transfer the center of gravity of the Empire to the outside. Consequently... northern and western Formosa must be looked on as a colony of squatters who, however, in the course of the years, have received titles and documents from the mandarins for the land which they had often acquired by the sword. All this was done by means of contracts and compromise, and so it comes about that today, in the midst of a population already numbering millions, and who immigrated comparatively recently, we find a number of old families who, having lived here for centuries, have developed a power that far exceeds that of the Imperial officials, due to the great forces that the possession of land has always put at their disposal. But it is clear that these various parties lend each other support in view of the chaotic condition of a population that has come together from the most varied provinces of the Empire, and in view of the need of exploiting the camphor forests in their own interests both against the Europeans outside the country and the mountain-dwelling natives within. The rich and independent settler of long standing supported the mandarin in maintaining and extending Imperial rights, at least insofar as he himself was not included in them, and on the other hand the mandarin has always been intelligent enough to respect the traditional rights of such an independent leader,

42: Schetelig--390-391 T-2 (no date) 1868 Formosans-2
116, 423, 556, 565

exacting no transport tax for his merchandise and not even hampering him in his destructive war against the extensive camphor woods, although otherwise every infringement of the law concerning the sacredness of the camphor monopoly is looked on as a kind of high treason directed against the Crown.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

Annex "A," Subparagraph 1f,
Sociological Background

SOCIAL STRUCTURE

I. SOCIAL STRATIFICATION

1. General Characteristics

565 Originally Formosa was a frontier for adventurers. In the new land people were less constrained by their cultural heritage and more independent. In the documents of the Manchu era it is stated that the Formosan people refused to degrade themselves by servitude, and that male and female servants were imported from the mainland.[1] The two centuries of Manchu rule were interspersed with a sequence of uprisings, some large, some small. The situation did not favor any stereotyped form of social stratification. There were some embryonic elements of a feudal system, but they were wiped out by the Japanese colonial administration. Rich and poor, landlords and tenants, both extremes existed, but under the colonial scheme the rich were not allowed to engage in modern industrial enterprise. The property of the rich was equally divided by their sons at the

1. Yoshihusa Kinebuchi: History of Social Work in Taiwan, 1940, Taipei, pp. 622-623.

565 time of inheritance, so the contrast between the rich and the poor was not striking. In effect, except for the political and ethnic class lines between the ruling Japanese and the ruled Formosans, social stratification was not clearly marked during the Japanese rule.

After the restoration of Formosa to China in 1945, political and ethnic class lines disappeared with the abolition of the colonial system. With the implementation of the Land-to-the-Tiller policy, inequality in land proprietorship was greatly reduced. When the China Mainland was lost to the Communists in 1949, tycoons transferred their capital to other parts of the world, so that there are no extremely wealthy people in Formosa. New industrial development after the restoration may cause economic differentiation in the future, but for the time being, social stratification is not a serious problem in Formosa. This is the general outline. Some specific topics will be considered on the following section.

2. Primary and Secondary Ownership of Land

471 425 Until the early years of the Manchu rule the land in the southern part of the island was agriculturally exploited under the protection of the government. When people began to farm the northern and middle part of the isla

5. Upper Nine Ranks and Lower Nine Ranks

565 During the Manchu era there were three classes in Formosa, namely, (1) officials and gentry, (2) common people, and (3) the "base" class. Although the officials and gentry exercised great influence over the common people, there was no rigid demarcation between the two. When a commoner passed the imperial examinations, he could be appointed an official. The situation of the base class was somewhat different. There was a demarcation between them and other two classes, but eh demarcation was not as rigid as in a caste system.

Each class was divided into several ranks. Among the common people there were the so-called upper nine ranks, including (1) secretaries of officials, (2) physicians, (3) painters, (4) masters of geomancy, (5) fortune tellers, (6) physiognomists, (7) Buddhist monks, (8) Taoist monks, (9) teachers of the lute. The lower nine ranks of the "base" class were: (1) prostitutes, (2) actors, (3) witches, (4) musicians (trumpeters), (5) hog drivers, (6) barbers, (7) male and female servants, (8) masseurs, and (9) grave diggers. Sedan chair carriers were low in the scale of occupations. Obviously the ranking was based on occupation. In pre-modern society it was very common for certain jobs to be looked on as mean, and

565 people engaged in them had a low social status. Conspicuous examples can be found in Japan, Korea, and India. In medieval German cities operators of bath houses, barbers, flute players, drummers, night-watchmen, scavengers, executioners, etc. were treated as "unehrliche leute", and their sons were not allowed to participate in any guild. In Formosa, common people did not marry with the people of the lower nine ranks, and they even hesitated to take a meal with them. The lowest classes were not entitled to take the imperial examinations. When a person passed an imperial examination, he had to prove that, among the three generations of his immediate ancestors no one had engaged in these mean occupations. Otherwise, the title granted by the examination would be canceled. But the disability was confined to the last three generations. In this respect it was different from the rigid slave system or caste system, in which the status was permanently inherited.

This system persisted until the first quarter of the present century. The development of industry and education, and the enlightenment movement after the 1920's have contributed to its elimination. At present, musicians, actors, waiters, barbers, etc. are looked on much the same as those engaged in other occupations, and young people do not even know what the upper and the lower nine ranks are.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

423 556 631 against climate and short-term deterioration in use, against destruction through violence, and against decline in the income that it produced. Since the farming population was increasing within a fairly definite area, it had additional value in speculation. Land was also relatively safe against confiscation by the government; not only could its ownership be hidden from casual inspection, but the government itself depended on the obligations owed to landlords by tenants to uphold its authority. Under agrarian conditions of farming on a small scale it is impossible to cultivate large holdings of land under a single management. Hence, the only way to amass large wealth is to become a landlord—beyond some point, necessarily an absentee landlord. In early Taiwan, considerable concentration of landholdings was reported. Ownership tended to gravitate into the control of large and powerful families, whose influence was the only recourse of government officials in asserting their rule.[7]

565 426 427 On the economic side, this concentration of wealth was not given a chance to develop into industrial-type investment. The landed gentry, often landed on considerable scale, were the only group of persons who had access to sufficient income to become capitalists.[8] Practically, however, it proved more secure and profitable to let out their lands to tenant farmers. When they branched out into different enterprises, it was as an adjunct to their status as gentry. In South Taiwan, for example,

> ". . . sugar was manufactured from the cane grown upon the owners' plantations, or from that brought from elsewhere. The cane was grown by the tenants, or by those who through being heavily indebted to the landowner stood in the same relation as retainers . . . under it [this system] the master of the sugar factory secures a threefold profit.
>
> 1. As landlord, he claims from his tenants from 15 per cent. to 20 per cent. of the cane as rent.

[7] One might suspect that, as in China, members of these families *were* the officials at lower levels of administration. But there is no direct evidence on this point, aside from frequent references to the fact that *clan* solidarity, imported to Taiwan by the migrants from South China, was one of the few bases for organizing any kind of joint action by Taiwanese on a large scale.

[8] The government was unable to fill such a role itself for reasons already noted. Officials, who were not permanent fixtures in Taiwan, confined their acquisitive energies to foreign commerce, where returns were quicker and they did not need to make long-term commitments. For example, it is significant that the government almost never operated its own monopolies, but let them out to many private agents and taxed the products as they were exported.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

2. As capitalist, he secures 14 per cent. to 24 per cent. interest on all the money he may have loaned to his tenant. 565
3. In order to cover the running expenses of the sugar factory he, as master, appropriates half the cane brought in by his tenants. 426 427

"These vast profits leave very little for the poor tenants, who have therefore no means of improving the soil, but fall deeper into debt, until at length they become mere slaves of the sugar factor. This system has proved the greatest hindrance to the growth of the business."[9]

Establishment of Japanese Authority

Japan's objectives in enlarging its Empire required a more energetic administration. With the background of past failures, it is understandable that the Japanese who first arrived in Taiwan met difficulty in trying to impose this kind of rule. It quickly became evident that neither profit nor political dominion was assured to them without some extraordinary measures. 177 631

Japanese first installed themselves in economic life exactly where outsiders had done so in the past—at the periphery of traditional marketing and property relations. They remained most active, as we have seen, outside the realm of agriculture proper. Through their steps in gaining access to the old agrarian institutions, we can now begin to see how far these changes impinged on agriculture itself. The Japanese did not proceed by sheer force, nor simply in a form of "economic penetration." The control was made effective by wedding the two channels—business and government—and by manipulating the pre-existing situation from a few vantage points at the outside. To make a success of this endeavor, the Japanese found it expedient to leave much of this rural social structure almost intact, and turn its basic features to their own account.

Histories of Taiwan over this period usually emphasize only the opposition to the new government that was overt and armed. But it was not by military conquest that the Japanese eventually secured the lowland area of the island. The military aspect was over quickly. Organized resistance collapsed by the end of 1895. Within a year or so after formally taking possession, Japanese became aware that direct attempts to alter the old rural state of affairs were too costly and slow, and were ineffectual against guerrilla bands that had wide-

[9] Takekoshi, Yosaburo (1907), p. 243.

466 Formerly the employee was an apprentice with a status of a house servant, but now the relationship is regulated by written contracts.

4. Male and Female Servants

566 Up to the early years of Japanese rule a type of true servitude existed in Formosa. These servants were not slaves, but were bought and sold for money, and were very low in social status. Male servants disappeared earlier in time, but female servants remained until a much later date. It is interesting to note that, the civil status of female servants in Formosa was somewhat different from their status on the mainland. On the mainland their servitude was life-long, but in Taiwan they were bought by contract, and emancipated when the servant or her family could provide money to buy her back. In the case of marriage, her intended husband had to pay money to buy her freedom. Her status somewhat resembled the indentured servant of colonial North America. The frontier spirit, the newness of social institutions, and the scarcity of women seem to be the cause of this contrast between the mainland and Taiwan.

In 1917, the higher court of justices in Taipei invalidated the purchase system of female servants as detrimental to public welfare and morals. The following year the commissioner of police, fortified by this

566 decision, instructed the census department of the local police to confirm all existing female servants but to refuse any new registrations. Another blow was given to the system of female servants by the higher court of justice in 1935. According to this decision, a female servant could emancipate herself whenever she desired, and the householder could not object. Thus, at least nominally and legally, the institution of female servants was abolished. However, it has continued in fact under the new name of "adopted daughters". In 1935, at a conference of social workers, the system of female servants was assailed, and a program for improvement was recommended. At present, one seldom hears about female servants, but in fact some are still kept under the name of adopted daughters. Their status is, however, much improved in comparison with former times. The name "adopted daughters" includes female servants, girls for prostitution, and true adopted daughters. After the restoration of the island to China, the system of "adopted daughters" was frowned upon. Article 296 of the Chinese Criminal Code provides that selling a person into servititude or restraining the liberty of a person is a criminal offense punishable with imprisonment of one to seven years. The custom is abating and may totally disappear in the course of time.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

the land reform act, and used the money for additional investments.

Many former landlords have done poorly at business, and some have even failed because of their lack of experience and training. Others have maintained their economic investments in the villages. Several formerly large landholders in the two villages adjacent to Hsin Hsing continue their activities in their villages and the surrounding area very much as before. Although their landholdings were cut significantly by the land reform, they nevertheless retain their maximum three *chia* of land. Also, in some instances, a number of landlords prior to the 1953 act managed to retain control of more than the three *chia* limit by legally dividing their family and then transferring portions of their land to the names of other members of their family. By virtue of their positions many landlords, especially those who worked as minor officials or civil servants in the local administration or who were well acquainted with officials, became aware of the ins and outs of the proposed land reform laws and so knew exactly how to manipulate their landholdings legally in order to retain as much land as possible.

Even today landlords may, and do, buy land in excess of three *chia* and then hire laborers to till it for them. As long as they do not rent the land out they seem to be safe from legal action. A few landlords who manage to buy additional land are still doing so in the names of other members of their family and in such cases then actually rent the land out to tenants. But it appears that the fear of another Land Reform Program in the future, as well as the increased movement of the landlords' economic interests outside the rural area, serves to deter many landlords from attempting to reaccumulate landholdings, even by the devious but legal means.

Another frequent activity of landlords who have chosen to maintain their economic interests in the Hsin Hsing area is that of moneylending. The small farmer, having little to offer as security, still continues to resort to the local moneylender for cash or other loans. The local moneylender lends fairly large amounts for longer periods of time than any agency of the government or association but, of course, at extremely high interest rates.

The landlords will continue to engage in moneylending as long as the farmer has credit difficulty. If a good profit can be made from moneylending, it is evident that the wealthy landlords will not willingly transfer their economic interests into more productive economic activities.

Traditionally, the village landlord has played a major role in the leadership of his village and its immediate vicinity. During the Japanese period, such leadership roles were greatly reinforced by the Japanese, who preferred to handle village problems through the wealthy landlord class rather than by dealing directly with the "peas-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

ants." The Hsin Hsing villagers readily recall that the local Japanese police and officials showed respect only for the well-to-do landlords. Consequently, if the villagers were to get along successfully with the Japanese, they had to work through their landlords. They usually elected a landlord to handle local village affairs and to represent village interests in dealing with the Japanese authorities.

The arrangement was also to the landlord's advantage. As the official leader, he wielded greater power by which he could more easily manipulate the villagers, and even the tax collector, to his own advantage. His recognition as a leader by his fellow villagers and by the authorities also increased his prestige.

Not only was such a landlord the elected village political leader but he might often be an informal leader as well, a person who took an active part in most of the social and religious affairs of the village. He usually contributed money and time to help make these affairs a success. The efforts of the landlord helped to build up his reputation as a public-spirited citizen. Frequently, he assumed the role of mediator in discussions of village and intervillage problems and in disputes between his own villagers or even between members of other villages. When the landlord's efforts as a mediator extended beyond his own village, he enhanced his own reputation in the whole area and that of his village as well.

These conditions continued after the restoration into the post-land reform period. Today, the landlord class continues in the rural area and wields power in local grass roots politics as well as in socioeconomic affairs. In most villages the recognized leaders are still those who are rich, maintain big landholdings, and have had a fairly good education. Such people may also have influence—perhaps by virtue of a relative—in some government agency. It is still a great advantage to a village to have a wealthy representative of the landlord class to deal successfully with authorities. Many, if not most of the government officials, are drawn from this class, since they are educated and usually wealthy.

However, this picture is beginning to change. Village affairs are being profoundly affected as many former large landlords and traditional local leaders transfer their economic interests and activities away from the land to new business interests elsewhere. When a landlord gives up his major economic interests in the area, it is usually not long before village social, religious, and political activities become much less important to him. Because the personal advantage is gone, he is no longer concerned with maintaining his status or leadership role. He may even move his residence out of the village in order to be closer to his new economic interests.

Villages suffering such a loss of local leadership have reacted in two

45:Stanford U. S-4, 5 1956 AD1 Formosa
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527 Members of the family who live at a distance revisit the home. Poorer families, who seldom eat meat during the year, have feasts during the New Year's festival, even if it means slaughtering the family pig or a number of hens.[6] Formosans also celebrate the Dragon-boat Festival on May 5 and the Moon Festival on August 15. The birth of Confucius, the birthday of Dr. Sun Yat-sen, and the anniversary of the founding of the Chinese Republic are national holidays. Government offices and schools are closed and there are memorial ceremonies.

574 The family itself celebrates marriages and births with elaborate feasts for relatives and friends. Funerals are also a time for large gatherings; a feast is usually provided for those who walk with the procession and attend the rites of burial.

796 Many religious ceremonies provide additional opportunities for celebrations. A day devoted to Matsu, goddess of travel, is remembered. Her traditional importance to the Formosans may be attributable to the protection she offered those who made the

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6. Low-income groups eat little meat except at festival times. Raper, op.cit., p. 274.

40: Kirk--25-26 S-2 (no date) 1941 Formosans-1-2
116, 561, 575, 658, 883, 177.88 Japanese

"Youth movements. The Japanese are laying great stress upon the various youth movements which are actively sponsored in Taiwan by the Government General and the local provincial governments. There are young men's associations, young women's associations, and Boy Scouts. These organizations aim to

> train and drill youth spiritually and physically to inculcate loyalty, to improve character as loyal subjects, to instill a spirit of public service, to encourage self-help, self-control and initiative, to increase knowledge and skill necessary for practical life, to encourage diligence and thrift, and to improve general health conditions of the nation.

The specific purpose of the young women's association (Joshi Seinen Dan), especially among Formosan Chinese, is 'to encourage and propagate the use of the national language, to inculcate female virtue, to educate women in housekeeping, to improve home-life, to cultivate sentiments through recreation, to improve health conditions, and thus to train women in sound womanhood.' The young woman's movements, however, are far less active than the men's associations. The local territory covered by each association corresponds to a public school district. Young people under 20 yea of age

who are graduates of [26] public schools may join the youth movement. The young Formosan Chinese members are particularly interested in spreading the use of the Japanese language and in raising the Formosan standards of living. The young men are called upon to assist the police in traffic control during celebrations, to serve on watch duty or to run errands, and even to do hard manual labor, on occasion, when additional workers are needed.

The geographical position of Formosa and the ethnic factors in the overwhelming non-Japanese population are largely responsible for the determined drive of the Imperial government to assimilate the Formosans as speedily as possible."

596 usually bringing their wives and children with them. The proportion of nuclear families has increased with urbanization and industrialization in the past twenty years.

2. Folk Associations

Various Folk Associations: In the
575 pre-modern village community co-operation for mutual aid in making a living was essential, and there were many kinds of associations in response to various social needs. Hitherto specialists on Formosa have focused their attention mainly upon village and family. In fact, folk society attained a fairly high degree of development, and it was much too complex to be managed by blood and locality groups alone. Institutions of social cohesion based on social function or social need was in evidence, and these we will designate as folk associations.

625 There were various associations for the protection of agricultural work. When crops and vegetables were still young or almost ripe, they had to be protected from damage by cattle, hogs or chickens. Usually an association was organized to take care of this. Special persons were appointed to watch over the fields. Every household was notified not to let its animals out, and if any one violated the regulation, he was punished by the association. There were associations for the regulation of

625 cutting lumber in the woods owned in common by the village and associations for the protection of fruits, bamboo sprouts, etc. from theft. These were the so-called agricultural protective associations. In the season between the two harvests, at the end of the year or before the next crop was ripe, there were petty grain thefts. For the prevention of these, an assocaition of night watchmen was organized. A person from each household was requisitioned and the group was divided into several small bands which stood watch by turns. To prevent attack by aborigines or bandits, a self-protecting association was organized. All adult males in the village, except the old people, participated in it, and in the time free from work, they trained themselves with various weapons. The need for the regulation of such local group activity was essential and constant. As a result, this kind of association was deeply rooted among the village people in Formosa. Many public works, such as repairing roads, bridges, drainage or irrigation canals, etc. were often managed by these associations and sometimes they constituted an embryonic village government.

575 There were other kinds of associations. A buffalo-keeping association collectively watched the buffalos of each household. It was a kind of co-operative. There were associations for mutual aid for burial in case

575 of the death of parents. This was a kind of mutual insurance. The association for mutual financial aid, called "hui," was a kind of temporary credit union.

438 361 Set-up of Towns and Cities: Although the life of farmers was highly self-sufficient, they had to exchange some of their products for agricultural implements and other daily necessities. In response to this necessity towns sprang up in the midst of this agrarian society. As will be seen from a map, Formosa has a fairly even distribution of towns along the western plain. The longest distance between two towns or villages in the plains area is under 10 miles; a distance of 6 miles is most common. This means that each individual lives with 5 miles or less of some town or village, and in one day or less can walk to the village center and back home. In other words, even though he walks, every farmer can sell his products and buy his daily necessities at some town or village between sunrise and sunset. Among the small towns and villages there are larger towns, and among larger towns there is an occasional city as a local center. On the whole, there is a systematic distribution of cities, towns, and villages. Obviously this was the result of natural growth in an agrarian society. After the Japanese occupation there were newly developed mining towns, fishing ports, sugar plantation towns, railway and

441 Timber-dealer Street, Bamboo Street, Bamboo-splintsmaker Street, Stone-cutter Street, Coir palm treating Street, etc. These are much the same as the Bread Street, Milk Street, Fish Street, Honey Lane, etc. of medieval London or the Schustergusse, Gerbergasse, Webergasse, etc. in the medieval German city. The same condition can be found in other old Formosan cities, such as Lukang and Changhua.

442 Besides these merchant-guilds there were guilds of wholesale merchants who traded with the mainland or other ports of the island. Tainan had three such guilds: (1) the North Guild, which traded with North China, and had more than 20 member stores; (2) the South Guild, which traded with South China and had more than 30 member stores; (3) the Port Guild, which traded with other ports of Formosa, and had more than 50 member stores. They all had a shrine as the center of their activities. They participated in public affairs of the city and carried on social welfare activities. In time of disturbance, they contributed money to the government, and volunteered in defense work. An area of Taipei city, Tataoting, was originally constructed by an influencial guild.

•575 There were still other kinds of associations in the cities. Among the upper classes, there were associations for the

576 promotion of education, for moral culture, for music, drama, and literary activities. Various kinds of secret societies and fraternities also existed.

4. The number and types of Associations: As folk associations are essential for the life of the people in folk society, we can expect that there were numerous such associations in agrarian Formosa. Some data exist which wil enable us to make an estimate. The Japanese colonial government made a survey of religion from 1915 to 1918, and the result was published in 1919, as "The Report of the Survey of Religion in Taiwan", Vol. 1. According to this report there was 6,159 associations with 291,161 members.[3] Since informal associations are hard to identify and may not have been recorded, the actual number is likely to be larger than the reported figure.

454 The above figure did not include the associations for mutual financial aid (the hui). According to a survey by the Japanese in 1922, there were 2,055 hui with 24,428 members in Taipei prefecture, 145 hui with 1,720 members in Taichung prefecture. They estimated the number in other prefectures of the island to be 2,200 hui with 26,138 members.

3. Table 27.

454 Thus there was a total of 4,400 hui with 52,286 members in Formosa.[4] If we add these figures to the above, there were 10,569 associations with 343,447 members around 1922. The Formosan population in 1922 (excluding Japanese) was about 3.7 millions, so more than 9 per cent participated in some association. Since this 9 per cent represents adult members of each household, it is evident that a substantiat proportion of households in Formosa participated in associations.

575 All folk associations retained some religious character, so the Japanese treated them all as religious associations. In fact they were organized for a great variety of purposes. In "The Report of the Survey of Religion in Taiwan," eight kinds of associations are enumerated:[5]

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4. Chen Yunghu: "The business of Ho-huei in Taiwan." The Quarterly of the Bank of Taiwan, Vol. V. No. 4, 1953, p. 123.
5. Table 23, p. 129.

45:Stanford U. S-4, 5 1956 ADI Formosa
ADI

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Kind of Associations	No. of Associations
1. Associations to help the education of kinsmen	160
2. Associations for public construction and relief	6
3. Associations organized by the people of the same trade	1,685
4. Associations organized by the people of the same town of origin	890
5. Associations organized by the people living in the same village or town	1,851
6. Associations organized by the people of the same surname (that is associations of kinsmen)	1,077
7. Associations organized by the people of the same hobby	30
8. Other associations	460
Total	6,159

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

•575 The number of members of each association ranged from a few persons to more than one thousand. Out of 6,159 associations 4,859 (that is 78.7%) numbered between 6 and 50 persons. Almost half of the total number of associations had between 11 and 30 members. A membership between 11 and 20 seems most common; there were 1,865 (that is, nearly 30% of the total) associations of this kind.

More than three quarters of the associations were founded between 1760-1895. This was due to rapid population growth in those years. Some of the associations owned property. Farms owned by them exceeded 7 thousand chia (16,800 acres), and cash owned by them amounted to 217,601 yen. The associations which had financial means were generally more influential.

5. Gradual decline of Folk Associations: Folk associations were organized in response to the needs of an agrarian society. Up until the early years of Japanese rule, folk associations were very important. The new rulers realized this fact, and so far as these associatiions did not militate against or disturb the Japanese rule, they were allowed to continue. As peace and order were maintained and conditions of sanitation, agriculture and education were improved, the need for folk associations gradually diminished. Their

575 number began to decline. Some associations disappeared, some remained in name only. Some associations with properties were troubled by disputes among their members.

B. Under the Japanese Rule

656 Strength arises from unification. The
575 new rulers of Formosa in general looked with disfavor on associations of the Formosan people, with the exception of those which facilitated their administration.

From the political point of view there were two categories of associations: those promoted or approved by the Japanese government, and those voluntarily organized by the Formosans and not welcomed by the government. Among the former were: (1) industrial and occupational associations; (2) associations for educational and social development; and (3) social clubs, philanthropic and religious associations.

Many associations were sponsored and controlled by the government, often with government officials as their directors, and had their offices in government buildings. In fact there were auxiliary agencies for administration, and were not voluntary associations of the people. Most associations for the promotion of production belonged to this type. For example, associations of farmers

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were called "Agricultural Associations". It was not an association of farmers for co-operation and improvement of agriculture. Participation was compulsory, membership fees were collected along with taxes, and farmers received only instruction and supervision. Associations for animal husbandry, for fishing, for forestry and irrigation were similar in nature. Co-operatives for fruit growers (banana, citrus fruits, etc.), associations of various trades, chambers of commerce were more autonomous, but government control and supervision were always in evidence. There were various kinds of occupational and professional associations for physicians, lawyers, teachers, etc., and though the Formosan people were allowed to join them as members, they were all controlled by the Japanese.

Associations for educational and social development were also numerous. There were parent-teacher associations called "father and elder brothers" association to help school education. There were householders' associations and housewives' associations to promote adult education. In addition there were youth associations, girls' associations and boy scouts for young people. Community Development Association, Landlord-Tenants Associations, Sanitary Associations, Athletic Associations, the Red Cross, Patriotic Women's Associations, Association for the Improvement of Living, Associations for the

45:Stanford U. S-4; 5 1956 AD1 Formosa
~~AD1~~ AD1

656 575 Reformation of Bad Habits and Customs (such as prostitutes and drinking), etc. are further examples of this type. Many of these associations were organized under government encouragement in response to the new situation after the 1920's in order to distract the awakening Formosans who were grumbling against colonialism.

Social clubs for hobbies, recreational, literary artistic and cultural activities were organized freely by the Japanese. A selected number of Formosans were permitted to join these clubs. Philanthropic agencies had existed since the Manchu era. Some of them were reorganized and new agencies were added during the Japanese era. Religious groups with the exception of Christian minors, were less active.

Voluntary Associations of the Formosans

668 As folk associations waned with the change of social life after World War I, the Formosan people began to form their own voluntary associations of a modern type.

1. Political Associations

After World War I the spirit of democracy permeated the whole world. In Japan serious problems appeared and democratic and socialistic movements became widespread.

467 Japan started its invasion into North China, even the conservative and harmless Taiwan League for Local Self-Government was ordered disbanded by the government.

III. SOCIAL ORGANIZATION AFTER THE RESTORATION

575 Since the restoration of Formosa to China in 1945, the people have been free to form associations of various kinds, provided these associations do no conflict with the anti-Communist policy of the government. Many new organizations have come into being. In the village, the traditional folk associations for religion and for mutual financial aid still exist. Most of the associations established during the Japanese period have been reorganized, with Chinese members replacing the Japanese and the Chinese government assuming control formerly in the hands of the Japanese colonial government. All associations are registered with the Provincial Department of Social Affairs, which supervises their activities. An association may be dissolved or may be compelled to re-elect its officers if found guilty of violating national laws or ordinances.[6]

For administrative purposes, associations

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6. In 1953, 247 organizations were ordered to re-elect their officers, 9 to be reorganized, 8 to suspend their activities, and 1 to be dispersed. Chung-hua Min-kuo Nien-chien

(continued next page)

575 on Formosa are divided into (1) farmers' associations, (2) labor unions, (3) fishermen's associations, (4) trade associations, (5) professional groups, (6) social groups, and (7) co-operatives. Most of the associations are organized on a local basis and are generally patterned after the governmental administration, that is, directives and rulings are made at a single headquarter and disseminated to lower groups. A provincial organization establishes its branches in hsien and municipalities; the latter in turn organize sub-branches in towns and villages. Some associations have a national organization, which expects to extend its activities when the Mainland is regained.

474 The Farmers' Association was first organized thirty years ago for the express purpose of protecting the rights of the farmers. Very often it came into conflict with the Japanese administration, which finally ordered its dissolution and replaced it with the Agricultural Association, a quasi-government agency. The activities of the Agricultural Association were confined to the promotion of agricultural production. In 1949, the

6. (continued) [Yearbook of the Republic of China], 1954, Taipei, p. 730.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

577 Filial piety and other traditional values stem from the concept of the family. It is a mark of shame to be called unfilial, and children do not neglect their parents or elderly relatives. A successful kinsman is obligated to assit his kinsmen financially or politically even if such an act should be against the interests of the state.

III. RECENT CHANGES

596 178 The advent of the Japanese was followed by successive changes in the social and political institutions of the Formosan Chinese. The government took over many of the responsibilities of the clan and the extended family in matters which pertained to the maintenance of public order, the establishment of public schools, and other public institutions. Industrialization, the introduction of corporate enterprise, and urbanization in general, together with the newly-assumed duties of the government were responsible for the loosening of familial ties and the emancipation of women within the family as well as within society.

More people now live in urban areas and farmers have ceased to lead nearly self-sufficient lives; they look to the farmers' organizations for agricultural information and other forms of mutual assistance. Opportunities for jobs in banks, factories, railroads, and

15: U.S. Navy --22 [7] (no date) 1944 Formosans
116, 181, 266, 578, 177.66 Japanese
636.66

"Through the past twenty years observers have commented on the passivity, and the subserviency of the Formosan-Chinese to Japanese rule. However sullen or resentful the general populace may be, they have been without effective means of resistance. This is not to be attributed to meekness or lack of spirit, but rather to the extremes of force and cruelty with which the Japanese established initial order and imposed their elaborate system of controls, reaching into every household on the island and placing upon the members collective responsibility for the acts of individuals. Even the most generous allowances cannot conceal the fact that before the Japanese came the Formosan-Chinese population as a whole was capable of extremes of ferocity in mob action among themselves, not stopping short of ritual cannibalism (the eating of the hearts and livers of victims to acquire strength and spirit), nor of the cold-blooded sale of the flesh of captured aborigines on the open market both on the island and across the channel along the coast of Fukien. In the years before 1941, educated Formosans commented frequently (and of course privately) upon the probable extremes of mob action likely to be directed against the Japanese if ever an opportunity should be presented. That the Japanese are aware of this was amply demonstrated on February 18, 1938, when the attack of a single bomber from China caused the authorities to barricade public buildings and to set up machine guns throughout the capital city before they sounded the air raid alarm. The guns were directed at the Formosan-Chinese population."

42: Schetelig--390 T-2 (no date) 1868 Formosans
116, 162, 578

So, while it is possible to get to know the land in its original form on a journey up the middle course of the Tamsui River...a journey up the southern arm gives one a view of the old, original colonial system of the Chinese on Formosa. First we travel along the road from Tamsui to the southern locality of Taiwanfu, consequently covering well trodden ground. But this region of the western plain was the first that the Chinese developed, after the occupation 200 years ago and, accordingly, it is here that we found Chinese law and Chinese customs in their greatest purity. Worthy of note, at the same time, are the number of Chinese dialects and consequently of Chinese provinces that are represented here. Here the Fokien Chinese live in colonies beside their sworn enemy, the Hakka, from the province of Kwangtiang, and the Hoklo, the sugar-cane cultivator of Swatau, while between them all, hated by all and getting the better of them all, there wanders the sly Cantonese, the merchant, scribe, land owner or camphor agent. We kept on our way in the old fashion and did not unload our baggage until the boats sat motionless on the stone rubble of the rapids. This happened near the old fortress of Tokscham, the possession of a wealthy and influential Chinese family which has been in residence here since the earliest period of Chinese colonization.

1:Gallin E,4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable.

175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan.

175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu.

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The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were

175 124 127 [161] [579]. 241 312

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

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Hsin Hsing, Village in Change

T 177 178 369 621

In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

T In E 17 369 [648]

Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

F 175 369 621 618 [161] [423] [579]

Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tsu* villages were quite powerful and frequently the de facto govern-

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537 members in the Lesiglative Yuan.[11] The percentage of women delegates is also applied to the provincial and local councils. In Taipei alone, there are about one hundred full-fledged women doctors and a great number of qualified mid-wives, five chartered women accountants, thirteen women judges, and six women prosecutors.[12]

IV. FAMILY ORGANIZATION AND DISORGANIZATION

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Monogamous marriage is the rule in Formosa, although concubines and mistresses have not been eliminated. People of the same surname do not intermarry. Marriage remains a family affair as well as an affair of the parties concerned. When a son reaches adulthood it is a traditional obligation of the parents to see that he is married. Parents in most cases choose spouses for their children. But today the majority of men and women at least have some knowledge of their future spouses before marriage. It is stipulated by law that an

11. Chung-pei Hsu, The Position of Women in Free China, Taipei, China Culture Publishing Foundation, 1953, p. 2.
12. Ibid.

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engagement must be contracted by the parties concerned, and if their consent has not been obtained, the engagement is not binding.[13] Contrary to this legal provision, only about 10 per cent of the marriages in the rural and urban households surveyed were contracted by the parties themselves, and the remainder were arranged by parents, relatives, friends, or go-betweens.[14] In some instances people may seek marriage through advertisements placed in newspapers. Feasts attend the wedding, elaborate or simple, according to the family's socio-economic status. Marriages between sons and adopted daughters, or, to a lesser extent, between daughters and adopted sons, are usually performed within the family circle. The patrilocal nature of matrimony requires, in most instances, that the groom's father provides living quarters for the bride. When possible, the bride's family provides a dowry consisting of clothes, furniture, jewelry, and so forth. Some girls consider a dowry so important that they work before marriage in order to save money so that they may bring to their husbands' families such things as furniture and beautiful clothes. For reasons of economy, collective marriages are performed in city halls from time to time.

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13. Ching-hsiung Wu (ed.), Chung-hua Min-kuo Liu-fa Hui-pien [Compendium of the Six Codes of the Republic of China], Volume II, Civil Code, 1947, Shanghai, pp. 505-11.

14. Raper and others, op. cit., p. 268, and Raper, op. cit., p. 209.

15: U.S. Navy--30 (no date) 1944 Formosans
116, 581, 836, 585, 842

"The Chinese make no pretense that marriage is other than a useful procreational arrangement. Sometimes the tradition is observed that the parents or elder relatives of the groom's family send back to the bride's house evidence that the bride was virginal. In any case, for at least three days(and sometimes longer according to family customs) the bride must remain within the bedroom and there receive the groom's friends and their congratulations and gifts. The new father-in-law or other elder male will proudly show guests the bedchamber and invite them to feel of the softness or note the elegance of the bed. All are supposed to receive a cup of ceremonial tea from the hands of the bride. As they finish it, a gift of money is usually left in the empty cup (wrapped in red paper) and the blushing bride is urged to have as many male children as possible, quickly."

15: U.S. Navy--30 [4] (no date) 1944 Formosans
116, 581, 587, 595, 842

"Too many daughters in a house which cannot employ them to economic advantage are an embarrassment and must be sent out to marriages or to common-law cohabitation or concubinage on a less favorable social basis. It is almost unheard of that a widow or divorcee should remarry."

15: U.S. Navy--30 [5] (no date) 1944 Formosans
116, 595, 597, 581, 591

"If a couple is so unfortunate as to have no male issue they may resort to either or both of two practices. If the husband can afford it, a secondary wife can be taken into the home, whose male offspring will have the full status of heirs and will, in all probability, be reared by the first wife. If a secondary wife is not taken, or if there are no sons of such a union, then adoption is resorted to. The son of another family (never the first son or heir) can be adopted outright or taken as the husband of a daughter of the house. This last arrangement is preferred, for it establishes a blood connection. The new son-in-law assumes the name of his bride's house and may take up residence in it. This arrangement often results in unhappy family situations, for the adopting family is usually in much better economic circumstance than the family of the young man adopted, and he is subject to a sense of accepted social inferiority. There are, however, instances of arrangements between well-to-do friends who wish to link the fortunes of their houses."

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER VIII

Patterns of Marriage and Divorce

581 UP TO THIS POINT, it has been possible to describe the manifestations of the Chinese family system in Taiwan only through an abbreviated view of the families existing at a particular moment—the view which is afforded by enumeration of households in the census. This approach suffers from several shortcomings. The delineation of what should comprise a family, inherently arbitrary, was one that took account of only those family members who resided together, and thus understated the influence of kinship in the society. Also, the data give but a sketchy indication of family members' characteristics from which we might deduce more satisfactorily their familial roles (items like age, marital status, and their degrees of relationship to each other). In short, our knowledge of what occurs in Taiwanese families is not so well documented as the behavior of their members outside of the family units, and comes largely by inference from this second kind of information.

Part of this gap may be filled in two ways from other sorts of data. The conclusions about family composition will be supplemented in this chapter by a discussion of *marriage*, on which depended the formation of new family units and the continuation of old ones. The next chapter will be devoted to measuring the fertility of Taiwanese, through which their families replenished the population with new members.

Like people in other countries, most Taiwanese marry sooner or later. The differences between Taiwan and many Western countries are superficially those of degree—for most Taiwanese men and women marriage comes early and is nearly universal. It ranks as one of the most significant events that can happen in a family, and is attended by attitudes and customs that reflect the importance ascribed to it. The wedding itself is ordinarily solemnized by the most elaborate and festive ceremony that a family can afford.[1] The idea of marriage is so endowed with importance and virtuous purpose that for a person to remain celibate is usually a mark of unexampled mis-

[1] There are many descriptions of the conduct of Chinese on these occasions and the ways in which this fits in with other familial life. Cf. Lang, O. (1946), and Levy, M. J., Jr. (1949).

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

fortune. In contrast to the West, Chinese culture entertains no alternatives that offer serious competition to the "normal" family roles. 581

TABLE 59

PROPORTIONS OF TAIWANESE EVER-MARRIED, BY AGE AND SEX, 1905 TO 1935 162

Males and Females

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*
			Males			
10–14	0.1	0.0	0.2	0.1	0.1	0.1
15–19	10.2	5.7	6.3	5.3	7.3	5.7
20–24	45.7	40.1	42.8	44.7	51.6	49.8
25–29	77.4	72.9	76.5	78.2	82.9	83.1
30–34	89.4	88.1	88.6	89.7	91.3	91.9
35 and over	95.3	95.4	95.5	95.8	96.2	96.0
			Females			
10–14	2.3	0.7	0.6	0.4	0.5	0.4
15–19	47.3	34.7	32.8	29.4	32.6	28.1
20–24	91.6	87.4	86.6	84.4	86.3	83.0
25–29	98.2	96.6	96.9	96.2	96.1	95.9
30–34	99.2	98.5	98.5	98.3	98.0	97.7
35 and over	99.7	99.5	99.4	99.3	99.3	99.0

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census. The "Informally Married," who in 1920 were shown as a subtotal of "Unmarried," have been reinstated here as "Married," in conformity with the census procedure at other dates.

There has been no indication from related spheres of activity already discussed that these pressures to marry were anything but constant and unyielding during Japanese rule in Taiwan. The percentages of Taiwanese over age 30 who eventually married remained about the same—all but one or two per cent of women, and all but nine or ten per cent of men. Yet the proportions of Taiwanese who had ever been married did not remain constant at all ages. The younger people of both sexes displayed some signs of altering the time when their marriage took place (see Table 59). 582 162

So far as this evidence is germane, however, it offers conflicting testimony: the pressures would appear to have been weakened for women under age 30 and to have grown stronger for men. Faced with this apparent inconsistency, we naturally cannot vouch for the inner motives of people about to marry. Nor can we adopt the usual

15: U.S. Navy --23 [6] (no date) 1944 Formosans
116, 563, 582, 609 Japanese
636.58

"Fusion of ethnic groups. Special permission must be obtained from the government before a marriage between a Formosan-Chinese and a Japanese can be made legal. There are a few notable cases of marriages arranged between wealthy Formosan men and Japanese women, (as between a son of the wealthy Ko family in Taihoku, for instance, and the daughter of an impecunious Japanese nobleman). As a general rule the antipathy which one race holds for the other inhibits even casual sexual intercourse between the two. This, plus the fact that the Formosan-Chinese birth rate is much higher than that of the Japanese, precludes any hope for gradual fusion of the two peoples on the island."

15: U.S. Navy--29 [6] (no date) 1944 Formosans
116, 582, 177.58 Japanese
636.58

"There have been changes in such fundamental customs as betrothal and marriage under the impact of large-scale modernization programs and the realignment of social life to conform to Japanese ideas of colonial management."

15: U.S. Navy--29 [8] (no date) 1944 Formosans
116, 582, 584

"Marriage for both sexes comes early, usually before the age of twenty, and can take place only after a 'go-between' has brought each side to terms concerning dowry and wedding day. These go-betweens are sometimes friends of one family or the other, but most often are professional matchmakers who receive fees in cash or in presents to an amount commensurate with the wealth and social standing of the families concerned. Once a match has been agreed to, presents are exchanged formally and a preliminary betrothal contract is drawn up, giving data concerning the families and the pedigrees of each contracting party."

15: U.S. Navy--29 [9] (no date) 1944 Formosans
116, 582

"It is an iron-clad rule that persons from families with the same surname can not marry under any circumstance, no matter how clearly it may be evident that no blood connection exists."

587 586 Second marriages are usually looked down upon, but in order to perpetuate the family line a childless widow may marry again. Divorce, although the rate has been increasing in recent years because of financial difficulties and the growing independence of women, is not as serious a problem in Formosa as it is in the United States. Formosa's divorce rate in 1953 was as low as 0.45 per 1,000 population, as compared with a rate of 2.48 per 1,000 population in 1951 in the United States.[15] For good or ill, a popular adage that a virtuous woman does not marry twice is often repeated, and a divorcee rarely finds opportunity for a second marriage.

582 The average age at which men and women marry is reported to be rising. Among young men of urban areas, marriage is often delayed because of financial difficulties. The adoption of daughters often poses a social problem. 587 548 The old notion that a daughter may be bought or sold like a commodity remains among some uneducated people. Although the purpose of such adoptions may be that of securing a young companion or maintaining the family lines,

15. United Nations, Demographic Yearbook, 1953, New York, 1953, pp. 276-77.

52:Barclay S-5. (podate)1954 ADl Formosa ADl

fortune. In contrast to the West, Chinese culture entertains no alternatives that offer serious competition to the "normal" family roles. 581

TABLE 59

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			Males			
10–14	0.1	0.0	0.2	0.1	0.1	0.1
15–19	10.2	5.7	6.3	5.3	7.3	5.7
20–24	45.7	40.1	42.8	44.7	51.6	49.8
25–29	77.4	72.9	76.5	78.2	82.9	83.1
30–34	89.4	88.1	88.6	89.7	91.3	91.9
35 and over	95.3	95.4	95.5	95.8	96.2	96.0
			Females			
10–14	2.3	0.7	0.6	0.4	0.5	0.4
15–19	47.3	34.7	32.8	29.4	32.6	28.1
20–24	91.6	87.4	86.6	84.4	86.3	83.0
25–29	98.2	96.6	96.9	96.2	96.1	95.9
30–34	99.2	98.5	98.5	98.3	98.0	97.7
35 and over	99.7	99.5	99.4	99.3	99.3	99.0

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census. The "Informally Married," who in 1920 were shown as a subtotal of "Unmarried," have been reinstated here as "Married," in conformity with the census procedure at other dates.

There has been no indication from related spheres of activity already discussed that these pressures to marry were anything but constant and unyielding during Japanese rule in Taiwan. The percentages of Taiwanese over age 30 who eventually married remained about the same—all but one or two per cent of women, and all but nine or ten per cent of men. Yet the proportions of Taiwanese who had ever been married did not remain constant at all ages. The younger people of both sexes displayed some signs of altering the time when their marriage took place (see Table 59). 582 162

So far as this evidence is germane, however, it offers conflicting testimony: the pressures would appear to have been weakened for women under age 30 and to have grown stronger for men. Faced with this apparent inconsistency, we naturally cannot vouch for the inner motives of people about to marry. Nor can we adopt the usual

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course in demography and merely say that there was a trend for people in Taiwan to "marry earlier" or "marry later," for this is to say nothing about why men and women apparently were of different minds in the matter. But thanks to the assiduity of the Japanese in maintaining Taiwan's population statistics, the problem is open to closer examination with the help of additional data.

TABLE 60

SEX BALANCE OF TAIWANESE IN MARRIAGEABLE AGES

Males per 100 Females Enumerated in Ages 15–49 in Successive Censuses, 1905 to 1940

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*	*1940*
10–14	122	113	109	107	105	103	104
15–19	126	116	112	109	106	104	100
20–24	123	121	115	112	108	106	102
25–29	122	123	120	114	111	108	104
30–34	119	119	120	118	114	110	107
35–39	116	114	114	118	116	112	109
40–44	112	107	108	110	114	114	110
45–49	100	100	99	101	105	109	108
Total, 15–49	119	115	112	111	109	107	104

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

It is worth while first to consider the conditions of the marriage market in Taiwan, in terms of the relative supply of men and women available to marry. Since, practically speaking, the Taiwanese were a "closed population," this is one instance where demographic trends in births and deaths may be observed very simply in their bearing on the more complex aspects of behavior. We have already seen that the chances of surviving through infancy and childhood had been extremely poor for girls born before 1895, and that this handicap disappeared only gradually in later years. As a result, by the time they were nearing age 20—the range when most of them married—there were not enough women to furnish wives for the eligible men.

In 1905, for example, there were more than 20 "surplus" males for every 100 females in the age group 15-19, who could not find wives from the same age group, and would have difficulty in finding them from any younger groups of girls which had suffered similar high mortality (see Table 60). Apparently, as girls began to catch

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up with the boys in the chances of surviving in earlier life, they lost some of this advantage relative to men in marrying; and, as the scarcity of marriageable women became less of a factor conditioning the marriage opportunities for men and women, the result was that the chances of marrying at each age (under, say, 30) improved for men and declined for women.

TABLE 61
EXCESS OF MARRIED WOMEN IN TAIWAN, 1905-1935

	Married Men	*Married Women*	*Difference (2) – (1)*	*Males per 100 Females*
1905				
Taiwanese	594,827	598,556	3,729	99.4
Japanese	12,302	8,246	–4,056	149.2
Other	3,487	220	–3,267	1,585.0
Total	610,616	607,022	–3,594	100.6
1920				
Taiwanese	641,746	648,764	7,018	98.9
Japanese	37,377	32,946	–4,431	113.4
Other	7,427	2,270	–5,157	327.2
Total	686,550	683,980	–2,570	100.4
1935				
Taiwanese	913,655	924,963	11,308	98.8
Japanese	56,562	52,663	–3,899	107.4
Other	15,342	8,132	–7,210	188.7
Total	985,559	985,758	199	100.0

Sources: *Census of 1905, Detailed Tables*, Table 5; *Census of 1920, Descriptive Report with Appendix*, Appendix Table 26; *Census of 1935, Statistical Tables*, Table 7. The category of "Married" as published in 1920 has been reconstituted so as to make it the same as that shown in the other censuses.

All this would be strictly true only if the Taiwanese population had been "closed" against marriage with other groups as completely as it was against migration. There were barriers to intermarriage, but in fact they were less effective. To some extent women enjoyed their felicitous marriage prospects because their nuptial horizons were not entirely restricted to Taiwanese men. Some of them married Mainland Chinese or even Japanese, which helped to enhance their scarcity. These mixed unions probably had a dubious legal status, for many of the male Japanese and Chinese nationals in Taiwan were little more than transients, and some who reported them-

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selves as married may have done so because of a wife at home. It is unknown how many supplemental unions of this sort with Taiwanese women there were. They were not legally registered as marriages where Japanese were involved, for prior to 1932 such marriages were prohibited by law.

The legal status of a union, however, did not make so much difference in the census figures on married persons, since the census was designed to record unregistered as well as "legal" marriages. In this it seems to have been successful, even for those that were not fully legitimized by law, and the census reports are therefore a fairly good source to detect whether or not mixed unions existed.[2] A brief summary of this information is given in Table 61. With monogamous mating and without intermarriage, there should have been equal numbers of Taiwanese married men and married women at any one moment.[3] Actually, every census showed an excess of women over men who were married: a proportion in the neighborhood of one per cent of Taiwanese women were "unmatched" in this sense.

But although some of these had undoubtedly become wives of Japanese or Chinese nationals, from the census materials there is no way of determining how widespread this intermarriage was. In the first place, Taiwanese men of wealth were said to take concubines, after the fashion of old-style Chinese gentry, and thereby may have accounted for some of the extra married women.[4] Also, from the Japanese (and Chinese) side, there is no way of knowing how many of these men were reported as married because of wives in Japan (or China), and how many because of wives among the Taiwanese.

Finally, a small though unknown number of Taiwanese men had found wives from women in the other nationality groups in the island, and these have the effect of cancelling some of the "excess" of married Taiwanese women.

These factors make the situation more complicated than it would

[2] The first census (1905) was an exception. Liaisons with Japanese men and Taiwanese women were explicitly not recognized, though such unions involving Mainland Chinese were. In all other censuses, the "informally married"—i.e., those whose marriages were not legally registered—were always shown separately, though sometimes included as a subtotal of "married" and sometimes as a subtotal of "single."

[3] Some Taiwanese men, by the time of the later censuses, were absent in Japan and elsewhere in the Empire, but they were too few to have any noticeable effect in these tabulations.

[4] By the same token, the sex imbalance of married Taiwanese cannot be said to be a measure of concubinage, because of the unknown amount of intermarriage. Neither of these two questions, both important, can be clarified beyond this indeterminate state of information.

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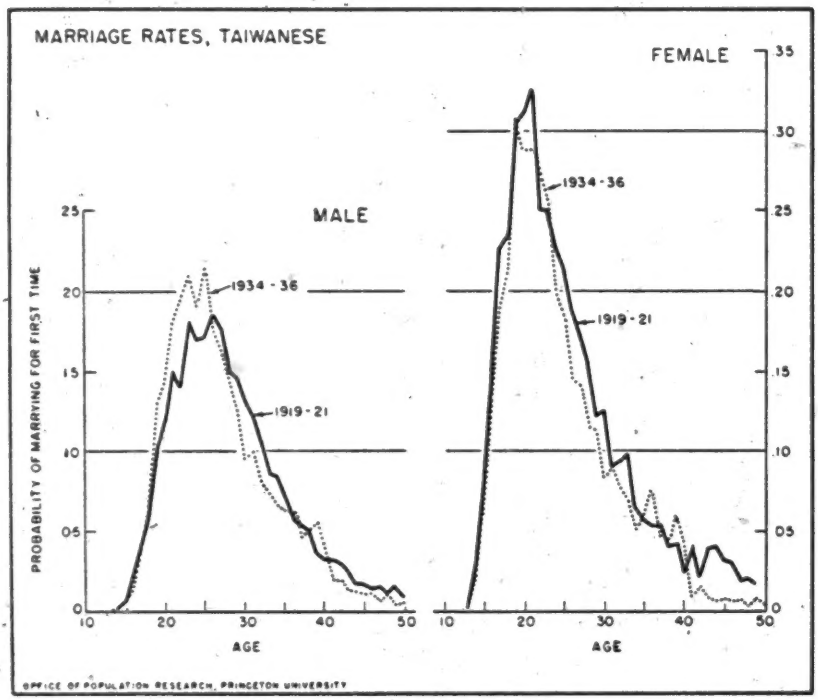

Fig. 31. Marriage Rates of Taiwanese. Probabilities of Marrying for First Time at Each Year of Age, 1919-21 and 1934-36. Males and Females.

be if Taiwanese alone were involved. Still, it is possible to get a more refined idea of the trends already observed by examining the age pattern of marrying that can be found among the Taiwanese. Marriage rates of moderate accuracy can be calculated, based on registered marriages with adjustments for those which were not registered.[5] But because the data on marital status were not published

[5] Marriage rates in this sense have been computed in the form of a "gross nuptiality table." In this form they are often termed "probabilities of marrying," which must first be computed as "probabilities of remaining single." They are exactly analogous to the "probabilities of dying" in a life table, in that they represent the proportion of persons entering each year of age who would have married during that age if none had died, according to the age pattern of the particular calendar year in question.

The rates given by such a table in its raw form are deficient; registered marriages in Taiwan were enough only to produce the number of "legally" married couples that were recorded in each census, but insufficient to have supplied all those whom the census found to be "actually" married (i.e., living together in socially recognized unions). This first set of marriage rates was therefore *adjusted* to bring it more nearly into accord with the facts as shown by the census. The adjustment was arrived at by calculating separately, from the census alone, a nuptiality table for "actually" married al

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582 162 in full detail at each census, there are just two occasions for which satisfactory marriage rates can be found—1920 and 1935. Marriage rates for these two dates are shown in Fig. 31, representing the marriages of three years averaged around the census year (i.e., 1919-21 and 1934-36).

The data of Fig. 31 pertain only to those being married for the first time, since the first marriage removes a person permanently from the unmarried. They show something less than the full extent of the changes in marriages that have already been demonstrated, for the shifting that appears in Fig. 31 is confined to half of the total period of observation. Already by 1920 women's extremely high chances of marrying before age 25 had begun to subside and those of men to rise. Even so, the persistence of this change is clearly evident in the latter half of the period. Marriage rates continued to move in opposite directions for men and for women after 1920 (though after 1920 it is less apparent for women). Taiwanese customs of marriage still allotted the better opportunities to women when young, concentrating these near age 20, while the high point in men's chances came three or four years later in life. Regardless of their differences in earlier adulthood (when most of the first marriages actually occurred), between 1920 and 1935 neither men nor women showed any tendency to defer marrying until after age 25—the rates of both sexes declined after age 30 and in the later 20's.

Widowhood and Divorce

162 589 Not everyone who marries stays married. In societies where mortality is relatively severe, large proportions of spouses are likely to be separated from their partners through death. Since the mortality of Taiwanese was higher for men than for women, wives were more likely to be bereaved than husbands, and there were more widows than widowers. While every census found substantial portions of people of both sexes who had once been married but whose husbands

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"legally" married persons; the ratio of the one to the other was used for "correcting" the rates based on registered (legal) marriages. This procedure leaves something to be desired; the most that can be said in its favor is that it converts into useful form data that would otherwise be useless.

The procedures of estimating nuptiality from census data were an adaptation of those discussed in Mortara, G. (1949). These figures might be suitable to use in place of the data that actually appear in the text, but for the fact that they reflect unduly the events of the census year, and thus give a poor indication of trend. The age pattern of unregistered marriages has no significance as such, for there was nothing to prevent unregistered marriages from being subsequently registered.

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TABLE 66

THE SHIFT TOWARD FIRST MARRIAGES IN TAIWAN

Persons Marrying for the First Time, Per 1,000 Total Marriages between Taiwanese, 1906-1943

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Year	*Husbands*	*Wives*	*Both Husband and Wife Marrying for First Time*
1906	717	644	585
1910	754	685	629
1915	791	746	691
1920	776	746	684
1925	835	825	766
1930	858	854	797
1935	887	893	836
1940	896	907	851
1943	901	921	864

Source: *Statistical Summary*, Table 70.

united *both* partners for the first time. The remainder went toward restoring to married life the widowed and divorced, who were very numerous. Because so many people dropped out, marriage had become surprisingly inefficient as a way of perpetuating family lines, and a large-scale duplication of effort was regularly incurred by those who tried again.

As time went on, however, we have seen that the shortage of women of marriageable age began to disappear, death separated husbands and wives less frequently, and divorce gradually declined in its incidence. By 1940, marriages had become more lasting and less recidivous for both men and women. The margin by which the proportion of women marrying for the first time lagged behind that of men almost vanished, and as high as 85 per cent of all registered matches were first marriages for both husband and wife.

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There were further implications of this shift away from remarriage. Other things being equal (such as the prestige or importance of the particular family connection), a match in which the opposite partner was being married for the first time would be preferred, by the family of either the bride or the groom, over one in which the partner had been divorced or widowed from a previous marriage. The Chinese do not impose on relatives of the deceased the obligation (which is binding in some societies) of marrying a widowed husband or wife; far less do they have any preference for divorced

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TABLE 67

RELATIVE RESTRICTION OF CHOICE IN MATES BY MEN AND WOMEN MARRYING FOR THE FIRST TIME

Per Cent of First Marriages in Each Year That Occurred with Divorced or Widowed Partners of the Opposite Sex. Taiwanese Only

Year	*Unmarried Men. Per Cent Marrying Divorced Wives or Widows*	*Unmarried Women. Per Cent Marrying Divorced Husbands or Widowers*
1906	18	9
1910	16	8
1915	13	7
1920	12	8
1925	8	7
1930	7	7
1935	6	6
1940	5	6
1943	4	6

Source: *Statistical Summary*, Table 70.

persons as candidates for marriage. When people marrying for the first time must take this less desirable latter alternative, it amounts to a restriction in marital choice, through circumstances of poverty or low prestige. We have already found that in their matrimonial position men in some ways were situated unfavorably, owing to the scarcity of eligible women. It is a reflection of this handicap that in the earlier years of registration a much larger proportion of Taiwanese men than women in their first marriage had to accept divorced wives or widows. In this matter of latitude of choice, the subsequent trends in marriage patterns can be summed up as a process of reducing the amount of restriction and equalizing this difference (see Table 67).

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The prospects of widowed or divorced people in remarriage are of course the opposite sides of the same picture, since by Chinese cultural standards their position is expected to be unfavorable. Other things being equal, *their* most advantageous matches are with people previously unmarried. The situation being defined in this way, their chances are closely related to the trends in first marriages—so long as unmarried partners cannot be found for some persons marrying for the first time, these chances might be fairly high.

But it is also true that widowed and divorced people of both sexes

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586 591 Evidently it is mistaken to consider divorce simply as a prerogative of the husband or his family, just because the Chinese believe that it ought to be. Several sources of friction can be found in Chinese family structure that might lead to divorce, but by their manifestations in Taiwan they point to the wife's side, and not the husband's, as having been responsible for its exceptionally high incidence. A great many of the divorces that were recorded must have been precipitated by the wife's family (if not by the wife herself), and it seems inescapable that their willingness to do so was governed largely by the opportunities to find another match for her. The patterns of marriage as well as divorce lend support to this conclusion.

The Reproductive Span of Married Life

162 582 One reason for giving attention to marriage is that it is the principal step by which people pass into adult familial roles, and thus embodies many of their ideas about the significance of these roles. It is also a matter of great interest in connection with reproductive behavior, since in all known societies some form of marriage establishes the approved social setting for bringing children into the world. From the standpoint of replacement of members in a population, however, the important thing is not simply when people first become married, but how much time they actually spend in married life. But because a particular marriage almost never lasts through the lifetime of both its immediate partners, the duration of married life cannot be precisely determined for Taiwanese. People are arriving and departing continually, and not all of them leave a sufficient trace in the sorts of demographic statistics that are usually available.

The most practical expedient for estimating the amount of time spent in marriage is to consider only those women of reproductive ages who are currently married at some particular time.[14] In Table 70 they are arranged as proportions of all women at these ages at census dates, confirming what has already been implied above—that many years were spent without their husbands by women who had been married, because widowhood and divorce were too prevalent to be cancelled out by remarriage. As women became older more of them became widows, but the percentages of women who dropped

[14] From the standpoint of demographic concepts, there is nothing inherently "better" about narrowing attention to women instead of men. The main reason for doing so here is that we have ways of estimating the fertility of women in Taiwan according to age, but not that of men. The choice of 15-49 as the age interval to use is dictated by convention, but in other populations it has been found to include nearly all cases of maternity.

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TABLE 70

PER CENT OF TAIWANESE WOMEN CURRENTLY MARRIED, BY AGE, AT VARIOUS CENSUS DATES

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Age	*1905*	*1920*	*1935*
15–19	45.9	32.0	27.7
20–24	88.3	83.5	81.2
25–29	92.5	91.6	92.8
30–34	89.0	89.8	92.4
35–39	81.2	84.7	89.3
40–44	68.8	75.8	82.8
45–49	55.9	63.2	74.2
Total, 15–49	75.7	72.2	74.1

Source: Tables of the Taiwanese population by age, sex and marital status in the respective censuses. "Married" in 1920 includes women whose marriages were not registered.

out of married life in this way declined sharply with the fall in mortality among husbands and in the frequency of divorce. Hence some of the time lost to young wives through later marriage was made up by others through prolonged survival of their husbands. One cannot say with certainty that the *net* result was a lengthening of married life for the women of Table 70.[18] But even if it had been, this lengthening might not make much of a contribution to the fertility of women in reproductive ages. It had most of its effect over age 35, when many women had already completed their childbearing.

When it comes to patterns of difference in marriage between groups of Taiwanese, there is not much to find. Little information

[18] There is no simple answer to the question of whether the time spent in marriage increased or not. Other things equal, the fact that women lived longer would result automatically in a lengthening of married life—fewer wives at these ages would die before their husbands. Similarly with longer life for husbands (and less divorce)—women would spend a greater *proportion* of their time married.

The case becomes complicated as soon as new generations of women entering the reproductive ages are included. These new groups of women were becoming larger every year, making the extra time that they spent awaiting marriage still greater, and offsetting some of the increase of the married among older women.

The balance of these effects at census dates is shown by the proportions of women married in the entire age group 15–49, which fell after 1905 and partially recovered later. But these do not give the only answer to the question, for there is no doubt that those women *already* married would stay married longer than women had before, owing largely to the reduction of mortality in the population. It makes a difference whether the question about years spent in marriage is put in terms of a particular group (or "cohort") of women at different times or different groups of women at some particular time. Although the first of these alternatives is really more pertinent to the other problems of interest, even an approximate answer makes extravagant demands for data, and the second form is the one in which related questions (such as local differences, in this chapter, and of fertility, in the next) must be phrased.

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exists to indicate the marrying habits of the people according to their occupations; and for the meager material that is available, the study of Taiwan's occupational data has shown that these can be relied upon only for men, whereas it is the women that interest us here.[16] A comparison can be made, in 1920, between the principal

TABLE 71

PER CENT OF TAIWANESE WOMEN MARRIED, 1920, BY AGE AND ANCESTRAL PLACE OF ORIGIN

Age	*Fukien Origin*	*Kwangtung Origin*	*Other Taiwanese**
15–19	31.9	31.1	37.3
20–24	84.2	81.1	76.2
25–29	92.0	91.3	83.6
30–34	89.9	90.8	84.1
35–39	84.5	86.5	82.6
40–44	75.0	80.0	75.7
45–49	61.8	70.4	66.9
Total, 15–49	72.1	72.9	70.8

* "Other Taiwanese" consisted almost entirely of non-Chinese members of aboriginal tribes in Taiwan.

Source: *Census of 1920, Detailed Tables*, Table 2.

"Married" includes women whose marriages were not registered.

groups of Taiwanese according to place of origin. Those married among Chinese who traced their ancestry from Fukien, and those from Kwangtung, are listed separately in Table 71. Both had almost equal proportions of all their women 15-49 married in 1920. The group from Fukien, which comprised most of the population in Taiwan, apparently married somewhat earlier, but were more widowed in the higher reproductive ages. The women from families of Kwangtung origin, most of whom are descendants from the "Hakka" group in Taiwan, were married to a lesser extent while young, but were able to avoid widowhood until later in life.

It is not possible to find out definitely whether Kwangtung widows were more likely to remarry, or whether they simply had hardier husbands and became widows less often. Their smaller quota of widows can be partly explained away, however, by two facts: their

[16] The later census reports did not show this information at all. In 1920 a long and complicated table was devoted to cross-tabulation of occupation and marital status by age, and similarly for the census of 1905. But for the reason noted in the text they are not of much value in answering the questions raised here. Figures for registered marriages were published according to the occupation of each spouse, but for these and additional reasons these tables are practically useless.

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whole age pattern in marrying was a later one (and therefore probably made their husbands younger in relation to themselves); and most of them lived in Hsinchu Prefecture, which gave them and their husbands better chances of surviving. In view of these considerations, it seems that greater remarriage of widows probably was not very important in producing this difference.

The entry for "Other Taiwanese" in Table 71 gives some indication of the prevalence of marriage in those small groups of the island's aborigines who lived in the foothills and plains. Their women were distinguished from the Chinese by earlier marriage, and poorer chances both of marrying for the first time and of remarrying when widowed or divorced. They were a small group, however, and information about them probably tells nothing about the inhabitants of the interior, who were not enumerated in the census of 1920.

TABLE 72

PER CENT OF TAIWANESE WOMEN MARRIED

By Age, Inside and Outside Major Cities*

1925 and 1935

Age	1925 Inside Cities	1925 Outside Cities	1935 Inside Cities	1935 Outside Cities
15–19	24.4	29.4	23.9	28.3
20–24	73.3	83.5	73.8	82.4
25–29	85.9	93.5	87.3	93.7
30–34	87.2	92.7	87.6	93.1
35–39	83.4	88.3	84.6	90.1
40–44	74.8	80.1	78.6	83.5
45–49	63.0	68.9	69.1	75.0
Total, 15–49	67.0	73.0	69.4	74.9

* "Inside Cities" includes the nine cities of Municipal rank in 1935. The data for 1925 have been rearranged to conform to this rule.

Source: *Census of 1925, Statistical Tables*, Table 3; *Census of 1935, Statistical Tables*, Table 7.

Local conditions peculiar to different parts of Taiwan also produced a certain amount of variation in the extent of marriage by women. A clear-cut distinction of this sort is that which appears between the people in the major cities and those in the surrounding rural regions. When all the cities that were of Municipal rank in 1935 are grouped together, and then the remainder of the population collected in another group, the women in cities are found to have lagged behind the others by a considerable margin in getting

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married. The gap in proportions married was greatest for the young women in the age interval 20-24, narrowing with advancing age (see Table 72). The gap was similar and located at the same ages both in 1925 and 1935, suggesting that the cities probably shared with the rest of the island in the trend toward later marriage for women.

TABLE 73

VARIATION IN PROPORTIONS MARRIED

Per Cent of Women in the Ages 20–34 Currently Married By Prefecture, Inside and Outside Major Cities, 1925 and 1935 Taiwanese Only

Name of Prefecture	1925 Inside Cities	1925 Outside Cities	1935 Inside Cities	1935 Outside Cities	Name of City
Taipei		88.4		88.3	
	76.2		76.1		(Taipei)
	79.0		84.0		(Chilung)
Hsinchu		87.3		87.2	
	84.7		84.0		(Hsinchu)
Taichung		90.2		89.8	
	86.8		86.1		(Taichung)
	85.5		87.1		(Changhua)
Tainan		92.2		92.1	
	80.2		78.6		(Tainan)
	86.1		87.5		(Chiayi)
Kaohsiung		87.6		85.8	
	87.9		87.1		(Kaohsiung)
	87.1		85.7		(P'ingtung)
Taitung		80.4		83.7	
Hualien		84.0		87.8	
P'enghu Islands		84.6		84.7	
Total Island	81.6	89.3	82.2	89.0	

Source: *Census of 1925, Statistical Tables*, Table 3; *Census of 1935, Statistical Tables*, Table 7.

One cannot deny that there were better incentives or opportunities outside than inside the major cities for women to marry while very young. The extent of marriage among women in these cities is one of the principal features that set them off from the rural sections. But the sharpness of the difference is misleading, and gives an impression of contrast between country and city that is unwarranted. The notion of "urban" as distinct from agrarian conditions

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does not accurately characterize cities that are so little urbanized as those in Taiwan. Some of the difference in Table 72 comes, not from their distinctness as cities, but from the characteristics of people in their surrounding areas. It turns out that cities were less unlike the rural sections of the island when they are compared with those parts from which they drew many of their people (see Table 73). One city actually had a *higher* proportion of its women 20-34 married than the rest of the Prefecture in which it was located.

The case is similar when variation in the individual rural Districts that make up the remainder of the Prefectures (outside of the major cities) is taken into account. Most of it falls in the ages 15-19, which are not shown in Table 73. Even in the ages dealt with here these smaller civil divisions exhibited considerable differences in their marriage customs, which make it impossible to discern patterns of any consequence in the proportions married, as far as cities are concerned, that might denote change. Those places where women had a relatively late start in marrying were sometimes among the *highest* in proportions married by age 30; some of the early-marrying ones were among the lowest in those still married of their older women. But insofar as these local peculiarities represent differences in the way that marriage was regarded by the people, one common factor stands out in all of them—the variation seems to have been in scheduling *when* the women should marry, and not in fixing the proportion who eventually were found to be married.[17] The percentages of women married over age 30 were similar in all smaller civil divisions, both Municipalities and rural Districts. And so the principal result of their diversity may have been to make localities gain or lose in the time that their younger women spent in married life.[18]

[17] The local peculiarities seem also to have been firmly rooted in custom and not patterns of accidental variation, for they were fairly stable through time. The differences in proportions married repeated themselves: they were correlated with nothing else more strongly than with the same proportions at a later date, even though the women involved of course were different each time. Some idea of this stability can be gained by comparing 1925 and 1935 in Table 73, though the case is more impressive when all rural Districts are compared separately. Although it might be expected that young women with lower incidence of marriage would also have lower fertility, there is no indication that this was so in Taiwan to any marked degree, as we shall see in the next chapter. Part of the explanation is doubtless that the differences followed this pattern of local custom more than one of change.

[18] Local variations cannot be said to be linked to the same factors that were discussed above for the entire island. For example, families of young men seeking marriage might, if confronted by a local shortage of young women, arrange a match in a neighboring place. Moreover, the shortage itself might not be one revealed in the statistics, but merely one of families having eligible *surnames* (or sufficiently distant relationships). Chinese regard marriage between persons of the same family name as incestuous, and the residents of small communities often are nearly all of the same

15: U.S. Navy--29 [7] (no date) 1944 Formosans
116, 181, 178, 584, 562

"The general atmosphere of life on Taiwan has been always somewhat less conservative than on the Chinese mainland. Indeed, there are many evidences of the pioneer spirit at work. A girl still has very little to say concerning the choice of a husband, and the parents or eldest relatives on both sides actually carry out the negotiations leading to marriage. Still there is much less of the prenuptial seclusion of women in Taiwan. Marriages are frequently arranged after a young couple has had an opportunity to see one another in public (but not alone)."

15: U.S. Navy--29 [8] (no date) 1944 Formosans
116, 582, 584

"Marriage for both sexes comes early, usually before the age of twenty, and can take place only after a 'go-between' has brought each side to terms concerning dowry and wedding day. These go-betweens are sometimes friends of one family or the other, but most often are professional matchmakers who receive fees in cash or in presents to an amount commensurate with the wealth and social standing of the families concerned. Once a match has been agreed to, presents are exchanged formally and a preliminary betrothal contract is drawn up, giving data concerning the families and the pedigrees of each contracting party."

15: U.S. Navy--29 [10] (no date) 1944 Formosans
116, 584, 565

"The period of probationary agreement is longer or shorter as the means of the families permit or the soothsayers direct. Among the poorest coolies and farmers it is very short or may be almost dispensed with because of the lack of funds or goods for fees and gifts and because of the necessity to get a new woman into the house for cooking, cleaning and working for the welfare of the new family."

596 no uncle, the mother, although this happened rarely, assumed authority. Household management, as well as external business affairs, was the responsibility of the male head.

596 562 The position of women was subservient; women had few property rights, and they themselves were the property of men. Confucian principles taught that woman's world was in the home, that a virtuous woman would obey her father before marriage, her husband after marriage, and her son after the death of her husband. Daughters at home were temporary members of the family who would someday marry and join their husbands' households. When a family estate was divided, all property was distributed among the males. Wives and daughters were their husbands' and fathers' heirs only in those cases where there were no males to inherit. Instances of women dominating men were not unheard of, but always at the sacrifice of the man's self-respect and as a subject of ridicule. As a daughter-in-law, a girl had to please her husband's parents, her husband being subordinate to his father in the family. A husband, out of filial piety, had to side with his mother if she happened to be harsh in her treatment of his wife.

584 596 Marriages were arranged by the parents. Happiness of the couple was not a consideration,

584 for the perpetuation of the family was the prime
596 motive for matrimony. Very often people married without knowing each other previously. Since to marry was to bring forth a new generation, concubinage for the purpose of procreation was not frowned upon. Where there were no sons in the family, adoption of the children of close relatives or friends was encouraged. As Mencius taught: There are three things which are unfilial, and to have no heirs is the greatest of them.

Although the extended family was pre-
596 dominant in pre-Japanese Formosan society, no
593 familial relationship was closer than that found among the members of a nuclear family. In an extended family, a father might have a tight control over his married sons, but he would grow old and his sons' attentions and affections would revolve around their wives and their children.

Within a nuclear family the father-son relationship was said to be the closest.[3] A son

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3. Shoji Yamanaka, "Rigen ni arawareta Taiwan oyobi Shina no kazoku seikatsu," ["Family Life in Taiwan and China as Expressed in Sayings and Proverbs"], Taiwan bunka ronso, Vol. II, [Symposium of the Culture of Taiwan], Taihoku, Shimizu shoten, 1943, pp. 1-107.

15: U.S. Navy--29 [11] (no date) 1944 Formosans -1
116, 585, 554, 591

"The marriage itself takes place in two ceremonies. The first consists of a solemn release of the bride from her home. In theory she ceases to be a member of her blood family. Her name is formally struck from the family records during a solemn gathering before the family altar and ancestral tablets. A last ceremonial cup of tea is drunk, a bit of rice is eaten, her name is removed and she is ready to be carried away.

If the wedding is carried out in full tradition, the bridegroom arrives at the bride's house with a suite of attendants and many colorfully prepared gifts. A closed palanquin, which is carried in over the threshold of the bride's house, is put down before her ancestral tablets. Sometimes the bridegroom sends an honored representative to act for him while he himself remains at his own home. The bride is placed in the palanquin and, in theory at least, is not expected to set foot to the earth nor be seen by anyone until she arrives at her new husband's home and is carried over the threshold. Usually one or more of the bride's family accompany her to her new home. The whole procession is strung out as long and impressively as possible along the road, with extremely noisy professional musicians to swell the numbers in the party. As many gifts as can be carried are decorated brilliantly in red paper and cloth and carried with festive cakes and other foods on open carts through the street. Great prestige is gained by a lavish display and no effort is spared to impress the neighbors with the economic well-being of both houses concerned.

15: U.S. Navy--29 [11] (no date) 1944 Formosans-2
116, 585, 554, 591

A second ceremony now is performed, during which the bride's name is entered upon the family register of the new house. Unless some disastrous thing occurs she is thereafter committed to complete obedience to the elders in the new household and to her husband.

Feasting follows, during which the bride and groom retire to their bridal chamber.

A good measure of ribaldry and earthy humor accompanies these feasts in proportion to the amount of alcohol consumed."

15: U.S. Navy--30 (no date) 1944 Formosans
116, 581, 836, 585, 842

"The Chinese make no pretense that marriage is other than a useful procreational arrangement. Sometimes the tradition is observed that the parents or elder relatives of the groom's family send back to the bride's house evidence that the bride was virginal. In any case, for at least three days(and sometimes longer according to family customs) the bride must remain within the bedroom and there receive the groom's friends and their congratulations and gifts. The new father-in-law or other elder male will proudly show guests the bedchamber and invite them to feel of the softness or note the elegance of the bed. All are supposed to receive a cup of ceremonial tea from the hands of the bride. As they finish it, a gift of money is usually left in the empty cup (wrapped in red paper) and the blushing bride is urged to have as many male children as possible, quickly."

15: U.S. Navy--30 [2] (no date) 1944 Formosans
116, 585, 837, 851

"If it can be afforded, in many families the bride is expected to remain within the house for a long period and under no circumstance to go out unaccompanied by an elder woman of her husband's family for three months. This appears to be an elementary and practical form of assurance that the first-born (preferably a son) shall certainly be issue of the new husband and of no other and that therefore the house is assured of a genuine heir to its name and to the duties of worship of the ancestors."

15: U.S. Navy--30 [3] (no date) 1944 Formosans
116, 586

"A girl may go back to her parents' home within a short period after marriage without too much prejudice if she discovers her new husband to be not all that was represented in the marriage contract. This is a rare occurrence, however, and a most serious matter, not to be undertaken lightly by a woman who values her future happiness.

On the other hand, divorces can be initiated by the man with little or no trouble and on slight pretext. Considerations of prestige or of having to confess to a bad bargain have their inhibitive effect, and a husband who has sent back a girl to her family without recognizably serious grounds will have difficulty in making another match on the same social and economic level."

587 Second marriages are usually looked down
upon, but in order to perpetuate the family
•586 line a childless widow may marry again. Divorce,
although the rate has been increasing in recent
years because of financial difficulties and
the growing independence of women, is not as
serious a problem in Formosa as it is in the
United States. Formosa's divorce rate in 1953
was as low as 0.45 per 1,000 population, as
compared with a rate of 2.48 per 1,000
population in 1951 in the United States.[15]
For good or ill, a popular adage that a
virtuous woman does not marry twice is often
repeated, and a divorcee rarely finds opportunity
for a second marriage.

582 The average age at which men and women
marry is reported to be rising. Among young
men of urban areas, marriage is often delayed
because of financial difficulties. The adoption
of daughters often poses a social problem.
597 The old notion that a daughter may be bought
548 or sold like a commodity remains among some
uneducated people. Although the purpose of
such adoptions may be that of securing a young
companion or maintaining the family lines,

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15. United Nations, Demographic Yearbook, 1953, New York, 1953, pp. 276-77.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

587 first is uncertain and tends to be the target of considerable hostility.[6] But if she bears a child, especially a son, during the husband's lifetime, her membership in his family is made relatively secure, for she becomes the means for continuation of the family line. If the family has enough wealth and enough adult family members to prevail in the matter, it is to be preferred that the wife remain a widow rather than remarry. The attitudes generated by the family system, which manage to induce nearly everyone to marry once, act to some extent as a restraint on the number of years that may be spent in married life. Depending on the circumstances, widowhood therefore may be permanent and have the effect of preventing many women from being mothers of additional children.

But the prohibition against remarrying is often given lax observance. In Taiwan special arrangements were sometimes made to ease the practical difficulties.[7] Many women must have lost their husbands before providing a male heir, and a childless widow might have very little claim to standing in her husband's family. Because the remarriage of widows was not looked upon with favor, they were not likely to enjoy the prospects of so good a match as those of unmarried women. It is commonly known that a cheap wedding can be arranged with widows, and so they probably became wives of poorer men. With the shortage of marriageable women that existed in early Taiwan, the abundance of widows doubtless was a factor in finding wives for many men who otherwise might not have married at all.

Remarriage is not regarded so austerely for widowed men; the same circumstances affect them, but all work in the other direction. A man has compelling reasons to remarry after the death of his wife, and these are even stronger if he has become the head of a household and the father of children. A widower's incentive was equal to that of a widow, and he had fewer obstacles.

586 162 Like widowhood, *divorce* also removes some men and women from married life and helps to reduce still further the efficiency of mar-

[6] See Levy, M. J., Jr. (1949), Chapters III and IV.

[7] Since the Chinese conception of marriage and descent is patrilineal, the "normal" course for a widow who remarries would be to enter the family of the second husband. The presence of children born to her as a wife, however, complicates the situation, for they are regarded as descendants in the male line—i.e., members of the first husband's family—and would not ordinarily be relinquished. Among poorer Taiwanese there existed a special form of marriage in situations of this sort, observed also in many parts of China, which provides that the second husband marries *into* the family of the widow's children. Marriage of this kind is deprecated and probably occurs chiefly when a widow is left without able-bodied members of her husband's family.

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riage in cementing marital unions. Divorces are different, however, in that most of them occur early, rather than increasing with the length of married life. They leave (at least initially) an equal number of ex-partners of either sex who can remarry if the institutional system permits. They also leave a lesser total residue of persons in a non-married status. The divorced enumerated in the censuses were very small proportions of Taiwanese adults, and showed no trend with the passage of time save reduction to still smaller sizes at the younger ages (see Table 63).

TABLE 63

DIVORCED MEN AND WOMEN IN TAIWAN

Per Cent of Taiwanese Who Were Counted as Divorced from a Previous Marriage, 1905 to 1935, by Age

Age	1905	1915	1920	1925	1930	1935
			Males			
15–19	0.3	0.1	0.1	0.1	0.1	0.0
20–24	1.2	0.8	0.8	0.7	0.7	0.6
25–29	1.9	1.8	1.8	1.6	1.4	1.3
30–34	2.1	2.3	2.3	2.0	1.8	1.6
35–39	1.8	2.1	2.4	2.2	1.9	1.7
40 and over	1.3	1.5	1.8	1.8	1.8	1.8
			Females			
15–19	0.7	0.4	0.4	0.3	0.3	0.2
20–24	1.2	0.9	1.2	0.9	0.9	0.7
25–29	0.9	1.0	1.3	1.0	1.0	0.9
30–34	0.8	0.9	1.2	1.0	1.0	1.0
35–39	0.7	0.8	1.1	1.0	1.0	0.9
40 and over	0.4	0.6	0.8	0.8	0.7	0.8

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

A paucity of divorced people has led observers from time to time to conclude that divorce itself is all but unknown among Chinese. On similar grounds, the abundance of widows is often taken as a rough measurement of how great are the proportions of people who have been widowed. The reasoning behind both types of inference is that the chances of remarriage are poor (especially for women), and therefore the number of observed survivors of divorce and widowhood are a gauge of their frequency.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

586 But neither divorce nor widowhood has been seriously investigated in an agrarian society. Though one must admit that reliable data have been rare, scholars have usually fallen back on stereotypes drawn from the folklore and value statements of the societies themselves. This approach has its pitfalls, especially when these statements are accepted literally without much attention to the social situations in which they have their effect.

Divorce, we are told, happens at the whim of the husband or his family; a wife may be sent back to her original home if her behavior fails to satisfy them on any of several grounds, all very explicitly stated. The divorced woman must return disgraced to her family, nevermore to be sought in marriage. The harshness of this procedure is tempered, mercifully, by prospective loss of the dowry to the husband's family, by recognized conditions that call forth forbearance on their part, and by "local sentiment" which may be offended by the arbitrariness of the whole affair.

In short, the prescriptions of archaic Chinese moral codes leave one with just about as much insight as to what to expect as if he knew nothing of them. In reality not a great deal can be said about the reasons for divorce with the assurance that it is generally accurate. It differs from widowhood in being the outcome of decision rather than death, decision affecting the two families between which the original marriage had been arranged. If a dispute is involved, which is likely, the focal point will probably be the relations of the wife with her husband's family, but only if the marriage was patrilocal. The grounds may be anything rising from these relations, which are known to be difficult. Grievances may exist on either side, though it is easy to see that they originate more readily from that of the husband's family.

586 162 Luckily there is a way of checking on the frequency of divorce in Taiwan, as there is not in the case of widowhood. Its legal significance was judged by Japanese to be sufficient to warrant keeping records of divorce as it occurred. Divorces were registered each year, according to the time elapsed since marriage (in single years of duration up to five, and thence in broader intervals). These data have been slightly rearranged, assuming (with some error) that all of those which occurred less than one year after marriage belonged to marriages made in the same calendar year, that those occurring between the first and the second year of the marriages' duration belonged to

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marriages of the previous year, and so on. It is then possible to calculate approximately the number of marriages of any particular year that ended in divorce within five years[8] (see Table 64).

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TABLE 64

MARRIAGES ENDED IN DIVORCE, 1906-1940

Per Cent of Registered Marriages of Each Year That Were Dissolved by Divorce within 5 Years' Duration
Taiwanese Only

Year	*A. Assuming That* All *Taiwanese Marriages Could End in Divorce*	*B. Assuming That Divorce Occurred Only to* First *Marriages*
1906	14.4	22.3
1910	9.4	13.8
1915	10.5	14.0
1920	7.9	10.6
1925	7.7	9.4
1930	5.8	6.8
1935	4.7	5.2
1939	3.6	3.9

Source: *Statistical Summary*, Table 77.

It makes some difference whether we include those persons who were marrying for the second (or subsequent) time or whether we assume that only first-married couples were divorced. Since the truth probably lies somewhere between these alternatives, Table 64 has a column of figures for each, based of course on the same number of divorces in both cases. Close to 10 per cent of Taiwanese marriages before 1920, nearly 15 per cent if first marriages alone are considered, were regularly being dissolved within five years. The outcome of marriages in 1906 may suggest that divorce had an even higher

[8] For example, it is assumed that first-year divorces in 1910 belonged to marriages of 1910, and that divorces in the second year of marriages to these people all took place in 1911, in the third year 1912, etc. This procedure makes no allowance for those marriages that might have been broken by death, but it will be seen that this omission merely makes the evidence of trend more conservative, and does not exaggerate it.

In most years, between 60 and 70 per cent of registered divorces happened within the first five years of married life. Table 64 must be confined to this period for each annual crop of marriages, because the published data show only the first five years' divorces by single year of duration. The result is that the "divorce rates" of Table 64 represent only two-thirds to three-quarters of the divorces that eventually occurred. This fraction fell slightly during the period of registration, leading to some exaggeration of the decline in divorce shown in Table 64.

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586 162 incidence before the registration system was established, but also may have been nothing more than a peculiarity of the early operation of the registration system itself. Whatever its initial level, the divorce rate fell steadily throughout the Japanese occupation. Somewhat under four per cent of marriages registered in 1939 failed to last for five years.

The Prevalence of Remarriage

587 162 It is beyond the capacity of these resources to reveal the percentages of any year's marriages that ever ended in divorce. Our disregard of divorces if they occurred more than five years after marriage and the omission of many marriages from registration make it not worth while to strive for more than this approximation. More pressing is the question of what happened to all the people whose marriages suffered this adverse outcome. Even at its lowest stage in Taiwan, divorce was still not uncommon, and produced far more divorced people than the census enumerations were able to detect. Yet experience with these census materials has justified a high respect for their accuracy; there is no reason to doubt that they are the most dependable of all public records in Taiwan. It follows, then, that a large share of those who had been divorced, amounting to most of all those divorced before age 25 or 30, must have remarried. Moreover, they must have remarried without delay, for as a group they spent too little time out of wedlock for more than a small fraction to be counted as divorced in any census.

By way of illustrating the grounds for these conclusions, Table 65 shows the numbers of Taiwanese recorded as divorced in the census of 1920. In adjacent columns are the numbers of remarriages that were registered to divorced persons during that year. In the second portion of Table 65 the same information is given for widows and widowers. Unfortunately the case cannot be made more rigorously. Since there is no way of knowing how many people of each age became divorced or widowed during the year, the total time spent in either status cannot be estimated, and we cannot construct "remarriage rates" by the same procedures applied to people marrying for the first time. In Table 65 it is nonetheless evident that the turnover in divorced and widowed spouses was remarkably high.[9] Remarriages

[9] The turnover may well have been higher than that suggested by Table 65: some remarriages were probably not registered, and some may have been registered incorrectly as first marriages.

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587 without some explanation of the peculiar role of divorce in early
162 Taiwan. But there is a common thread running through both of these problems. The negotiation of marriages has been profoundly influenced by the supply of eligible women in relation to that of men—the marriage market formerly was one in which women of marriageable age were scarce. This situation conferred several advantages on the families containing eligible girls, as against those with young men seeking marriage: (1) an excellent chance to avoid permanent spinsterhood by eventually marrying, (2) a better chance to find a partner not previously married, (3) a better chance for them to remarry, if a widow or divorced, and (4) more favorable terms on remarriage.

586 The premium formerly enjoyed by marriageable women supplies
162 the best clue not only to the favorable matches open to families with adult daughters, but also to the reasons why they might afford to suffer the supposed indignity of a divorce. It has been pointed out above that Chinese tradition views divorce one-sidedly—it is something to be initiated by the husband's family, since the wedding makes the wife a member of their household, and the household is where the well-known strains attending her presence arise. But the trends in divorce cannot be explained on this basis. It would imply that husbands, or their families, provoked a profusion of divorces when their own chances of remarriage were at low ebb, and that they became less desirous of divorce as these chances improved.

The wife's parental family does not actually suspend its attachments or obligations to her upon marriage, though commentaries on the Chinese family system commonly give this impression. Her relatives are ordinarily a party to the marriage itself, and may be very alert to the connection which it establishes between the two families. They can often choose whether to let a dispute develop into a break in this connection; sometimes they ensure this turn of events by upholding her interests, or by quarreling over unfulfilled terms of the marriage agreement, whereas they would show more restraint if her chance for remarriage were not good.

58' Nor is the position of the wife herself always so helpless as it is
162 depicted. Over one-fifth of the earlier registered marriages between Taiwanese were not of the "ordinary" type at all, but were matri-
591 local. Though they did not all have the same standing in custom,[12]

[12] They include three recognized forms: adoption of a future son-in-law by a girl's parents, who may then be in charge of him from childhood on; simply marrying-in by the husband; and marrying-in with apparently some restriction to his rights of inheritance. The exact distinctions are left somewhat unclear, for the terms are Japanese, and the facts Chinese. It is also likely that there were variations in procedure from one place to another.

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TABLE 69

PER CENT OF ALL REGISTERED MARRIAGES BETWEEN TAIWANESE THAT WERE MATRILOCAL, 1906-43

1906	21.8
1910	20.4
1915	18.4
1920	17.5
1925	16.1
1930	15.7
1935	9.8
1940	7.8
1943	6.2

Source: *Statistical Summary*, Table 65.

these marriages had in common the fact that the husbands entered the families of the wives, in the reverse of the pattern that was considered normal. These extraordinary marriages were a measure of necessity rather than a repudiation of tradition, for they diminished as a share of all marriages along with the major difficulties of men in finding brides. But matrilocal marriage signifies a considerable compromise with the dominance allotted to men by Chinese tradition. Where it occurs, it means that in order to maintain the rule of male descent, either the husband must be relegated to a less important position or the continuity of the wife's family must be broken. Chinese may on different occasions prefer one or the other of these alternatives, but when they resort to matrilocal marriage it is a sign that precedence has been given to continuation of the wife's family line. This solution makes the husband's status in the wife's family rest on sufferance, and cannot avoid undermining his dignity and authority.[13] The norms of patriarchal authority were not undermined, however, in the Taiwanese population as a whole: when men were no longer obliged to marry on these degrading terms, they began to shun this type of marriage (see Table 69). Because it was inconsistent with the rest of the family system, matrilocal marriage presented a special occasion for discord—men were led to expect one kind of familial role as husbands, but required to accept another one that was inferior.

[13] Further compromise is actually possible. Various devices are practiced in China, such as entering the husband on the registers of the wife's family, changing his surname to theirs, and perhaps admitting him to her inheritance, as ways to smooth over the departure from tradition in such marriages. How urgent these niceties are probably depends on the importance and wealth of the families involved—i.e., how urgently they feel the need to keep up conventional appearances.

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586 591 Evidently it is mistaken to consider divorce simply as a prerogative of the husband or his family, just because the Chinese believe that it ought to be. Several sources of friction can be found in Chinese family structure that might lead to divorce, but by their manifestations in Taiwan they point to the wife's side, and not the husband's, as having been responsible for its exceptionally high incidence. A great many of the divorces that were recorded must have been precipitated by the wife's family (if not by the wife herself), and it seems inescapable that their willingness to do so was governed largely by the opportunities to find another match for her. The patterns of marriage as well as divorce lend support to this conclusion.

The Reproductive Span of Married Life

162 582 One reason for giving attention to marriage is that it is the principal step by which people pass into adult familial roles, and thus embodies many of their ideas about the significance of these roles. It is also a matter of great interest in connection with reproductive behavior, since in all known societies some form of marriage establishes the approved social setting for bringing children into the world. From the standpoint of replacement of members in a population, however, the important thing is not simply when people first become married, but how much time they actually spend in married life. But because a particular marriage almost never lasts through the lifetime of both its immediate partners, the duration of married life cannot be precisely determined for Taiwanese. People are arriving and departing continually, and not all of them leave a sufficient trace in the sorts of demographic statistics that are usually available.

The most practical expedient for estimating the amount of time spent in marriage is to consider only those women of reproductive ages who are currently married at some particular time.[14] In Table 70 they are arranged as proportions of all women at these ages at census dates, confirming what has already been implied above—that many years were spent without their husbands by women who had been married, because widowhood and divorce were too prevalent to be cancelled out by remarriage. As women became older more of them became widows, but the percentages of women who dropped

[14] From the standpoint of demographic concepts, there is nothing inherently "better" about narrowing attention to women instead of men. The main reason for doing so here is that we have ways of estimating the fertility of women in Taiwan according to age, but not that of men. The choice of 15-49 as the age interval to use is dictated by convention, but in other populations it has been found to include nearly all cases of maternity.

15: U.S. Navy--30 [4] (no date) 1944 Formosans
116, 581, 587, 595, 842

"Too many daughters in a house which cannot employ them to economic advantage are an embarrassment and must be sent out to marriages or to common-law cohabitation or concubinage on a less favorable social basis. It is almost unheard of that a widow or divorcee should remarry."

587 586 Second marriages are usually looked down upon, but in order to perpetuate the family line a childless widow may marry again. Divorce, although the rate has been increasing in recent years because of financial difficulties and the growing independence of women, is not as serious a problem in Formosa as it is in the United States. Formosa's divorce rate in 1953 was as low as 0.45 per 1,000 population, as compared with a rate of 2.48 per 1,000 population in 1951 in the United States.[15] For good or ill, a popular adage that a virtuous woman does not marry twice is often repeated, and a divorcee rarely finds opportunity for a second marriage.

582 The average age at which men and women marry is reported to be rising. Among young men of urban areas, marriage is often delayed because of financial difficulties. The adoption of daughters often poses a social problem. 597 548 The old notion that a daughter may be bought or sold like a commodity remains among some uneducated people. Although the purpose of such adoptions may be that of securing a young companion or maintaining the family lines,

15. United Nations, Demographic Yearbook, 1953, New York, 1953, pp. 276-77.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

or wives had died, the proportions at nearly every age were two to three times as great for women as for men (see Table 62). 162 589

TABLE 62

WIDOWS AND WIDOWERS IN TAIWAN

Per Cent of Taiwanese Men and Women Who Were Counted as Widows or Widowers in Each Census, 1905 to 1935, by Age

Age	1905	1915	1920	1925	1930	1935
			Males			
20–24	1.0	0.7	0.8	0.5	0.5	0.4
25–29	2.5	2.1	2.4	1.4	1.2	1.1
30–34	4.3	4.1	4.2	2.9	2.3	1.9
35–39	6.8	6.1	6.6	4.9	4.0	3.4
40–44	10.1	8.8	9.2	7.7	6.5	5.7
45–49	14.0	12.1	12.4	10.7	10.1	8.9
50 and over	28.6	26.3	29.3	23.1	22.2	21.3
			Females			
20–24	2.1	1.7	1.9	1.2	1.0	1.0
25–29	4.8	3.7	4.0	2.7	2.3	2.2
30–34	9.4	6.9	7.4	5.3	4.7	4.4
35–39	17.6	13.2	13.2	10.2	9.3	8.2
40–44	30.2	23.7	22.5	18.7	16.5	15.0
45–49	43.4	37.9	35.2	29.9	27.2	24.1
50 and over	72.2	71.2	69.2	65.1	61.6	57.9

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

By 1935, the proportions of adult women who were widows had gradually fallen at all ages, until they were no more than half as high as they had been in 1905. The decrease in proportions of widowed men was similar, though less pronounced. Most of this decline probably arose from the fact that spouses of both sexes became less likely to die during early adulthood, thanks to improved mortality. Not all, however, can be definitely attributed to an actual decrease in widowhood, for the census recorded as widowed only those who remained in the status of widows.

Just as death of a husband or wife is a way to end a marriage, remarriage is a way out of widowhood. In the case of women it is one that is not highly regarded by Chinese tradition. A wife leaves her original family and enters that of her husband, where her status at 587

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587 first is uncertain and tends to be the target of considerable hostility.[6] But if she bears a child, especially a son, during the husband's lifetime, her membership in his family is made relatively secure, for she becomes the means for continuation of the family line. If the family has enough wealth and enough adult family members to prevail in the matter, it is to be preferred that the wife remain a widow rather than remarry. The attitudes generated by the family system, which manage to induce nearly everyone to marry once, act to some extent as a restraint on the number of years that may be spent in married life. Depending on the circumstances, widowhood therefore may be permanent and have the effect of preventing many women from being mothers of additional children.

But the prohibition against remarrying is often given lax observance. In Taiwan special arrangements were sometimes made to ease the practical difficulties.[7] Many women must have lost their husbands before providing a male heir, and a childless widow might have very little claim to standing in her husband's family. Because the remarriage of widows was not looked upon with favor, they were not likely to enjoy the prospects of so good a match as those of unmarried women. It is commonly known that a cheap wedding can be arranged with widows, and so they probably became wives of poorer men. With the shortage of marriageable women that existed in early Taiwan, the abundance of widows doubtless was a factor in finding wives for many men who otherwise might not have married at all.

Remarriage is not regarded so austerely for widowed men; the same circumstances affect them, but all work in the other direction. A man has compelling reasons to remarry after the death of his wife, and these are even stronger if he has become the head of a household and the father of children. A widower's incentive was equal to that of a widow, and he had fewer obstacles.

586 Like widowhood, *divorce* also removes some men and women from
162 married life and helps to reduce still further the efficiency of mar-

[6] See Levy, M. J., Jr. (1949), Chapters III and IV.

[7] Since the Chinese conception of marriage and descent is patrilineal, the "normal" course for a widow who remarries would be to enter the family of the second husband. The presence of children born to her as a wife, however, complicates the situation, for they are regarded as descendants in the male line—i.e., members of the first husband's family—and would not ordinarily be relinquished. Among poorer Taiwanese there existed a special form of marriage in situations of this sort, observed also in many parts of China, which provides that the second husband marries *into* the family of the widow's children. Marriage of this kind is deprecated and probably occurs chiefly when a widow is left without able-bodied members of her husband's family.

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586 incidence before the registration system was established, but also
162 may have been nothing more than a peculiarity of the early operation of the registration system itself. Whatever its initial level, the divorce rate fell steadily throughout the Japanese occupation. Somewhat under four per cent of marriages registered in 1939 failed to last for five years.

The Prevalence of Remarriage

587 It is beyond the capacity of these resources to reveal the percent-
162 ages of any year's marriages that ever ended in divorce. Our disregard of divorces if they occurred more than five years after marriage and the omission of many marriages from registration make it not worth while to strive for more than this approximation. More pressing is the question of what happened to all the people whose marriages suffered this adverse outcome. Even at its lowest stage in Taiwan, divorce was still not uncommon, and produced far more divorced people than the census enumerations were able to detect. Yet experience with these census materials has justified a high respect for their accuracy; there is no reason to doubt that they are the most dependable of all public records in Taiwan. It follows, then, that a large share of those who had been divorced, amounting to most of all those divorced before age 25 or 30, must have remarried. Moreover, they must have remarried without delay, for as a group they spent too little time out of wedlock for more than a small fraction to be counted as divorced in any census.

By way of illustrating the grounds for these conclusions, Table 65 shows the numbers of Taiwanese recorded as divorced in the census of 1920. In adjacent columns are the numbers of remarriages that were registered to divorced persons during that year. In the second portion of Table 65 the same information is given for widows and widowers. Unfortunately the case cannot be made more rigorously. Since there is no way of knowing how many people of each age became divorced or widowed during the year, the total time spent in either status cannot be estimated, and we cannot construct "remarriage rates" by the same procedures applied to people marrying for the first time. In Table 65 it is nonetheless evident that the turnover in divorced and widowed spouses was remarkably high.* Remarriages

* The turnover may well have been higher than that suggested by Table 65: some remarriages were probably not registered, and some may have been registered incorrectly as first marriages.

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TABLE 65

REMARRIAGES OF WIDOWED AND DIVORCED PERSONS, 1920

(Taiwanese Only)

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Age	Males: Divorced Men Counted on October 1	Males: Remarriages Registered During 1920	Females: Divorced Women Counted on October 1	Females: Remarriages Registered During 1920
A. Divorced*				
10–14	3	1	20	16
15–19	155	66	622	586
20–24	1,303	506	1,389	1,193
25–29	2,362	825	1,185	738
30–34	2,771	727	999	412
35–39	2,756	434	929	236
40–44	2,081	211	786	115
45–49	1,377	100	711	45
50 and over	1,943	53	1,097	20
Total, All Ages	14,751	2,923	7,738	3,361

Age	Males: Widowers Counted on October 1	Males: Remarriages Registered During 1920	Females: Widows Counted on October 1	Females: Remarriages Registered During 1920
B. Widowed*				
10–14	17	1	22	8
15–19	154	48	607	412
20–24	1,278	445	2,504	1,269
25–29	3,191	923	4,224	1,560
30–34	5,058	1,254	7,263	1,455
35–39	7,743	1,364	13,457	1,081
40–44	8,548	930	20,061	624
45–49	9,214	595	27,215	284
50 and over	35,819	503	137,752	133
Total, All Ages	71,022	6,063	213,105	6,826

* The categories of "Widowed" and "Divorced" in this table are restricted to the persons whose original marriages had been registered. Those widowed or divorced men and women whose marriages were not registered have been excluded, for if they remarried they would probably register the event as their first marriage. Accordingly, the numbers in this table are slightly lower than those shown in most census tables for 1920.

Sources: *Census of 1920, Detailed Tables, Total Island*, Table 2; *Vital Statistics of the Population, 1920*, Table 12.

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at some ages were almost as numerous as those who were found to be eligible at the census date.

In 1920, divorced women were favored over men in remarriage, but widows apparently were not. One cannot help noticing that more widows were remarrying in 1920 than widowers—6,826 as against 6,063, taking all ages together. This could happen only because there were many more of them to seek remarriage. The actual likelihood of marrying again was almost certainly poorer for widows than for widowed men, partly for the reasons already mentioned. While the experience of divorced persons was superficially about the same—3,361 remarriages of women, compared with 2,923 of men—the real situation was almost reversed. Since divorce withdraws an equal number of men and of women from marriage, any later sex disparity among the divorced (aside from some loss of men through heavier mortality) must be the result of unequal chances of remarrying. It turns out, therefore, that divorced women enjoyed better chances than divorced men to marry again. Even during the earlier years when divorce was exceptionally widespread in Taiwan, it probably interfered less with future childbearing among the women affected than did widowhood among widows.[10]

Though these facts do not advance us very far toward explaining the reasons for the wide incidence of divorce in Taiwan and its fall, it helps to know that entering divorce (or widowhood) was not an irrevocable step, provided that the people involved were young enough.[11] Some of the advantage that divorced women maintained over widows was simply that they were younger (though it was more than this, since they also remarried more readily at the same ages). But in order to get a more complete answer one must look for the consequences of the high divorce rates among those who were marrying. For this answer it is necessary to put one additional question: Whom did people find to marry in their second attempt?

Under conditions in Taiwan after 1895, and probably also under those that were current before, a remarkably small proportion of all marriages were introducing people into matrimony for the first time. Only 717 of every thousand marriages in 1906 had this effect for men, still fewer—644—for women. A mere 585, less than 60 per cent,

[10] Of course, divorced women were younger, and this made remarriage more likely. But men and women at the same ages also showed the same disparity.

[11] This is, of course, only another way of saying that part of the handicaps often associated with divorce and widowhood arise because many people in these categories are older than the ages at which it is customary to marry.

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TABLE 66

THE SHIFT TOWARD FIRST MARRIAGES IN TAIWAN

Persons Marrying for the First Time, Per 1,000 Total Marriages between Taiwanese, 1906-1943

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Year	*Husbands*	*Wives*	*Both Husband and Wife Marrying for First Time*
1906	717	644	585
1910	754	685	629
1915	791	746	691
1920	776	746	684
1925	835	825	766
1930	858	854	797
1935	887	893	836
1940	896	907	851
1943	901	921	864

Source: *Statistical Summary*, Table 70.

united *both* partners for the first time. The remainder went toward restoring to married life the widowed and divorced, who were very numerous. Because so many people dropped out, marriage had become surprisingly inefficient as a way of perpetuating family lines, and a large-scale duplication of effort was regularly incurred by those who tried again.

As time went on, however, we have seen that the shortage of women of marriageable age began to disappear, death separated husbands and wives less frequently, and divorce gradually declined in its incidence. By 1940, marriages had become more lasting and less recidivous for both men and women. The margin by which the proportion of women marrying for the first time lagged behind that of men almost vanished, and as high as 85 per cent of all registered matches were first marriages for both husband and wife.

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There were further implications of this shift away from remarriage. Other things being equal (such as the prestige or importance of the particular family connection), a match in which the opposite partner was being married for the first time would be preferred, by the family of either the bride or the groom, over one in which the partner had been divorced or widowed from a previous marriage. The Chinese do not impose on relatives of the deceased the obligation (which is binding in some societies) of marrying a widowed husband or wife; far less do they have any preference for divorced

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TABLE 67

RELATIVE RESTRICTION OF CHOICE IN MATES BY MEN AND WOMEN MARRYING FOR THE FIRST TIME

Per Cent of First Marriages in Each Year That Occurred with Divorced or Widowed Partners of the Opposite Sex. Taiwanese Only

Year	*Unmarried Men. Per Cent Marrying Divorced Wives or Widows*	*Unmarried Women. Per Cent Marrying Divorced Husbands or Widowers*
1906	18	9
1910	16	8
1915	13	7
1920	12	8
1925	8	7
1930	7	7
1935	6	6
1940	5	6
1943	4	6

Source: *Statistical Summary*, Table 70.

persons as candidates for marriage. When people marrying for the first time must take this less desirable latter alternative, it amounts to a restriction in marital choice, through circumstances of poverty or low prestige. We have already found that in their matrimonial position men in some ways were situated unfavorably, owing to the scarcity of eligible women. It is a reflection of this handicap that in the earlier years of registration a much larger proportion of Taiwanese men than women in their first marriage had to accept divorced wives or widows. In this matter of latitude of choice, the subsequent trends in marriage patterns can be summed up as a process of reducing the amount of restriction and equalizing this difference (see Table 67).

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The prospects of widowed or divorced people in remarriage are of course the opposite sides of the same picture, since by Chinese cultural standards their position is expected to be unfavorable. Other things being equal, *their* most advantageous matches are with people previously unmarried. The situation being defined in this way, their chances are closely related to the trends in first marriages—so long as unmarried partners cannot be found for some persons marrying for the first time, these chances might be fairly high.

But it is also true that widowed and divorced people of both sexes

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declined as a portion of the population. For this reason, their chances on remarriage of finding partners not previously married were steadily improved, in spite of the fact that the first-married became less dependent on the widowed and divorced for their supply of

TABLE 68

RELATIVE ADVANTAGE OF MEN AND OF WOMEN IN REMARRIAGE

Per Cent of Registered Remarriages by Widowed and Divorced Persons with Previously Unmarried Partners of the Opposite Sex

Taiwanese Only

	WIDOWED		*DIVORCED*	
Year	*Husbands. Per Cent Marrying Unmarried Women*	*Wives. Per Cent Marrying Unmarried Men*	*Husbands. Per Cent Marrying Unmarried Women*	*Wives. Per Cent Marrying Unmarried Men*
1906	15	30	32	49
1910	17	33	37	53
1915	20	35	39	48
1920	23	31	39	47
1925	29	34	48	48
1930	30	33	54	51
1935	44	40	60	55
1940	48	42	63	54
1943	52	43	68	52

Source: *Statistical Summary*, Table 70.

spouses (see Table 68). Let it be said, however, that these chances were never very poor. The scarcity of women helped to place widows and divorced women in a position that was surprisingly good, especially in view of the contrary impression given by the accepted notions about their low repute in China.

Men made much larger gains than women, and here they not only equalled but eventually surpassed women in the degree to which they succeeded in getting such terms on remarriage. Judged by this standard, divorced people of either sex were better off than the widowed. This was partly because they were younger and in that respect more marriageable; but in any case if their prospects were so bright, it is impossible to assert that a Chinese taboo against remarriage of divorced people is very strong.

So it is evident that the explanation for these trends in divorce rests upon answers to questions about other trends and patterns of marriage, and that these more significant answers are incomplete

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587 162 without some explanation of the peculiar role of divorce in early Taiwan. But there is a common thread running through both of these problems. The negotiation of marriages has been profoundly influenced by the supply of eligible women in relation to that of men—the marriage market formerly was one in which women of marriageable age were scarce. This situation conferred several advantages on the families containing eligible girls, as against those with young men seeking marriage: (1) an excellent chance to avoid permanent spinsterhood by eventually marrying, (2) a better chance to find a partner not previously married, (3) a better chance for them to remarry, if a widow or divorced, and (4) more favorable terms on remarriage.

586 162 The premium formerly enjoyed by marriageable women supplies the best clue not only to the favorable matches open to families with adult daughters, but also to the reasons why they might afford to suffer the supposed indignity of a divorce. It has been pointed out above that Chinese tradition views divorce one-sidedly—it is something to be initiated by the husband's family, since the wedding makes the wife a member of their household, and the household is where the well-known strains attending her presence arise. But the trends in divorce cannot be explained on this basis. It would imply that husbands, or their families, provoked a profusion of divorces when their own chances of remarriage were at low ebb, and that they became less desirous of divorce as these chances improved.

The wife's parental family does not actually suspend its attachments or obligations to her upon marriage, though commentaries on the Chinese family system commonly give this impression. Her relatives are ordinarily a party to the marriage itself, and may be very alert to the connection which it establishes between the two families. They can often choose whether to let a dispute develop into a break in this connection; sometimes they ensure this turn of events by upholding her interests, or by quarreling over unfulfilled terms of the marriage agreement, whereas they would show more restraint if her chance for remarriage were not good.

58' 162 591 Nor is the position of the wife herself always so helpless as it is depicted. Over one-fifth of the earlier registered marriages between Taiwanese were not of the "ordinary" type at all, but were matrilocal. Though they did not all have the same standing in custom,[12]

[12] They include three recognized forms: adoption of a future son-in-law by a girl's parents, who may then be in charge of him from childhood on; simply marrying-in by the husband; and marrying-in with apparently some restriction to his rights of inheritance. The exact distinctions are left somewhat unclear, for the terms are Japanese, and the facts Chinese. It is also likely that there were variations in procedure from one place to another.

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582 in full detail at each census, there are just two occasions for which satisfactory marriage rates can be found—1920 and 1935. Marriage
162 rates for these two dates are shown in Fig. 31, representing the marriages of three years averaged around the census year (i.e., 1919-21 and 1934-36).

The data of Fig. 31 pertain only to those being married for the first time, since the first marriage removes a person permanently from the unmarried. They show something less than the full extent of the changes in marriages that have already been demonstrated, for the shifting that appears in Fig. 31 is confined to half of the total period of observation. Already by 1920 women's extremely high chances of marrying before age 25 had begun to subside and those of men to rise. Even so, the persistence of this change is clearly evident in the latter half of the period. Marriage rates continued to move in opposite directions for men and for women after 1920 (though after 1920 it is less apparent for women). Taiwanese customs of marriage still allotted the better opportunities to women when young, concentrating these near age 20, while the high point in men's chances came three or four years later in life. Regardless of their differences in earlier adulthood (when most of the first marriages actually occurred), between 1920 and 1935 neither men nor women showed any tendency to defer marrying until after age 25—the rates of both sexes declined after age 30 and in the later 20's.

Widowhood and Divorce

162 Not everyone who marries stays married. In societies where mor-
589 tality is relatively severe, large proportions of spouses are likely to be separated from their partners through death. Since the mortality of Taiwanese was higher for men than for women, wives were more likely to be bereaved than husbands, and there were more widows than widowers. While every census found substantial portions of people of both sexes who had once been married but whose husbands

"legally" married persons; the ratio of the one to the other was used for "correcting" the rates based on registered (legal) marriages. This procedure leaves something to be desired; the most that can be said in its favor is that it converts into useful form data that would otherwise be useless.

The procedures of estimating nuptiality from census data were an adaptation of those discussed in Mortara, G. (1949). These figures might be suitable to use in place of the data that actually appear in the text, but for the fact that they reflect unduly the events of the census year, and thus give a poor indication of trend. The age pattern of unregistered marriages has no significance as such, for there was nothing to prevent unregistered marriages from being subsequently registered.

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or wives had died, the proportions at nearly every age were two to three times as great for women as for men (see Table 62). 162 589

TABLE 62

WIDOWS AND WIDOWERS IN TAIWAN

Per Cent of Taiwanese Men and Women Who Were Counted as Widows or Widowers in Each Census, 1905 to 1935, by Age

Age	*1905*	*1915*	*1920*	*1925*	*1930*	*1935*
			Males			
20–24	1.0	0.7	0.8	0.5	0.5	0.4
25–29	2.5	2.1	2.4	1.4	1.2	1.1
30–34	4.3	4.1	4.2	2.9	2.3	1.9
35–39	6.8	6.1	6.6	4.9	4.0	3.4
40–44	10.1	8.8	9.2	7.7	6.5	5.7
45–49	14.0	12.1	12.4	10.7	10.1	8.9
50 and over	28.6	26.3	29.8	23.1	22.2	21.3
			Females			
20–24	2.1	1.7	1.9	1.2	1.0	1.0
25–29	4.8	3.7	4.0	2.7	2.3	2.2
30–34	9.4	6.9	7.4	5.3	4.7	4.4
35–39	17.6	13.2	13.2	10.2	9.3	8.2
40–44	30.2	23.7	22.5	18.7	16.5	15.0
45–49	43.4	37.9	35.2	29.9	27.2	24.1
50 and over	72.2	71.2	69.2	65.1	61.6	57.9

Source: Tables of the Taiwanese population by age, sex and marital status in the reports of each census.

By 1935, the proportions of adult women who were widows had gradually fallen at all ages, until they were no more than half as high as they had been in 1905. The decrease in proportions of widowed men was similar, though less pronounced. Most of this decline probably arose from the fact that spouses of both sexes became less likely to die during early adulthood, thanks to improved mortality. Not all, however, can be definitely attributed to an actual decrease in widowhood, for the census recorded as widowed only those who remained in the status of widows.

Just as death of a husband or wife is a way to end a marriage, remarriage is a way out of widowhood. In the case of women it is one that is not highly regarded by Chinese tradition. A wife leaves her original family and enters that of her husband, where her status at 587

15: U.S. Navy --24 [4] (no date) 1944 Formosans
116, 221, 591, 438, 602

"Temporary movements. The people who move to these industrial sites [MC: i.e. developing industrial centers like Keelung, Shinchiku etc.] leave their families, or perhaps only some of the children, with the grandparents on the farms. There is a constant traffic (largely on foot) between ancestral homes in the country and the houses of sons and daughters in town. A great deal of produce is carried into the city for private consumption in this fashion, and in turn various small goods are carried out again to the country. The continuing and strong relationship between the main house and all branches of a family is of very great importance in Chinese life."

15: U.S. Navy --27 [5] (no date) 1944 Formosans
116, 591, 177, 554, 596

"As a usual thing Formosan-Chinese sons remain at home when they marry, bringing in their wives and rearing their children under the guidance of the eldest member of the family. Hence many individuals make up one family, living in patriarchal style. All members of the family share in the work and in the returns from the land, which is held in joint title. Some wealthy Formosans who have profited by cooperating with the Japanese have, as a matter of policy, added Japanese living quarters to their homes or attempt to live in Japanese fashion."

15: U.S. Navy--29 [11] (no date) 1944 Formosans -1
116, 585, 554, 591

"The marriage itself takes place in two ceremonies. The first consists of a solemn release of the bride from her home. In theory she ceases to be a member of her blood family. Her name is formally struck from the family records during a solemn gathering before the family altar and ancestral tablets. A last ceremonial cup of tea is drunk, a bit of rice is eaten, her name is removed and she is ready to be carried away.

If the wedding is carried out in full tradition, the bridegroom arrives at the bride's house with a suite of attendants and many colorfully prepared gifts. A closed palanquin, which is carried in over the threshold of the bride's house, is put down before her ancestral tablets. Sometimes the bridegroom sends an honored representative to act for him while he himself remains at his own home. The bride is placed in the palanquin and, in theory at least, is not expected to set foot to the earth nor be seen by anyone until she arrives at her new husband's home and is carried over the threshold. Usually one or more of the bride's family accompany her to her new home. The whole procession is strung out as long and impressively as possible along the road, with extremely noisy professional musicians to swell the numbers in the party. As many gifts as can be carried are decorated brilliantly in red paper and cloth and carried with festive cakes and other foods on open carts through the street. Great prestige is gained by a lavish display and no effort is spared to impress the neighbors with the economic well-being of both houses concerned.

15: U.S. Navy--29 [11] (no date) 1944 Formosans-2
116, 585, 554, 591

A second ceremony now is performed, during which the bride's name is entered upon the family register of the new house. Unless some disastrous thing occurs she is thereafter committed to complete obedience to the elders in the new household and to her husband.

Feasting follows, during which the bride and groom retire to their bridal chamber.

A good measure of ribaldry and earthy humor accompanies these feasts in proportion to the amount of alcohol consumed."

15: U.S. Navy--30 [5] (to date) 1944 Formosans
116, 595, 597, 581, 591

"If a couple is so unfortunate as to have no male issue they may resort to either or both of two practices. If the husband can afford it, a secondary wife can be taken into the home, whose male offspring will have the full status of heirs and will, in all probability, be reared by the first wife. If a secondary wife is not taken, or if there are no sons of such a union, then adoption is resorted to. The son of another family (never the first son or heir) can be adopted outright or taken as the husband of a daughter of the house. This last arrangement is preferred, for it establishes a blood connection. The new son-in-law assumes the name of his bride's house and may take up residence in it. This arrangement often results in unhappy family situations, for the adopting family is usually in much better economic circumstance than the family of the young man adopted, and he is subject to a sense of accepted social inferiority. There are, however, instances of arrangements between well-to-do friends who wish to link the fortunes of their houses."

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The wife's parental family does not actually suspend its attachments or obligations to her upon marriage, though commentaries on the Chinese family system commonly give this impression. Her relatives are ordinarily a party to the marriage itself, and may be very alert to the connection which it establishes between the two families. They can often choose whether to let a dispute develop into a break in this connection; sometimes they ensure this turn of events by upholding her interests, or by quarreling over unfulfilled terms of the marriage agreement, whereas they would show more restraint if her chance for remarriage were not good.

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162 Taiwanese were not of the "ordinary" type at all, but were matrilocal. Though they did not all have the same standing in custom,[12]
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[12] They include three recognized forms: adoption of a future son-in-law by a girl's parents, who may then be in charge of him from childhood on; simply marrying-in by the husband; and marrying-in with apparently some restriction to his rights of inheritance. The exact distinctions are left somewhat unclear, for the terms are Japanese, and the facts Chinese. It is also likely that there were variations in procedure from one place to another.

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TABLE 69

PER CENT OF ALL REGISTERED MARRIAGES BETWEEN TAIWANESE THAT WERE MATRILOCAL, 1906-43

1906	21.8
1910	20.4
1915	18.4
1920	17.5
1925	16.1
1930	15.7
1935	9.8
1940	7.8
1943	6.2

Source: *Statistical Summary*, Table 65.

these marriages had in common the fact that the husbands entered the families of the wives, in the reverse of the pattern that was considered normal. These extraordinary marriages were a measure of necessity rather than a repudiation of tradition, for they diminished as a share of all marriages along with the major difficulties of men in finding brides. But matrilocal marriage signifies a considerable compromise with the dominance allotted to men by Chinese tradition. Where it occurs, it means that in order to maintain the rule of male descent, either the husband must be relegated to a less important position or the continuity of the wife's family must be broken. Chinese may on different occasions prefer one or the other of these alternatives, but when they resort to matrilocal marriage it is a sign that precedence has been given to continuation of the wife's family line. This solution makes the husband's status in the wife's family rest on sufferance, and cannot avoid undermining his dignity and authority.[13] The norms of patriarchal authority were not undermined, however, in the Taiwanese population as a whole: when men were no longer obliged to marry on these degrading terms, they began to shun this type of marriage (see Table 69). Because it was inconsistent with the rest of the family system, matrilocal marriage presented a special occasion for discord—men were led to expect one kind of familial role as husbands, but required to accept another one that was inferior.

[13] Further compromise is actually possible. Various devices are practiced in China, such as entering the husband on the registers of the wife's family, changing his surname to theirs, and perhaps admitting him to her inheritance, as ways to smooth over the departure from tradition in such marriages. How urgent these niceties are probably depends on the importance and wealth of the families involved—i.e., how urgently they feel the need to keep up conventional appearances.

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586 591 Evidently it is mistaken to consider divorce simply as a prerogative of the husband or his family, just because the Chinese believe that it ought to be. Several sources of friction can be found in Chinese family structure that might lead to divorce, but by their manifestations in Taiwan they point to the wife's side, and not the husband's, as having been responsible for its exceptionally high incidence. A great many of the divorces that were recorded must have been precipitated by the wife's family (if not by the wife herself), and it seems inescapable that their willingness to do so was governed largely by the opportunities to find another match for her. The patterns of marriage as well as divorce lend support to this conclusion.

The Reproductive Span of Married Life

162 582 One reason for giving attention to marriage is that it is the principal step by which people pass into adult familial roles, and thus embodies many of their ideas about the significance of these roles. It is also a matter of great interest in connection with reproductive behavior, since in all known societies some form of marriage establishes the approved social setting for bringing children into the world. From the standpoint of replacement of members in a population, however, the important thing is not simply when people first become married, but how much time they actually spend in married life. But because a particular marriage almost never lasts through the lifetime of both its immediate partners, the duration of married life cannot be precisely determined for Taiwanese. People are arriving and departing continually, and not all of them leave a sufficient trace in the sorts of demographic statistics that are usually available.

The most practical expedient for estimating the amount of time spent in marriage is to consider only those women of reproductive ages who are currently married at some particular time.[14] In Table 70 they are arranged as proportions of all women at these ages at census dates, confirming what has already been implied above—that many years were spent without their husbands by women who had been married, because widowhood and divorce were too prevalent to be cancelled out by remarriage. As women became older more of them became widows, but the percentages of women who dropped

[14] From the standpoint of demographic concepts, there is nothing inherently "better" about narrowing attention to women instead of men. The main reason for doing so here is that we have ways of estimating the fertility of women in Taiwan according to age, but not that of men. The choice of 15-49 as the age interval to use is dictated by convention, but in other populations it has been found to include nearly all cases of maternity.

15: U.S. Navy --27 [4] (no date) 1944 Formosans
116, 592, 562, 304, 464

"As in China, the older women who have sons are allowed to wield great influence within the home. Unmarried women and girls have few rights. Footbinding has been forbidden by the Japanese. There has been no attempt to limit female and child labor under even the most extreme conditions."

15: U.S. Navy--28 [5] (no date) 1944 Formosans
116, 342, 592, 352, 354

"Usually at least three generations are resident in a house. If the family is a large one, there are many additional rooms and buildings, all arranged symmetrically at the side and back of the main court. If the [MC: country] house is a large one and quite prosperous, there may be a series of courts one behind the other. The roof of the main building or room dominates the whole structure. The floors are tile, brick or tamped earth. Lighting arrangements are poor. The house is furnished with chairs, tables and beds in Chinese style, which is not unlike Occidental furniture."

15: U.S. Navy--28 [9] (no date) 1944 Formosans
116, 362, 444, 592

"Middle and lower class people live at the rear of their shops, in the second court, if one exists. Since the same patriarchal habits exist in towns as in the countryside, a great concentration of people is found to be living within one dwelling. Single households may include forty or fifty members. As many as 153 persons have been observed to be living in one old foreign-style dwelling in Taihoku."

15: U.S. Navy--28 [10] (no date) 1944 Formosans
116, 592, 596, 369

"Frequently husbands leave their wives and children under the patriarchal roof in the country while they spend the week in towns at some places of business or trade. The wives and older children help care for the farm. Many city households are dependent upon relatives in the country for much of their foodstuff, and there is constant going back and forth."

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CHAPTER VII

The Setting for Family Life

No matter what part of Taiwanese life we have investigated, it has not been possible to proceed very far without encountering evidences of familial pressures and sentiments. This has been true of the organization of farming, the "inheritance" of skills, the reluctance to migrate, certain special patterns of mortality, and the attainment of peace and order by the Japanese. Yet kinship is something that people usually consider as a private matter (and moreover take for granted without inquiry as it exists among themselves), and so it is not easy to increase our knowledge of it. 596

The aspect of kinship that makes it so important is the framework of obligations and expectations that it imposes on people's activities in related spheres.[1] Like many forces affecting behavior, the Chinese family system is an intangible thing, and must be approached by indirection—for example, by construing some of the basic moral precepts that the society has received from the past, which is the usual procedure, or, as we shall essay in this chapter, by examining some of the patterns that people display in their familial roles. The former of these devices has been singularly appropriate, for Chinese have one of the richest accumulations of expressions about their sentiments in family matters that ever existed; but it has left us with a one-sided and sometimes unclear view of the subject, largely because it has been followed with little reference to the latter. While neither of these alternatives gives a perfect representation of the family system in actual operation, the advantage here lies in using Taiwan's census data to illuminate a few points on which accurate information has previously been lacking.

The Size of Household Units

Japanese authorities showed that they were aware of the family's practical significance to the people, for in Taiwan they made it the basis of their census and vital registration statistics as well as of their regular civil administration. In each census the blank forms that were distributed to be filled in with personal information were all made out with the *household* as the unit of enumeration. The head 592

[1] For thorough discussion of the family's role in Chinese social organization, see Lang, O. (1946) and Levy, M. J., Jr. (1950).

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

592 of a household was the one responsible for entering the correct facts regarding each member. The Japanese owed much of their creditable success in census enumeration in Taiwan to the way they were able to secure conformity to these standards by household heads. Once they were in possession of authority to do this, the family system did the rest.[2]

The household is not identical with a family unit. It includes some persons living with a family group who are not related by birth or marriage to the others, and it leaves out all who are temporarily or permanently absent at the date of the census. But the household, properly defined, is the unit that counts in Chinese society. It is the concrete group in which joint decisions are made, and in which the obligations of the family system operate most directly. Also, it is the foremost, for some people the only, unit of participation in the society at large.[3] Provided that sufficient information is given about its members, the household is probably a more useful basis for enumeration than kinship, strictly defined.

[2] The high caliber of their census system did not owe everything to this expedient, however. It had been a common feature of the ancient registrations of people in China, where in pre-modern times it had not given such gratifying results. Japanese adapted the lessons of experience in these matters by Western nations, and added some innovations of their own. They worked out sets of definitions which provided meaningful categories and consistent groupings of the population (as well, of course, as some that did not), and they developed an effective administration to carry out the work of enumeration.

In such a society the most modern innovations in census technique are useless by themselves. Similarly, the family system *without* special statistical standards may be a poor instrument for recording information about its members—there is every encouragement to evasion unless this is forestalled. Systematic omissions might be more serious in household statistics than in any other type of tabulation, for they would probably be concentrated in certain types of household members whom there was some incentive to conceal—the biases would be strongest in a table that showed household membership.

In order to control the responses in these household schedules, the census rules defined an ordinary household as those persons actually present who had residence, family budget, or both, in common. People, or branches of a family, who did not meet these simple but effective requirements were enumerated as separate households; special types of living arrangements ("quasi-households," q.v. below) were assigned to another category. These and other rules of procedure were maintained with only minor changes of wording in all of the seven censuses of Taiwan. They were reported fully in the explanatory section or appendix of the main descriptive volumes for 1905, 1915, 1920 and 1930.

[3] In Taiwan there was another basis for organizing family solidarity, the so-called "clan" or *tsu*. It was very prominent, especially in pre-Japanese times when it was the basis for setting in motion insurrections and often the means for restoring peace and order. But the clan was never a *family* in the sense of a common unit of participation in the society. It was a loose alliance of affiliated families rather than the unit in which everyday matters were conducted. For the distinction between the two, and a discussion of the *tsu* as it appeared in South China, see Hu Hsien-chin (1948).

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THE SETTING FOR FAMILY LIFE

Chinese cultural norms set no limit to the number of family relatives that it is desirable to maintain in a single household, but attach great merit to holding together many branches of a family in one unit. Though Chinese are thus inclined to feel that the bigger the family the better—there seem to be no general class or status differences in the ideal size that they should strive for—so many degrees of relationship are eligible for inclusion that other considerations usually enter and help to settle the question. In practice, the real limitations tend to be how strongly a particular family feels it can enhance its prestige through adherence to tradition, and how well it can afford financially to do so.

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TABLE 43

SIZE OF HOUSEHOLDS IN TAIWAN IN SUCCESSIVE CENSUSES

Average Persons per Household, All Types of Household, All Ethnic Groups, 1905 to 1940

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1905	5.2
1915	5.3
1920	5.3
1925	5.5
1930	5.7
1935	5.8
1940	6.0

Sources: *1935 Census, Statistical Tables*, Descriptive Section, p. 30.
1940 Census, Summary Returns, published in the Gazette of the Government-General of Taiwan, April 22, 1941.

Despite the considerable emphasis on their size and cohesion, these family units actually are not exceptionally large. From the total numbers of households and of people, published with the regular report of each census of Taiwan, we can first establish a few main features of the case to guide the more detailed discussion that is to follow. Expressed as the average number of persons to a household, these figures show that the size of households (for everyone, mixing together all nationality groups and all types of household arrangements) started out in 1905 at 5.2, and rose steadily during the census period (see Table 43). The increase was not especially rapid, but it was unbroken and marked by acceleration with the passage of time. Correlated with what is already known about the growth of population in Taiwan, this steady movement implies that

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592 162 households were not keeping up with the increase of people, and that family groups were therefore undergoing some change in their composition. Though some aspects of this change can be shown more satisfactorily below, the process is most easily seen in these figures, since they cover the complete span of the census administration.

162 128 As usual, the published results of these census materials did not do justice to the care that went into their collection. Household tables were not always shown in useful form, and the figures of Table 43 do not convey very much even about the size of families in Taiwan. Obviously in order to draw reliable conclusions about families of Taiwanese it must be possible to separate them as a group in the statistics, and to make sure that the statistics employed are a fair representation of family groups. For exactly this purpose, the Japanese treated one kind of household as standard, the so-called "ordinary" household, to cover the "normal" types of living arrangements. People in certain special categories were excluded; residents of these non-family households, or "quasi-households," will be omitted from most of the tables that follow.[4]

162 592 563 Information about quasi-households is sketchy and hard to find. The size of these establishments is unknown for separate nationality groups, perhaps through a deliberate effort to conceal the military forces (though they would nearly all have been classified as Japanese anyway, according to the status of the person in charge). The figures can be pieced together for the entire population, and appear in Tables 44 and 45. Quasi-households were a very small part of the total, but accounted for a much larger portion of non-Taiwanese. Only one person in a hundred of all nationality groups lived in such circumstances; 6.6 per cent of Japanese and 20 per cent of Mainland Chinese lived in quasi-households in 1930, but relatively few of the Taiwanese were found outside of ordinary households. Since Taiwanese are the main source of interest in the problem, the few living in quasi-households are unimportant, and for the remainder of this chapter the term "household" will be used to refer to "ordinary" households only.

On the average, ordinary households of Taiwanese contained be-

[4] They comprise people counted in hospitals, prisons, schools, military barracks, police and other special dormitories, and hotels. Although they must be removed before the household data can be said to represent patterns of familial life, the line drawn between the two types of household is not entirely rigorous. Many of these people, especially the ones in hotels and schools, were only temporarily absent from their homes, and their family affiliations may have continued undiminished.

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TABLE 44

PER CENT OF TAIWAN'S POPULATION LIVING IN "ORDINARY" HOUSEHOLDS, 1905-1930

Both Sexes

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Year	Persons Living in Ordinary Households	Persons Living in "Quasi-Households"	Per Cent Living in Ordinary Households
	All Nationality Groups		
1905	3,021,260	18,491	99.4
1915	3,461,282	18,640	99.5
1920	3,624,403	30,905	99.2
1930	4,546,970	45,567	99.0
	Taiwanese		
1920	3,454,956	11,551	99.7
1930	4,293,234	20,447	99.5
	Japanese		
1920	151,862	12,404	92.4
1930	213,314	14,967	93.4
	Other Nationalities*		
1920	17,585	6,950	71.7
1930	40,422	10,153	79.9

* "Other nationalities" consists almost entirely of Mainland Chinese.

Sources: *Census of 1905, General Volume of Statistical Tables*, Table 114.
Census of 1915, Statistical Tables, Table 109 and 116.
Census of 1920, Descriptive Report with Appendix, Appendix Table 149, 164, 165 and 169.
Census of 1930, Statistical Tables, Total Island, Table 5.

tween five and six persons during that portion of the census period when they can be observed separately. Because Taiwanese made up almost the entire population and because most of them lived in family groups, the initial approximation of Table 43 was fairly close to the actual size of their households. Differences begin to emerge when other nationality groups are listed by themselves; the households of both Japanese and Mainland Chinese on the average were smaller by a considerable margin than those of the Taiwanese, and remained that way (see Table 45).

Not only did Taiwanese follow the ideal of large households more closely than the other population groups in Taiwan, but they displayed a different pattern in approaching it. Distributed according to the number of persons in each, only the households of Taiwanese

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TABLE 45

SIZE OF HOUSEHOLDS, BY TYPE AND NATIONALITY OF HEAD

Average Persons Per Household, "Ordinary" Households and "Quasi-Households"

All Nationality Groups, Taiwanese, Japanese and Other Nationalities

1905 to 1930

Year	*Ordinary Households*	*Quasi-Households*
	All Nationality Groups	
1905	5.19	6.2
1915	5.31	12.4
1920	5.30	20.6
1930	5.64	17.1
	Taiwanese	
1920	5.45	
1930	5.82	
	Japanese	
1920	3.37	
1930	3.74	
	Other Nationalities*	
1920	3.79	
1930	3.84	

* "Other nationalities" consists almost entirely of Mainland Chinese.

Source: From data of preceding table. Certain army and navy barracks were included as quasi-households in the Census of 1920 for the first time, accounting for much of the increase over 1915 and 1905 in the average size of quasi-households shown above.

were in a pattern that reveals a predominance of families with two or more generations, families of the sort that must be required to maintain a high rate of natural increase. Their households were found most commonly with four and five members, more rarely of smaller sizes. The process by which the average size of Taiwanese households rose from 1905 on was not a completely general shift toward larger units, but rather one of forming relatively fewer small households (with the exception of people living alone) and raising the proportion of very large ones (see Fig. 30). The sizes most often achieved remained very nearly the same as before, and the distribution simply became more skewed. (Expressed in terms of the numbers of persons involved, the effect of this change would, of course,

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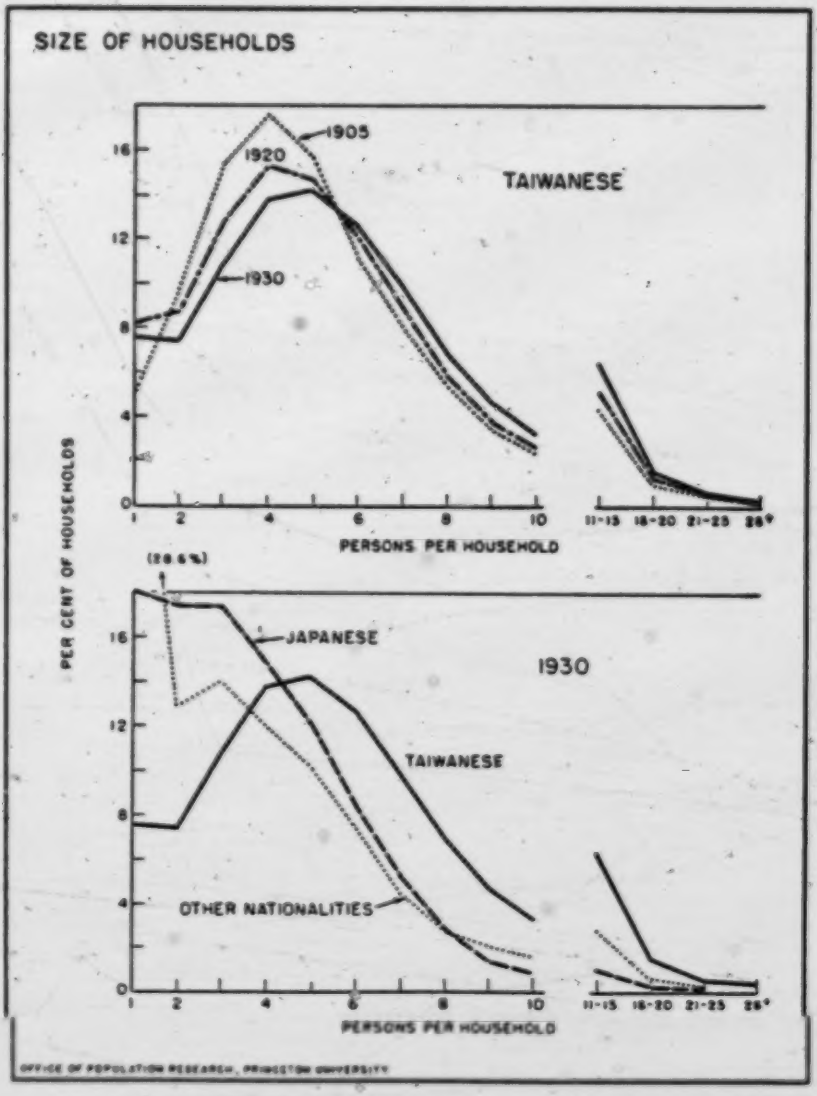

Fig. 30. Size of Households in Taiwan at Various Dates. Households Distributed by the Number of Persons in Each. Taiwanese, Japanese and Others.

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592 be multiplied in households of larger size, since they were larger by virtue of containing many people.)

563 A great many Japanese and Chinese nationals staying in Taiwan
162 obviously were separated from close family ties—for example, those who lived alone, and perhaps some of those in households of two or three persons, not to mention the ones who stayed in quasi-households. Few in either group maintained households in Taiwan as large as those that were usual among their countrymen at home. The Japanese gradually began to establish families in Taiwan, and to take up solitary living somewhat less frequently than at the beginning of their rule. In contrast, an extremely high proportion (29 per cent) of Chinese from the mainland by 1930 were still living alone in households of single persons, a result of the transient and impermanent status that they occupied in the island. It is interesting that in both of these minority groups, households of more than five persons, though not very numerous, had a distribution less unlike those of the Taiwanese. Apparently among the more settled and permanent non-Taiwanese in the population the ideals of the desirable family size were similar to those of the Taiwanese; but this attitude seems to have been more widely shared by Taiwanese, who as a group came closer to realizing it.

Composition of Taiwanese Households

592 It is not size in itself that distinguishes the Chinese family system from its counterparts in other countries. Nor does it mean a great deal to know about the size of family or household groups—even when we know their distribution from large to small—unless something can be discovered about their composition. Kinship would not be such a preoccupation in the minds of Chinese if it did not include other things that we have accustomed ourselves to regard as "non-familial." All that the factor of size indicates is the extent to which diverse familial roles can be encompassed within household units. In ascertaining these more diverse activities that were carried on in Taiwanese households, it will be helpful to find out some of the various kinds of members that were present.

The census schedules made inquiry into the family relationship of each household member, reckoned with reference to the head of the household. When the person was not a relative of the head, some further statement was still required—whether hired help, domestic servant, or simply a "lodger" in the house. The trouble is that the

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greatest part of this information was discarded by the time the census reached the stage of publication. The work of tabulating and publishing the wealth of material that was collected on people's family affiliations—which would have entailed tremendous cost—was apparently never carried out. With the 200-odd different positions of kinship that are recognized in the language, and the nine proverbial generations through which they might be counted, probably most of the population of Taiwan would prove to be mutually related if their full genealogies were known. Consequently, the tables that resulted from these censuses indicate relationship only in the indefinite sense of "family members," without giving any clear idea of what this term actually meant.[5]

Only two censuses, those of 1920 and 1930, published information on household composition that can stand comparison in detail.[6] The membership of "ordinary" households at both dates is shown in Table 46, in terms of the average number of persons per household, in each census category. The totals, 5.45 and 5.81 respectively, correspond to those given in Table 45 above. Taiwan's households were made up mostly of "family members," or relatives of the household heads; the entire group of related persons is represented by *both* of these two categories combined. Non-related occupants were rare—averaged over all households, they were so few that for most purposes they may be thrown together into one group, "Other."

One member of each household was expected to be entered as the "head" in the census enumeration. This designation meant the person who actually represented the household with the outside world and who held authority in making joint decisions that affected the group as a whole. The category was well adapted to the situation, for the same person would as a matter of course assume responsibility to fill out the household's census report. Almost all of the heads were men; but in view of the strong ideal that this should be

[5] The directions for filling out the forms in the census of 1920 stated that it should be interpreted to mean "lineal relatives," and we know from the general features of the family system that kinship in this sense would ordinarily be restricted to relatives on the male side only. But no more definite instructions were given on this point by the census regulations. See *Census of 1920, Descriptive Report with Appendix*, p. 15 of descriptive section.

The meaning of "lodger" (or "guest," or "visitor," as the term might also be translated), is still unclear; apparently it was a catch-all for all people who did not fit into the other categories.

[6] The census of 1915 contained some similar household tables, but these have not been available for this study. Those published for 1920 are the most complete and detailed of all, and will be drawn upon most heavily.

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TABLE 46

COMPOSITION OF TAIWANESE HOUSEHOLDS, 1920 AND 1930

Average Number of Persons per Household, by Status in the Household, and Sex

	1920			1930			Change 1920 to 1930 (1930/1920 x 100)
	Total	*Males*	*Females*	*Total*	*Males*	*Females*	*Both Sexes*
All Household Residents	5.45	2.79	2.66	5.81	2.95	2.87	107
Heads	0.99	0.87	0.12	0.99	0.86	0.12	100
Family Members	4.36	1.85	2.51	4.71	2.01	2.71	108
Occupied							
a. In Household	1.48	0.85	0.63	0.96	0.57	0.38	89
b. Outside				0.35	0.27	0.08	
No Occupation	2.88	1.00	1.88	3.41	1.17	2.24	118
Employees	0.05	0.05	•	0.05	0.05	0.01	110
Domestics	0.01	•	•	•	•	•	
"Lodgers"	0.04	0.02	0.01	0.06	0.03	0.03	

• Indicates less than 0.005. Due to rounding of figures, sub-totals occasionally do not add to the correct totals.

Source: From *Census of 1920, Detailed Tables*, Table 36 and *Census of 1930, Statistical Tables, Total Island*, Table 5.

the general rule, there is significance in the fact that more than ten per cent of all households were managed by women. Several signs, which can be discussed somewhat later, suggest that it is not always looked upon as out of the way for women to attain this position.

At the moment of enumeration, Taiwanese had more households than heads of households, or not enough heads (regardless of sex) to go around. In this detail Taiwan was different from both Korea and Japan, where there was an inflexible requirement that each household must have one of its members counted in this role. The difference apparently came from a peculiarity of administration, because for some reason the Japanese did not apply the same regulation in Taiwan. This is not to say, however, that certain households were "headless"—the excess of households over heads meant either that some heads maintained more than one establishment (which might be possible through concubinage), or that the person in this position was in certain instances temporarily absent from home (in which case he would be counted merely as a member of some other

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household, wherever he might be).[7] This discrepancy is present in all the tables that follow, but is usually very small and can be ignored.

Of the remaining family members in both 1920 and 1930, those who had an occupation were outnumbered by those who had none. There is nothing unusual in this, for the family nearly everywhere is conspicuous for the amount of dependency that it regularly supports. The generality of this fact is partly due to nothing but the generality of relying on families to bring forth and nurture new generations of adults, which all known societies have done in greater or lesser degree. But dependency is especially prominent in Taiwan and similar countries: children there are very numerous, and they are joined by the aged in partaking of the family's resources on a non-productive basis. The support of each person above as well as below the limits of the working life falls completely on his kinsmen—this is an expectation enforced throughout the society, and it concentrates practically the entire burden on the resources of individual households.[8]

Excluding the heads of households (who in almost all cases were employed), nearly three-fourths of all other family members had no recognized occupation in 1930—the fraction being less than this for males, somewhat higher for females. Non-producing members took up a large part of family groups in more than just a static sense; people with no occupation also accounted for the major part of enlargements in household size that accompanied population increase. Even though the period of comparison here is short (the decade between 1920 and 1930), it is clear that on the average the largest gain per household was in this large category (see the final column in Table 46). In other words, the institutional system translated the growth of population into an increase of dependent family members as well as an increase of families, and turned the greater lon-

[7] This second possibility is more plausible, since the excess was greatest where heads were most likely to be absent—*in Prefectures with most emigration, outside of* agriculture (as compared with agricultural households), and in those households with larger numbers of non-relatives. The same was true of Japanese living in Taiwan.

[8] Even though this burden may be mitigated by the fact that old people are *not* very numerous, and that children *are* put to work, high mortality usually ensures that a high proportion of infants will survive only long enough to claim their full share of dependency, and will die before contributing any large measure of productive effort. Moreover, countries that are faced with this problem also lack the extra-familial provisions (schools, labor-saving equipment) that many industrial countries have utilized to offset this burden.

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592 gevity discussed in the previous chapter into additional old and young members of non-working ages.[9]

Family Membership in Households

592 Not all households had the variety in their membership shown by the average of all of them in Table 46. In fact, it was not common for households to contain non-family members at all, and the in-
596 ternal affairs of most households did not involve persons other than near relatives. Owing to the indefinite criterion of family relationship in the census data, no more than a crude approach can be made to discovering what special or unusual features were present in those families that incorporated "outsiders" into their households.

The traditions that shape Chinese familial life are explicit as to why large families are desirable and how they should be achieved. Their foremost concern is that of descent, of preserving the continuity of a particular family indefinitely into the future. The most emphatic rule of descent is that it should be patrilineal, that a family line may be perpetuated only through its male side. There are no notable exceptions to this rule; in cases where it cannot be followed to the letter, its purpose is observed by means of adoption, changing of surnames, or even reversing some of the usual procedures in marriage, as we shall see in the next chapter.

Since the exact relationships are not shown, it is never possible to be certain just *which* family relatives were included in a household of a given size. But the nuclear group might be described as husband, wife, and unmarried children, for the kinship system does not customarily provide these people (or such of them who remain alive and present) any alternative place of residence. With this group alone, much of which was usually made up of dependent children, the actual size of most households was not large enough to leave room for either additional relatives or "outsiders." (See Fig. 30, above.)

The goal of still larger families, which was realized by a restricted though substantial part of the population, could not have been attained without encountering special difficulties imposed by the family system itself.[10] But any further enlargements of a family could be

[9] There was some change in the standard of what constituted employment for women between these two censuses, and this accentuated slightly what otherwise would be the pattern of change in Table 46. The same pattern results, perhaps less strongly, if only males are used in the comparison.

[10] Of course, the parents of the husband or other relatives of the father's (or higher)

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made in only one way—by retaining in it two or more brothers, with *their* nuclear family groups, if any. In achieving the extended families that have been cherished in Chinese tradition this is the crucial step, for there are counter-pressures that tend to discourage it. Collateral ties are known to be relatively weak among Chinese—sons do not have bonds of the same strength with each other that they have with their fathers. These ties are especially difficult to maintain after the death of a father, for sons may exercise individual claims to shares in the family property. These claims sometimes lead to division of the family and its property even before the father dies; they are intensified as soon as the brothers are married. Extending the family unit to any considerable size implies some ability to coordinate these conflicting interests and requires leisure for devoting attention to managing its collective affairs, not to mention special resources to support its existence on a more elaborate scale. Obviously it was unusual to succeed in preventing family division along such lines as these. If everyone had succeeded, the number of households in Taiwan would have remained about the same, and the entire increase of population would have gone toward enlarging those that were already there. Although this is not what actually happened, the fact that larger households in Taiwan increased in proportion after 1905 (see Fig. 30) may be a sign that the opportunities for staving off the division of families were improving.

Changes in the size distribution of households are probably an accurate indicator of the rise and fall of family fortunes, if not a very illuminating one. For in reality, when one speaks of ordinary households among Taiwanese, it is practically the same thing as speaking of family groups and nothing else. Nearly everyone who lived in a household of more than one member was a blood relative of the head. In these "co-resident" households, excluding for the moment those Taiwanese who lived alone, over 98 per cent of all Taiwanese in 1920 were related to the household head (if the head

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generation might be added, for they had claims of support that could not be disregarded—one of them might even be the head of the household. But Taiwanese did not live long enough to allow more than three lineal generations to be represented for very long at the same time in the same family.

On the other hand, daughters ordinarily ceased to be included in a family after marriage, since the rule of male descent worked in reverse for them—they were expected to enter the families of their husbands, where in most cases they were found in census enumerations. Though the actual practice in these matters was less uniform than has usually been supposed, it remains true that the expected and preferred arrangement is that outlined here.

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TABLE 47

EXTENT OF FAMILY RELATIONSHIP IN TAIWANESE HOUSEHOLDS, 1920

Persons in All (Ordinary) Households, Those Living Alone, Those Living in Households with Others ("Co-Residents"), Co-Residents Who Were Mutually Related, and the Per Cent Who Were Related. By Type of Household

	All Household Residents	*Persons Living Alone*	*Co-Residents (1)–(2)*	*Mutually Related Co-Residents (Including Head of Household)*	*Per Cent of Co-Residents Mutually Related*
All Households					
a. All Types	3,454,956	51,694	3,403,262	3,343,175	98.2
b. Purely family			3,093,000	3,093,000	100.0
c. Mixed			310,262	250,175	80.6
Households with Head Occupied					
a. All types	3,111,558	44,417	3,067,141	3,012,945	98.2
b. Purely family			2,788,813	2,788,813	100.0
c. Mixed			278,328	224,132	80.5
Households with Head Not Occupied					
a. All Types	343,398	7,277	336,121	330,230	98.2
b. Purely family			304,187	304,187	100.0
c. Mixed			31,934	26,043	81.6
Head Occupied in Agriculture*					
a. All Types	2,230,098	14,929	2,215,169	2,189,415	98.8
b. Purely family			2,033,653	2,033,653	100.0
c. Mixed			181,516	155,762	85.8
Head Occupied Outside Agriculture					
a. All Types	881,460	29,488	851,972	823,530	96.7
b. Purely family			755,160	755,160	100.0
c. Mixed			96,812	68,370	70.6
Head Occupied in Manufacturing					
a. All Types	212,380	7,547	204,833	194,852	95.1
b. Purely family			173,210	173,210	100.0
c. Mixed			31,623	21,642	68.4
Head Occupied in Commerce					
a. All Types	242,048	6,991	235,057	223,124	94.9
b. Purely family			192,816	192,816	100.0
c. Mixed			42,241	30,308	71.8
Head Occupied Elsewhere Outside Agriculture					
a. All Types	427,032	14,950	412,082	405,554	98.4
b. Purely family			389,134	389,134	100.0
c. Mixed			22,948	16,420	71.6

* Includes Forestry.

Source: From *Census of 1920, Detailed Tables*, Table 36.

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is also counted in the figure). This held true in almost the same degree throughout some of the major portions of the society—whether or not the head had a regular occupation, and on the average regardless of the particular occupation of the head (see Table 47). 592 [596]

Closer inspection reveals that the apparent similarity in membership existed chiefly through a preponderance of households made up exclusively of family members, with no outsiders ("purely family households" in Table 47). Of all "co-residents," over nine-tenths lived together in households of this kind, and the case was the same in all the major occupational groups. Whatever differences arose in each occupational group as a whole, therefore, stemmed from a minority of households containing families together with non-relatives—the "mixed households." It is only within *this* segment that the principal characteristics distinguishing various groups in the population can be found. While four-fifths of all people in even these "mixed" units consisted of family relatives, the proportion was larger in those households dependent on agriculture, and considerably smaller where the head was employed elsewhere (especially in manufacturing and commerce) (see Table 47).

There were different ways of becoming a member of a household, according to the kind of member one was to be, and some of these differences are reflected in the balance between male and female in households of various sizes (see Table 48). Relatives entered a family unit through circumstances well covered by institutional rules or procedures—most commonly by birth or by marriage. Neither of these channels permits much latitude of choice to the parties most directly involved—birth is non-voluntary for those being born, and marriage is usually an alliance arranged by persons other than the partners being married. Hence marked sex disparities should not be expected in households that are formed on the basis of kinship alone. However, these "normal" paths of entry were not the only ones, though the predominance of purely family households very nearly made them so. Men obviously had moved out of many family units, especially the smaller ones, and into mixed households of various sizes—*not* conspicuously into the larger ones. A considerable share of these men must have been single, for departure accompanied by a wife would not have altered the sex balance as between larger and smaller households.

Although very few households contained any outsiders, the larger the unit the less likely it was to consist solely of related persons. It

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TABLE 48

FAMILY RELATEDNESS AND SEX COMPOSITION OF HOUSEHOLD RESIDENTS

By Size of Household, 1920

Persons per Household	Total Taiwanese Residents (in Ordinary Households)*	Per Cent in Mixed Households, Each Size	Males per 100 Females†		
			All Households	Purely Family Households	Mixed Households
1	51,694	—	421	—	—
2	110,618	4.2	122	116	407
3	242,469	3.4	100	98	186
4	385,756	3.8	99	97	144
5	465,810	4.6	100	99	132
6	461,430	5.9	103	102	123
7	394,282	7.6	106	104	122
8	298,984	8.4	107	106	123
9	219,402	10.8	107	105	121
10	162,460	13.1	106	104	121
11–15	409,643	16.4	106	103	120
16–20	142,703	22.5	105	102	112
21–25	59,615	26.9	105	104	109
26–30	24,760	33.2	106	105	107
31 and above	25,306	41.6	111	104	121

* This column was computed by multiplication, and its total is 24 persons less than the totals published in other tables.

† These sex ratios were computed from figures for the entire population, Taiwanese and other groups together. Taiwanese, however, preponderate.

Source: *Census of 1920, Detailed Tables*, Tables 33 and 35.

might seem inevitable that households that had added outsiders would be larger than others, but the circumstance is less obvious than at first appears: as we shall see shortly, the households of greater size were not larger by this fact alone, for they also had more family members as well, implying that their familial structure must likewise have been distinctive in some respect. Only in households of more usual size, say of less than eight or nine persons, was the purely family type nearly universal. Yet it should be noted that more than half of all Taiwanese in households of more than 25 persons were also living in units made up exclusively of their family relatives—incorporating outsiders was not essential in order to achieve large size.

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Persons Living Alone

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For a people who take family matters as seriously as they do, Taiwanese appeared to forego to a remarkable extent the relationships that grow out of residing together in some kind of household group. The proportion who lived alone does not look especially large—1.5 per cent in 1920 and 1.3 per cent in 1930 (though these people formed a much larger figure when counted as households, as in Fig. 30). But this meant that more than 50 thousand Taiwanese in 1920, and 56 thousand in 1930 were out of immediate contact with a family group at the time of the census (see Table 49).

TABLE 49
TAIWANESE PERSONS LIVING ALONE, 1920
("Single-Person Households.") By Occupation

	Persons Living Alone	*Per Cent of Total*	*Per Cent Female*
Total	51,694	100.0	21.5
Occupied	44,417	85.9	13.9
Not Occupied	7,277	14.1	68.1
By Occupation:			
Agriculture	14,929	28.9	15.7
Outside Agriculture	29,488	57.0	13.0
a. Manufacturing	7,547	14.6	23.1
b. Commerce	6,991	13.5	7.7
c. Other	14,950	28.9	10.3

Source: *Census of 1920, Detailed Tables*, Table 36.

It should not be supposed that for this reason they were out of touch with the kinship system. Fourteen per cent were listed as "not occupied" in 1920, most of whom were probably retired parents without sons or living apart from them. The remainder may have included people temporarily absent from home, perhaps even some of the household heads who were not enumerated with their families. By their livelihood they do not appear to have been a very representative group, for most were spread through miscellaneous occupations outside of agriculture, but were rarely found among farmers. Only one-fifth were women, still fewer among those who were self-supporting.

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592 Without more knowledge about these people there is little that can be done except to remark on their numbers, and perhaps to entertain suspicions that many of them were counted apart from familial households due to arbitrary application of census rules, when they actually were more closely affiliated with some group of relatives. Having the information in Table 49, however, we can separate these relatively isolated individuals from those who *were* living in constant association with other household members, and thereby gain a better picture of the patterns that arose from this association. This is the meaning that will be given to "co-resident" households in the subsequent discussion.

The Composition of Co-Resident Households

The average number of persons living together in all "co-resident" households was larger than the figures in Table 46 above.[11] The average size of purely family households was almost the same—"outsiders" were so few that their total number was scarcely noticeable in the figures for households of all types together (see Table 50). But the composition of all households resembled that of purely family households only because nearly all were of the latter type. Mixed households, considered by themselves, were distinguished by more than simply the presence of "outsiders." On the average they also had more members who were family relatives (see the last column in Table 50). Being larger in both categories brought their average total size up to 8.1 persons, as compared with 5.7 in purely family households. Outsiders thus were not incorporated into families of the usual sort, but into families that were already exceptional for their large size. In addition, these non-relatives were actually more of a group to be reckoned with than it first appeared; they were distributed so unevenly that they formed a considerable part of the households where they were found.[12]

The picture of membership for all households was dominated in a similar manner by those households with the head actively employed. Since most fell into this category, the figures for all households in Table 46 or Table 50 are little more than a representation of those whose heads had some occupation. The case was the same

[11] The 1920 census was the only one that allows this distinction to be made. Therefore, when comparisons are to be drawn between 1920 and 1930, these "single-person households" must be restored.

[12] Some "outsiders" formed households that were nothing but business enterprises, usually small handicraft establishments, with no nucleus of family members. Most, however, were incorporated into households already organized as family units.

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TABLE 50.

COMPOSITION OF TAIWANESE HOUSEHOLDS—TOTAL, HEAD OCCUPIED AND HEAD NOT OCCUPIED, 1920

Average Persons per Household, by Position in Household, Type of Household, and Sex. (Persons Living Alone Are Excluded)*

	Households of All types			*Purely Family Households*			*Mixed Households*		
	Both Sexes	*Males*	*Females*	*Both Sexes*	*Males*	*Females*	*Both Sexes*	*Males*	*Females*
1. All Households									
All Members	5.8	3.0	2.9	5.7	2.9	2.8	8.1	4.5	3.7
Head	1.0	0.9	0.1	1.0	0.9	0.1	1.0	0.9	0.1
Relatives	4.7	2.0	2.7	4.7	2.0	2.7	5.6	2.4	3.2
Others	0.1	0.1	0.0	—	—	—	1.6	1.2	0.4
2. Households with Head Occupied									
All Members	5.9	3.0	2.9	5.8	2.9	2.8	8.1	4.5	3.6
Head	1.0	0.9	0.1	1.0	0.9	0.1	1.0	0.9	0.1
Relatives	4.8	2.0	2.8	4.8	2.0	2.7	5.6	2.4	3.2
Others	0.1	0.1	0.0	—	—	—	1.6	1.2	0.4
3. Households with Head Not Occupied									
All Members	5.3	2.4	2.9	5.1	2.3	2.8	8.1	3.9	4.3
Head	1.0	0.5	0.4	1.0	0.5	0.4	1.0	0.5	0.5
Relatives	4.2	1.8	2.4	4.1	1.8	2.3	5.6	2.4	3.3
Others	0.1	0.1	0.0	—	—	—	1.5	1.0	0.5

* Rounding makes some figures fail to add up to the totals that are shown.
Source: From *Census of 1920, Detailed Tables*, Table 36.

for both the purely family and the mixed units. Where the head was *not* occupied, however, there were certain differences. For one thing, these had more females and fewer males. In purely family households, this shortage of males made the average total size smaller than in those where the head was employed (see Table 51). Mixed households with the head not occupied, which also had higher proportions of females, were as large as they were elsewhere; but here the deficiency of males for some reason was made up by non-family members. For example, almost half of the domestic servants (male and female) found in all Taiwanese households appeared in those whose heads were not occupied—they averaged more than one for every three households.

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TABLE 51

COMPOSITION OF TAIWANESE HOUSEHOLDS, BY OCCUPATION OF HEAD, 1920

Average Persons per Household, According to Position in Household, Taiwanese Households Only. Persons Living Alone Are Excluded. Total, Both Sexes*

	Households of All Types	*Purely Family Households*	*Mixed Households*
1. Head Occupied in Agriculture			
All Members	6.3	6.1	9.3
Head	1.0	1.0	1.0
Relatives	5.3	5.1	7.0
Others	0.1	—	1.3
2. Head Occupied Outside Agriculture			
All Members	5.1	4.9	6.6
Head	1.0	1.0	1.0
Relatives	3.9	3.9	3.7
Others	0.2	—	1.9
3. Head Occupied in Manufacturing			
All Members	4.9	4.7	6.5
Head	1.0	1.0	1.0
Relatives	3.7	3.7	3.5
Others	0.2	—	2.1
4. Head Occupied in Commerce			
All Members	5.6	5.3	7.0
Head	1.0	1.0	1.0
Relatives	4.3	4.3	4.0
Others	0.3	—	2.0
5. Head Occupied Elsewhere Outside Agriculture			
All Members	4.9	4.8	6.0
Head	1.0	1.0	1.0
Relatives	3.8	3.8	3.3
Others	0.1	—	1.7

* Rounding makes some figures fail to add up to the totals that are shown.
Source: From *Census of 1920, Detailed Tables*, Table 36.

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Just as in many other instances, the greatest contrast among those with head occupied was that between farming and non-farming households. Those directly dependent on agriculture averaged over six persons each, larger than the rest. The greater part of farming households, however, were purely family establishments (cf. Table 47, above), which did not exceed other familial households in size by any large margin. Many of the largest families, therefore, must have been concentrated in that portion of farming households in which outsiders were mixed with family members, which reached an average size of 9.3 persons each. Agriculture thus provided the most favorable setting for realizing the goal of extended and joint families, although one suspects that large farming households may have been partly due to lack of employment opportunities elsewhere.

But though large families and the presence of non-family members tended to go together in Taiwanese agriculture, the opposite was true in most other parts of the society. Mixed households outside of agriculture were actually *smaller* as family groups than their counterparts consisting of family members only. At the same time, mixed households outside agriculture had substantially more outsiders than mixed farming households. While the mixed households in agriculture were large by virtue of the cohesion provided by family ties, they were larger outside of agriculture in spite of it.

Whatever weakening of one's own familial connections was associated with working or living in the household of someone else, it was not equally available to persons of both sexes. The Chinese family system makes little provision for women to live away from the family of either their parents or their husbands, and in Taiwan hardly any of them did so.[13] There were few women anywhere in Taiwan living in households where they were unrelated to the head—less than one per cent of all those counted in 1920 (see Table 52). The fraction that lived in quasi-households was negligible. Though men were also limited in their opportunities for individual achievement unencumbered by family obligations, such restrictions were nearly unavoidable in the case of women. Even in those households shown in Table 50 and in Table 51 that did contain some outsiders—i.e., the mixed households—less than one-fifth of the women were

[13] Many of these women must have been merely the wives of men who were staying in the households of others. Most of the non-related women in mixed households were in the ambiguous category of "lodgers," which leaves us without any clear indication of the circumstances of their position.

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TABLE 52

"OUTSIDERS" IN TAIWANESE HOUSEHOLDS, 1920

592 Per Cent of All Members Who Were Not Relatives of the Head, by Sex, and by Occupation of Head.

(Heads of Households Are Included, Persons Living Alone Excluded)

	Males	*Females*
A. Households of All Types		
All Households	2.6	0.9
Households with Head Occupied	2.7	0.8
Households with Head Not Occupied	2.5	1.1
Head Occupied in Agriculture	1.8	0.5
Head Occupied Outside Agriculture	4.8	1.7
Manufacturing	7.4	2.2
Commerce	7.3	2.7
Other	2.1	1.1
B. Mixed Households		
All Households	26.8	10.3
Households with Head Occupied	27.0	10.0
Households with Head Not Occupied	25.2	12.3
Head Occupied in Agriculture	21.0	6.2
Head Occupied Outside Agriculture	37.1	18.1
Manufacturing	40.5	17.4
Commerce	36.0	17.3
Other	34.2	20.4

Source: From *Census of 1920, Detailed Tables*, Table 36.

not family members, whereas outsiders usually were at least twice as frequent among the men.

Participation by Women in Household Roles

592 562 The Chinese are notable in not allotting to women a status of any particular prominence or responsibility in the society at large. As a result, their participation in non-familial activities is very restricted, and the evidence of previous chapters has not often shown them to be engaged in affairs outside of their family groups. Since they are not found anywhere else, it is of some interest to discover what is possible about the position of women in the household.

Significantly, in the households of various types shown here, women were distributed almost everywhere in about the same pro-

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TABLE 53

PROPORTIONS OF FEMALES IN TAIWANESE HOUSEHOLDS, 1920

By Type of Household and Occupation of Head

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	Households of All Types	*Purely Family Households*	*Mixed Households*
A. Per Cent Female:			
Family Members*			
All Households	49.6	49.6	50.1
Households with Head Occupied	49.0	49.0	49.3
Households with Head Not Occupied	54.7	54.6	56.4
Head Occupied in Agriculture†	49.0	48.9	50.2
Head Occupied Outside Agriculture	49.1	49.3	47.3
a. Manufacturing	50.0	50.4	46.9
b. Commerce	49.4	49.6	47.9
c. Other	48.5	48.6	46.6
B. Per Cent Female:			
Head of Household			
All Households	11.2	11.3	10.6
Households with Head Occupied	7.1	7.2	6.5
Households with Head Not Occupied	45.1	45.1	45.7
Head Occupied in Agriculture†	7.4	7.3	7.3
Head Occupied Outside Agriculture	6.4	6.5	5.5
a. Manufacturing	12.8	13.5	7.5
b. Commerce	3.8	3.7	4.3
c. Other	4.6	4.6	4.8

* The head of the household is included as a family member.
† Includes Forestry.
Source: From *Census of 1920, Detailed Tables*, Table 36.

portion to men (see Table 53). Slightly less than half of the membership of most households was female, and it made almost no difference what was the family's source of support.[14] Despite the association between sex composition and household size found in Table 48, the degree of subordination of women apparently did not vary as between any of the principal lines of employment—women did not gain their positions in Taiwanese households through independent achievement, but chiefly through their attachment to men.

[14] The proportions of *all* household residents who were women is not shown in Table 55. Since women were nearly all members of the family, their percentages among *family* members is practically the same thing, except in mixed households.

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592 562 This uniformity was due in large measure to the fact that almost all women were members of their households by virtue of kinship, and hardly any of them stayed as non-relatives in the families of others. True, slightly over 20 per cent of all persons who were counted as outsiders were women; but this still did not amount to a large *number*, and it has already been pointed out that many must have been wives or children of men in this status.

Though on the average they were found in nearly equal numbers with men, there is no chance that women occupied the same positions in their families. Chinese ideas of propriety in behavior are never more consistent than in creating a distinction in familial roles based on a person's sex. The patriarchal ideal of authority in Taiwanese families is illustrated by the infrequency with which women became heads of households. Among those of the household heads who were employed (that is, practically all of them), men exceeded women by nine to one; in all but seven per cent of these households it was reported that the affairs were managed by men. In the minority of families where the head was not employed, this responsibility fell almost as often on women as on men—45 per cent of these households were managed by women. The only way for most women to accede to this position was through the death of their husbands. Therefore the concentration of female heads of households among the households with no apparent source of family support most likely represents those widows who were not taken in by their husbands' relatives.

Family Membership and Employment

592 464 Questions of livelihood, which are important to all peoples, are treated with a particular seriousness by Chinese. They are usually regarded as questions of household management, and thereby become closely interlocked with the ideas and values of the family system itself. When this happens, a large part of a society's economic life is likely to be sealed up in self-sufficient family units, and to lack the aspect of inter-dependence that characterizes the activities of individuals in the industrial regions of the world.

The households of Taiwan were the scene of most of the effort that went into providing support for the population, and hence are the most appropriate place to look for traces of its organization. A good indication of the contribution to household support in different classes of households is given by the extent of regular work by

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male residents. The work of women may have been equally important; but the indices for assessing it have the same shortcomings in making such comparisons that they had in measurement of the labor force—female labor was almost entirely contained within household units, and the census statistics do not represent it accurately at all, but only the willingness to acknowledge and report it as such.

Work by men was looked upon more readily as maintaining the household in relation to the external society, despite a similar tendency for it to be in actuality an internal matter. Male family members seemed to have regular employment in almost the same proportion regardless of the occupation of the head of the household. Slightly over 60 per cent of them reported some occupation in 1920 if the head is counted. This, of course, is only what is implied by the findings in earlier chapters, for the figure is close to that fraction of the entire male population in working ages. Although the average size of family varied among different groups, the share of family members' services taken by full-time work did not. The one exception to this rule large enough to appear in Table 54 occurred in families engaged in commerce, which for some reason held more non-employed men than families in any other non-agricultural type of work.[18] But if leisure was supported to any appreciable extent in Taiwanese families, there is little sign that it was concentrated in any particular field of livelihood.

It will make the comparison more complete if we also adopt an alternative view of dependency. Since in households with head occupied the head by definition cannot be a dependent, it is only fair to compare family members in commercial and other households after the family heads are excluded. The remaining males are the ones whose conduct is subordinate to the authority of the head, and who represent the part of the population most likely to have leisure status where a family's wealth will permit. It would appear that farming families, which had more of these subordinate members to support, put their services to much greater use. Only 35.5 per cent of subordinate males in commercial households reported employment in 1920 (35.9 per cent in purely family households). Other families tended to be distributed in between (see the columns "Excluding Head" in Section B, Table 54).

[18] Whatever the explanation for this peculiarity, it stemmed from an unusually *large* number of non-occupied men rather than abnormally *few* who had an occupation, since commercial families were uncommonly large in every respect as compared with other non-agricultural households.

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Families with unoccupied heads, which in several respects formed a class by themselves, were not so distinct when it came to employing their subordinate male family members. When the head is included in the computation, the fact that he (or she) was not occupied gives an appearance of dependency far greater than that found anywhere else in the population. Excluding the head (in Table 54) reveals that more of the remaining family members were employed than in any other field of livelihood except agriculture. Unfortunately there is no way of knowing what sorts of work they did; if

TABLE 54

EMPLOYMENT AND DEPENDENCY IN TAIWANESE HOUSEHOLDS, 1920

Male Family Members Who Reported a Regular Occupation, and Those Who Reported None, by Type of Household

A. Average Male Family Members Per Household, Occupied and Dependent†	*Households of All Types*	*Purely Family Households*	*Mixed Households*
All Households			
a. Occupied	1.74*	1.74*	1.84*
b. Dependent	1.15	1.13	1.43
Households with Head Occupied			
a. Occupied	1.85	1.84	1.96
b. Dependent	1.11	1.09	1.36
Households with Head Not Occupied			
a. Occupied	0.86	0.86	0.85
b. Dependent	1.49	1.46	2.04
Head Occupied in Agriculture‡			
a. Occupied	2.01	1.99	2.32
b. Dependent	1.18	1.15	1.66
Head Occupied Outside Agriculture			
a. Occupied	1.52	1.53	1.48
b. Dependent	0.97	0.97	0.97
Head Occupied in Manufacturing			
a. Occupied	1.46	1.45	1.47
b. Dependent	0.89	0.89	0.90
Head Occupied in Commerce			
a. Occupied	1.56	1.55	1.49
b. Dependent	1.11	1.11	1.13
Head Occupied in Other Non-Agricultural Occupation			
a. Occupied	1.54	1.54	1.47
b. Dependent	0.93	0.94	0.81

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TABLE 54 (continued)

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B. Per Cent of Male Family Members Occupied	Households of All Types		Purely Family Households		Mixed Households	
	Including Head	Excluding Head	Including Head	Excluding Head	Including Head	Excluding Head
All Households	60.2	45.8	60.6	46.1	56.3	42.4
Households with Head Occupied	62.5	45.6	62.8	45.8	59.0	43.1
Households with Head Not Occupied	36.6	47.7	37.2	48.7	29.5	36.2
Head Occupied in Agriculture	63.0	48.0	63.4	48.2	58.3	45.7
Head Occupied Outside Agr.	61.2	38.4	61.3	38.6	60.4	36.4
Manufacturing	62.0	40.0	62.0	40.2	61.9	38.4
Commerce	58.4	35.5	58.7	35.9	57.0	33.0
Other	62.3	39.3	62.2	39.3	64.5	40.3

* Household heads with no occupation are of course not included. All figures of average persons per household have been rounded, and sometimes will not add to the totals that are shown in other tables; they also will not always produce the exact percentages shown in the lower section of this table.

† "Dependent" refers to persons reporting no occupation in the census.

‡ "Agriculture" includes Forestry.

Source: From *Census of 1920, Detailed Tables*, Table 36.

many of the unoccupied heads were widows who had not re-married, it may be surmised that these households probably had representatives in most occupational groups.

But the most pervasive distinction in engaging in work or leisure within families appeared in those that incorporated outsiders to assist in the work of the household—the mixed households—which made less use of labor by family members than households consisting of family members only. In all but one of the occupational classes of Table 54, employment was less common among members of the families living in mixed households, whether the heads are counted or not. Households with heads not occupied were no exception. Even their subordinate male family members were put to work less often—when not dependent solely on their own resources of manpower, such families supported the greatest amount of leisure that can be found in any of these groups.

Differences of Occupational Status

The variation that these data show in the composition of family groups was recorded at a date before any strong force of Japanese

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•592 554 government policy could have been felt in this sphere, and so it must have been a pattern of long standing among the Taiwanese. Though there is no way of knowing how much the variation amounted to between individual families, between various sources of livelihood it was of a very restricted nature. One of the principal features of the Chinese social order, however, is that there has been very little variation in the general notions that people in different stations hold about what forms of conduct are *desirable*—the standards of behavior within one's family, or with members of related families, have been remarkably similar from group to group, whether or not these ideals are completely fulfilled in fact. It has also been characteristic of this system through many historic periods that it has not given rise to rigid status and class distinctions that became hereditary and remained fixed over time. The commonest sources of prestige have been associated with symbols that leave some room for personal achievements, and not simply privileged birth, in their attainment—the adoption of genteel as apart from vulgar pursuits, a highly esteemed and arduous classical education, and observance of traditional forms of ritual that are inappropriate to commonplace affairs. Wealth, in almost any form of livelihood, has conferred a capacity (e.g., through leisure) to practice these ideals, in many ways that poverty denied to the greatest part of the society.

Status distinctions of this sort are lines that cut across most if not 592 all of the occupational divisions recognized in Japanese censu·· practice, though they obviously were present in some more than others 463 (commerce or government service, for example, more than agriculture or fishing). There are further resources, however, to use in finding out the extent of variation within occupations. In the one master 554 table published with the census of 1920, households were also classified by three additional categories of "occupational status"—"Owners" or "Independent Workers;" "Officials," and "Laborers."[14] Each household, if the head was occupied, was assigned to one of these groups as well as to a regular occupation, so as to specify more fully the nature of the head's position. The classification is limited in value, for it is not certain that the terms signify anything that is

[14] The English terms are only approximations of the meaning in Japanese. The sense of "Independents" (*Yeh-chu* in the Chinese reading of the term) really is closer to the notion of "master" of an enterprise, somewhat like the term "self-employed" in Western census practice. "Officials" (*Yi-yüen* in Chinese, where it means a lowly and subordinate position) has an honorific connotation in Japanese. "Laborer" (read *Lao-wu* in Chinese) is relatively unambiguous, though it is not clear what line divides it from the others.

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consistent from one occupation to another. In agriculture, a person apparently was "independent" if he actually operated a farm (without distinction between landlords and others), and "laborer" if simply working for another. Agricultural occupations had hardly any positions that could be designated as "officials"; practically all of these were found as government officials or professionals of some kind. These terms are so vague that it is useless to be distressed over what they do not reveal. The service they *do* perform is to separate, within each broad occupational class, the more from the less successful families ("independent" as opposed to "laborers," based on the fortunes of the household head), and to distinguish a few of the cases that do not easily fall in either of these (the "officials," wherever they occurred).

The households of "laborers," in each of the main classes of occupations, were on the average smaller than those in the same occupations that were more prosperous, and smaller even than those of "officials" (see Table 55). The more prosperous ("independent") households were consistently larger than either of the others, whether they were composed solely of family members or included outsiders.[17] Mixed households of "independent" heads were the largest of all, and had smaller proportions of outsiders than mixed households of the two other "status" groups. In other words, the wealthier mixed households exceeded the lesser ones in the same manner that had marked the difference between mixed households and those composed of family relatives only—chiefly through the extension of their families rather than the incorporation of outsiders. Not merely in the families of farmers, but within any occupational category, the households of the well-to-do were larger than those of the poorer portions of the population and in this same pattern.

Households whose heads were "independently" employed had the smallest proportions of their male family members engaged in full-time work. But while leisure, as measured by this standard, was especially common in "independent" households whether outsiders were present or not, it was greater in mixed households of this group

[17] Here, as before, persons living alone ("single-person households") have been excluded, and Table 55 represents co-resident households only. Therefore the actual number of persons per household is less important (e.g., for comparison with later dates in Taiwan or with other data), than the pattern of variation from group to group in Table 55. It happens in this case that most of the single-person households were of the "laborer" group, and so would make the contrast between the two more pronounced if included, by giving the "laborers" a still-smaller figure for average household size.

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TABLE 55

AVERAGE SIZE OF HOUSEHOLD AND EXTENT OF MALE EMPLOYMENT IN FAMILIES CLASSIFIED BY "OCCUPATIONAL STATUS," 1920

By Occupation of Head and Type of Household

	Number of Households	*Households of All Types*	*Purely Family Households*	*Mixed Households*
A. Average Persons per Household, both Sexes, by Occupation of Head.				
All Occupations				
a. Independents*	388,635	6.4	6.2	8.7
b. Laborers	128,768	4.4	4.4	5.4
c. Officials	1,462	4.9	4.6	5.8
Agriculture				
a. Independents	309,158	6.6	6.4	9.5
b. Laborers	41,314	4.2	4.2	5.5
Outside Agriculture				
a. Independents	79,477	5.7	5.5	7.1
b. Laborers	87,454	4.5	4.5	5.3
B. Per Cent of Male Family Members Who Reported an Occupation				
All Occupations				
a. Independents		62.0	62.3	57.9
b. Laborers		65.1	65.0	69.2
c. Officials		54.0	52.5	60.9
Agriculture				
a. Independents		62.6	63.0	58.1
b. Laborers		67.6	67.6	65.2
Outside Agriculture				
a. Independents		58.8	59.0	57.3
b. Laborers		64.0	63.7	70.0

* For an explanation of the meaning of these terms, see text.
Source: From *Census of 1920, Detailed Tables*, Table 36.

than anywhere else (see Table 55, Section B). Apparently these more prosperous households also took in outsiders for different purposes. Though not shown in Table 55, the non-relatives in "laborers'" households were chiefly "lodgers" (whatever might be included under this term); the ones in "independent" households were mostly

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listed as employees, who allowed family members to be released from regular work.

Changes Between 1920 and 1930

The decade between 1920 and 1930 produced little change in household or family structure as far as size or other observable features were concerned (see Table 46, above). Families on the average became slightly larger than before, but chiefly by additions to their dependent children and possibly older relatives. When the data for 1920 are put back into terms appropriate for comparison with 1930 (that is, by replacing the single-person households in the computation of averages), it appears that the growth of households was distributed almost uniformly in different portions of the population—it is necessary merely to add the figure of about 4/10 to the average size of households in each major occupational group in 1920 to approximate the size found in that group in 1930. The tables showing household composition were much abridged in 1930, and permit only restricted comparison. In many of the features already used to describe their structure in 1920, however, households in 1930 were practically the same. They were made up almost entirely of family relatives; and presumably the contrasts between mixed and purely family households were unaltered. The same uniformity in sex composition prevailed among the various classes of occupations, with the same exception in the case of households with non-occupied heads. Since these data contribute nothing to the discussion, they have not been reproduced here.

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There is more to be gained by comparing economic activities of family members. The burden of dependency was on the average slightly increased between 1920 and 1930, as we have seen (Table 46, above). By 1930, households representing all the main sources of support (i.e., occupations of heads) had smaller proportions of male family members occupied than 10 years before.[18]

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Agricultural households seemed to share less in this rise of family dependency than others (see Table 56). In part the divergence may be because peasant agriculture is better able to provide a secure livelihood for many who could not find steady employment elsewhere—especially young boys and older men. We have found, in

[18] How the added burden was shared between households of only family and mixed households cannot be ascertained, though the similarity of other patterns leads one to presume that this one remained nearly the same as in 1920. This was one of the items of detail omitted in publication of the 1930 census.

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TABLE 56

CHANGES IN THE EXTENT OF MALE EMPLOYMENT IN TAIWANESE FAMILIES 1920 TO 1930

(Persons Living Alone Are Included)

	Per Cent of Male Family Members Occupied, Including Head	
	1920	*1930*
All Households	61.0	56.9
Households with Head Occupied	63.4	59.6
Households with Head Not Occupied	36.6	36.6
Head Occupied in Agriculture*	63.4	60.0
Head Occupied Outside Agriculture*	63.4	58.5

* The remaining occupational groups are not shown for comparison here, because the tables published in 1930 followed a different scheme of classification for households—according to the "*industry*" of the heads. The category "Agriculture" has been made comparable in 1930 by taking those engaged in "Cultivation" only. (A special table published in 1930 shows that almost everyone in this category was also classified as having an agricultural "occupation"; workers in "Forestry," of course, are not included.) The group with head "Not Occupied" is the same in both occupational and industrial classifications.

Source: From *Census of 1930, Statistical Tables, Total Island*, Table 5. Data for 1920 from preceding tables.

Chapter IV, that agriculture in Taiwan exerted its greatest attraction compared with other occupations for men of these ages. Thus men of these borderline ages probably were reported as employed in agriculture, and as dependents elsewhere, and some of this divergence may be simply a difference of standards rather than of work that was performed. But farming families had more use for the services of these people (and of those with physical disabilities); it is possible that the greater readiness to recognize these services—of women as well as of men—reflects their actual importance in contributing to the support of their households.

This apparent trend toward creating a gap between agriculture and other parts of the society was not a very impressive one. It is worthy of attention chiefly because it stands alone; there are no other new patterns of dependency to be found between 1920 and 1930, since the other occupational categories cannot be matched at both dates. And, more important, insofar as there was a leisured group or class among Taiwanese, it was still not to any marked extent occupationally aligned.

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Work Within the Household

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People's working activities play a part in familial life that is larger than merely the support that they provide. Since they are ordinarily not carried on in isolation, these activities supply one of the connections between the family and the remainder of the society. In industrial countries they sometimes appear to dominate this connection, and have become one of the criteria that fix a person's station in society. In agrarian countries it tends to be the other way around; the working roles of most adults are carried on as adjuncts to their other familial roles, and depend on kinship obligations for coordination. This, for example, is almost completely the case in household enterprises, and holds true in varying degrees for such wider market transactions that exist.

In Taiwan, the productive effort of most people was in fact confined to work pursued in cooperation with other family members and organized as household duties. This has already been demonstrated in a negative way as far as women were concerned—the occupational statistics, in failing to show very much about the work of women, do confirm that they were scarcely ever employed outside of their households. In household enterprises—and practically all farming was conducted on this basis—the head of the household was almost automatically the chief participant. However, since the statistics give no positive answer in the case of women or household heads, it is in the activities of subordinate male family members who were employed that we have the best indication of the concentration of work within households, and of its variation in different sections of the society.

Except for the minority counted as "employees," these remaining men were the ones with most opportunity to find work unrestricted (or unaided) by their kinship affiliations—i.e., in something that might approach a "labor market." Yet as late as 1930, over two-thirds of the Taiwanese men in this group still pursued their occupations in the households of their own families (see Table 57). In reality their labor was even more family-centered than this. In the large majority of households the head had some occupation, and there 76.1 per cent of all occupied male family members worked in the same enterprise. The remaining household heads had no occupation themselves, and hence did not operate family enterprises that could claim the services of men in their families. Most of the men in these fam-

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TABLE 57

CONCENTRATION OF EMPLOYMENT WITHIN HOUSEHOLDS, 1930
Per Cent of "Subordinate" Male Family Members
(i.e., Excluding the Household Head) Who Were
Employed Within Their Households
(Taiwanese Households Only, Including Persons Living Alone)

	Per Cent of Employed "Subordinate" Male Family Members Whose Employment Was Inside Their Household
All Households	68.2
Households with Head Occupied	76.1
Households with Head Not Occupied	21.6
Head Occupied in Agriculture*	87.3
Head Occupied Outside Agriculture	34.2
Manufacturing	33.1
Commerce	42.2
Other	26.3

* See note to preceding table.
Source: From *Census of 1930, Statistical Tables, Total Island*, Table 5.

ilies who were occupied found employment outside—only 21.6 per cent of them carried on their work in the family.[19]

Among those households with heads occupied, there were differences just as great between the fields of livelihood that provided support for the households. Farming families kept 87.3 per cent of their subordinate working males occupied at home. It was their numerical weight in the population that made the figure for all occupations so high—in non-agricultural households it was only one-third (see Table 57). The influence of the more modern parts of the economy is indicated by the fact that families engaged in these fields had the greatest proportion of working-out among their eligible men.[20] Of the non-agricultural categories of occupation shown in Table 57, the commercial households came the closest to conforming to the norm exemplified in agriculture.

[19] Literally, the data of Table 57 refer to those working in the "same occupation or same enterprise" as the head of the household. The meaning is not so broad as the literal translation might suggest, because "same occupation" did not mean merely "also in agriculture" or "also in commerce" or some other large category. It means the same type of work in considerable detail—"also a butcher" or "also a bean-curd maker," for example. In nearly every case it probably meant work in the same family enterprise.

[20] Of course, many who worked out may have gone to work for relatives, and still did not enter the labor market.

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Of interest for the sake of comparison are the corresponding data illustrating the variation between different parts of the island (Table 58). In most of the individual Prefectures there were only minor differences in the extent to which employed men in all families (excluding the heads) performed their work at home. The most populous sections seemed uniform in the proportion that were so en-

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TABLE 58

CONCENTRATION OF EMPLOYMENT WITHIN HOUSEHOLDS: VARIATION BETWEEN PREFECTURES OF TAIWAN, 1930

Per Cent of Employed "Subordinate" Male Family Members Whose Employment Was Inside Their Households

Name of Prefecture	*All Households*	*Households With Head Occupied*	*Head Occupied in Agriculture**	*Head Occupied Outside Agriculture*	*Head Reporting No Occupation*
Taipei	50.4	59.6	81.8	21.4	10.5
Hsinchu	72.3	79.5	88.5	34.3	19.7
Taichung	71.0	79.1	88.3	36.5	25.6
Tainan	71.6	79.5	88.6	41.6	25.7
Kaohsiung	72.2	78.4	85.7	45.9	26.5
Taitung	95.1	95.8	97.6	52.0	69.9
Hualien	82.5	85.0	91.8	30.5	34.1
P'enghu	64.5	64.5	75.1	54.8	30.7
Total Island	68.2	76.1	87.3	34.2	21.6

* See footnote for Table 56.

Source: From *Census of 1930, Statistical Tables*, by Prefecture (respective Prefectural volumes), Table 5.

gaged; the deviations in the two Prefectures on the East Coast (where hardly anyone worked outside of his household), and in P'enghu Islands, did not affect many people. Taipei Prefecture was the significant exception to the rule, for it was the only place with considerable numbers of male workers occupied in extra-familial pursuits.

The more detailed columns of Table 58 help to clarify the source of the variation. As the site of the capital city and administrative center of the island, and the portion in which Japanese concentrated their efforts in developing modern conveniences and comforts, Taipei had even before 1930 gained many features of distinction over the rest of the island. It was at this time the transportation hub (built around shipping from the port of Chilung, which later de-

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596 464 clined), the home of one-third of all Japanese, the location of the better educational facilities, the commercial area of most importance for trade in other than farm products, and of course the center of most large government and business offices. Taipei Prefecture, therefore, had proceeded farthest in the spread of non-agricultural activities in its population. Even though a substantial group in this population does not appear in these tables because they were Japanese, the effect of their presence is evident in the way that non-farming occupations were conducted by Taiwanese—all but 21 per cent of the men in such work (excepting the heads of households and people staying in the households of others) were employed away from their families, a proportion less than any other Prefecture and only half the figure in some. Agriculture was much less affected by the unusual character of other pursuits, but it did not go untouched. Though most farmers in Taipei did their work in their own households, they fell somewhat below the mark set by the rest of the agricultural population.[21]

Significantly, in all of the other Prefectures (except P'enghu, which was not of much account in size), agricultural households were nearly uniform in the degree to which they retained the use of services by subordinate men in their families—close to 90 per cent of the men in this category who lived with their families.[22] The principal differences from one Prefecture to another when all households are considered at once, therefore, must have arisen from the prevalence and the mode of organization in activities *outside* of agriculture, for they practically disappear when farming households alone are compared.

592 596 There can be little doubt that the family system, through its weight in the conduct of household affairs, has furnished the most important social setting for behavior of the Taiwanese. We have not only the testimony of Chinese tradition to support this conclusion, but the corroboration of statistical evidence as well. Practically everyone was a member of some familial household—most were related by

[21] Taipei was the site of tea plantations, which, through a greater use of wage labor, may have been responsible for the deviation from the pattern elsewhere in the island. A plantation might employ men (and actually did employ many women) on a more or less regular basis from several farming households, and leave their services free at some seasons of the year for work in their own fields.

[22] Naturally this does not include those who had left home to enter some other occupation; these would appear as outsiders in some other households or as persons living alone, perhaps in some cases as separate families.

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kinship, and those who were not, the "outsiders," generally owed their membership to the work that they performed in the families of others. In addition, many strong obligations were observed among people who were related but not living together in the same household. So in reality the significance of the family system was wider than can be adequately conveyed by the facts of this chapter; it extended beyond the bounds of kinship, in its application to non-related household residents, and beyond the limits of individual households, in governing the intercourse between related families.

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As for those Taiwanese who lived in their own familial households, the best-documented of all their activities is the work that they performed. The extent of male employment in these family groups showed no large differences as between the major classes of occupations. But leisure, as judged by the abstention from regular work, was apparently more widespread in families of greater affluence, regardless of their particular source of support. And their households were also the ones that made the most use of services of non-family members, which was one of the ways of making leisure possible.

It is significant that the work of most men was carried on in household enterprises inside their own families. In a sense this was a fulfillment of traditional exhortations that families should be self-sufficient, but a great deal more was involved at the same time. A society which is family-centered in most respects cannot afford to make very far-reaching exceptions in the case of economic activities: since employment, if it occurs outside of the household, is a possible avenue for a person to advance in social position independently of family influence, it also is potentially a competing source of loyalty. In this and various other ways, the stability of the social order was buttressed by the force of its own organization as well as through the support of its moral precepts, by making it difficult for people to by-pass the family system in pursuit of their self-interest.

Though the span of observation is short and confined to a relatively early period in Taiwan, the facts betray no remarkable sign of yielding in this household structure. And changes that did not alter this fundamental pattern could not amount to very much. The failure of "colonial development" to be a clearcut departure from the past among Taiwanese should be attributed very largely to the stability of their familial institutions.

584 for the perpetuation of the family was the prime
596 motive for matrimony. Very often people married without knowing each other previously. Since to marry was to bring forth a new generation, concubinage for the purpose of procreation was not frowned upon. Where there were no sons in the family, adoption of the children of close relatives or friends was encouraged. As Mencius taught: There are three things which are unfilial, and to have no heirs is the greatest of them.

Although the extended family was pre-
596 dominant in pre-Japanese Formosan society, no
593 familial relationship was closer than that found among the members of a nuclear family. In an extended family, a father might have a tight control over his married sons, but he would grow old and his sons' attentions and affections would revolve around their wives and their children.

Within a nuclear family the father-son relationship was said to be the closest.[3] A son

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3. Shoji Yamanaka, "Rigen ni arawareta Taiwan oyobi Shina no kazoku seikatsu," ["Family Life in Taiwan and China as Expressed in Sayings and Proverbs"], Taiwan bunka ronso, Vol. II, [Symposium of the Culture of Taiwan], Taihoku, Shimizu shoten, 1943, pp. 1-107.

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593 never exposed his father's mistakes or misdemeanors. A close bilateral dependence between father and son among the poor families and unilateral dependence of son upon father in rich families were the rule generally. The father was expected to exercise disciplinary power over his sons, and the mother was to care for and love them. Often a boy relied on his father's reputation to establish himself in a new situation. When a parent died, the son was charged with responsibility for the funeral rites, the selection of a grave site, the maintenance of the grave, and periodic sacrifices at the ancestral shrine. Ritual obligations functioned not only as a medium for the continuation of the reciprocal parent-child relationship, but also as a means of validating one's position in the community.[4] The father-daughter relationship was formal and temporary. Poor people preferred not to have girl babies because female children would be dependent upon the parents for sustenance during their early years and upon maturity would marry and join other families. However, the daughter's children always attracted the grand-parents' love and attention.

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4. Morton H. Friend, Fabric of Chinese Society, New York, Praeger, 1953, p. 53.

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593 Brothers were not bound to each other with the same strength each felt for the father. The degree of cohesion was determined by their social and economic circumstances. When it was necessary to protect the family from an enemy without, brothers were considered as close as one's limbs.[5] If there were differences in occupations and economic interests, a division of the family after the death of the father was inevitable. Then each son formed a nuclear or joint family for himself, and brothers became mere neighbors. But such instances were rare. Many factors bound together the nuclear units, making the typical family grouping extended and inclusive.

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411 The social function of the extended family was as a unit for self-protection against possible attack by aborigines, bandits, enemy clans, and criminals. For defense against so many enemies, village and clan members united, but the extended family was the basic defense unit. In well-to-do families there were stores of rifles, spears, and other weapons. Even today, gun loopholes can be found in the outer walls of some old houses.[6]

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5. Yamanaka, loc, cit.
6. Ibid.

15: U.S. Navy--27 [3] (no date) 1944 Formosans
116, 171, 595

"Marriage customs are generally similar to those prevailing in China. Monogamy is the legal standard and concubinage is discouraged in practice as well as in theory, for few can afford it."

15: U.S. Navy--30 [4] (no date) 1944 Formosans
116, 581, 587, 595, 842

"Too many daughters in a house which cannot employ them to economic advantage are an embarrassment and must be sent out to marriages or to common-law cohabitation or concubinage on a less favorable social basis. It is almost unheard of that a widow or divorcee should remarry."

15: U.S. Navy--30 [5] (no date) 1944 Formosans
116, 595, 597, 581, 591

"If a couple is so unfortunate as to have no male issue they may resort to either or both of two practices. If the husband can afford it, a secondary wife can be taken into the home, whose male offspring will have the full status of heirs and will, in all probability, be reared by the first wife. If a secondary wife is not taken, or if there are no sons of such a union, then adoption is resorted to. The son of another family (never the first son or heir) can be adopted outright or taken as the husband of a daughter of the house. This last arrangement is preferred, for it establishes a blood connection. The new son-in-law assumes the name of his bride's house and may take up residence in it. This arrangement often results in unhappy family situations, for the adopting family is usually in much better economic circumstance than the family of the young man adopted, and he is subject to a sense of accepted social inferiority. There are, however, instances of arrangements between well-to-do friends who wish to link the fortunes of their houses."

15: U.S. Navy--30 [6] (no date) 1944 Formosans
116, 595, 842

"The secondary wife has a legal status little inferior to that of the first wife. If no children are forthcoming from the first marriage, a man is under obligation to provide heirs to continue the worship of his forefathers. Frequently, too, as a woman gets older she is more and more willing that her husband enjoy the comforts and pleasures of younger companionship, and it is not uncommon that a cordial relationship is established among the two wives and the children. Concubinage on the other hand, has a less elevated object in the satisfaction of physical pleasures without the excuse of a need for heirs. Only the upper classes with an income well above average can afford to maintain two households or one establishment big enough to keep wives and concubines happily aloof from one another. Concubines usually have no status in law and can hold no implicit claim against the estate of their master. Concubines are recruited usually from families too poor to overlook a source of ready cash and perhaps other economic favors."

10: Schumacher--225 [4] T-1 (ca. 1896) 1898 Formosans
116, 596, 621

The Chinese live very much secluded by families, even in large towns, and have contact with other family units only through the official mediation of the head of each group concerned.

15: U.S. Navy --26 [6] (no date) 1944 Formosans
116, 741, 596, 177.74 Japanese
636.74

"The Japanese officially list 1,676 organizations or facilities for philanthropic and social welfare work in Taiwan. These include semi-official organizations such as 'Improvement of Village' associations, pawnshops, public markets, and others which under government supervison perform the work which would be financed elsewhere either through the government budget directly or through spontaneous private charity. There is less need for such organizations in a social system which is built on family units in which the individuals share and share alike."

15: U.S. Navy --26 [8] (no date) 1944 Formosans
116, 596, 736, 626, 177.73 Japanese
636.73

"There are social welfare departments in the Government which endeavor to care for persons without support or livelihood. The family system absorbs the majority of such cases, for a moral obligation lies upon the entire family to support and to share with all members. Property and the income from it is held in common. An able-bodied person who shirks his duties and tends to become a charge upon the family is open to reproof by the elders and by the family council. In extreme cases a member may be cut off from the clan in disgrace and so have no further claim upon it.

Those who are ill, the aged and the physically handicapped can claim the same support from the family group. Hence few appear as public charges."

15: U.S. Navy--27 [2] (no date) 1944 Formosans
116, 556, 511, 596

"Among the Formosans there is little outward display although there are several notably wealthy families. The majority of Formosans are impoverished farmers, but the natural richness of the land, the favorable climate, the quality of the soil and the communal nature of the Chinese family system which permits the individual to share equally in the total goods of the family, combine to prevent such great extremes of destitution as are to be found on the China mainland only 90 miles away."

15: U.S. Navy --27 [5] (no date) 1944 Formosans
116, 591, 177, 554, 596

"As a usual thing Formosan-Chinese sons remain at home when they marry, bringing in their wives and rearing their children under the guidance of the eldest member of the family. Hence many individuals make up one family, living in patriarchal style. All members of the family share in the work and in the returns from the land, which is held in joint title. Some wealthy Formosans who have profited by cooperating with the Japanese have, as a matter of policy, added Japanese living quarters to their homes or attempt to live in Japanese fashion."

15: U.S. Navy--28 [10] (no date) 1944 Formosans
116, 592, 596, 369

"Frequently husbands leave their wives and children under the patriarchal roof in the country while they spend the week in towns at some places of business or trade. The wives and older children help care for the farm. Many city households are dependent upon relatives in the country for much of their foodstuff, and there is constant going back and forth."

II. SOCIAL ORGANIZATION

A. Traditional Organizations

596 The village community is the basic unit of folk society. Formosa's original village communities contained the family, the kinship group, and other folk associations.

1. Family and Kinship Group

The family in early Formosa was the so-called extended family or the composite family. It was a cluster of nuclear families living in a large rambling structure or compound consisting of many rooms surrounding courtyards. The head of the family lived in the central section. Each of his sons on marriage was assigned to a separate room according to seniority, designated as "the first chamber," "the second chamber," and so on. Usually each chamber was the center of a nuclear family consisting of husband, wife, and unmarried children. Not infrequently, married sons and daughters-in-law and even grandchildren were included. Generally such a family had common meals and common property, but there were variations. On the breakup of a large family the sons formed independent families, in turn assigning their sons separate chambers. Although divided among themselves, the brothers, their sons and grandsons constituted a kinship group. Thus, the extended family

596 under the family-head and the kinship group under the elder of the clan constituted small integrated kingdoms.

The functioning of the patriarchal and extended family is far from simple. The inheritance of property, troubles between sons or daughters-in-law, the relation between daughter-in-law and mother-in-law or daughter and her brother's wife, all these are very complicated and easily lead to discord and antagonism. However, inspite of this, the members do unite and co-operate in defending their life and common property. Strong authority is bestowed on the house-father to control the family, and patience is taken as the cardinal virtue of the members of the extended family.

After peace and order were established by the Japanese colonial government, consolidation of kinsmen for self-protection lost its raison d'etre. As the system of administration became more complete, the necessity for mutual-aid among kinsfolk gradually diminished. While the older generation valued highly the prosperous family and kinship group, the young people saw no reason why they should sacrifice their individuality and freedom for their ancestors and the extended family. Young people went to big towns and cities as factory workers, clerks, merchants, teachers or professional men,

596 usually bringing their wives and children with them. The proportion of nuclear families has increased with urbanization and industrialization in the past twenty years.

2. Folk Associations

Various Folk Associations: In the
575 pre-modern village community co-operation for mutual aid in making a living was essential, and there were many kinds of associations in response to various social needs. Hitherto specialists on Formosa have focused their attention mainly upon village and family. In fact, folk society attained a fairly high degree of development, and it was much too complex to be managed by blood and locality groups alone. Institutions of social cohesion based on social function or social need was in evidence, and these we will designate as folk associations.

625 There were various associations for the protection of agricultural work. When crops and vegetables were still young or almost ripe, they had to be protected from damage by cattle, hogs or chickens. Usually an association was organized to take care of this. Special persons were appointed to watch over the fields. Every household was notified not to let its animals out, and if any one violated the regulation, he was punished by the association. There were associations for the regulation of

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Annex "A," Subparagraph 1g,
Sociological Background

FAMILY

• 596 Definition of Terms. Family is defined as "a group of people living together as a unit who are related to one another by blood, marriage, or adoption." In the main, it refers to an economic "family," i.e., in addition to the above characteristics, it has both common property and common budget.[1] The terms chia or chia-t'ing, meaning "family" in Mandarin, and ke or tz'u, meaning "family" in Min-nan dialect, seem to afford no distinction between the nuclear family (parents and unmarried children), the stem family (parents and married son), the joint family (parents and married sons), and the extended family (more than two generations, married and kinsmen). An extended family may include several family units of nuclear and stem type and it may also include more than two generations. Similarly, a joint family may include some kinsmen. These terms, to some extent, often correspond with the term "household" (hu in Mandarin and ho in Min-nan dialect) which may include servants, boarders, etc. Thus, the terms are not clearly differentiated. Therefore, whenever possible, families will be referred to as nuclear, stem, joint, or extended, depending upon the criteria given above.

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1. Olga Lang, Chinese Family and Society, New Haven, Yale University Press, 1946, p. 13.

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I. INTRODUCTION

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Familial relationships and sentiments form the most important basis of social fabric and human behavior in Formosa. Precepts as well as structure of the family and kinship groups, with which the society has lived for centuries, exist side by side with ideas and influences of Western institutions. The extended family, which was predominant in the past, is now gradually on the wane as the result of changes brought about by industrialization and the introduction of new social institutions.

With the exception of tribal aborigines, Formosa's society in pre-Japanese times was a transplantation of those which existed in Fukien and northern Kwangtung provinces. With the coming of the Japanese, economic, educational, religious, and political ties that had held together members within villages, clans, and extended families began to crumble. In other words, most of the familial functions were gradually taken over by the state -- the Government-General of Formosa -- and, indirectly, Japan. Since the beginning of the twentieth century, the Formosan Chinese have been exposed to conflicting cultures and have been forced to reconcile the old and new.

596 178 Today, the typical family grouping in the rural areas is that of the extended family; in urban areas, the typical grouping is that of the nuclear or joint family.

II. THE TRADITIONAL FAMILY

596 Ever since the seventeenth century, kinship groups in Formosa have been changing from clans to extended families, and from extended families to joint and nuclear families. Cohesion and functional ties within a clan are no longer strong, and today only the large and extended family remains an arbiter of social behavior.

The traditional family was extended and patriarchal. The ideal was to have a large family, with many generations living under the same roof. A large family was a strength in itself in a society which depended on farming for its livelihood. A popular Formosan saying, "If there are three sons to a man, there will be one thousand in the family within six generations," well expresses the ideal of a large family.[2] The extended family was a

2. Taiwan Government-General, Taiwan rigen shuran [Collection of Taiwan's Maxims and Proverbs], Taihoku, Taihoku kappansha, 1914, p. 138.

596 cluster of nuclear families living in a large rambling structure or compound, with many rooms surrounding a courtyard. The head of the family lived in the central section. Each of his sons upon marriage was assigned to a separate room according to seniority, the eldest son and his wife given "the first chamber," the second son given "the second chamber," and so on. Usually each chamber was the center of a nuclear family consisting of husband, wife, and unmarried children. Often married sons and daughters-in-law and even grandchildren were included. Generally such an extended family shared common meals and common property, but there were some variations. When the patriarch of a large family died, his sons formed independent families, in turn assigning their sons separate chambers.

The most important concern of family life was to preserve the continuity of the family. Its pattern was patrilineal; a family line might be perpetuated only through the male heirs.

The head of the family was usually an elder male. The authority of the father was considered supreme within the household, and his position was assumed by the oldest son when the father died. If the son were too young, an uncle became head, and if there were

584 for the perpetuation of the family was the prime
596 motive for matrimony. Very often people married without knowing each other previously. Since to marry was to bring forth a new generation, concubinage for the purpose of procreation was not frowned upon. Where there were no sons in the family, adoption of the children of close relatives or friends was encouraged. As Mencius taught: There are three things which are unfilial, and to have no heirs is the greatest of them.

Although the extended family was pre-
596 dominant in pre-Japanese Formosan society, no
593 familial relationship was closer than that found among the members of a nuclear family. In an extended family, a father might have a tight control over his married sons, but he would grow old and his sons' attentions and affections would revolve around their wives and their children.

Within a nuclear family the father-son relationship was said to be the closest.[3] A son

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3. Shoji Yamanaka, "Rigen ni arawareta Taiwan oyobi Shina no kazoku seikatsu," ["Family Life in Taiwan and China as Expressed in Sayings and Proverbs"], Taiwan bunka ronso, Vol. II, [Symposium of the Culture of Taiwan], Taihoku, Shimizu shoten, 1943, pp. 1-107.

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593 never exposed his father's mistakes or misdemeanors. A close bilateral dependence between father and son among the poor families and unilateral dependence of son upon father in rich families were the rule generally. The father was expected to exercise disciplinary power over his sons, and the mother was to care for and love them. Often a boy relied on his father's reputation to establish himself in a new situation. When a parent died, the son was charged with responsibility for the funeral rites, the selection of a grave site, the maintenance of the grave, and periodic sacrifices at the ancestral shrine. Ritual obligations functioned not only as a medium for the continuation of the reciprocal parent-child relationship, but also as a means of validating one's position in the community.[4] The father-daughter relationship was formal and temporary. Poor people preferred not to have girl babies because female children would be dependent upon the parents for sustenance during their early years and upon maturity would marry and join other families. However, the daughter's children always attracted the grand-parents' love and attention.

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4. Morton H. Friend, Fabric of Chinese Society, New York, Praeger, 1953, p. 53.

596 593 Brothers were not bound to each other with the same strength each felt for the father. The degree of cohesion was determined by their social and economic circumstances. When it was necessary to protect the family from an enemy without, brothers were considered as close as one's limbs.[5] If there were differences in occupations and economic interests, a division of the family after the death of the father was inevitable. Then each son formed a nuclear or joint family for himself, and brothers became mere neighbors. But such instances were rare. Many factors bound together the nuclear units, making the typical family grouping extended and inclusive.

596 411 The social function of the extended family was as a unit for self-protection against possible attack by aborigines, bandits, enemy clans, and criminals. For defense against so many enemies, village and clan members united, but the extended family was the basic defense unit. In well-to-do families there were stores of rifles, spears, and other weapons. Even today, gun loopholes can be found in the outer walls of some old houses.[6]

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5. Yamanaka, loc, cit.
6. Ibid.

596 771 The extended family was in itself a religious group. Worship of common ancestors, observation of their birthdays, and participation in annual festivals were ceremonies observed by all members of the family. Religious practices served to impress family members with a feeling of kinship and common heritage.

596 871 The education of children became the function of an extended family when there were no public schools. Tutors were invited to join the family and all the children studied at common expense, regardless of their parents' status within the family. All the children had an equal opportunity to learn.

596 The family was also an economic unit. Male adults participated in the family business and the entire family shared a common budget. In rural families, rice paddies were hulled and cloth was woven by women in the home. Chickens, ducks, vegetables, and preserves were produced in the household, thus making it unnecessary to buy more than a few necessities at the market. In this manner, the family functioned as a unit of production and consumption. Another feature pertaining to the extended family was the system of community property. Family property belonged to the entire family, and at the dispersion of the family it was divided among the sons, with a relatively larger share going to the eldest son, who assumed responsibility for maintenance of the family shrine.

596 There was strength in remaining a large family. Farming needed the co-operation of all adult members. A family engaged in commerce often feared the loss of prestige and economic strength if the family were divided.

Thus, the family played a decidedly important role in the whole web of human contacts.

596 Group living necessitated a pattern of
181 obligations, sentiments, and expectations. The custom of passing on a business from father to son, the reluctance of rural people to leave their ancestral land for the cities, and the mutual profit shared by family members -- young or old -- who worked together to earn the family's livelihood all reflect the influence of family relationships upon individual lives. Many cultural characteristics of the Formosans -- their great dignity and politeness, their unwillingness to express disagreement, their tendency to keep their own counsel, and the way in which they maintain an attitude of non-interference toward the lives and the problems of others -- had their origin in the close-knit family groups and the conditions in which of necessity they lived. Considerate behavior and the ability to compromise have been necessary to maintain friendly relationships within the family.

577 Filial piety and other traditional values stem from the concept of the family. It is a mark of shame to be called unfilial, and children do not neglect their parents or elderly relatives. A successful kinsman is obligated to assit his kinsmen financially or politically even if such an act should be against the interests of the state.

III. RECENT CHANGES

596 178 The advent of the Japanese was followed by successive changes in the social and political institutions of the Formosan Chinese. The government took over many of the responsibilities of the clan and the extended family in matters which pertained to the maintenance of public order, the establishment of public schools, and other public institutions. Industrialization, the introduction of corporate enterprise, and urbanization in general, together with the newly-assumed duties of the government were responsible for the loosening of familial ties and the emancipation of women within the family as well as within society.

More people now live in urban areas and farmers have ceased to lead nearly self-sufficient lives; they look to the farmers' organizations for agricultural information and other forms of mutual assistance. Opportunities for jobs in banks, factories, railroads, and

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• 596 178 shipping have resulted in further division of extended families and at the same time have given women more opportunity for employment outside the household. There is a great deal of evidence that extended families are separating to form smaller and less-inclusive [162] units. In 1812, the average household consisted of 8.3 persons;[7] in 1953, the average household had 5.5 persons.[8] In a survey conducted by the Foreign Operations Administration's Mutual Security Mission to China, the composition of urban households was characterized by a relatively large proportion of legal households consisting of a single person, and such households accounted for more than 9 per cent of the total.[9]

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7. Yoshinori Ino, Taiwan bunkashi, Vol. II [The Records of the Culture of Taiwan], Tokyo Toko shoyin, 1928, p. 238.

8. Statistical Abstract of the Republic of China, 1955, Taipei, Directorate-General of Budgets, Accounts, and Statistics, Executive Yuan, 1955, p. 27.

9. A. F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 261.

596 369 Rural households retain many of the features of the traditional family. They are often made up of three or four generations with a goodly sprinkling of kinsmen, adopted children, and others. However, among the one hundred households which were the subjects of a survey conducted by the Joint Commission on Rural Reconstruction, 58 were termed nuclear families and included 48 per cent of the total population surveyed. The other 42 households were three- and four-generation households, and included the remaining 52 per cent.[10]

562 178 The influence of the West has greatly improved the position of women in Formosan society. Women today have equal elective franchise and the right of inheritance. They have not only become clerks and manual workers but also have entered the professions and have taken a role in politics. The Chinese Constitution stipulates that the number of women delegates to the National Assembly, as well as the number of women members of the Legislative and Control Yuan, shall be determined by law. The Electoral Law fixes the percentage at ten, and at present there are 60 women of a total

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10. A. F. Raper, Rural Taiwan - Problem and Promise, Taipei, Joint Commission on Rural Reconstruction, 1953, p. 208.

597 many people adopt girls to be employed as
548 servants and, in a few extreme cases, adopt several girls in order to derive profit from their prostitution. A recent household registration indicates that there are about 135,000 adoped daughters on the island, of which abdut 100,000 are said to have been adopted for the purposes mentioned above. They are less
597 daughters than bonded servants, and may be sold or traded frequently and forced to serve in cafes or to engage in prostitution.[16] Many cases of incest and abduction and suicide pacts involve young women who have been "adopted" in this manner and innocently cause the disintegration of a household. Recommendations, however, are being made for correction of this abuse.[17]

V. FAMILIAL SETTING OF THE ABORIGINES[18]

• 596 Family cohesion within aboriginal families is probably as strong as that in Formosan families.

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16. Hsin-she-hui Yüen-k'an [New Society Monthly], VIII, 7, Taipei, July 1955, pp. 1-28.
17. Ibid.
18. Sainosuke Fujiksaki, Taiwan no banzoku [Savage Tribes of Taiwan], Tokyo, Kokushi kankokai, 1936, Part II, Chapter 4; Part IV, Chapter 4; Part V, Chapter 2; and Part IV, Chapter 3.

• 596 Marital customs among the tribesmen seem to indicate that their groupings include both nuclear and extended families. Bunun, Paiwan, and Yami tribes have nuclear families, and each son after marriage establishes his own household.

Aboriginal families are patriarchal, with the exception of those of the Paiwan and Ami tribes. The latter families are perpetuated through the female line; a man marries into the bride's family in both tribes and the newlyweds establish separate households after marriage.

562 428 The position of women in Ami and Paiwan tribes is superior to that of the men. Men have no rights of inheritance and have no say in the management of property in these tribes, although they represent their families at public meetings and in other social contacts. Women are sole heads of the family in matters which concern the family and its relatives. In other tribes, an inheritance is equally divided among the sons or goes to the eldest son who is the heir. When there are no sons in the family in the Bunun tribe, the family line is terminated, and the family property is given to the closest male relative. An interesting aspect of inheritance in the Ami tribe is that the youngest daughter remains at home to inherit the family property as well as to perpetuate the family line.

A. The Rural Family

596 369 563 The patriarchal, extended family common to the Mainland is the pattern of the family for the majority of people on Formosa. In rural communities, the father and sons work in the fields, the mother and the wives of married sons look after the hogs, fowl, and cattle and do the work of the household. Daughters care for the younger children, help in the preparation of meals, and wash the clothes. Boys and girls attend school until twelve years' of age; schooling continues after that age only if the child is talented and the family is able to afford tuition and the loss of the child's labor at home. Generally speaking, women of Fukienese descent are not given as many laborious duties as the Hakka women, who raise hogs, cattle, and fowl, and tend vegetable plots even in non-farming communities. Fukien children are more apt to prepare for city jobs than to continue work on the farms.

Since World War II, farm rents have been reduced and farmers are encouraged to farm more intensively in order to secure larger yields. As a result, women now do more farm-work than before. It is reported that women in Chihu are responsible for at least

369 40 per cent of the district's agricultural
596 production; in 1937, they accounted for only
563 17 per cent of the total yield.[1]

The aborigines in the mountainous regions of Formosa make a living from slash-and-burn agriculture and hunting. Some of the aboriginal tribes (the Bunun, the Tsou, the Paiwan, and the Yami) follow the patriarchal, extended family pattern. Others (the Atayal and Saisett) have a nuclear family organization -- each member of the family fulfills a definite role fixed by tribal custom. Aborigine women ordinarily do more farm work than Chinese women. Until recently few children from native tribes attended school, and until recently few aborigines ventured outside their tribal regions.

B. The Urban Family

369 The population of Formosa has been
161 increasing rapidly. The rate of increase is greatest in the urban areas. Each of Formosa's four largest cities -- Taipei, Kaoshiung,

1. Arthur F. Raper, Rural Taiwan - Problem and Promise, Taipei, 1953, p. 120.

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CHAPTER VII

The Setting for Family Life

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NO MATTER what part of Taiwanese life we have investigated, it has not been possible to proceed very far without encountering evidences of familial pressures and sentiments. This has been true of the organization of farming, the "inheritance" of skills, the reluctance to migrate, certain special patterns of mortality, and the attainment of peace and order by the Japanese. Yet kinship is something that people usually consider as a private matter (and moreover take for granted without inquiry as it exists among themselves), and so it is not easy to increase our knowledge of it.

The aspect of kinship that makes it so important is the framework of obligations and expectations that it imposes on people's activities in related spheres.[1] Like many forces affecting behavior, the Chinese family system is an intangible thing, and must be approached by indirection—for example, by construing some of the basic moral precepts that the society has received from the past, which is the usual procedure, or, as we shall essay in this chapter, by examining some of the patterns that people display in their familial roles. The former of these devices has been singularly appropriate, for Chinese have one of the richest accumulations of expressions about their sentiments in family matters that ever existed; but it has left us with a one-sided and sometimes unclear view of the subject, largely because it has been followed with little reference to the latter. While neither of these alternatives gives a perfect representation of the family system in actual operation, the advantage here lies in using Taiwan's census data to illuminate a few points on which accurate information has previously been lacking.

The Size of Household Units

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Japanese authorities showed that they were aware of the family's practical significance to the people, for in Taiwan they made it the basis of their census and vital registration statistics as well as of their regular civil administration. In each census the blank forms that were distributed to be filled in with personal information were all made out with the *household* as the unit of enumeration. The head

[1] For thorough discussion of the family's role in Chinese social organization, see Lang, O. (1946) and Levy, M. J., Jr. (1950).

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592 gevity discussed in the previous chapter into additional old and young members of non-working ages.[9]

Family Membership in Households

592 Not all households had the variety in their membership shown by the average of all of them in Table 46. In fact, it was not common for households to contain non-family members at all, and the in-
596 ternal affairs of most households did not involve persons other than near relatives. Owing to the indefinite criterion of family relationship in the census data, no more than a crude approach can be made to discovering what special or unusual features were present in those families that incorporated "outsiders" into their households.

The traditions that shape Chinese familial life are explicit as to why large families are desirable and how they should be achieved. Their foremost concern is that of descent, of preserving the continuity of a particular family indefinitely into the future. The most emphatic rule of descent is that it should be patrilineal, that a family line may be perpetuated only through its male side. There are no notable exceptions to this rule; in cases where it cannot be followed to the letter, its purpose is observed by means of adoption, changing of surnames, or even reversing some of the usual procedures in marriage, as we shall see in the next chapter.

Since the exact relationships are not shown, it is never possible to be certain just *which* family relatives were included in a household of a given size. But the nuclear group might be described as husband, wife, and unmarried children, for the kinship system does not customarily provide these people (or such of them who remain alive and present) any alternative place of residence. With this group alone, much of which was usually made up of dependent children, the actual size of most households was not large enough to leave room for either additional relatives or "outsiders." (See Fig. 30, above.)

The goal of still larger families, which was realized by a restricted though substantial part of the population, could not have been attained without encountering special difficulties imposed by the family system itself.[10] But any further enlargements of a family could be

[9] There was some change in the standard of what constituted employment for women between these two censuses, and this accentuated slightly what otherwise would be the pattern of change in Table 46. The same pattern results, perhaps less strongly, if only males are used in the comparison.

[10] Of course, the parents of the husband or other relatives of the father's (or higher)

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made in only one way—by retaining in it two or more brothers, with *their* nuclear family groups, if any. In achieving the extended families that have been cherished in Chinese tradition this is the crucial step, for there are counter-pressures that tend to discourage it. Collateral ties are known to be relatively weak among Chinese—sons do not have bonds of the same strength with each other that they have with their fathers. These ties are especially difficult to maintain after the death of a father, for sons may exercise individual claims to shares in the family property. These claims sometimes lead to division of the family and its property even before the father dies; they are intensified as soon as the brothers are married. Extending the family unit to any considerable size implies some ability to coordinate these conflicting interests and requires leisure for devoting attention to managing its collective affairs, not to mention special resources to support its existence on a more elaborate scale. Obviously it was unusual to succeed in preventing family division along such lines as these. If everyone had succeeded, the number of households in Taiwan would have remained about the same, and the entire increase of population would have gone toward enlarging those that were already there. Although this is not what actually happened, the fact that larger households in Taiwan increased in proportion after 1905 (see Fig. 30) may be a sign that the opportunities for staving off the division of families were improving.

Changes in the size distribution of households are probably an accurate indicator of the rise and fall of family fortunes, if not a very illuminating one. For in reality, when one speaks of ordinary households among Taiwanese, it is practically the same thing as speaking of family groups and nothing else. Nearly everyone who lived in a household of more than one member was a blood relative of the head. In these "co-resident" households, excluding for the moment those Taiwanese who lived alone, over 98 per cent of all Taiwanese in 1920 were related to the household head (if the head

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generation might be added, for they had claims of support that could not be disregarded—one of them might even be the head of the household. But Taiwanese did not live long enough to allow more than three lineal generations to be represented for very long at the same time in the same family.

On the other hand, daughters ordinarily ceased to be included in a family after marriage, since the rule of male descent worked in reverse for them—they were expected to enter the families of their husbands, where in most cases they were found in census enumerations. Though the actual practice in these matters was less uniform than has usually been supposed, it remains true that the expected and preferred arrangement is that outlined here.

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TABLE 47

EXTENT OF FAMILY RELATIONSHIP IN TAIWANESE HOUSEHOLDS, 1920

Persons in All (Ordinary) Households, Those Living Alone, Those Living in Households with Others ("Co-Residents"), Co-Residents Who Were Mutually Related, and the Per Cent Who Were Related. By Type of Household

	All Household Residents	*Persons Living Alone*	*Co-Residents (1)−(2)*	*Mutually Related Co-Residents (Including Head of Household)*	*Per Cent of Co-Residents Mutually Related*
All Households					
a. All Types	3,454,956	51,694	3,403,262	3,343,175	98.2
b. Purely family			3,093,000	3,093,000	100.0
c. Mixed			310,262	250,175	80.6
Households with Head Occupied					
a. All types	3,111,558	44,417	3,067,141	3,012,945	98.2
b. Purely family			2,788,813	2,788,813	100.0
c. Mixed			278,328	224,132	80.5
Households with Head Not Occupied					
a. All Types	343,398	7,277	336,121	330,230	98.2
b. Purely family			304,187	304,187	100.0
c. Mixed			31,934	26,043	81.6
Head Occupied in Agriculture*					
a. All Types	2,230,098	14,929	2,215,169	2,189,415	98.8
b. Purely family			2,033,653	2,033,653	100.0
c. Mixed			181,516	155,762	85.8
Head Occupied Outside Agriculture					
a. All Types	881,460	29,488	851,972	823,530	96.7
b. Purely family			755,160	755,160	100.0
c. Mixed			96,812	68,370	70.6
Head Occupied in Manufacturing					
a. All Types	212,380	7,547	204,833	194,852	95.1
b. Purely family			173,210	173,210	100.0
c. Mixed			31,623	21,642	68.4
Head Occupied in Commerce					
a. All Types	242,048	6,991	235,057	223,124	94.9
b. Purely family			192,816	192,816	100.0
c. Mixed			42,241	30,308	71.8
Head Occupied Elsewhere Outside Agriculture					
a. All Types	427,032	14,950	412,082	405,554	98.4
b. Purely family			389,134	389,134	100.0
c. Mixed			22,948	16,420	71.6

* Includes Forestry.

Source: From *Census of 1920, Detailed Tables*, Table 36.

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is also counted in the figure). This held true in almost the same degree throughout some of the major portions of the society—whether or not the head had a regular occupation, and on the average regardless of the particular occupation of the head (see Table 47). 592 [596]

Closer inspection reveals that the apparent similarity in membership existed chiefly through a preponderance of households made up exclusively of family members, with no outsiders ("purely family households" in Table 47). Of all "co-residents," over nine-tenths lived together in households of this kind, and the case was the same in all the major occupational groups. Whatever differences arose in each occupational group as a whole, therefore, stemmed from a minority of households containing families together with non-relatives—the "mixed households." It is only within *this* segment that the principal characteristics distinguishing various groups in the population can be found. While four-fifths of all people in even these "mixed" units consisted of family relatives, the proportion was larger in those households dependent on agriculture, and considerably smaller where the head was employed elsewhere (especially in manufacturing and commerce) (see Table 47).

There were different ways of becoming a member of a household, according to the kind of member one was to be, and some of these differences are reflected in the balance between male and female in households of various sizes (see Table 48). Relatives entered a family unit through circumstances well covered by institutional rules or procedures—most commonly by birth or by marriage. Neither of these channels permits much latitude of choice to the parties most directly involved—birth is non-voluntary for those being born, and marriage is usually an alliance arranged by persons other than the partners being married. Hence marked sex disparities should not be expected in households that are formed on the basis of kinship alone. However, these "normal" paths of entry were not the only ones, though the predominance of purely family households very nearly made them so. Men obviously had moved out of many family units, especially the smaller ones, and into mixed households of various sizes—*not* conspicuously into the larger ones. A considerable share of these men must have been single, for departure accompanied by a wife would not have altered the sex balance as between larger and smaller households.

Although very few households contained any outsiders, the larger the unit the less likely it was to consist solely of related persons. It

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clined), the home of one-third of all Japanese, the location of the better educational facilities, the commercial area of most importance for trade in other than farm products, and of course the center of most large government and business offices. Taipei Prefecture, therefore, had proceeded farthest in the spread of non-agricultural activities in its population. Even though a substantial group in this population does not appear in these tables because they were Japanese, the effect of their presence is evident in the way that non-farming occupations were conducted by Taiwanese—all but 21 per cent of the men in such work (excepting the heads of households and people staying in the households of others) were employed away from their families, a proportion less than any other Prefecture and only half the figure in some. Agriculture was much less affected by the unusual character of other pursuits, but it did not go untouched. Though most farmers in Taipei did their work in their own households, they fell somewhat below the mark set by the rest of the agricultural population.[21]

Significantly, in all of the other Prefectures (except P'enghu, which was not of much account in size), agricultural households were nearly uniform in the degree to which they retained the use of services by subordinate men in their families—close to 90 per cent of the men in this category who lived with their families.[22] The principal differences from one Prefecture to another when all households are considered at once, therefore, must have arisen from the prevalence and the mode of organization in activities *outside* of agriculture, for they practically disappear when farming households alone are compared.

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There can be little doubt that the family system, through its weight in the conduct of household affairs, has furnished the most important social setting for behavior of the Taiwanese. We have not only the testimony of Chinese tradition to support this conclusion, but the corroboration of statistical evidence as well. Practically everyone was a member of some familial household—most were related by

[21] Taipei was the site of tea plantations, which, through a greater use of wage labor, may have been responsible for the deviation from the pattern elsewhere in the island. A plantation might employ men (and actually did employ many women) on a more or less regular basis from several farming households, and leave their services free at some seasons of the year for work in their own fields.

[22] Naturally this does not include those who had left home to enter some other occupation; these would appear as outsiders in some other households or as persons living alone, perhaps in some cases as separate families.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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kinship, and those who were not, the "outsiders," generally owed their membership to the work that they performed in the families of others. In addition, many strong obligations were observed among people who were related but not living together in the same household. So in reality the significance of the family system was wider than can be adequately conveyed by the facts of this chapter; it extended beyond the bounds of kinship, in its application to non-related household residents, and beyond the limits of individual households, in governing the intercourse between related families.

As for those Taiwanese who lived in their own familial households, the best-documented of all their activities is the work that they performed. The extent of male employment in these family groups showed no large differences as between the major classes of occupations. But leisure, as judged by the abstention from regular work, was apparently more widespread in families of greater affluence, regardless of their particular source of support. And their households were also the ones that made the most use of services of non-family members, which was one of the ways of making leisure possible.

It is significant that the work of most men was carried on in household enterprises inside their own families. In a sense this was a fulfillment of traditional exhortations that families should be self-sufficient, but a great deal more was involved at the same time. A society which is family-centered in most respects cannot afford to make very far-reaching exceptions in the case of economic activities: since employment, if it occurs outside of the household, is a possible avenue for a person to advance in social position independently of family influence, it also is potentially a competing source of loyalty. In this and various other ways, the stability of the social order was buttressed by the force of its own organization as well as through the support of its moral precepts, by making it difficult for people to by-pass the family system in pursuit of their self-interest.

Though the span of observation is short and confined to a relatively early period in Taiwan, the facts betray no remarkable sign of yielding in this household structure. And changes that did not alter this fundamental pattern could not amount to very much. The failure of "colonial development" to be a clearcut departure from the past among Taiwanese should be attributed very largely to the stability of their familial institutions.

15: U.S. Navy--30 [5] (no date) 1944 Formosans
116, 595, 597, 581, 591

"If a couple is so unfortunate as to have no male issue they may resort to either or both of two practices. If the husband can afford it, a secondary wife can be taken into the home, whose male offspring will have the full status of heirs and will, in all probability, be reared by the first wife. If a secondary wife is not taken, or if there are no sons of such a union, then adoption is resorted to. The son of another family (never the first son or heir) can be adopted outright or taken as the husband of a daughter of the house. This last arrangement is preferred, for it establishes a blood connection. The new son-in-law assumes the name of his bride's house and may take up residence in it. This arrangement often results in unhappy family situations, for the adopting family is usually in much better economic circumstance than the family of the young man adopted, and he is subject to a sense of accepted social inferiority. There are, however, instances of arrangements between well-to-do friends who wish to link the fortunes of their houses."

587 586 Second marriages are usually looked down upon, but in order to perpetuate the family line a childless widow may marry again. Divorce, although the rate has been increasing in recent years because of financial difficulties and the growing independence of women, is not as serious a problem in Formosa as it is in the United States. Formosa's divorce rate in 1953 was as low as 0.45 per 1,000 population, as compared with a rate of 2.48 per 1,000 population in 1951 in the United States.[15] For good or ill, a popular adage that a virtuous woman does not marry twice is often repeated, and a divorcee rarely finds opportunity for a second marriage.

582 The average age at which men and women marry is reported to be rising. Among young men of urban areas, marriage is often delayed because of financial difficulties. The adoption of daughters often poses a social problem. 587 548 The old notion that a daughter may be bought or sold like a commodity remains among some uneducated people. Although the purpose of such adoptions may be that of securing a young companion or maintaining the family lines,

15. United Nations, Demographic Yearbook, 1953, New York, 1953, pp. 276-77.

597 many people adopt girls to be employed as
548 servants and, in a few extreme cases, adopt several girls in order to derive profit from their prostitution. A recent household registration indicates that there are about 135,000 adoped daughters on the island, of which abdut 100,000 are said to have been adopted for the purposes mentioned above. They are less
597 daughters than bonded servants, and may be sold or traded frequently and forced to serve in cafes or to engage in prostitution.[16] Many cases of incest and abduction and suicide pacts involve young women who have been "adopted" in this manner and innocently cause the disintegration of a household. Recommendations, however, are being made for correction of this abuse.[17]

V. FAMILIAL SETTING OF THE ABORIGINES[18]

596 Family cohesion within aboriginal families is probably as strong as that in Formosan families.

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16. Hsin-she-hui Yüen-k'an [New Society Monthly], VII, 7, Taipei, July 1955, pp. 1-28.
17. Ibid.
18. Sainosuke Fujiksaki, Taiwan no banzoku [Savage Tribes of Taiwan], Tokyo, Kokushi kankokai, 1936, Part II, Chapter 4; Part IV, Chapter 4; Part V, Chapter 2; and Part IV, Chapter 3.

15: U.S. Navy--24 [4] (no date) 1944 Formosans
116, 221, 591, 438, 602

"Temporary movements. The people who move to these industrial sites [MC: i.e. developing industrial centers like Keelung, Shinchiku etc.] leave their families, or perhaps only some of the children, with the grandparents on the farms. There is a constant traffic (largely on foot) between ancestral homes in the country and the houses of sons and daughters in town. A great deal of produce is carried into the city for private consumption in this fashion, and in turn various small goods are carried out again to the country. The continuing and strong relationship between the main house and all branches of a family is of very great importance in Chinese life."

Annex "A," Subparagraph 1a,
Sociological Background

GENERAL CHARACTER OF SOCIETY

1. Three Types of Social Integration.

182 Among Formosans, as among other peoples, there are three developmental ideal types of social integration correspondings to three developmental ideal types of society:

a) Integration by blood relationship -- tribal society
b) Integration by locality -- folk society
c) Integration by social function, or social need within an area -- national society

182 602 Blood relationship is the most direct and immediate principle of social integration. It is natural that primitive societies in their transition from band to horde to tribal society, are integrated on this principle. The aboriginal society in Formosa belongs to this type. We of course refer to integration by blood relationship and tribal society as an ideal type. Even in primitive societies there are relationships by locality and relationships by function, but blood is the main principle of social integration.

182 When a society increases in numbers and its scope is extended, various kinds of work

4:Grajdanzev--25-26 S-4 (no date) 1942 Formosans
116, 168, 464, 656, 609, 177.16 Japan
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"Since the occupation of the island, the Japanese authorities have forbidden the free immigration of Chinese. Coolies were [26] admitted in limited numbers each year for seasonal work but they were compelled to return to the mainland after the expiration of their contract. Besides the coolie class some Chinese could enter Taiwan for business purposes with the permission of Japanese consular authorities, but they remained Chinese citizens and were treated as foreigners. These two groups of Chinese make up most of the 'foreigners'. The fall in their numbers in 1937 and 1938 is connected with the Sino-Japanese war, for many then preferred to return to China and the total number of 'foreigners' is now comparatively small. Thus the purpose of the Japanese authorities —to exclude the Chinese from the island—has been accomplished, but this has been more than offset by the natural increase of the Chinese population."

4:Grajdanzev--28 S-4 (no date) 1942 Formosans
116, 167, 311, 609, 177.16 Japan
636.16

"It should be noted that, even after the pacification of the island, Japanese immigrants were treated in a hostile manner by the Chinese population. Under this pressure many farmers were compelled to leave their villages, some of them renting their land to Chinese and becoming absentee landowners. The total number of Japanese occupied in agriculture in Taiwan in 1938 (including members of their families) was 8,065.

The colonization schemes for fishermen were not much more successful. In 1909 the government-general began its campaign, promising subsidies and other advantages. But those who answered the call preferred some occupation in Taiwan other than that of fishermen. In 1926 in Taihoku province 49 families (172 persons) were settled and most of them continue to work there. Since 1932, the government has again made efforts to attract fishermen to Taito province, and, up to 1937, 54 families had settled there. The plan for 1938 and 1939 foresaw the settlement of 25 families for each year. Such are the very modest results of the continuous efforts of the Japanese government.

Takahashi is of the opinion (1) (and his opinion reflects the ideas prevailing among

1. See his Gendai Taiwan Keizairon, pp. 8-9.

Japanese economists) that there is little room for the Japanese in Taiwan as long as the island remains an agricultural region; hence his belief that Taiwan should be industrialized."

4:Grajdanzev--28-29 S-4 (no date) 1942 Formosans
116, 168, 609, 701, 177.17 Japan
636.17

"Greater numbers of Japanese in Taiwan are necessary both for military reasons and for the speedy 'japanization' of the islanders. The military considerations advanced by Takahashi [29] are very interesting for they show that, in spite of forty-five years of Japanese domination, there is still a certain anxiety concerning the loyalty among the Japanese rulers of the Chinese. The island is highly militarized and accustomed to martial discipline and yet the Japanese still consider it necessary to strengthen it militarily. But even Takahashi puts greater stress on the 'japanization' of the natives than on the Japanese immigration. After forty-five years of Japanese domination, after their continuous efforts to increase the number of Japanese there and to 'japanize' the natives, the island remains predominantly Chinese in character, the Japanese forming only about five per cent of the total population, and this state of affairs is bound to continue as long as the natural increase of the Chinese remains at its present high level."

15: U.S. Navy --22 (no date) 1944 Formosans
116, 186, 609

"The Formosan-Chinese as a whole are intelligent but self-centered, displaying little interest in affairs beyond the limits of their own community. They do not have high standards of loyalty or honesty outside their own group. In dealing with strangers they are crafty, but with friends they are open, generous and kind. They despise the Japanese and all their ways, but respect policing power and conform to Japanese orders as the course of least resistance. They are physically tough and capable of great endurance as laborers."

15: U.S. Navy--22 [3] (no date) 1944 Formosans
116, 208, 609, 873, 177.20 Japanese
636.20

"The general population knows little of the outside world. The United Nations have individually and consistently been placed in an unfavorable light by the Japanese press, radio and educational policies. However, the Formosans who have reached the Middle and Higher Schools and those who have studied in Japan Proper, where they have had access to more evidence of American standards of living and national character, uniformly seem to admire the United States and what they understand of its liberal policies. The record of America's administration in the Philippines has made a considerable impression on educated Formosans. A few Formosans have received their higher education in America colleges and universities. For some years now they have been subject to strict surveillance."

15: U.S. Navy--23 (no date) 1944 Formosans
116, 162, 609, 563, 484

"The Cantonese. The people of Cantonese origin have always remained rather distinct and have been considered as foreigners. They numbered 'about 100,000' in 1930. As a group they have become identified with small-scale banking and wholesale trading. They have maintained their contacts with the mainland, and, when travel was possible, many spent part of each year at Canton."

15: U.S. Navy --23 [6] (no date) 1944 Formosans
116, 563, 582, 609 Japanese
636.58

"Fusion of ethnic groups. Special permission must be obtained from the government before a marriage between a Formosan-Chinese and a Japanese can be made legal. There are a few notable cases of marriages arranged between wealthy Formosan men and Japanese women, (as between a son of the wealthy Ko family in Taihoku, for instance, and the daughter of an impecunious Japanese nobleman). As a general rule the antipathy which one race holds for the other inhibits even casual sexual intercourse between the two. This, plus the fact that the Formosan-Chinese birth rate is much higher than that of the Japanese, precludes any hope for gradual fusion of the two peoples on the island."

15: U.S. Navy--23 [10] (no date) 1944 Formosans
116, 167, 511, 609 Japanese
636.16

"Immigration of Japanese agricultural workers has been encouraged both by the Government, directly, and by the development companies in which the Government has large interests. Attempts have been made to establish agricultural villages here and there, in the hope that such settlements would help advance the assimilation and control program. These settlements have been a failure. Thirty-eight were projected, eight were actually established, and all had failed by 1910. The native Formosan-Chinese populace was too hostile and the competition in living standards too great for the Japanese immigrants to bear. A second colonization plan, begun in 1910, succeeded in establishing three villages with a total of 3,368 persons settled. These have not flourished, though they continue to exist. They now have fewer settlers than in 1910.

The Government has made several attempts to attract and establish Japanese fishermen, but with practically no success, despite the government subsidies granted to them."

The actual ascent of Mount Morrison started from the village of Ling-ki-ho. It is surrounded by bare hills between which spread fields of rice and sweet potatoes. The little town has a population of about a thousand who initially showed themselves very hostile towards the Japanese; the ranks of the rebels included people engaged in the camphor trade. We had an extremely hard time finding porters in Ling-ki-ho and were completely unsuccessful in our search for guides. We had finally managed to engage twenty men who, when they learnt of our destination, promptly deserted us to the last man for fear of the aborigines, among whom individuals can distinguish themselves by capturing the heads of several Chinese. A youth of their group can think of marriage only after he has proved his courage by such an achievement. Once more twenty porters were hired; they were locked up overnight, examined by the doctor who eliminated four of them, and the next morning a load of about 24 kilograms was tied on the back of each one of them in the presence of armed soldiers, so that there was no opportunity for desertion. Our group included two officers with twenty-five men and their equipment and seven Japanese including a newspaper reporter, an interpreter, a doctor, geologist, and a topographer. I was not only supposed to be the leader of the expedition but was also entrusted with the task of studying the forest conditions in detail and of photographing everything of interest. Naturally we were well equipped with all kinds of scientific

26: Honda--470 N-3 (1896) 1897 Formosans-2
116, 122, 361, 482, 609

instruments and tools for clearing our way through the thicket, for building huts against the rain, etc.

31: Hofmann--631 N-3 (1909) 1912 Formosans
116, 563, 609

Japanese industrial products do not sell well among the Chinese. Most of the Japanese on Formosa are high or low officials. While in view of the large population it might be expected that the Japanese would develop an active and extensive retail trade, the relations between the Chinese and Japanese so far have made this impossible; this may be due to the fact that the Chinese isolate themselves intentionally as well as to an inherent antagonism between the two groups and a lack of confidence on both sides.

35: Collingwood--135 [2] D-2 (1866) 1867 Formosans
116, 609

"On the approach of the vessel, numbers of people assembled on the beach from the large Chinese village of Sano, attracted by the unusual circumstance: among them the gamins were conspicuous, capering about on the sand, while their more sober elders formed a long line in the background, squatting on their hams, and discussing over their pipes the cause of the phenomenon. As soon as we landed, we were escorted into the village by the crowd, and, on reaching it, were received by sundry explosions, which we were fain to consider a salute of honour."

35: Collingwood--135-136 D-2 (1866) 1867 Formosans
116, 411, 609

"Sundry warlike-looking personages, armed with matchlocks, had turned out to meet the suspicious-looking strangers; but seeing us walking unarmed and amicably among the citizens, they fired their weapons harmlessly in the air for effect. They allowed us to examine their matchlocks, which we were told were manufactured at Amoy; and their ammu-[136]nition, consisting of very coarse powder, with a finer grain for the priming, and bullets—some round, some oblong, some rectangular."

42: Schetelig--388 T-2 (no date) 1868 Formosans
116, 162, 186, 463, 609

The population of Sawo, which is cut off from all communication by land with the rest of the island (except with the Caponlan Plain), is consequently made up of the dregs of the Chinese population. Since agriculture is impossible, they belong to a genus of seaman such as exists only in China, for on occasion they can transform themselves into pirates, shore robbers, camphor wood thieves or mandarin's soldiers, as required. Sawo is a place with an evil reputation even among the Chinese....Shortly after we had arrived camphor agents landed and, although they were extremely polite to us on the surface, they nevertheless looked at us suspiciously for they thought that their secret trade might be unfavorably influenced by us. These persons then stirred up the inhabitants against us and spread the rumor that we were traveling in the interests of a foreign government, the Prussian Government, and they hampered us in all our movements. The web of intrigue that was thrown around us was extremely finely spun, and every day there were new troubles and new affronts; for the Chinese, when he is evil, observes the principle that evil must be profitable to him, or it is not worth the trouble. Finally, after they had tried in vain to starve us out, for we were well supplied, we had to forego water transportation. The boats and junks were hidden from us and we were compelled to travel by land over the ridge of hills to the north to the plain of Caponlan, since we could not leave behind the instruments, etc. Fortunately there were five of us and we were all armed, for among these rogues a single man would have perhaps had a hard time.

42: Schetelig--391-392 T-2 (no date) 1868 Formosans
116, 133, 609

In one house of this kind in Tokscham, the fortress of an old and immensely wealthy leader, we met with the greatest hospitality that it is possible to show strangers, and from here we made excursions to the camphor forests of the interior as well as up the extremely curious river valley to the south.

Here it is still possible to trace the successive stages that distinguish the history of the formation of the river. On either side the river is surrounded by a plateau some 600 to 700 feet high, and from this various terraces go down to the river itself and show, even today, that formerly the bed must have been extremely broad and deep, though now the water , which the Chinese lead away on all sides to their fields, is rarely more than a few feet above the point of lowest water level, as we found it [392]. So large does the area of evaporation of a once swift and deep stream become owing to the efforts made in cultivating fields and maintaining meadows.

631 As uprisings and clan wars became more
669 frequent and widespread, often nearby villages united to make a league of defense. When one village was raided, a drum or gong would be beaten and the allied neighboring villagers would come to the rescue. To affirm their consolidation, common temples were constructed and common patron gods were worshipped. In rotation each allied village celebrated the yearly festival in honor of the patron god. In each case the allied villagers participated in the festival and feast. The blood tie was represented by the village ancestral temple, the territorial tie was represented by the local patronal god. Usually the worship of local patron gods was more frequent and enthusiastic. Sociologically speaking, it is safe to say that, in spite of the often emphasized Chinese ancestral worship and family spirit, the principle of locality took precedence over the principle of blood relationship during the Manchu period. As far as the mass of Formosan Chinese is concerned, this is true. However, in the case of a smaller number of the upper ruling class, the blood tie was still the dominant principle.

7. Breakdown of Folk Society.

• 612 Consciousness of the blood tie and locality
178 bond was very strong among the Formosans in former times. When two persons found they had
631 the same surname, they would consider each other as brothers or cousins. When a person introduced himself, he usually added his native

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province. Associations of kinsfolk and associations of the persons of the same native town were organized in cities, and they performed a significant function as agencies for mutual protection and mutual aid. On the China Mainland, at least until recently, and among the overseas Chinese, these associations are still fairly active. So it was in Formosa up until the early years of the Japanese rule. Nowadays, many young Formosans do not even know exactly which prefecture is their native place on the Mainland. They pay little attention to ancestral shrines, and the remaining associations of kinsfolk or associations of the persons of the same native province no longer perform their former political and social functions. No doubt a radical change has taken place in the attitude of the people.

Since the Japanese administration proved able to keep peace and order with its vigorous police control, kin-groups and local associations for self-protection and mutual aid lost their significance. Gradually people became less eager to support these associations, and to the young generation, raised in peace and order, these associations became a thing of the past. With the administrative, industrial and economic improvement, self-sustaining and half-independent villages were integrated into an organic administrative system. Thus the folk society was broken down, and the people adapted themselves to modern political-economic system.

182 As long as the urban community still comprises only a small part of society, there will be no remarkable change. But when the scope of the urban community is extended and industry, commerce, and the field of services develop and become more important than agriculture, then the way of life changes greatly, agrarian society is transformed into industrial society, rural society is transformed into urban society. In Formosa the modern political-economic system was enforced by a colonial ruler, and industrialization and urbanization were begun only after the Japanese occupation.

2. Blood Relationship and Locality as Principles of Social Cohesion.

103 618 Among the place names in Formosa there are not a few called after the surname of a clan. Examples are, Tan-tso (Ch'en-tsu), which means the hamlet of the clan of the Ch'ens, or Lim-tso-liao (Lin-tsu-liao), which means the cottages of the clan of the Lins. Though hitherto not adequately noticed, this is an indication of the existence of the so-called clan-village, and it is a significant stage in social development.

103 Again, as in other countries, there are places named after the original native town of the residents. In one case the local name of a mainland town or city was adopted in Formosa, such as Chaochow (Ch'ao-chou) in southern Taiwan. In other cases, a prefix or suffix was attached to the

167 Japanese colonial government, which wanted the Taiwanese to sever their ties with their fatherland.

167 618 The early Chinese settlers came mostly to Formosa with their kinsfolk or town's people. On arriving on the island, the family group settled in a new place, and frequently used its clan name (surname) as the name of the village. This is the clan village. At first the clan village may have had only kinsfolk with the same surname as its members. Later on families related by marriage might join the village. As the people with the same surname consider themselves as belonging to the same clan, and intermarriage within the clan was barred by custom, all in-laws necessarily had a different surname. In-laws were the first heterogeneous element in the homogeneous clan village, but their number was very small. More in-laws might come to live, craftsmen or itinerant merchants might come and stay for a longer or shorter time. As time passed, the proportion of heterogeneous elements increased, but the original clan was still dominant in numbers, and constituted the so-called influential surname of the village. For instance, there was a Lim-tso-liao (means the hamlet of the Lins) near Peikang, Tainan. A survey done in 1930 showed that there were 327 households, consisting of 18 different surnames. Of these households 76.6 per cent were the kinsfolk of the influential clan of the Lins, and the other 17 surnames made up only 23.4 per cent of the total households.[1]

1. Yoshio Tomita, "A Study on the Settlement in Taiwan," Symposium of the Culture of Taiwan, Vol. I, 1943, Taipei, p. 179.

167 618 Professor Y. Tomita found that even though there were many villages which did not have the clan name as their place name, nevertheless each still retained one influential clan.[2] It is evident that settlement with kinsfolk was fairly common in early times.

5. Villages Formed by the People of the Same Native Town.

167 A survey made by the Japanese administration in 1926 revealed that a great number of villages in Formosa were formed by Chinese immigrants from the same native town on the Mainland. This type of settlement was more general than the clan village.

Both the clan village and the village consisting of the people of the same native town were highly homogeneous. As time passed, heterogeneous elements gradually increased. If the village was located in some place convenient for commerce and transportation, the heterogeneous elements rapidly grew. In the meantime, in response to the current social situation, the village community became the basic unit of social life, whether it derived from a clan village or from a village consisting of the people of the same native town.

6. The Function of the Village.

621 In pre-modern China, governmental administrative activity practically ended at the prefecture level. Most local affairs were left to the local community in the village and town, except

2. Ibid., pp. 176-188. Tomita's study was based on census report of 1930.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tsu* villages were quite powerful and frequently the de facto govern-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Haing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

10: Schumacher--225 [4] T-1 (ca. 1896) 1898 Formosans
116, 596, 621

The Chinese live very much secluded by families, even in large towns, and have contact with other family units only through the official mediation of the head of each group concerned.

167 618 Professor Y. Tomita found that even though there were many villages which did not have the clan name as their place name, nevertheless each still retained one influential clan.[2] It is evident that settlement with kinsfolk was fairly common in early times.

5. Villages Formed by the People of the Same Native Town.

167 A survey made by the Japanese administration in 1926 revealed that a great number of villages in Formosa were formed by Chinese immigrants from the same native town on the Mainland. This type of settlement was more general than the clan village.

Both the clan village and the village consisting of the people of the same native town were highly homogeneous. As time passed, heterogeneous elements gradually increased. If the village was located in some place convenient for commerce and transportation, the heterogeneous elements rapidly grew. In the meantime, in response to the current social situation, the village community became the basic unit of social life, whether it derived from a clan village or from a village consisting of the people of the same native town.

6. The Function of the Village.

•621 In pre-modern China, governmental administrative activity practically ended at the prefecture level. Most local affairs were left to the local community in the village and town, except

2. Ibid., pp. 176-188. Tomita's study was based on census report of 1930.

621 for tax collection, conscription and cases of capital crime which were handled directly by the prefectural government. In this respect the situation in Formosa under the Manchu regime was the same as that on the Mainland. Within the village, the elder was elected, and approved by the local government. He had some assistants under him. Public affairs and minor crimes were decided and disposed of by the village elders. At times the new settlers drew up rules for the administration of local affairs, and affairs for common interest were discussed and decided upon by the council of householders.

648 Manchu control of Formosa was always
631 tenuous. Uprisings were frequent, and after the first quarter of the 18th century internecine wars
669 occurred incessantly. As the government was not strong enough to keep peace and order, self-defense was left to kinship groups or groups of the people of the same native town. In this situation the influential kinship group was very significant. If it was strong, not only could it defend its kinsmen better, but it could even suppress other groups and enjoy various privileges. A strong clan insured survival and prosperity, and this was the reason why an abur 'ance of male descendants became the ideal of life among the Formosan Chinese. This
[161] may account for the enormous rate of natural growth of Formosa's population which is still going on unabated. On the other hand, for defense against raids of aborigines and pirates, even the influential clan had to get the co-operation of other people. This led to territorial consolidation within the village.

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Furthermore, higher officials were themselves aliens, responsible ultimately to the Manchu court. Their tenure depended on their standing in Peking. Special competence or energy in office was not an advantage—it could even be dangerous, by making them targets of rumor and innuendo. Careers were sometimes ruined on the suspicion that certain officials had separatist leanings or were friendly to foreigners. Personnel were transferred regularly, as in China, to remove them from temptations of familiarity with their offices. Their only safe path to success was to maintain stability in local affairs, and somehow to prevent civil discontent from turning into civil disturbance. 631

This system was calculated to engross its key officers in their personal relations with Peking. It proved to be more effective in ensuring loyalty than in promoting careful government or preventing corruption. There were few deterrents to peculation in office, which was respectable if prudently pursued, and surrounded by many opportunities—such as legal monopolies and illicit export trade—not present in China itself.

These limited and negative objectives of government invited continual lapses of internal rule. Being unfamiliar with local conditions, officials simply did not govern in rural villages. Throughout the countryside they kept the peace by intrigue with powerful families rather than through actual administration—families that relied heavily on property obligations among the peasantry to uphold their influence. The situation put a strain on the administration's own underpinnings, and led to severity in abuses and civil strife to which the mainland itself was unaccustomed. It is a testimony to the serviceability of traditional Chinese institutions that they survived this test. 631 621

Whatever its internal shortcomings, this scheme of political order was well suited to rebuff foreigners, at least foreigners whose advances were not backed by force. Acute frustration among the Western commercial agents in Taiwan stands as evidence that it was accomplishing this part of its purpose. They complained bitterly that officials had connived at Taiwanese violence against Europeans and had even incited such incidents.[3] 439 177

The best information available about Taiwan's external contacts is contained in the published reminiscences and travel accounts of foreign trading representatives. The literary interests of these men throw light on the main preoccupation of their trading activities.

[3] For example, see Pickering, W. A. (1898), Ch. 17.

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this nominal government policy existed within Taiwan's rural villages. The bulk of the population was made up of peasant farmers and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands.

The rural population led a settled existence. Taiwan being a small area, travel between places was not uncommon, but it was rare for families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island.

Local stability fostered local solidarities. The inconvenience of communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6]

Property institutions helped to buttress the stability in these small communities. In Taiwan, as in China, land ownership was the only durable form that substantial wealth could take. It was durable

[5] Takekoshi, Yosaburo (1907), pp. 252 and 269-270.

[6] The turbulent history of Taiwan has been carelessly represented as one of indiscriminate civil disorder, its early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

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spread local support. Their program to govern the countryside directly was a recognized failure as early as 1898.[10]

Starting with the issuance of *pao-chia* regulations in that year, the policy was revised with a view to getting less ambitious results, but more quickly. These were rules of conduct imposed on inhabitants of villages and smaller towns, under the threat of punitive action against the whole community. Virtually all Taiwanese outside the Aborigine Territory (with special provisions applying to certain cities) were assigned to household groups (*chia*), which were in turn grouped into village units (*pao*) for supervision. Responsibility for law observance and public order was allotted jointly among the households of each village. Positions of authority, carrying explicitly defined duties, were conferred on heads of prominent (i.e., wealthy and influential) families.

The system was based on a shrewd practical knowledge of those customary obligations that were most binding among Taiwanese. It was a move toward fitting the treatment of opposition to its roots instead of to its symptoms. By making the regulation of villages follow lines of kinship and property, these measures in effect were insinuated into the indigenous social structure of the population.

The rules placed a multitude of specific duties upon each *chia* as a group. The *chia*, through its head, was responsible for reporting all events such as births and deaths occurring within it, for reporting and controlling all movements of persons in and out of its area along with the conduct of the permanent residents; it put into effect the earnest health and sanitation rules that were often promulgated; it mobilized labor from its ranks for road-building and irrigation projects as directed from above; it was required to disseminate instructions for crop improvement and soil maintenance, bearing its own expenses; it supplied men for auxiliary police service, supported its own school facilities, assessed fines among its members, collected many taxes, and could be called upon to enforce additional rules decreed by prefectural governors.[11] These latter features in fact proved so attractive in avoiding the costs of more formal administration that the Japanese kept the regulations in full force throughout the entire span of their rule.

[10] Yanaihara, Tadao (1929), pp. 220-223.

[11] See OPNAV, Civil Affairs Handbook, *Takao Province* (1944), pp. 49-51; also Hsü Ti-wei (1946), p. 160 ff. This latter author calls the *pao-chia* system "the most effective instrument for destroying organized Chinese resistance to the Japanese."

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The arrangement had more than savings in the expenses of civil government to recommend it. It gave the new regime a channel of authority reaching into every village, however small. Perceiving the value of this, the Japanese took care not to let the system lapse through neglect. They kept a close watch over its functioning by means of a large and reliable force of their own police. More important, by insisting on rigorous enforcement of the regulations, they launched the *pao-chia* organization into full-scale and sustained operation from the beginning.[12] With the supervision of a trusted constabulary, it functioned through the medium of prior obligations and loyalties that were already present in every community, without the need to nurture affection for the central regime among the population.

Such a system—when it works—is a most efficient way of maintaining peace and order in a society already strongly bound by local custom. The Japanese originally adopted it as an improvement over the use of force, but never abandoned coercion in its operation. They merely utilized the structure of *pao* and *chia* to apply sanctions against wrongdoing more selectively and less frequently. Penalties fell on those persons in positions to exercise a deterrent influence on others.

As a further by-product, the refined coercive aspect helped to lessen the rewards that had to be granted for Taiwanese collaboration. This was important, for in rural areas such a form of control lends itself readily to keeping the avenues to individual betterment within an accustomed scope.[13] The impressive agricultural improve-

[12] A system like this one can function only where there are strong local solidarities. It turns communities into separate compartments for administration. This fact may be responsible for some of its success in maintaining order, for it inhibits organized opposition to established government from growing to any large scale. But the considerable success of the *pao-chia* system in Japanese hands cannot be accounted for by these divisive effects. They were also present in Nationalist and Imperial China, and there only helped to divide the society so far that no central administration was possible.

The essential difference was that in Taiwan the Japanese adopted it as an opportunity not for avoiding local government, but for effectuating central control over local affairs. Besides using it to enforce a minimum degree of legal conformity, they intermixed a host of other functions already alluded to. In addition, the Japanese incorporated a regular scheme of favors to be bestowed on active collaborators, in the nature of education, business opportunity, and appointment to government posts, and thus by-passed the usual effect of family connections in filling lower positions of authority.

[13] In later years many educated Taiwanese protested, and correctly so, that it worked as a levelling mechanism to impede all of them from rising very far above the status of peasants. In order to serve a central government at all, and not be merely a loose alliance of towns and villages, such a system must offer inducements to a gentry class for cooperation: this complaint by frustrated persons with schooling should properly be

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

632 621 ments, health program, and construction for public works all depended on generous amounts of labor. Without such cheap incentives to mobilize this labor, these projects could not have been pursued so effectively.

As obvious as these advantages of "indirect rule" may be, it should be as clear that it is a poor vehicle for introducing social change. The more it is used to wield authority, the stronger and more resistant to change it can become; the more it is undermined by altering local relationships that sustain it, the less remains of its usefulness. Hence, from adoption of this scheme initially as an expedient to "pacify" the island, Japanese authorities acquired a positive interest in preserving the same set of agrarian institutions that had existed in Taiwan before their arrival.

Thus they abandoned the idea of reorganizing the rural society—primarily because they tried and failed, but also because as it stood it gave them the best access to regulation of the agricultural population and farming practices. It was in some respects a ready-made instrument for exerting the necessary control with the least disturbance of customary affairs, having in the past enabled the various parties to the export trade to prosper at the expense of farmers. For better coordination of their policies, Japanese gradually did erect a more formal type of government administration, but the basis of the system in rural areas was not greatly affected by this modification.

The Impact of Improvements in Agriculture

185 The Japanese who were charged with remodeling Taiwan's economy gave first priority to long-range investments around the fringes of agriculture. The rural economy was already geared to exchange food and related products for special capital services. Certain of these services were soon altered under Japanese influence. Positions that provided them, or that could usurp them, gradually began to be occupied by Japanese nationals—official, private, and always an indistinct class in-between that wielded quasi-official sanctions.

Those innovations that worked their way into agriculture were directed chiefly to raising crop yields per unit of tilled land. Another avenue of increasing the total agricultural product was by extending

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construed as a lament that there were few opportunities for advancement outside the rural villages and towns dominated by petty gentry. Discontent from this source bore few signs of being the awakening of a popular movement for independence among the Taiwanese, as it is sometimes represented. See Hsü Tze-wei (1946), p. 161 ff.

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433 have always supplied a large part of the Taiwanese diet. How well
241 these three basic crops represent the whole of Taiwanese agriculture may be seen from their share in the total recorded value of farm produce (see Fig. 4).[18]

241 The spatial arrangement of crops discussed in the previous chap-
621 ter has an important bearing on the question of persistence in organization of agriculture. Rice fields were found throughout the flat lowland area, overlapping in every civil division with the other types of farming. In its import for the nature of the rural society, this fact overshadows most effects of diversification and rationalization of farming. The types of social system that can give rise to paddy cultivation of rice seem to be uncommonly well equipped to resist change. They are centered around settled family relationships that provide for uninterrupted use of suitable fields over many generations. This is the case throughout most of the paddy-rice areas of Asia, where these conditions resemble what is to be found in Taiwan.[19] Hence, from this stability within farming itself, one should not expect to find that its social setting was greatly different as a result of Japanese occupation.

Changes in Pattern of Employment

463 Farming is so important to Taiwan that it has first been treated separately, with very little reference to its place among other activities. By viewing it in relation to the pursuits of the entire working population, we can take into account the nature of alternative opportunities outside of agriculture.

There would not be much point in looking for possibilities of non-agricultural employment if the economy could not have supported a larger proportion of people in other activities. This is where many agrarian countries have felt the effect of poverty to stand in the way of their industrial progress. From the start of its modern era, Taiwan's peculiar status as a food exporter suggests that food supply was no barrier. Since that time, special diligence in the matter made land and human effort more effective in producing crops. Advancing both of these aspects of productivity implied that at least some movement of people to pursuits outside of agriculture was economically feasible.

[18] These trends, of course, indicate nothing about "well-being" of farmers, since large capital charges (for irrigation, fertilizer, and government administration) were being made against farm incomes.

[19] See Taeuber, Irene B. (1947), pp. 21-43.

1:Gallin E-4,5 (1957-1958) 1966
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Taiwan AD6
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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single *tzu* villages were quite powerful and frequently the de facto govern-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its membe families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
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ants." The Hsin Hsing villagers readily recall that the local Japanese police and officials showed respect only for the well-to-do landlords. Consequently, if the villagers were to get along successfully with the Japanese, they had to work through their landlords. They usually elected a landlord to handle local village affairs and to represent village interests in dealing with the Japanese authorities.

The arrangement was also to the landlord's advantage. As the official leader, he wielded greater power by which he could more easily manipulate the villagers, and even the tax collector, to his own advantage. His recognition as a leader by his fellow villagers and by the authorities also increased his prestige.

Not only was such a landlord the elected village political leader but he might often be an informal leader as well, a person who took an active part in most of the social and religious affairs of the village. He usually contributed money and time to help make these affairs a success. The efforts of the landlord helped to build up his reputation as a public-spirited citizen. Frequently, he assumed the role of mediator in discussions of village and intervillage problems and in disputes between his own villagers or even between members of other villages. When the landlord's efforts as a mediator extended beyond his own village, he enhanced his own reputation in the whole area and that of his village as well.

These conditions continued after the restoration into the post-land reform period. Today, the landlord class continues in the rural area and wields power in local grass roots politics as well as in socioeconomic affairs. In most villages the recognized leaders are still those who are rich, maintain big landholdings, and have had a fairly good education. Such people may also have influence—perhaps by virtue of a relative—in some government agency. It is still a great advantage to a village to have a wealthy representative of the landlord class to deal successfully with authorities. Many, if not most of the government officials, are drawn from this class, since they are educated and usually wealthy.

However, this picture is beginning to change. Village affairs are being profoundly affected as many former large landlords and traditional local leaders transfer their economic interests and activities away from the land to new business interests elsewhere. When a landlord gives up his major economic interests in the area, it is usually not long before village social, religious, and political activities become much less important to him. Because the personal advantage is gone, he is no longer concerned with maintaining his status or leadership role. He may even move his residence out of the village in order to be closer to his new economic interests.

Villages suffering such a loss of local leadership have reacted in two

15: U.S. Navy--25 [4] (no date) 1944 Formosans
116, 191, 624, 177.19 Japanese
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"The hosei or head of the Ho must have a knowledge of Japanese. One can not now hold office or participate in local meetings or assemblies without being able to speak Japanese, the 'national language.' Newspapers daily publish reports from various localities emphasizing local pride in the spread of Japanese. An example is an item from Rato, a town in Taihoku Province, stating that a forthcoming election would remove from town and village offices every non-Japanese speaker. A census in Heito, Takao Province, revealed that only 32 percent of the Formosan population knew the national language. To remedy the situation, a school was opened for every ten homes and instruction was to be given by members of the young men's association to persons over 10 years of age."

4:Grajdanzev--163 S-4 (no date) 1942 Formosans
116, 625, 642, 177.64 Japan
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"Since the mayor and half the members of the Council are appointed by the government, since the mayor and all higher officials have the right to reject the decisions of the councils, since the provincial councils are appointed or elected indirectly and since the advisory council to the governor-general is appointed directly, we may say that after forty-five years of Japanese rule, Taiwan is a colony in the government of which the islanders have no voice whatsoever and in which the Japanese themselves as citizens have little or no influence. The island is ruled by the governor-general with the help of the army and police."

4:Grajdanzev--163 [2] S-4 (no date) 1942 Formosans
116, 171, 625, 659, 871.177.62 Japan
636.62

"Many times on the preceding pages it has been shown that Taiwan is more poorly supplied with this or that commodity than is Japan proper. But in one respect Taiwan is better supplied——with policemen. According to Dainippon teikoku nenkan (Statistical Year Book of the Japanese Empire) for 1937, there was one policeman for every 1,052 persons in Japan proper in 1937, while in Taiwan there was one for every 580 persons. According to the same source there were more policemen than teachers in Taiwan—— 9,972 policemen in 1937 as compared with 9,651 teachers of all kinds in 1936—while in Japan proper the number of teachers was almost six times as large as the number of policemen. The number of policemen in Taiwan is almost three times the number of physicians."

4:Grajdanzev--163-164 S-4 (no date) 1942 Formosans-1-2
116, 563, 625, 177.62 Japan
636.62

"Besides having this regular police force the whole country is organized for police purposes through the revival of the old Chinese system of paochia. As we saw, the Chinese of the island have no voice in the government of the island, but they [164] are widely used for police purposes through the paochia system, which is obligatory for the Chinese, but from which the Japanese are free. Ten Chinese families form a chia and ten chia a pao, so that a pao comprises one hundred families or about 500-600 persons. At the end of 1938 there were 53,876 heads of chia and 5,648 heads of paochia (called paocheng in Chinese or hosei in Japanese). All these persons are elected by the members of the chia or pao, but they must be approved by the governor (or the chief of the district). It should be noted, however, that although they have no right to elect their own representatives for the self-government, the members of the pao and chia have the right to elect their own policemen. This paradox is due to the fact that the duties of the chiachang (the head of the chia) and the paocheng are heavy, unpleasant, sometimes dangerous, and completely unpaid, while any expenditures which may be incurred are covered by a tax on the members. Only relatively prosperous men can afford to do this work and even they do it for the most part unwillingly. They police their community under the guidance of the professional policemen, report the number of residents, new arrivals and departures (very severe punishments follow failure to

report), organize groups to pursue 'bandits', take precautionary measures in case of epidemics, repair the roads and bridges, fight insect pests, collect the taxes, etc., etc. If a crime is committed or the chiachang neglects his duty, he is the first person to be held responsible, but he along with the whole group is also held jointly responsible. This system was established by the Japanese government at a time when in spite of all governmental efforts, the island was not pacified, and some extraordinary measures were necessary to bring peace. But now, after more than forty years have passed since its inception, the system is a sign of weakness on the part of the government; it shows its distrust of a people conquered so many years ago and a belief among the rulers that only through this system can peace and order be maintained on the island."

4:Grajdanzev--171 S-4 (no date) 1942 Formosans
116, 208, 641, 625, 177.66 Japan
636.66

"Taiwan was conquered by the Japanese army. The regime which was established there was a military regime, and with few modifications it continues to be a military regime today. The government does not trust the Chinese, spies upon them, and is afraid of any movement which does not emanate from the government-general itself. Suppression of the Chinese culture and forcible japanization of the islanders is considered by the government as the best means of turning the islanders into loyal subjects of the Empire."

15: U.S. Navy --21 [5] (no date) 1944 Formosans
116, 157, 167, 625, 177.18 Japanese
636.18

"The Japanese are exceptionally thorough and successful organizers, and have brought under their own control the economic life of the island. The police force and many of the urban commercial people came originally from Southern Kyushu and Shikoku, and speak the local dialects of those regions. The Japanese of the metropolitan areas in the homeland speak frankly of the hardness and unattractiveness of the colonial Japanese character in Taiwan."

15: U.S. Navy --26 [13] (no date) 1944 Formosans
116, 625, 556, 744, 177.74 Japanese
636.74

"The Japanese policeman undertakes to instruct rural peoples in sanitation, house-building, religious observance and many other things elsewhere usually left to private initiative. Large-scale public works projects have raised the whole standard of health and public welfare. Extremes of wealth and poverty are not very apparent in normal times."

596 usually bringing their wives and children with them. The proportion of nuclear families has increased with urbanization and industrialization in the past twenty years.

2. Folk Associations

Various Folk Associations: In the
575 pre-modern village community co-operation for mutual aid in making a living was essential, and there were many kinds of associations in response to various social needs. Hitherto specialists on Formosa have focused their attention mainly upon village and family. In fact, folk society attained a fairly high degree of development, and it was much too complex to be managed by blood and locality groups alone. Institutions of social cohesion based on social function or social need was in evidence, and these we will designate as folk associations.

• 625 There were various associations for the protection of agricultural work. When crops and vegetables were still young or almost ripe, they had to be protected from damage by cattle, hogs or chickens. Usually an association was organized to take care of this. Special persons were appointed to watch over the fields. Every household was notified not to let its animals out, and if any one violated the regulation, he was punished by the association. There were associations for the regulation of

•625 cutting lumber in the woods owned in common by the village and associations for the protection of fruits, bamboo sprouts, etc. from theft. These were the so-called agricultural protective associations. In the season between the two harvests, at the end of the year or before the next crop was ripe, there were petty grain thefts. For the prevention of these, an assocaition of night watchmen was organized. A person from each household was requisitioned and the group was divided into several small bands which stood watch by turns. To prevent attack by aborigines or bandits, a self-protecting association was organized. All adult males in the village, except the old people, participated in it, and in the time free from work, they trained themselves with various weapons. The need for the regulation of such local group activity was essential and constant. As a result, this kind of association was deeply rooted among the village people in Formosa. Many public works, such as repairing roads, bridges, drainage or irrigation canals, etc. were often managed by these associations and sometimes they constituted an embryonic village government.

575 There were other kinds of associations. A buffalo-keeping association collectively watched the buffalos of each household. It was a kind of co-operative. There were associations for mutual aid for burial in case

631 of eligible voters among the Formosan Chinese
666 was extremely small. In 1935, the year in
641 which the so-called local self-government was introduced, there were 40,297 qualified voters among 270,674 Japanese residents, but only 187,155 qualified voters among 4,674,300 Formosan Chinese. The total membership, including government appointees of provincial, district and city assemblies as instituted in 1935, was 252 Japanese and 169 Formosan Chinese. Thus, not only were all administrative offices almost exclusively staffed by Japanese, but even in provincial and municipal representative bodies the Japanese members also far outnumbered the Formosan members.

•625 For administrative control of the populace, the Japanese relied upon an elaborate police system. This system[8] comprised a civilian police force, numbering over 12,000 in 1940, supplemented by a special police force of over 5,000, functioning in the areas occupied by the aborigines and by a military police force numbering some 6,000. To facilitate the task of the police force, the old Chinese pao-chia system of collective responsibility was revived and strengthened. Approximately ten households formed a chia and ten chia a pao.

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8. Ballantine, op. cit., p. 28.

625 The Chia-chang [head of a chia] and pao-cheng [head of a pao] were chosen from among the elders of the households concerned, but they were subject to the approval of the provincial and county officials and the police.[9] The term of office was two years. They did not draw any pay and the expenses were levied on the members. The duties of the chia-chang and the pao-cheng were many and varied; the principal ones were the maintenance of peace and order and the taking of a local census. They had to report new arrivals and departures, disseminate public information, collect taxes, and report law-breakers. If a crime was committed, these heads were first held responsible, but the whole group shared that responsibility along with the heads. Membership in the mutual responsibility organization was obligatory for all Formosan Chinese and failure to co-operate with the group became a matter for the police. Japanese residents were not required to become members. The police on Formosa were dreaded by the inhabitants for their ruthless brutality. An interesting analogy can be drawn between the pao-chia in Formosa under the Japanese rule and the inhabitants'

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9. Since 1936 a knowledge of the Japanese language had been made a requisite for these positions.

625 committee and inhabitants' teams that exist under the Communist regime in Mainland China today. With the efficient espionage built on the pao-chia system, the Japanese were able to control every household in Formosa just as the Communists are using the inhabitants' organizations to maintain an effective check on every household in Communist-dominated China.

635 After World War II, the Chinese govern-
631 ment took over the administration of Formosa and made the island one of the thirty-five provinces of China. However, the head of the provincial government was named administrator-general, and he was also commander-in-chief of the garrisons. The administrator-general exercised considerably wider power than a provincial governor; he supervised both the work of provincial machinery and the administrative functions assumed by the central government in the province. This arrangement was intended to be a temporary one during the period of the transfer of

697 an infirmary. Efforts have been successful in preventing epidemics and infectious diseases among the prisoners.

697 165 The number of deaths[8] in prisons and detention houses has been progressively reduced during the past five years although the number of inmates has remained more or less constant. The following table attests to the improved conditions in Formosan prisons.

DEATH RATE IN FORMOSAN PRISONS */

At End of Year	Number of Inmates In Prisons	Number of Inmates In Detention Homes	Total No. of Deaths During the Year
1949	2,909	1,691	70
1950	2,619	1,209	23
1951	3,667	2,043	19
1952	2,906	1,954	13
1953	3,021	2,346	8
1954	—	—	—

*/ Yearbook of the Republic of China, 1953, 1954.

II. THE POLICE SYSTEM

625 635 The Ministry of Interior of the Executive Yuan exercises general supervision over the

8. In 1946 there were 863 deaths caused by epidemics in Formosan prisons. The number of deaths in prison in 1947 was 222 and in 19[illegible], 156.

625 635 police system of the entire country, but the actual administration of police affairs is delegated to the provincial government.[9] In Taiwan Province, there are twenty-one police bureaus (one in each hsien and city, and one in Yangmingshan Special District), 90 branch bureaus, 202 police stations, and 1,268 substations, all of which are under the direction of the police department of the provincial government.

625 The functions of the police, as enumerated in the Police Law, are: (a) to issue police order; (b) to punish contraventions of police regulations; (c) to assist in the investigation of crimes; (d) to search, detain, or arrest suspects; (e) to execute administrative orders; (f) to preserve order, to regulate traffic, to protect health, to take census, to guard against fire, disaster, moral turpitude, and defacement of private and public properties.[10] The punishment for violating police regulations is limited to a fine under NT$100 or a detention of not more than fourteen days. Criminal cases are sent to law courts for prosecution.

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9. Police Law 1953, Article 3.
10. Ibid., Article 9.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD1

625 874 The exact number of personnel belonging to the police force on Formosa is not available. According to the China Handbook for 1954-55, the total police force numbered a little more than 20,000 in 1953. There are two schools devoted to the training of police personnel: the Central Police Academy trains officers, the Taiwan Police Academy trains enlisted men. In 1953, ten officers were selected for advanced training in the United States and Japan.[11]

III. MEASURES AGAINST COMMUNIST ACTIVITIES

668 648 The Communists in Peking see Formosa as a potential threat to their regime in contradistinction to the Chinese people on the Mainland, who look to Formosa in the hope of ultimate emancipation. As long as Formosa remains free, it is a thorn in their flesh. The Nationalist Government may use the island as a staging area in preparation for an attack on the China Mainland, much as the Allies made use of Britain prior to the invasion of Nazi-dominated Europe. In consequence, Communists never relent in their effort to infiltrate into the island.

648 625 The Nationalist Government, alert to the presence of saboteurs and spies, has organized a security network under the direction of Lt. General Chiang Ching-kuo, son of Chiang Kai-shek. The security network is controlled by the

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11. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 184.

648 Files Office (Tzu-liao Shih), attached to the
625 President's Office (Tsung-t'ung Fu). There are security agencies, called investigation and statistics bureaus, in the Ministry of Defense, the Kuomintang, and the Ministry of the Interior (in charge of police). These agencies operate secretly and are known to have made arrests, conducted trials in camera, and even imprisoned and executed political offenders.

Formosa's public security agency is the Peace Preservation Corps, organized in 1949 for the express purpose of maintaining peace and order on the island. Its main objective is to suppress all subversive activities before they can threaten national security. Detachments of the corps are located at strategic points for the protection of railways, bridges, waterworks, power stations, mines, and industrial plants. Mountainous areas are regularly patrolled by members of the corps, and no one is allowed to enter the mountain regions without express permission. The Peace Preservation Corps also regulates all arrivals and departures from the island to prevent smuggling as well as the infiltration of Communist agents.

[635] The governor of Taiwan Province (ex officio) is nominally the commander of the Peace Preservation Corps, but in fact the corps receives orders directly from Chiang Ching-kuo.

In 1950, an underground Communist organization, whose membership included a deputy chief-of-staff, the wife of the general in

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charge of training the new army, and the managing director of the Taiwan Sugar Corporation, was exposed by the Peace Preservation Corps. According to the China Handbook 1954-55, approximately one-hundred espionage cases, involving some 4,500 people, have been uncovered in the past four years.[12] The Pan-Asia Alliance News Agency reported on January 3, 1956 that, according to an official release, Communist agents were most active in Formosa just before the conflict in Korea began, but since the launching of the Counterespionage Campaign in 1950, a number of Communist cells have been discovered. In 1955, two conspiracies were suppressed, although the government report does not give further details. One of these cases may have involved the attempt of Major Kuo T'ing-liang to assassinate President Chiang in May 1955. The case was widely publicized because it resulted in the resignation of General Sun Li-jen, former commander-in-chief of the Nationalist land forces, who had been Kuo's superior for many years.

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In 1951, the Nationalist Government called upon Communists to renounce their affiliation with the Party; in return, they would receive assurance from the government that their life and property would be protected.[13] Several hundred

12. China Handbook, 1954-55, p. 184.

13. Procedures for Communists and Fellow-travelers to Surrender, promulgated on Sept. 16, 1951.

648 668 Communists have since surrendered to the government.[14]

625 648 The tightness of security control and the severity of punishment have gained for Formosa the unpleasant appellation of a "Police State." It might be true that in proportion to the size of the territory and the population the number of secret service men is unduly large. This will be no surprise if we take into consideration the fact that the security agents of the Nationalist Government formerly patrolled all of China, a territory 160 times larger than the island of Formosa, and that when the continent was overrun by the Communists, the great majority of those security men had to withdraw to Formosa, for they, more than other groups, were most hated by the Communists. Nevertheless, the swarming of secret service men in Formosa has created the impression that everyone on the island is being haunted by the shadow of a Police State.[15] It is also possible that some searches and arrests have been unwarranted. But overcaution is inevitable as Nationalist China is at war with a ruthless and unscrupulous enemy. After all, under martial law, persons endangering the safety of a nation may be sentenced to death

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14. China Yearbook, 1953, p.825:203 Communists surrendered between May 1952 and April 1953. China Handbook 1954-55, p.184: "More than 100 Communists gave themselves up in 1953."

15. [see following page]

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or to imprisonment for not less than ten years.

The Nationalist Government has been frequently accused of showing little mercy to its enemies, of "imposing more death sentences than anyone else outside the Iron Curtain."[16] In referring to such criticism, Lih-wu Han, former Minister of Education, explains that the government cannot afford to be other than strict and severe. Extreme penalties are necessary because the safety of the island and its people is at stake. Exposure by the government of Communist espionage clearly indicates the nature and extent of the danger. "The electric plant would have been

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15. "The P. D. (Political Department of the Ministry of Defense) is undermining the Army. Instead of seeing comrades to their right and left, soldiers see political spies marching beside them." Robert S. Elegant, "How Good is Chiang's Army," The Reporter, Vol. 5, No. 13, Dec. 25, 1951, p. 18. "Throughout my stay I was haunted by the shadow of a Police State malevolent in its objectives and far-reaching in its methods." H. Maclear Bate, Report from Formosa, London, Eyre & Spottiswoode, 1952, p. 22.

16. H. Maclear Bate, ibid., p. 49.

625 blown up and water works wrecked if the Com-
648 munists had had their way. The lives of responsible personages would have been in constant danger, too. Then, the risk of internal trouble during a possible invasion from outside would have been very grave."[17] It appears that, in order to save Formosa from Communist domination, rigid government control may not be entirely indefensible.

722 During the past few years, as conditions
698 on the island grew more stable, the Nationalist
693 Government has been taking measures to guard against unwarranted arrest and imprisonment. In a decree issued on January 29, 1951, the Executive Yuan prescribed that public defenders should be provided in the military court to defend persons accused of violating martial law in cases where the minimum punishment would be not less than five years' imprisonment. A spouse, lineal blood relative, collateral blood relative within third degree, or a statutory agent may be present at the trial and testify on behalf of the accused.

722 Since 1949 Formosa has been subject to
698 martial law. Article 8 provides that the following offenses committed in strategic zones may be tried by the military court: (a) offenses against the internal security of the state, (b) against the external security of the state, (c) against public order, (d) against public safety, (e) forgery, counterfeiting of currency, valuable securities, documents, (f) murder or homicide, (g) restraining personal liberty, (h) snatching, robbery, and piracy, (i) intimidation and kidnapping, and (j) malicious mischief. If provisions

17. Lih-wu Han, op. cit., p. 49.

701 government schools; free medical clinic service with 50 per cent discount on surgery; retention of vacated jobs; priority in leasing public lands for cultivation; and priority in loans for co-operative enterprises. A major part of expenditures for this program is borne by provincial, municipal, and county government.[52]

Police System

625 The police administration of Taiwan follows a centralized system. The province is divided into a number of police districts and patrolled by a police force commanded by the Department of Police of the Provincial Government. Its jurisdiction also extends to harbor and railroad patrol. The exact size of the police force is not known.[53]

Nationalist policies have been directed mainly toward the improvement of the service. The over-all emphasis on security, centrally administered, has not been changed. Briefly, the average educational qualifications of the officers of the police have been raised. Of 3,109 officers, 72 per cent are graduates of colleges or technical or military schools of college standing. Native Taiwanese in the service are being promoted. Salaries and in-service training are being stepped up. A police school, managed by the national authorities and financed by the provincial government, has been in operation since 1948.[54] In addition, since 1947 an "economic police" has been engaged in detection of currency forgeries, underground financial operations and black-marketing, bootlegging of liquor,

[52] *Taiwan Reconstruction**, Vol. 1, p. 15.

[53] Department of Police. *Police and Public Safety**. Taipeh. 1949. The Department of Police estimated a police force of 13,000 under the Japanese, but did not disclose the Nationalist figure.

[54] For data in this paragraph, see *Taiwan Reconstruction**, Vol. 2, pp. 331–44.

[P. 222 (A)]

625 wine, tobacco, and salt in violation of government monopoly, and violations of the 37.5 rent reduction program.

Conclusions

643 In describing the Nationalist government policies, 1949–51, the writer has sought to ascertain their nature and contents by recounting a chain of events which set the political pattern in contemporary Taiwan and by a survey of what has taken place since. From them may be drawn the following tentative conclusions:

1. Generalissimo Chiang Kai-shek and his supporters have been exercising a dominant role in National Government policies, 1949–51.

665 2. While there are three known political parties active in national politics in Taiwan, the Kuomintang, as presently constituted, is the ruling party.

631 3. The political framework in Taiwan may be described as one of over-all political control by the Nationalist government, centralized management by the provincial government, and local self-government, still in its preliminary stage, at the municipal and county levels.

652 4. The National Taiwan currency has exhibited a degree of stability which compares favorably with that in most postwar countries having suffered from war devastation.

5. Nationalist government assets and reserve, sale of government properties, and ECA assistance are contributing factors in balancing the provincial budgets in recent years.

427 6. The 37.5 rent reduction program has contributed towards rural well-being, along with the projects sponsored by the Joint Committee on Rural Rehabilitation.

433 7. There has been an upward trend in agricultural and industrial produc-

[p. 222 (B)]

15: U.S. Navy --26 [8] (no date) 1944 Formosans
116, 596, 736, 626, 177.73 Japanese
636.73

"There are social welfare departments in the Government which endeavor to care for persons without support or livelihood. The family system absorbs the majority of such cases, for a moral obligation lies upon the entire family to support and to share with all members. Property and the income from it is held in common. An able-bodied person who shirks his duties and tends to become a charge upon the family is open to reproof by the elders and by the family council. In extreme cases a member may be cut off from the clan in disgrace and so have no further claim upon it.

Those who are ill, the aged and the physically handicapped can claim the same support from the family group. Hence few appear as public charges."

40: Kirk--19-20 S-2 (no date) 1941 Formosans
116, 191, 626, 177.19 Japanese

"The Japanese language. Japan has undertaken the immense task of changing the language of nearly 5,000,000 people. First of all, those who are struggling to acquire a workable knowledge of Japanese are listed in the 'blue book' and are given special privileges and exemp- [20] tions. Those who speak no Japanese have little chance of holding any elective political office. In banks and government offices Japanese alone is spoken. Above the doorways of Formosan homes where Japanese is spoken appears the legend: 'This household speaks the national language.' Signs frequently appear in busses and public places admonishing the people to 'Speak only the National Language.'"

40: Kirk--22-23 S-2 (no date) 1941 Formosans
116, 123, 626, 797, 177.79 Japanese

"Religion. Besides changing the language and social customs of the people, the Japanese wish to destroy the Taiwan religion and the local temples, and substitute in their place the Japanese torii, shrine, and the Shinto [23] ritual. This policy is well illustrated by a personal experience. During his stay in Formosa, the writer was closely guarded by the military police. One gendarme, and sometimes two, always accompanied the 'foreign suspect' on his visits to the Chinese and primitive settlements. Even in Taihoku, the principal city, a policeman in plain clothes was invariably on hand when the writer would appear in the morning, and this 'guard-of-honor' would not take his leave until the day's work was done. The 'foreigner' made a useful discovery very early in his Formosan career. Whenever a new 'guard' appeared, a visit to the nearest Shrine came first on the day's schedule. At once the whole attitude of the policeman toward his non-Japanese companion seemed to change from one suspicion to friendliness and he unconsciously became more or less an interested 'research assistant.' Unfortunately, the Japanese system seemed to call for a change of policemen as soon as one 'guard' showed signs of proving his worth as 'a social investigator.'

The residents of Formosa today, it appears, if they with to gain status in the eyes of public officials, may do well to forsake all other religions and follow the teachings of Shintoism."

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

ants." The Hsin Hsing villagers readily recall that the local Japanese police and officials showed respect only for the well-to-do landlords. Consequently, if the villagers were to get along successfully with the Japanese, they had to work through their landlords. They usually elected a landlord to handle local village affairs and to represent village interests in dealing with the Japanese authorities.

The arrangement was also to the landlord's advantage. As the official leader, he wielded greater power by which he could more easily manipulate the villagers, and even the tax collector, to his own advantage. His recognition as a leader by his fellow villagers and by the authorities also increased his prestige.

Not only was such a landlord the elected village political leader but he might often be an informal leader as well, a person who took an active part in most of the social and religious affairs of the village. He usually contributed money and time to help make these affairs a success. The efforts of the landlord helped to build up his reputation as a public-spirited citizen. Frequently, he assumed the role of mediator in discussions of village and intervillage problems and in disputes between his own villagers or even between members of other villages. When the landlord's efforts as a mediator extended beyond his own village, he enhanced his own reputation in the whole area and that of his village as well.

These conditions continued after the restoration into the post-land reform period. Today, the landlord class continues in the rural area and wields power in local grass roots politics as well as in socioeconomic affairs. In most villages the recognized leaders are still those who are rich, maintain big landholdings, and have had a fairly good education. Such people may also have influence—perhaps by virtue of a relative—in some government agency. It is still a great advantage to a village to have a wealthy representative of the landlord class to deal successfully with authorities. Many, if not most of the government officials, are drawn from this class, since they are educated and usually wealthy.

However, this picture is beginning to change. Village affairs are being profoundly affected as many former large landlords and traditional local leaders transfer their economic interests and activities away from the land to new business interests elsewhere. When a landlord gives up his major economic interests in the area, it is usually not long before village social, religious, and political activities become much less important to him. Because the personal advantage is gone, he is no longer concerned with maintaining his status or leadership role. He may even move his residence out of the village in order to be closer to his new economic interests.

Villages suffering such a loss of local leadership have reacted in two

7: Joest--61 [6] E-5 (no date) 1882 Formosans
116, 628

There are constant feuds among the Chinwan tribes.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

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1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

1: Stanford U. S-4, 5 1956 AD1 Formosa AD1

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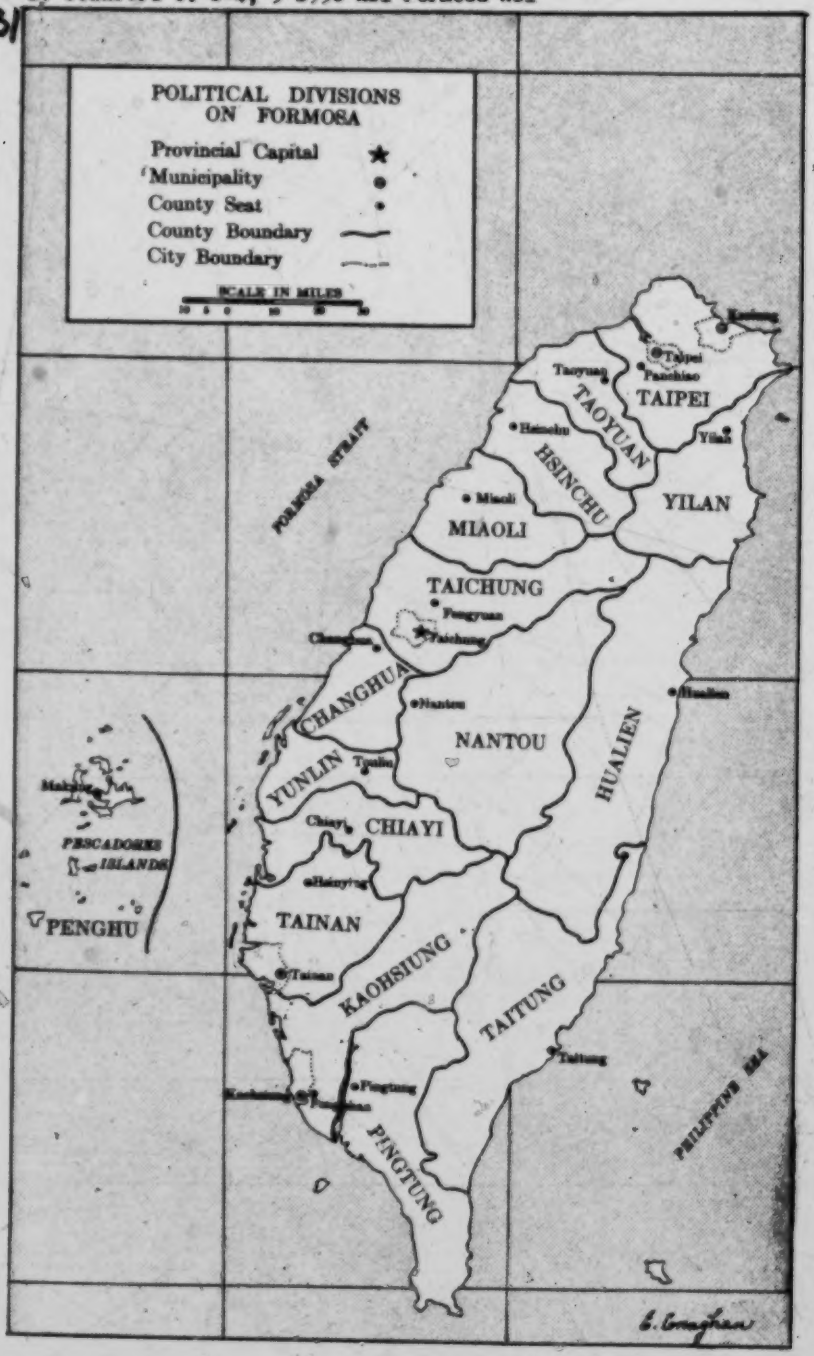

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Reduce AC to BC

B C

[Facing p. 15]

4:Grajdanzev--3 S-4 (no date) 1942 Formosans
116, 131, 631, 177.63 Japan
636.63

"The area of Taiwan, excluding the islands around it, is 35,760 sq. km. (13,807 sq. miles), a little more than the area of the Netherlands, or one-third as large as Virginia, and almost equal to the area of Kyushu or the Japanese part of Saghalien. The island stretches from north to south, the distance from its northern-most point to its southern promontory being 400 km. (249 miles) and, from east to west at the broadest part, 150 km. (93 miles). As an administrative area the Taiwan government-general includes adjacent islands and the Pescadores. The total number of these islands is 76, but their total area is only 64 sq. km. Recently the Spratley Islands off the coast of Indo-China were made a part of the territory of the government-general, but as yet they have not been adequately surveyed."

4:Grajdanzev--132-133 S-4 (no date) 1942 Formosans
116, 631, 652, 177.65 Japan
636.65

"First of all let us compare the gross revenue of the government-general, provinces and municipalities, in order to secure a clear idea of their relative importance. [133]

Public Revenues for 1939 (Budget Estimates) (1)

1. Of course, there are probably cases of double counting in this table, e.g. a grant-in-aid from the government-general to provinces may appear in the budget of the government-general and also in the provincial budgets.

	In 1/000 yen	Percent of total
Government-general	208,602	74.4
Provinces	34,610	12.4
Municipalities	36,961	13.2

Thus three-fourths of all revenues pass through the hands of the government-general; compared to it the local administration is of trifling importance, and we may therefore concentrate our attention chiefly on the budget of the government-general."

4:Grajdanzev--161 [2] S-4 (no date) 1942

116, 631, 177.63
636.63

Formosans
Japan

"Let us now examine the local government administration of Taiwan. It is divided into five provinces, three districts, fifty-one counties and nine cities. Districts are formed in less developed regions—Taito, Karenka (in the East) and Boko (the Pescadores)."

6: Kirchhoff--38 U-4 (no date) 1895 Formosans-1-2
116, 631, 177.63 China
636.63

The administration of Formosa has become even more specialized and made even more independent in the last years. According to Hosie's report, the island has now been raised to the rank of an independent Chinese province under a governor directly responsible to the central government of the Empire. At the present he resides in Tai-pe-fu. At the same time the division of Formosa into three prefectures was ordered, each of them embracing a number of sub-prefectures (hsiën, ting, tschu). They consist of the following:

I. Northern prefecture (Tai-pe-fu).
   1) Hsiën Tem-sui,
   2) " Sin-tschu (or Hsin-tschu),
   3) " Y-lan (or I-lan),
   4) Ting Ki-lung.
II. Middle prefecture (Tai-uan-fu).
   1) Hsiën Tai-uan, *

* This district must consequently have its center of administration in a town called Tai-uan; we thought we should indicate this to be to the east of Tschang-hua, where Hosie's map shows a town called Tai-nan (obviously an error in lettering).

6: Kirchhoff--38 U-4 (no date) 1895 Formosans-2
116, 631, 177.63 China
636.63

2) Hsiën Tschang-hua,
3) " Jün-lin,
4) " Miao-li,
5) Ting Pu-li.

III: Southern prefecture (Tai-nan-fu).
1) Hsiën An-ping,
2) " Fung-schan (Feng-schan, as the English call it),
3) " Kia-y (or Kia-i),
4) " Heng-tschun,
5) Tschu Tai-tung (formerly the district of Pi-lam).

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD2

132 winds bring an annual precipitation of more than 120 inches. Frosts are frequent and the higher mountains are snow-covered during the winter.

Penghu Region

This region comprises the Pescadores Islands, and is subject to strong wind almost all year round. The average velocity of 15 miles per hour is recorded, but during December the velocity is as much as 20 miles per hour. The precipitation amounts to about 40 inches a year.

VII. POLITICAL DIVISIONS

• 631 On August 16, 1950, the administrative areas of Formosa were rearranged into five municipalities, 16 hsien, and Yangminshan Administration. The five municipalities are: Taipei, Tainan, Keelung, Kaohsiung, and Taichung. The sixteen hsien are: Taipei, Taoyuan, Miaoli, Changhua, Yunlin, Tainan, Pingtung, Hualien, Yilan, Hsinchu, Taichung, Nantou, Chiayi, Kaohsiung, Taitung, and Penghu (Pescadores).

621 for tax collection, conscription and cases of capital crime which were handled directly by the prefectural government. In this respect the situation in Formosa under the Manchu regime was the same as that on the Mainland. Within the village, the elder was elected, and approved by the local government. He had some assistants under him. Public affairs and minor crimes were decided and disposed of by the village elders. At times the new settlers drew up rules for the administration of local affairs, and affairs for common interest were discussed and decided upon by the council of householders.

648 Manchu control of Formosa was always tenuous. Uprisings were frequent, and after the
631 first quarter of the 18th century internecine wars
669 occurred incessantly. As the government was not strong enough to keep peace and order, self-defense was left to kinship groups or groups of the people of the same native town. In this situation the influential kinship group was very significant. If it was strong, not only could it defend its kinsmen better, but it could even suppress other groups and enjoy various privileges. A strong clan insured survival and prosperity, and this was the reason why an abur 'ance of male descendants became the ideal of life among the Formosan Chinese. This
[161] may account for the enormous rate of natural growth of Formosa's population which is still going on unabated. On the other hand, for defense against raids of aborigines and pirates, even the influential clan had to get the co-operation of other people. This led to territorial consolidation within the village.

631 669 As uprisings and clan wars became more frequent and widespread, often nearby villages united to make a league of defense. When one village was raided, a drum or gong would be beaten and the allied neighboring villagers would come to the rescue. To affirm their consolidation, common temples were constructed and common patron gods were worshipped. In rotation each allied village celebrated the yearly festival in honor of the patron god. In each case the allied villagers participated in the festival and feast. The blood tie was represented by the village ancestral temple, the territorial tie was represented by the local patronal god. Usually the worship of local patron gods was more frequent and enthusiastic. Sociologically speaking, it is safe to say that, in spite of the often emphasized Chinese ancestral worship and family spirit, the principle of locality took precedence over the principle of blood relationship during the Manchu period. As far as the mass of Formosan Chinese is concerned, this is true. However, in the case of a smaller number of the upper ruling class, the blood tie was still the dominant principle.

7. Breakdown of Folk Society.

612 178 631 Consciousness of the blood tie and locality bond was very strong among the Formosans in former times. When two persons found they had the same surname, they would consider each other as brothers or cousins. When a person introduced himself, he usually added his native

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province. Associations of kinsfolk and associations of the persons of the same native town were organized in cities, and they performed a significant function as agencies for mutual protection and mutual aid. On the China Mainland, at least until recently, and among the overseas Chinese, these associations are still fairly active. So it was in Formosa up until the early years of the Japanese rule. Nowadays, many young Formosans do not even know exactly which prefecture is their native place on the Mainland. They pay little attention to ancestral shrines, and the remaining associations of kinsfolk or associations of the persons of the same native province no longer perform their former political and social functions. No doubt a radical change has taken place in the attitude of the people.

Since the Japanese administration proved able to keep peace and order with its vigorous police control, kin-groups and local associations for self-protection and mutual aid lost their significance. Gradually people became less eager to support these associations, and to the young generation, raised in peace and order, these associations became a thing of the past. With the administrative, industrial and economic improvement, self-sustaining and half-independent villages were integrated into an organic administrative system. Thus the folk society was broken down, and the people adapted themselves to modern political-economic system.

•631 The colonial system was abolished after Formosa was restored to China in 1945. The Three Principles of the People advocated by Dr. Sun Yat-sen were adopted as the basis of politics and administration. It has been pointed out that under the Japanese rule certain advantages of modern technology were introduced "without... counterparts in social organization."[3] It is undeniable that organizational lag is a problem. Now, under the encouragement of the government, various organizations and associations are being promoted. Local self-government in particular is being strengthened. No doubt the development of education and the change from a colonial and dependent economy to an autonomous economy are incentives to stimulate active group co-operation. Social changes are inevitable, but time is too short to gauge how much and how fast the new developments will affect the general character of the Formosan society.

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3. G. W. Barclay, Colonial Development and Population in Taiwan, Princeton University Press, 1954, p. 255.

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Following the revolt of February 28, 1947, the new Chinese provincial administration accepted seven Formosan Chinese as commissioners in a total of fifteen. When K. C. Wu became governor, another effort was made to broaden the participation of local Chinese in government. The provincial commission was enlarged to include seventeen Formosans in a total of twenty-three. Greater number of local people were employed in the civil service. By June 1950, of the total of 81,006 persons employed by the provincial government, Formosans accounted for 53,024.[52] On August 16, 1950 the administrative areas were revised from eight hsien and nine municipalities directly under the province to sixteen hsien and five municipalities. Steps were immediately taken to promote self government in the province. The popular election of the magistrates of the sixteen hsien, the mayors of the five municipalities, the members of the hsien and municipal councils, and the members of the Provincial council was held for the first time in July 1950 and completed in March 1951. A new election took place in 1953-54. Since that time the election law has been modified so that future elections will take place on the same day in all sections of Formosa.

52. Fred W. Riggs, Formosa under Chinese Nationalist Rule, New York, The Macmillan Company, 1952, p. 49.

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Annex "A," Subparagraph 2a',
Political Background

HISTORICAL DEVELOPMENT OF THE GOVERNMENT

175 Formosa has been the habitat of primitive people and lawless Chinese and Japanese since the dawn of its recorded history. In the early part of the seventeenth century, the Dutch and the Spaniards founded trading posts in Formosa and establishing the first organized community on the island. After a rule of 38 years, the Dutch were forced from Formosa by a group of Chinese who were loyal to the fallen Ming Dynasty (1368-1644). Chinese governmental institutions modelled after those prevailing during the Ming period superseded the Dutch, until the Ming adherents were themselves ousted by the Manchu conquerors.

175 For two centuries, beginning in 1683, 131 the island of Formosa was a fu or prefecture of the Chinese province of Fukien. In 1887, by imperial decree, it was made a separate province. The island was ceded to Japan in 1895 following the Sino-Japanese War. During the first twenty-five years of Japanese occupation the island was under military rule: the government was preoccupied with the quelling of revolts, and the governors-general were all military men. From 1919 to 1936 civilian officials were chosen as governors-general.

115 After 1936, in line with Japan's southward
63 expansion policy, the appointees were all admirals. The administrative system had undergone several revisions, the last revision occurring in November 1943.

63 Under the Japanese, Formosa was divided into five provinces (Japanese shu) and three districts (Japanese cho). The five provinces were located in the western part of the island, each placed under the supervision of a provincial governor. The eastern part of the island, which is mountainous and sparsely populated, formed two districts and the Penghu Islands (Pescadores) the third. The five provinces were subdivided into nine cities (Janapese shi) and forty-five counties (Japanese gun). The counties were further divided into towns (Japanese gai) and villages (Japanese sho). The administrative area of towns often embraced a considerable rural area. All areas not within a city or a town fell within the political boundary of a village. The two districts of eastern Formosa were subdivided into ten counties, and the counties into towns and villages.[1]

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1. Hideo Naito, Taiwan, a Unique Colonial Record, 1937-38 edition, Tokyo, Kokusai Nippon Kyokai, 1938, pp. 64-74.

631 The governor-general was the head of
643 the government-general of Formosa. Appointed directly by the Japanese emperor, he wielded extensive and autocratic powers. He supervised the work of all administrative machinery, nominated all officials under him, and, with the exception of a few of the highest rank such as the governor of the provinces and districts, he could promote or dismiss the officials under him. He appointed half of the membership of the provincial assemblies. He had the right to suspend or cancel orders of the provincial governors, veto measures of the provincial assemblies, and dissolve the assemblies. He could impose on any person on the island, without recourse to the courts, imprisonment up to one year or a fine up to ¥ 200. He was assisted by a director-general of civil administration who supervised the secretariat, the various administrative bureaus, and the Central Research Institute, and an Office of Imperial Affairs which co-ordinated military and civil affairs.[2] When the governor-general was a military man, he was also the commander-in-chief of the armed forces on Formosa. If he was a civilian, he might request the local commander to make use of the military or

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2. Joseph W. Ballantine, Formosa, a Problem for United States Policy, Washington, D.C., The Brookings Institution, 1952, p. 27.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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643 naval forces for the maintenance of order.

647 Under the governor-general, were a secretariat, several administrative departments, which included home affairs, education, finance, police, communication, agriculture, and industry, and monopoly bureaus and research institutes. There was also an
645 advisory council with forty councilors, all appointed by the governor-general, who was its chairman. The term of office for the councilors was two years. "In case of necessity, however, the governor-general of Taiwan is authorized to relieve any councilor of his post before the expiration of his office term."[3] The prerogatives of the council were "to announce its opinions in reply to questions submitted thereto by the governor-general regarding important matters of administration."[4] The councilors were appointed from among high-ranking government officials and resident citizens "rich in scholarship and experience." "Clearly, this is a purely bureaucratic
646 institution. The people of Taiwan have no representatives in the Japanese Imperial Diet; they have no representative body which takes

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3. The Organization of the Council, Imperial Ordinance No. 248, June 1, as revised on June 28, 1930 by Imperial Ordinance No. 128, Article IV.

4. Ibid., Article I.

632 answer to questions submitted to them by
633 the local government authorities." The heads of towns and villages had no obligation to seek or to follow the advice of local assemblies. The governor-general could dissolve the assemblies at any level at will.

631 The exceedingly limited extent of "self-
666 government,[1]" which the Japanese had much
641 publicized, was further minimized by the franchise. Suffrage was granted to all self-supporting male Japanese subjects 25 years of age or older, resident in the relevant districts for more than six months, who have been paying for six months or longer a minimum local tax of ¥ 5.00 a year.[6] Formosan Chinese were counted as Japanese subjects, but because the majority of them paid a city, town, or village tax under ¥ 5.00 a year,[7] the number

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6. Naito, op. cit., p. 73.

7. "The small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko (chio = 2.39 acres). But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote." Grajdanzev, op. cit., p. 163.

1 [During Japanese occupation from 1895 to 1945 -- Analyst]

631 of eligible voters among the Formosan Chinese
666 was extremely small. In 1935, the year in
641 which the so-called local self-government was introduced, there were 40,297 qualified voters among 270,674 Japanese residents, but only 187,155 qualified voters among 4,674,300 Formosan Chinese. The total membership, including government appointees of provincial, district and city assemblies as instituted in 1935, was 252 Japanese and 169 Formosan Chinese. Thus, not only were all administrative offices almost exclusively staffed by Japanese, but even in provincial and municipal representative bodies the Japanese members also far outnumbered the Formosan members.

625 For administrative control of the populace, the Japanese relied upon an elaborate police system. This system[8] comprised a civilian police force, numbering over 12,000 in 1940, supplemented by a special police force of over 5,000, functioning in the areas occupied by the aborigines and by a military police force numbering some 6,000. To facilitate the task of the police force, the old Chinese pao-chia system of collective responsibility was revived and strengthened. Approximately ten households formed a chia and ten chia a pao.

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8. Ballantine, op. cit., p. 28.

625 committee and inhabitants' teams that exist under the Communist regime in Mainland China today. With the efficient espionage built on the pao-chia system, the Japanese were able to control every household in Formosa just as the Communists are using the inhabitants' organizations to maintain an effective check on every household in Communist-dominated China.

635 After World War II, the Chinese government took over the administration of Formosa and made the island one of the thirty-five provinces of China. However, the head of the provincial government was named administrator-general, and he was also commander-in-chief of the garrisons. The administrator-general exercised considerably wider power than a provincial governor; he supervised both the work of provincial machinery and the administrative functions assumed by the central government in the province. This arrangement was intended to be a temporary one during the period of the transfer of

authority.[10] The administrator-general was assisted by a secretary-general. There were nine departments in the provincial government which included the secretariat, civil affairs, education, finance, agriculture and forestry, industry and mining, communications, police, and accounts. In addition, there were the food bureau, the bureau of monopolies, and the trade bureau.

The five provinces of Taipei, Hsinchu, Taichung, Tainan, and Kaoksiung and the three districts of Taitung, Hualien, and Penghu were converted into eight hsien [counties], each under a hsien-chang [magistrate], and the nine cities -- Keelung, Changhua, Tainan, Chiayi, Kaohsiung, and Pingtung -- in the five provinces were brought under the direct control of the provincial government at Taipei. Two new cities, Yilan and Hua-lien, were established and were placed under the

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10. T'ai-wan Min-cheng Ti-i-chi [First Collective Report on the Civil Affairs of Taiwan], published by the T'ai-wan Sheng Hsing-cheng Chang-kuan Kung-shu Ming-cheng ch'u [The Department of Civil Affairs of the Office of Administrator-General], Taipei, May 1946, p. 104.

63/ jurisdiction of the hsien government in which they were located. The hsien were subdivided into chen [town] and hsiang [rural districts]. Towns and rural districts were further subdivided into ts'un [villages]. The cities were divided into ch'ü [districts, or sections] and ch'ü into li [wards]. A ts'un is composed of one hundred to two hundred households, and a li from one hundred fifty to three hundred households. Under the ts'un and the li is the smallest community organization, the lin [neighborhoods], consisting of six to fifteen households. Ts'un and li correspond to the former pao, and lin to the former chia, the designations having been altered to obliterate the unhappy associations the former names held for the people who were forced to live under the old system of pao-chia with its unrestrained police powers.

66 63/ Elections of local representative bodies took place in 1946. Franchise was extended to all citizens of both sexes over twenty years of age. Approximately 91.80 per cent of the eligible voters registered for voting.[11] The

11. Total number of registered voters was 2,409,560, First Collective Report on the Civil Affairs of Taiwan, p. 139.

630 election of hsien and city assemblies was
631 completed before April 7 and the provincial assembly (called the Provincial Political Council) was formally inaugurated on May 1. Although the functions of the local assemblies were principally consultative, they represented a great improvement over the Japanese system in two ways: first, the base for suffrage had been extended to include a greater number of voters, and, secondly, all the members of the assembly were elected. The election of district heads, magistrates, and mayors was deferred, because the authorities asserted the people at that time lacked administrative experience to undertake the work.[12]

635 After the local insurrection of February
636 7, 1947, the provincial administration was brought into conformity with that of other provinces of China. The post of administrator-general was abolished. A provincial council of fourteen members or commissioners, with the governor as chairman, was established. Half of the provincial commissioners were chosen from local residents, the Formosan Chinese. The monopoly bureau, whose restrictive activities were immediately responsible for the outbreak of riots, was

12. Ibid., p. 103.

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631 Toward the latter part of 1949 the Mainland of China was lost to the Communists. The Central Government of the Republic of China moved to Formosa. Formosa became both the seat of the national government and the provincial government. Thus, two levels of governmental mechanism exist side by side. In order to study the functions of the different branches of the government and the division of power between them, it will be necessary to examine the constitutional provisions and the structural organization of the central, provincial, and local governments.

Annex "A," Subparagraph 2b. 2,
Political Background

PROVINCIAL AND LOCAL GOVERNMENT AND POPULAR ELECTIONS

I. THE PROVINCIAL GOVERNMENT

631 Formosa was made a province upon its
632 retrocession to China after World War II. The Taiwan Provincial Government holds jurisdiction over the main island of Formosa, twelve smaller islands in adjacent waters, and the sixty-four islands of the Penghu group known to the Western world as the Pescadores. The total area of these islands is 13,880 square miles and the population, excluding the military, was 8,695,843 in February 1955.[1]

The capital of the province is Taipei, which is also the capital of the Nationalist Government of the Republic of China in refuge. The provincial capital, according to a recent air defense plan, will move to Taichung when the necessary construction work in the latter city is completed.[2]

634 Taiwan Province is divided into sixteen administrative areas called hsien (a hsien is roughly comparable to a county in the United States) and five municipalities under the direct jurisdiction of the provincial government. The

1. Report of the Department of Civil Affairs, Taiwan Provincial Government.

2. According to a Taipei broadcast on Dec. 27, 1955, provincial capital was to move to Taichung in April 1956.

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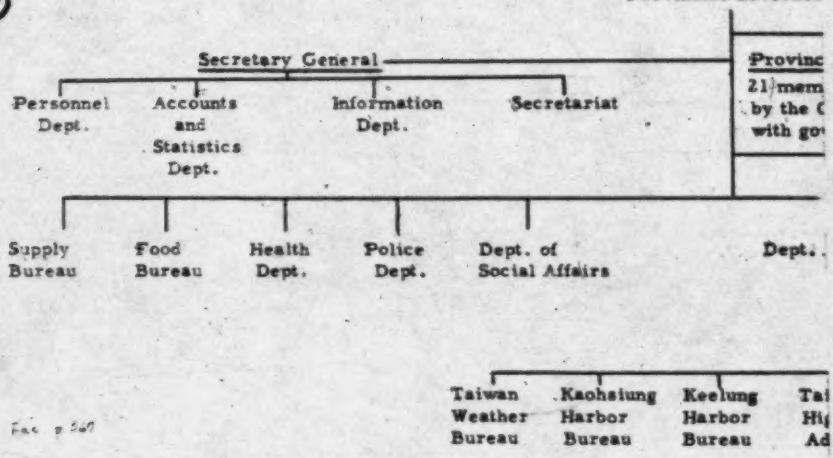
STRUCTURAL CHART OF TAIWAN



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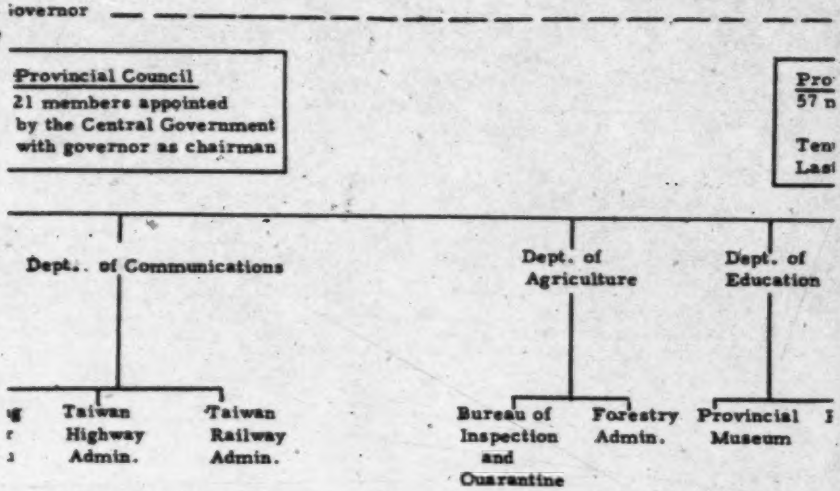
TAIWAN PROVINCIAL GOVERNMENT



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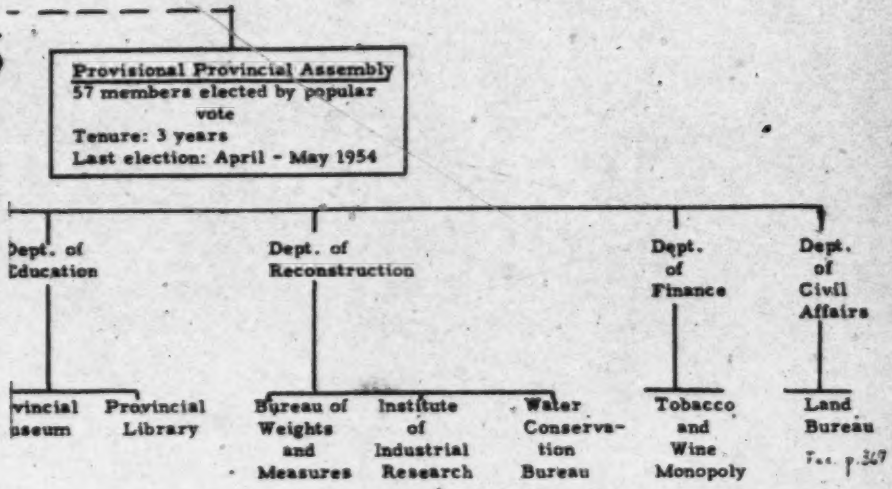

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634 following hsien are on the western slope of the mountain ranges: from north to south, Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua, Nantou, Yunlin, Chiayi, Tainan, Kaohsiung, and Pingtung. Three hsien cover the eastern slope of the mountains; these are Yilan, Hualien, and Taitung. The Pescadores form a separate hsien, Penghu. Two of the five municipalities, Keelung and Taipei, are located at the northern tip of the island, the remaining three, Taichung, Tainan, and Kaohsiung, are on the western side of the island. The scenic resort, Yangmingshan, where President Chiang Kai-shek resides, is a northern suburb of Taipei and forms a special administrative district.

632 The sixteen hsien are each divided into chen (towns) and hsiang (groups of villages or rural districts). Chen and hsiang are further subdivided, respectively, into li (wards) and ts'un (villages). The five municipalities are dividied into ch'ü (districts or sections) and ch'ü are divided into li. A ts'un (village) is composed of 100-200 households and a li (ward) of 150-300. The smallest community organization is called lin (neighborhood) and consists of 6-15 households. In the province of Taiwan there are 82,290 lin which form 3,066 ts'un and 3,489 li. These ts'un and li combine to form 77 chen and 235 hsiang.[3]

631 At the head of the provincial government is
635 the governor, who is the chairman of the Provincial Council. The Taiwan Provincial Council is composed of twenty-one members, six of whom are concurrently commissioners of provincial departments.

3. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China 1953], Taipei, 11/30/53, p.643.

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631 The Provincial Council meets once a week to listen to the reports of the various departments of the provincial government and discuss proposals brought up by the governor or the provincial departments. Although resolutions are passed or submitted to the Executive Yuan in the name of the Provincial Council, it appears in actual practice that the powers of the members of the council are limited to deliberation and final decisions do not depend on majority rule. The governor passes or vetoes each resolution.

According to the Chinese Constitution,[4] each province is to enact its own self-government law and the provincial governor is to be elected by the people of that province. In Formosa, since the provincial self-government law has not been enacted, local self-government is at present confined to the hsien and municipal levels. The provincial government remains under direct control of the central government. The governor is nominated by the president of the Executive Yuan and appointed by the president of the Republic. The department heads and members of the provincial council are selected by the governor and recommended to the Executive Yuan for appointment.

The Taiwan Provincial Government has a secretariat, headed by a secretary-general, and a number of administrative departments, each

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4. Constitution, 1947, Articles 112 and 113.

63/635 under a commissioner or a director. The provincial legislature, called the Provisional Provincial Assembly, is the representative body of the people.[5] In 1951 its members were elected by the hsien and municipality assemblies. In 1953 the law was altered to permit direct election by the people.[6] The present assembly, composed of 57 members, was elected by popular vote in April-May 1954. A hsien or municipality with a population of 150,000 or less is entitled to elect one member to the assembly. If it has a population exceeding 150,000, it is entitled to elect one additional member for each additional 150,000. If the remaining population exceeds 75,000, the hsien or municipality may elect another additional member. When a hsien or a [642] municipality elects four or more representatives, one of the members must be a woman. In the present assembly there are six woman members. The autochthonous tribes living on the plains elect one representative, those living in the mountains elect two representatives. The tenure of office of the present assembly is three years.[7]

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5. So called because the provincial government is under the direct control of the central government, and the provincial council does not exercise full power.

6. Regulations governing the organization of the Provisional Provincial Assembly, promulgated by the Executive Yuan on August 22, 1953.

7. The tenure of the First Provincial Assembly, elected in 1951, was two years.

63/ 636 Nominally the Provisional Provincial Assembly possesses broad legislative powers. The provincial government has to present to the assembly for discussion and decision all measures affecting the rights and obligations of the people, the provincial budget, and the disposal of public property. However, the prerogatives of the assembly is circumscribed by a provision in the organic law of the assembly that in the event of a disagreement between the provincial government and the provisional provincial assembly, the former may request a reconsideration.[8] Should the assembly uphold its original resolution, the provincial government may submit the dispute to the Executive Yuan for final judgment. Moreover, when the assembly is in recess, the provincial government with the approval of the Executive Yuan may take any emergency action and report the matter to the assembly at its next session. Since the assembly meets for a period of ten to fifteen days every six months,[9] the provincial government is not seriously restricted by the assembly. The Executive Yuan has the right to dissolve the Provisional Provincial Assembly and order a new election, if it considers the assembly is acting in contradiction to national policy.[10]

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8. Article 23.

9. In case of necessity a session may be extended, but the extension may not exceed seven days.

10. Article 24 of the Regulations Governing the Organization of the Taiwan Provisional Provincial Assembly.

II. HSIEN AND MUNICIPAL GOVERNMENTS

[636] 634 The province of Taiwan is divided into 16 hsien and 5 municipalities. At the head of each hsien government a hsien-chang (magistrate) and each municipality is headed by a shih-chang (mayor). In the hsien or municipal government, there are a number of bureaus in charge of civil affairs, finance, education, economic reconstruction, police, land, and public health. The number of bureaus varies according to the importance of the district and the size of its population. Each hsien or municipality has a representative body of the people called the hsien assembly or municipal assembly. The subdivisions of hsien and municipality are chen, hsiang and ch'ü, each headed by a chief. They have each a representative body of the people called chen or hsiang assemblies.

631 Local self-government was promulgated in Formosa in April 1950. All members of the councils of towns and rural districts, members of hsien and municipal assemblies, the heads of towns, rural districts, mayors of municipalities, and hsien magistrates were elected by direct suffrage. A second election took place in 1954. The term of office for magistrates, mayors, and heads of towns, rural districts,

.631 and sections of a municipality is three years and the term office for the assemblies and local councils is two years. If a magistrate or a mayor commits a crime or fails to effectively carry out the order of a superior authority he may be dismissed by the provincial government or recalled by a referendum of the voters. In such case, a new election must be held within a month. Similarly, the administrative heads of a town, rural district, or section may be relieved of office by an order of the magistrate or mayor or by a referendum recall.

634 The hsien and municipal assemblies are authorized to decide on all matters related to local self-government (i.e., education, public health, communications, public utilities, and local industries), to sanction local budgets, to audit local expenditures, to decide on the disposal of local public property, to call for administrative reports, to make interpellations, and to issue hsien or municipal ordinances. The assemblies hold a session every four months and no limit is imposed on the length of each session. If the hsien or municipal government should find the resolution of the representative assembly difficult to enforce, it may, with the approval of the provincial government, request a reconsideration. If two-thirds of the attending members of the assembly support the original resolution, it becomes binding. The hsien and municipal assemblies are not subject to dissolution; evidently they possess a much greater latitude of power than the provincial assembly. The citizens'councils of towns and rural districts meet once every three months.

pating voters decreased slightly, but the actual number of people who cast their votes in subsequent elections increased. For instance, in the election of hsien and municipal assemblies the total number of votes cast in 1950 was 2,769,696; the number of votes cast in 1953 totalled 2,961,941. Of a total of 1,846 candidates, 860 members of the hsien and municipal assemblie were elected in 1953. Seventy-four members were women.

The educational background of local legislators is much lower than that of the members of the Legislative Yuan. Over ninety per cent of the members of the current Legislative Yuan are college graduates; of the 860 members of the hsien and municipal assemblies, only 202 are graduates of universities or technical colleges, 342 are graduates of high schools, and the remainder attended primary schools or were privately tutored.

The occupations of the members of local legislatures have been reported as follows:[19]

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17. Number of civilian population on Formosa in February 1955 was 8,695,843; number of qualified voters: 3,997,226, according to report of Civil Affairs Dept. of Taiwan Provincial Government.

18. The China Handbook 1954-55, pp. 474-76.

19. Reports of the election offices, Dept. of Civil Affairs, Taiwan Provincial Government.

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631 635 Farming	273
Mining	15
Manufacturing	31
Transportation	16
Trade	228
Professionals (doctors, lawyers, etc.)	126
Civil Service	104
Others*	67

* Including 39 housewives and 17 retired industrialists and merchants

Of the 860 members of the hsien and municipal assemblies, 806 are native-born and 54 are Mainlanders. The magistrates and mayors elected to office in 1954 are, with two exceptions, all native-born. The exceptions are Kuan-i Hsieh, the mayor of Keelung, the largest port city of Taiwan Province, and the magistrate of Penghu hsien, Yü-lin Li. Hsieh and Li came to Formosa after World War II. The preponderance of Formosa-born candidates elected to the local governments and local assemblies suggests that the Nationalist Government is willing to encourage self-rule in Formosa. After the local election of 1950, one American observer concluded: "That the Taiwanese are making headway toward local political responsibility is clear." [20]

20. Fred W. Riggs: Formosa Under Nationalist Rule, New York, Institute of Pacific Relations, 1952, p. 52.

631 At the provincial level, 16 of the 21 members
635 of the provincial council are native-born, and the secretary-general, the commissioners of the provincial departments of civil affairs and reconstruction, and the directors of the department of health and the food bureau are natives of Formosa. It seems likely that as Formosa-born persons gain experience in government they will demand broadened jurisdiction for the provincial assembly and the election of a Formosan as governor of the province.

642 that whenever the country was unified, we had a time of peace and tranquility, and whenever the country was split, we had anarchy."[2] Federal system, such as existing in the United States, in which vast powers are reserved to the local constituents, is alien to the Chinese conception of government.

642 It is true that the Constitution of the
643 Republic of China has devoted five articles[3] to the enumeration of the powers of the central and local governments, but it does not attempt to define the relation between the central and local governments. What those articles attempt to do is the distribution of administrative duties among the different levels of government according to expediency or convenience. Generally speaking administrative duties are distributed on the principle that whatever can most efficiently be done by the central government will be distributed to the central government. Provincial and hsien governments handle only matters of local interest and anything else that

2. Dr. Sun Yat-sen: Discource on Democracy, San-Min Chu-i [The Three People's Principles].
3. Constitution 1947, Articles 107-111.

642 631 the central government may assign to them. The central government has the power of redemarcating the administrative divisions of the country at any time. For instance, before the last world war, Manchuria consisted of three provinces, but after the war the number of provinces was changed to nine. In normal times, the central government retains legislative and supervisory powers over practically all matters, and so far no occasion has arisen to call for the redefining of relations between the national and local governments.

631 635 On Formosa, since the loss of Mainland China to Communism, a peculiar situation has been in existence. Taiwan Province has become the only territory over which the national government of the Republic of China exercises effective control. Two levels of governmental mechanism -- the central government and the provincial government -- have been operating side by side. Except the departments of foreign affairs and defense, administrative functions of all other departments of the central government are overlapping with those of the provincial government. Many foreign visitors are under the impression that most of the administrative powers of the provincial government are being exercised directly by the central government and that only limited residual powers are left to the provincial government. But the facts do not seem to

631 substantiate this contention. For instance,
635 in the realm of finance, all taxes with the exception of customs duties, are collected by the provincial government. The Bank of
[652] Taiwan, a provincial bank, takes over all the functions of the central bank. It issues currency notes, supplies foreign exchange, and acts as the fiscal agent both of the national and provincial governments. With
871 regard to education, only the Taiwan National
631 University is under the supervision of the
635 Ministry of Education of the national government. All other schools in the province, including the College of Engineering and the Normal University are under the direct jurisdiction of the provincial government. Actually the different ministries in the national government have undergone so much consolidation after they had been moved to Formosa, that most of them are now maintaining only a skeleton staff.[4]

631 The relative importance of the Taiwan
635 provincial government does not, however, diminish the highly centralized authority of President Chiang Kai-shek, for the provincial

4. There are now 12,000 employees in the national government vs. 113,000 in the provincial government. Time, op. cit., p. 34.

631 government enjoys no autonomous power.
635 The governor and all the personnel in key positions of the provincial government are all chosen by the President or at least appointed
643 with his approval. Just like the men in high posts of the national government and the military command, only those considered absolutely loyal are appointed by him. President Chiang Kai-shek has often been criticized in his choice of personnel for rating personal loyalty to himself above everything else. This should not occasion surprise if one is familiar with Chinese history. Ever since the earlier Han Dynasty (202 B.C.-23 A.D.) Confucianism has been the dominant political philosophy of China. Confucius was born in a time of growing political and social unrest. He sought to re-establish order and peace by advocating a beneficent monarchy with all its subjects loyal to the sovereign. Through the milleniums, in the interest of maintaining order and peace as well as perpetuating their rule, Chinese rulers honored and supported Confucius. The emperors always singled out personal loyalty as the criterion for appointment, and President Chiang is merely upholding a deep-rooted political tradition.

Then, China became a republic in 1912. For sixteen long years there were incessant strifes created by different military factions, and chaos gripped the country. With a thousand cadets of the Whampoa Military

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

Japanese government officers could be stationed over the island to establish political order firmly. 648

This delay in extending their mastery over the whole of Taiwan was a disappointment to the Japanese. It spurred them to concentrate their efforts at organization on measures other than force to bring the inhabitants under control. Once set in motion after some three years' experiment and delay, their methods brought swift results. They encircled and isolated the aboriginal tribes in the hills, and introduced a refinement of old Chinese forms of keeping local order—the so-called *pao-chia* system.[10] 648 631

Private Corporations and Japanese Investment

Other measures followed to make the Japanese rule more effective. As the exercise of authority became more a matter of routine, the policy turned more and more to exploring improvements and enlargements of production. This progress in government can be traced in the annals of specific achievements, like the drive to raise rice yields[11] and the public health program. By 1905 the Government-General felt itself well enough established to take a detailed census of the population; the descriptive report of its procedures is the best evidence of a firm degree of control and competence in performing complicated administrative tasks in Taiwan. 648 659

For the next 25 years or more, until they began to shift their energies to preparation for World War II, the Japanese proceeded to work out their policies for Taiwan (outside of the Aborigine Territory) with scarcely a serious check.[12] This long interlude between two periods of tight regulation is sometimes known as one of official "liberalism" or laissez-faire toward business affairs. It can be so designated, however, only in contrast to the strictness that preceded and followed. In steady succession the government completed several major projects. It finished the land survey of the entire island, essential to all their later engineering works as well as to the desired 654

[10] The *pao-chia* system was a scheme for assigning joint responsibility to village and familial groups for the conduct of their members. Its operation and the reasons for its effectiveness are taken up in the following chapter.

[11] Mendiola, N. B. (1949), p. 76 ff.

[12] The Taiwanese efforts at insurrection, as for example recounted in OPNAV, Civil Affairs Handbook (1944), pp. 173-177, tended to be exaggerated by their instigators. Due to their own clumsiness, these were quickly put down by the Japanese, though not without some local disruption. Inside the Aborigine Territory, on the other hand, the Japanese devoted many years of hard fighting and frustration to "pacification," and did not hold the entire island securely until the mid-1920's, nor peacefully until almost 1940.

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some competition for the more desirable lands near the coast. In order to maintain their accustomed manner of farming, many were forced to move inland, where they gradually dispossessed aborigines and the earlier Hakka settlers and pushed eventually to the foothills of the interior. These many-sided conflicts of interest gave rise to land tenures more complicated than those usually found in China. The result was a set of property customs that was to become confused and encumbering in later years.[1]

With agrarian land tenures, however, it is all too easy to mistake form for substance. The system of land tenures in Taiwan gained several features that are distinctive to itself, arising to incorporate new parties into an old system—the aborigines who first occupied the area, and Chinese who acquired land titles to profit from the arrival of immigrants. But, since these landed property relationships are of little interest to us from an antiquarian point of view, their lasting effects are more important: they contributed to a form of village organization that survived through the entire Japanese occupation down to the present.

(3)

The flow of migrants is remarkable in that it populated Taiwan, with little variation over the years, closely after the model of the South China coastal area.[2] The resemblance to the mainland went beyond forms of settlement and land utilization. Politically, under Manchu control the island was supposed to be assimilated into the administration of the rest of China. It was governed as a regular political division—first as a prefecture of Fukien and later as a province itself—by officials appointed directly from Peking.

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Taiwan inevitably presented special problems of control. In the first place, it could be separated from easy communication with the continent; eventually it grew almost as accessible to the Western powers as to Peking. The device most relied upon to tie the area to China was a weak one. The authorities tried, futilely, to isolate it from all external contact. From time to time, they went as far as to restrict the entry of Chinese from across the Straits, though even this had little success.

[1] See Ch'en Cheng-hsiang (1950), pp. 41-43, and Kawada, Shiro (1928).

[2] The instances of alleged "radical transformation" of land tenures (Kawada, Shiro [December 1928], p. 88) were primarily fiscal measures to reassert the central government's share in revenues from the land. Such reforms often are superficial, from the standpoint of village organization. By way of illustration, one of the early official acts of the Japanese in Taiwan was to sweep away a whole section of these archaic land titles. While these reforms cleared the way to regulate rural areas from outside, they scarcely made an impression on property relations within the villages.

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Furthermore, higher officials were themselves aliens, responsible ultimately to the Manchu court. Their tenure depended on their standing in Peking. Special competence or energy in office was not an advantage—it could even be dangerous, by making them targets of rumor and innuendo. Careers were sometimes ruined on the suspicion that certain officials had separatist leanings or were friendly to foreigners. Personnel were transferred regularly, as in China, to remove them from temptations of familiarity with their offices. Their only safe path to success was to maintain stability in local affairs, and somehow to prevent civil discontent from turning into civil disturbance.

This system was calculated to engross its key officers in their personal relations with Peking. It proved to be more effective in ensuring loyalty than in promoting careful government or preventing corruption. There were few deterrents to peculation in office, which was respectable if prudently pursued, and surrounded by many opportunities—such as legal monopolies and illicit export trade—not present in China itself.

These limited and negative objectives of government invited continual lapses of internal rule. Being unfamiliar with local conditions, officials simply did not govern in rural villages. Throughout the countryside they kept the peace by intrigue with powerful families rather than through actual administration—families that relied heavily on property obligations among the peasantry to uphold their influence. The situation put a strain on the administration's own underpinnings, and led to severity in abuses and civil strife to which the mainland itself was unaccustomed. It is a testimony to the serviceability of traditional Chinese institutions that they survived this test.

Whatever its internal shortcomings, this scheme of political order was well suited to rebuff foreigners, at least foreigners whose advances were not backed by force. Acute frustration among the Western commercial agents in Taiwan stands as evidence that it was accomplishing this part of its purpose. They complained bitterly that officials had connived at Taiwanese violence against Europeans and had even incited such incidents.[8]

The best information available about Taiwan's external contacts is contained in the published reminiscences and travel accounts of foreign trading representatives. The literary interests of these men throw light on the main preoccupation of their trading activities.

[8] For example, see Pickering, W. A. (1898), Ch. 17.

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this nominal government policy existed within Taiwan's rural villages. The bulk of the population was made up of peasant farmers and small tradesmen, who supplied the commodities for most of the export trade. The fact that their products were exported did not bring them into closer touch with outside markets. Farming and other village activities did not reach beyond local boundaries; the arrangements for disposing of farm produce, as we have seen, were in different hands.

The rural population led a settled existence. Taiwan being a small area, travel between places was not uncommon, but it was rare for families to change residence from one part to another. With poor roads and chronic banditry, even minor journeys entailed some hardship and risk and so were undertaken chiefly for exceptional purposes. The same difficulties hindered the movement of commodities. Internal markets had not been very effectively developed to transfer articles of ordinary use from town to town; reports tell of wide variation in prices for standard items such as food, and of prohibitive hazards to products in transit.[5] Often products could be shipped to the coast and on to China more easily than to points elsewhere in the island.

Local stability fostered local solidarities. The inconvenience of communication helped rural settlements to become close-knit communities, by segregating certain cleavages and antagonisms that the Chinese had brought with them from the mainland. Many had come from different localities in Fukien and Kwangtung, and had maintained their ancestral clan affiliations. Members of these groups frequently settled together and did not intermarry with others. Even many years after annexation by Japan, the Japanese found that several communities had kept themselves free of mixture with other groups. For these various reasons, village organization in many respects became self-contained and self-sufficient.[6]

Property institutions helped to buttress the stability in these small communities. In Taiwan, as in China, land ownership was the only durable form that substantial wealth could take. It was durable

[5] Takekoshi, Yosaburo (1907), pp. 252 and 269-270.

[6] The turbulent history of Taiwan has been carelessly represented as one of indiscriminate civil disorder, in early population as "unruly." It is noteworthy that most of the disturbances apparently followed the lines of cleavage above. Far from portending a breakdown of tradition within the Chinese settlements, these incidents were contests of strength between distinct parties—powerful clans, government forces, and aboriginal tribes. None was directed against the form of the social order itself, and none ever threatened that order.

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against climate and short-term deterioration in use, against destruction through violence, and against decline in the income that it produced. Since the farming population was increasing within a fairly definite area, it had additional value in speculation. Land was also relatively safe against confiscation by the government; not only could its ownership be hidden from casual inspection, but the government itself depended on the obligations owed to landlords by tenants to uphold its authority. Under agrarian conditions of farming on a small scale it is impossible to cultivate large holdings of land under a single management. Hence, the only way to amass large wealth is to become a landlord—beyond some point, necessarily an absentee landlord. In early Taiwan, considerable concentration of landholdings was reported. Ownership tended to gravitate into the control of large and powerful families, whose influence was the only recourse of government officials in asserting their rule.[7]

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On the economic side, this concentration of wealth was not given a chance to develop into industrial-type investment. The landed gentry, often landed on considerable scale, were the only group of persons who had access to sufficient income to become capitalists.[8] Practically, however, it proved more secure and profitable to let out their lands to tenant farmers. When they branched out into different enterprises, it was as an adjunct to their status as gentry. In South Taiwan, for example,

> ". . . sugar was manufactured from the cane grown upon the owners' plantations, or from that brought from elsewhere. The cane was grown by the tenants, or by those who through being heavily indebted to the landowner stood in the same relation as retainers . . . under it [this system] the master of the sugar factory secures a threefold profit.
>
> 1. As landlord, he claims from his tenants from 15 per cent. to 20 per cent. of the cane as rent.

[7] One might suspect that, as in China, members of these families *were* the officials at lower levels of administration. But there is no direct evidence on this point, aside from frequent references to the fact that *clan* solidarity, imported to Taiwan by the migrants from South China, was one of the few bases for organizing any kind of joint action by Taiwanese on a large scale.

[8] The government was unable to fill such a role itself for reasons already noted. Officials, who were not permanent fixtures in Taiwan, confined their acquisitive energies to foreign commerce, where returns were quicker and they did not need to make long-term commitments. For example, it is significant that the government almost never operated its own monopolies, but let them out to many private agents and taxed the products as they were exported.

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2. As capitalist, he secures 14 per cent. to 24 per cent. interest on all the money he may have loaned to his tenant. 565
3. In order to cover the running expenses of the sugar factory he, as master, appropriates half the cane brought in by his tenants. 426 427

"These vast profits leave very little for the poor tenants, who have therefore no means of improving the soil, but fall deeper into debt, until at length they become mere slaves of the sugar factor. This system has proved the greatest hindrance to the growth of the business."[9]

Establishment of Japanese Authority

Japan's objectives in enlarging its Empire required a more energetic administration. With the background of past failures, it is understandable that the Japanese who first arrived in Taiwan met difficulty in trying to impose this kind of rule. It quickly became evident that neither profit nor political dominion was assured to them without some extraordinary measures. 177 631

Japanese first installed themselves in economic life exactly where outsiders had done so in the past—at the periphery of traditional marketing and property relations. They remained most active, as we have seen, outside the realm of agriculture proper. Through their steps in gaining access to the old agrarian institutions, we can now begin to see how far these changes impinged on agriculture itself. The Japanese did not proceed by sheer force, nor simply in a form of "economic penetration." The control was made effective by wedding the two channels—business and government—and by manipulating the pre-existing situation from a few vantage points at the outside. To make a success of this endeavor, the Japanese found it expedient to leave much of this rural social structure almost intact, and turn its basic features to their own account.

Histories of Taiwan over this period usually emphasize only the opposition to the new government that was overt and armed. But it was not by military conquest that the Japanese eventually secured the lowland area of the island. The military aspect was over quickly. Organized resistance collapsed by the end of 1895. Within a year or so after formally taking possession, Japanese became aware that direct attempts to alter the old rural state of affairs were too costly and slow, and were ineffectual against guerrilla bands that had wide-

[9] Takekoshi, Yosaburo (1907), p. 243.

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spread local support. Their program to govern the countryside directly was a recognized failure as early as 1898.[10]

Starting with the issuance of *pao-chia* regulations in that year, the policy was revised with a view to getting less ambitious results, but more quickly. These were rules of conduct imposed on inhabitants of villages and smaller towns, under the threat of punitive action against the whole community. Virtually all Taiwanese outside the Aborigine Territory (with special provisions applying to certain cities) were assigned to household groups (*chia*), which were in turn grouped into village units (*pao*) for supervision. Responsibility for law observance and public order was allotted jointly among the households of each village. Positions of authority, carrying explicitly defined duties, were conferred on heads of prominent (i.e., wealthy and influential) families.

The system was based on a shrewd practical knowledge of those customary obligations that were most binding among Taiwanese. It was a move toward fitting the treatment of opposition to its roots instead of to its symptoms. By making the regulation of villages follow lines of kinship and property, these measures in effect were insinuated into the indigenous social structure of the population.

The rules placed a multitude of specific duties upon each *chia* as a group. The *chia*, through its head, was responsible for reporting all events such as births and deaths occurring within it, for reporting and controlling all movements of persons in and out of its area along with the conduct of the permanent residents; it put into effect the earnest health and sanitation rules that were often promulgated; it mobilized labor from its ranks for road-building and irrigation projects as directed from above; it was required to disseminate instructions for crop improvement and soil maintenance, bearing its own expenses; it supplied men for auxiliary police service, supported its own school facilities, assessed fines among its members, collected many taxes, and could be called upon to enforce additional rules decreed by prefectural governors.[11] These latter features in fact proved so attractive in avoiding the costs of more formal administration that the Japanese kept the regulations in full force throughout the entire span of their rule.

[10] Yanaihara, Tadao (1929), pp. 220-223.

[11] See OPNAV, Civil Affairs Handbook, *Takao Province* (1944), pp. 49-51; also Hsü Tzu-wei (1946), p. 160 ff. This latter author calls the *pao-chia* system "the most effective instrument for destroying organized Chinese resistance to the Japanese."

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On a much smaller scale, Japanese replaced Chinese as immigrants. 167
Chinese arriving from the mainland were given a distinct legal status as aliens. Their activities were restricted, and they were no longer allowed to merge with permanent Taiwanese residents. Practically all movement by Taiwanese thenceforth consisted of internal migration, redistributing the population that was already there.

Only a part of the island is level enough to have encouraged heavy 659
agricultural settlement; almost half of the total area is more than 631
500 meters above sea level. For administration, and therefore for the census, Taiwan was separated from 1920 on into seven main divisions. Two of them, plus an eighth for P'enghu (the Pescadores Islands) off the West coast, were technically under a different sort of political organization; but for convenience we shall refer to all eight as *Prefectures*.[2] Most types of census and registration statistics were tabulated for each of these political units as well as for the total island.

Beneath the level of Prefectures, local administration was organized around a set of Districts and a smaller number of Municipalities. In the population statistics, these formed two parallel units: no District contained a Municipality, and both were subordinate to Prefectures.[3] There were seven Municipalities at the census date in 1930, raised to nine before 1935, and 53 Districts in both years; in comparisons of different years, all will be standardized to the arrangement in 1935. Inside each District were towns and villages. Few materials are available for these individually; for most purposes the smallest divisions that can be studied are the Districts.[4]

Finally, the mountainous interior region—the Aborigine Terri-

[2] If not literally accurate, the term is appropriate in that authority below the Government-General was highly centralized in the subordinate governors of these divisions. How they are designated here is a matter of no consequence, as it made little difference in the actual administration. P'enghu, scarcely known to Westerners except as the Pescadores Islands, was in 1926 made a separate division under the Government-General. Prior to this it had shifted between separate status and a subdivision of Kaohsiung Prefecture. Hence there is no unbroken series of data for it.

[3] Again, the details of political organization were not uniform, but that need not concern us here. Both terms are arbitrary: "District" for the term *chün* (in its Chinese reading), and "Municipality" for *shih*. It was the practice to form new municipalities by removing some important town of sufficient size as a unit from its surrounding District, sometimes adding some former villages, also intact. This practice gives a basis for identifying the population of cities for comparison over a period when such administrative changes were taking place.

[4] The area of towns and villages exhausted the entire area of Districts, leaving no space between their boundaries. Therefore they do not always refer to meaningful units of settlement, and the terms are not consistent.

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tory—was put under special control (though it nominally fell inside some part of each prefecture). This area must be considered as a separate division of the island. Its actual conditions and the quality of its population data are distinct from the remainder. Japanese were secretive about their treatment of the Aborigine Territory, and we have little information about it that is dependable.

These civil divisions were the outcome of some experimentation in government administration. The scheme just described was put into essentially its final form in 1920. Accordingly, most comparisons involving internal boundaries cannot be carried back beyond that year.

161

The Distribution of Total Population and of Migrants

In 1930, the population of Taiwanese was divided among the Prefectures as indicated in Table 19. Data in this form do not readily

TABLE 19

TOTAL POPULATION OF TAIWAN, 1930

By Prefecture, Inside and Outside the Aborigine Territory

(All Ethnic Groups)

	Area of Regular Administration			*Aborigine Territory*		
Prefecture	*Population*	*Density: Persons Per Sq. Km.*	*Density As % of Average For Total Island*	*Population*	*Density: Persons Per Sq. Km.*	*Per Cent*
Taipei	896,380	328.0	141	17,151	9.4	4
Hsinchu	641,479	243.9	105	23,232	11.8	5
Taichung	990,571	279.3	120	24,975	6.5	3
Tainan	1,155,287	233.9	100	4,359	9.0	4
Kaohsiung	601,547	210.5	90	31,772	11.1	5
Taitung	46,182	46.2	20	12,619	5.0	2
Hualien	72,555	53.7	23	14,304	4.4	2
P'enghu	60,124	473.9	204	—	—	-
Total Island	4,464,125	232.7	100	128,412	7.6	3

Source: *Census of 1930, Statistical Tables*, Table 11.

reveal relative concentration and dispersion of people. The real centers of population, if we disregard for a moment the dense settlement in the largest cities, were in portions of Taichung and Tainan

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and those which are delegated to it by the central government. Such matters as local self-government, division of administrative areas, forestry, industry, mining and commerce, educational system, banking, commodity control, navigation, public enterprises, land registration, and police system are legislated by the central government and may be delegated to the provincial authorities for execution. Matters pertaining to agriculture, commerce, industry, education, finance, taxation, and enterprises and cooperatives which are provincial in nature may be legislated by the provincial government.[10] In actual practice, important legislation concerning Taiwan is enacted by the National Government and administered by the provincial authorities. 642

The Taiwan Provisional Assembly, functioning as constituted May 1946, exercises a limited range of legislative powers. It considers "administration policies and activities and the provincial budget." Pending its development into a constitutional representative body, its decisions are subject to the veto of the National Government.[11]

The Governor of Taiwan is appointed by the Nationalist Government. Under him are various departments, bureaus, agencies, and province-operated enterprises. To draw an over-all picture of specific Nationalist policies pertinent to political, economic, social, and military activities on the island, the following analysis, necessarily brief, may be helpful.

Administrative Structure

The political organization of Taiwan follows a pattern of centralization, using 631

[10] For the division of powers, see Constitution of the Republic of China, Arts. 107–109.

[11] For details regarding the Assembly, see Chinese Constitution, Arts. 112–120; also Han Lih-wu, *Taiwan Today*, Taipeh, 1950—quotation at pp. 31–32.

[p. 215 (B)]

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631 urban centers as administrative units. The island is presently divided into sixteen counties and five province-controlled municipalities. Under them are various districts, townships, and villages.[12]

632 634 666 Within this framework of centralized control is carried out the program of encouraging local self-government. As of May 6, 1951, all the twenty-one mayors and county magistrates had been successively elected to their respective offices by popular vote.[13] Besides, there are 6,304 village and *li* (urban units akin to wards) assemblies learning self-government by doing. Representing them in township and district assemblies are some 8,024 village and *li* delegates.[14] On county and municipal levels are some 541 popularly elected councilmen.[15] Of an estimated 2,650,000 men and women of twenty years of age and over who are qualified to vote, some 2,416,072 had registered.[16]

647 Along with the development in local self-government has been an increase in the participation of local inhabitants in the management of their provincial affairs. It may be recalled that under the Japanese, of 84,559 government personnel in 1945, 55.53 per cent were Taiwanese, and the rest Japanese.[17] In June 1950 the total number of govern-

[12] See Provincial Government of Taiwan, *Report on Administrative Reorganization**, Taipeh, 1949; also Democratic Publications Association, *Taiwan Reconstruction** (Taipeh, 1950), Vol. 1, pp. 1–12.

[13] The Broadcast of Voice of Free China, Taipeh, April 28, 1951 reported the conclusion of nineteen local elections with the remaining two to be completed by May 6, 1951.

[14] April 1948 figures. Also see *Taiwan Reconstruction**, cited note 12 *supra*, pp. 7–12. The terms of office of the delegates have since been extended by the National Government to such time as "formal assemblies shall be constituted."

[15] *Ibid.*

[16] 1947 figure. See *Taiwan Reconstruction**, cited note 12 *supra*, p. 7.

[17] For a breakdown of government person-

[P. 216 (A)]

625 wine, tobacco, and salt in violation of government monopoly, and violations of the 37.5 rent reduction program.

Conclusions

643 In describing the Nationalist government policies, 1949–51, the writer has sought to ascertain their nature and contents by recounting a chain of events which set the political pattern in contemporary Taiwan and by a survey of what has taken place since. From them may be drawn the following tentative conclusions:

1. Generalissimo Chiang Kai-shek and his supporters have been exercising a dominant role in National Government policies, 1949–51.

665 2. While there are three known political parties active in national politics in Taiwan, the Kuomintang, as presently constituted, is the ruling party.

631 3. The political framework in Taiwan may be described as one of over-all political control by the Nationalist government, centralized management by the provincial government, and local self-government, still in its preliminary stage, at the municipal and county levels.

652 4. The National Taiwan currency has exhibited a degree of stability which compares favorably with that in most postwar countries having suffered from war devastation.

5. Nationalist government assets and reserve, sale of government properties, and ECA assistance are contributing factors in balancing the provincial budgets in recent years.

427 6. The 37.5 rent reduction program has contributed towards rural well-being, along with the projects sponsored by the Joint Committee on Rural Rehabilitation.

433 7. There has been an upward trend in agricultural and industrial produc-

[p. 222 (B)]

4:Grajdanzev--162-163 S-4 (no date) 1942 Formosans
116, 171, 632, 641. 177.64 Japan
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"The municipal or village councils have from 8 to 40 deputies (according to the population), half of whom are appointed by the government and half elected. The electorate is made up of male Empire subjects who have attained the age of twenty-five years, who are not dependent, who have lived continuously for at least six months in that particular locality and pay at least five yen in municipal or village taxes (house tax, land tax, or business tax). [163]

Thus it is clear that the only places in which there is some semblance of elections are the cities or villages. As has already been pointed out, the small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko. But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote. We have no data for Taiwan, but the example of Korea shows that by this device two per cent of the population—the Japanese—form the majority of the electorate."

634 Each county (called gun in the five provinces and shicho in the three districts) was administered by an official whose duty was to police the county. The chief of a county supervised the town and village governments under him.

632 City governments were responsible
633 directly to the provincial government in which they were situated, while towns and villages were responsible to the provincial government through the county administration. Mayors of cities, as well as chiefs of town and heads of villages, were all appointed by the governor-general. There was an assembly in each city, town, and village. The city assembly had a membership ranging from twenty to forty and the town and village assemblies had eight to twenty members. One-half of the members of the local assemblies were appointed by the governor of the province and one-half were elected by the qualified electorate. The city assemblies functioned in the same manner as the provincial assemblies. They could act on the city budget and tax matters. They also elected six members to the city council which took the place of the assembly when the latter was not in session. The governor of a province or the mayor of a city held the veto power over the acts of the assemblies. The town and village assemblies were consultative agencies, authorized only "to announce their opinions in

630 answer to questions submitted to them by
633 the local government authorities." The heads of towns and villages had no obligation to seek or to follow the advice of local assemblies. The governor-general could dissolve the assemblies at any level at will.

631 The exceedingly limited extent of "self-
666 government,"[1] which the Japanese had much
641 publicized, was further minimized by the franchise. Suffrage was granted to all self-supporting male Japanese subjects 25 years of age or older, resident in the relevant districts for more than six months, who have been paying for six months or longer a minimum local tax of ¥ 5.00 a year.[6] Formosan Chinese were counted as Japanese subjects, but because the majority of them paid a city, town, or village tax under ¥ 5.00 a year,[7] the number

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6. Naito, op. cit., p. 73.

7. "The small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko (chio = 2.39 acres). But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote." Grajdanzev, op. cit., p. 163.

1 [During Japanese occupation from 1895 to 1945 -- Analyst]

634 following hsien are on the western slope of the mountain ranges: from north to south, Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua, Nantou, Yunlin, Chiayi, Tainan, Kaohsiung, and Pingtung. Three hsien cover the eastern slope of the mountains; these are Yilan, Hualien, and Taitung. The Pescadores form a separate hsien, Penghu. Two of the five municipalities, Keelung and Taipei, are located at the northern tip of the island, the remaining three, Taichung, Tainan, and Kaohsiung, are on the western side of the island. The scenic resort, Yangmingshan, where President Chiang Kai-shek resides, is a northern suburb of Taipei and forms a special administrative district.

632 The sixteen hsien are each divided into chen (towns) and hsiang (groups of villages or rural districts). Chen and hsiang are further subdivided, respectively, into li (wards) and ts'un (villages). The five municipalities are dividied into ch'ü (districts or sections) and ch'ü are divided into li. A ts'un (village) is composed of 100-200 households and a li (ward) of 150-300. The smallest community organization is called lin (neighborhood) and consists of 6-15 households. In the province of Taiwan there are 82,290 lin which form 3,066 ts'un and 3,489 li. These ts'un and li combine to form 77 chen and 235 hsiang.[3]

631 At the head of the provincial government is 635 the governor, who is the chairman of the Provincial Council. The Taiwan Provincial Council is composed of twenty-one members, six of whom are concurrently commissioners of provincial departments.

3. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China 1953], Taipei, 11/30/53, p.643.

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spread local support. Their program to govern the countryside directly was a recognized failure as early as 1898.[10]

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The system was based on a shrewd practical knowledge of those customary obligations that were most binding among Taiwanese. It was a move toward fitting the treatment of opposition to its roots instead of to its symptoms. By making the regulation of villages follow lines of kinship and property, these measures in effect were insinuated into the indigenous social structure of the population.

The rules placed a multitude of specific duties upon each *chia* as a group. The *chia*, through its head, was responsible for reporting all events such as births and deaths occurring within it, for reporting and controlling all movements of persons in and out of its area along with the conduct of the permanent residents; it put into effect the earnest health and sanitation rules that were often promulgated; it mobilized labor from its ranks for road-building and irrigation projects as directed from above; it was required to disseminate instructions for crop improvement and soil maintenance, bearing its own expenses; it supplied men for auxiliary police service, supported its own school facilities, assessed fines among its members, collected many taxes, and could be called upon to enforce additional rules decreed by prefectural governors.[11] These latter features in fact proved so attractive in avoiding the costs of more formal administration that the Japanese kept the regulations in full force throughout the entire span of their rule.

[10] Yanaihara, Tadao (1929), pp. 220-223.

[11] See OPNAV, Civil Affairs Handbook, *Takao Province* (1944), pp. 49-51; also Hsü Tzu-wei (1946), p. 160 ff. This latter author calls the *pao-chia* system "the most effective instrument for destroying organized Chinese resistance to the Japanese."

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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The arrangement had more than savings in the expenses of civil government to recommend it. It gave the new regime a channel of authority reaching into every village, however small. Perceiving the value of this, the Japanese took care not to let the system lapse through neglect. They kept a close watch over its functioning by means of a large and reliable force of their own police. More important, by insisting on rigorous enforcement of the regulations, they launched the *pao-chia* organization into full-scale and sustained operation from the beginning.[12] With the supervision of a trusted constabulary, it functioned through the medium of prior obligations and loyalties that were already present in every community, without the need to nurture affection for the central regime among the population.

Such a system—when it works—is a most efficient way of maintaining peace and order in a society already strongly bound by local custom. The Japanese originally adopted it as an improvement over the use of force, but never abandoned coercion in its operation. They merely utilized the structure of *pao* and *chia* to apply sanctions against wrongdoing more selectively and less frequently. Penalties fell on those persons in positions to exercise a deterrent influence on others.

As a further by-product, the refined coercive aspect helped to lessen the rewards that had to be granted for Taiwanese collaboration. This was important, for in rural areas such a form of control lends itself readily to keeping the avenues to individual betterment within an accustomed scope.[13] The impressive agricultural improve-

[12] A system like this one can function only where there are strong local solidarities. It turns communities into separate compartments for administration. This fact may be responsible for some of its success in maintaining order, for it inhibits organized opposition to established government from growing to any large scale. But the considerable success of the *pao-chia* system in Japanese hands cannot be accounted for by these divisive effects. They were also present in Nationalist and Imperial China, and there only helped to divide the society so far that no central administration was possible.

The essential difference was that in Taiwan the Japanese adopted it as an opportunity not for avoiding local government, but for effectuating central control over local affairs. Besides using it to enforce a minimum degree of legal conformity, they intermixed a host of other functions already alluded to. In addition, the Japanese incorporated a regular scheme of favors to be bestowed on active collaborators, in the nature of education, business opportunity, and appointment to government posts, and thus by-passed the usual effect of family connections in filling lower positions of authority.

[13] In later years many educated Taiwanese protested, and correctly so, that it worked as a levelling mechanism to impede all of them from rising very far above the status of peasants. In order to serve a central government at all, and not be merely a loose alliance of towns and villages, such a system must offer inducements to a gentry class for cooperation: this complaint by frustrated persons with schooling should properly be

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ments, health program, and construction for public works all depended on generous amounts of labor. Without such cheap incentives to mobilize this labor, these projects could not have been pursued so effectively.

As obvious as these advantages of "indirect rule" may be, it should be as clear that it is a poor vehicle for introducing social change. The more it is used to wield authority, the stronger and more resistant to change it can become; the more it is undermined by altering local relationships that sustain it, the less remains of its usefulness. Hence, from adoption of this scheme initially as an expedient to "pacify" the island, Japanese authorities acquired a positive interest in preserving the same set of agrarian institutions that had existed in Taiwan before their arrival.

Thus they abandoned the idea of reorganizing the rural society—primarily because they tried and failed, but also because as it stood it gave them the best access to regulation of the agricultural population and farming practices. It was in some respects a ready-made instrument for exerting the necessary control with the least disturbance of customary affairs, having in the past enabled the various parties to the export trade to prosper at the expense of farmers. For better coordination of their policies, Japanese gradually did erect a more formal type of government administration, but the basis of the system in rural areas was not greatly affected by this modification.

The Impact of Improvements in Agriculture

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The Japanese who were charged with remodeling Taiwan's economy gave first priority to long-range investments around the fringes of agriculture. The rural economy was already geared to exchange food and related products for special capital services. Certain of these services were soon altered under Japanese influence. Positions that provided them, or that could usurp them, gradually began to be occupied by Japanese nationals—official, private, and always an indistinct class in between that wielded quasi-official sanctions.

Those innovations that worked their way into agriculture were directed chiefly to raising crop yields per unit of tilled land. Another avenue of increasing the total agricultural product was by extending

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construed as a lament that there were few opportunities for advancement outside the rural villages and towns dominated by petty gentry. Discontent from this source bore few signs of being the awakening of a popular movement for independence among the Taiwanese, as it is sometimes represented. See Hsü Tze-wei (1946), p. 161 ff.

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631 urban centers as administrative units. The island is presently divided into sixteen counties and five province-controlled municipalities. Under them are various districts, townships, and villages.[12]

632 634 666 Within this framework of centralized control is carried out the program of encouraging local self-government. As of May 6, 1951, all the twenty-one mayors and county magistrates had been successively elected to their respective offices by popular vote.[13] Besides, there are 6,304 village and *li* (urban units akin to wards) assemblies learning self-government by doing. Representing them in township and district assemblies are some 8,024 village and *li* delegates.[14] On county and municipal levels are some 541 popularly elected councilmen.[15] Of an estimated 2,650,000 men and women of twenty years of age and over who are qualified to vote, some 2,416,072 had registered.[16]

647 Along with the development in local self-government has been an increase in the participation of local inhabitants in the management of their provincial affairs. It may be recalled that under the Japanese, of 84,559 government personnel in 1945, 55.53 per cent were Taiwanese, and the rest Japanese.[17] In June 1950 the total number of govern-

[12] See Provincial Government of Taiwan, *Report on Administrative Reorganization**, Taipeh, 1949; also Democratic Publications Association, *Taiwan Reconstruction** (Taipeh, 1950), Vol. 1, pp. 1–12.

[13] The Broadcast of Voice of Free China, Taipeh, April 28, 1951 reported the conclusion of nineteen local elections with the remaining two to be completed by May 6, 1951.

[14] April 1948 figures. Also see *Taiwan Reconstruction**, cited note 12 *supra*, pp. 7–12. The terms of office of the delegates have since been extended by the National Government to such time as "formal assemblies shall be constituted."

[15] *Ibid.*

[16] 1947 figure. See *Taiwan Reconstruction**, cited note 12 *supra*, p. 7.

[17] For a breakdown of government person-

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VIII. IMPORTANT CITIES[3]

Keelung

439 Keelung City, the port for Taipei and northern Formosa, handles nearly one-half of Formosa's imports and a little more than one-fourth of all exports. Apart from factories which manufacture commercial fertilizers, wheat flour, and bicycles, it has ship-building facilities, a railway terminus, and warehouses. It also is a base for deep-sea and coastal fishing. The registered population in June 1953 was 170,000.[4]

Taipei

438 633 Taipei, located on the northern bank of Tan-shui River, is the largest city on the island, with an estimated population of over 700,000 in early 1956. It is the capital of

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3. Information on the important cities is taken from A.F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, pp. 73-109.

4. The registered civilian population, apparently not including military personnel and foreigners.

633 438 Nationalist China's Central Government as well as of the Taiwan Provincial Government.[5] It is the most important center for commerce and the heart of air, railway, and highway transportation. Institutions of higher learning are concentrated here. The scenic spots, Grass Mountain (Tsaoshan) and Peitou Hot Springs, are nearby, to the north of Taipei.

Taichung

438 The fourth largest city, relatively new and growing, Taichung is located in the middle of Taichung Plain and is one of the island's agricultural centers. It has a population of 222,000.

Tainan

Located near the China Sea and twenty-nine miles north of Kaohsiung, is Tainan, ancient capital of Formosa. It is an agricultural center for sugar-cane, rice, and peanuts and is important in fish culture. The population is about 250,000. Forts Provintia and Zelandia, constructed by the Dutch, and the temples of Confucius and Koxinga (famous general of the Ming Dynasty, 1368-1644) attract tourists.

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5. According to Ya-chou T'ung-hsin [Asia Foundation Bulletin], August 17, 1955, the seat of the Provincial Government will be moved to Taichung on October 1, 1955. For construction and other reasons this has not been realized as of March 1956.

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Kaohsiung

504 712 [439] Kaohsiung is the second largest city and is known for its harbor and large-scale industries. It has a population of 300,000. Because of its warm and rather dry climate, this port handles a major portion of the island's sugar, salt, and cement exports. The naval base of Tsoying is located in the city and the military fort, Fengshan, another important military base, is about six miles north of the city limits.

Makung

712 633 Makung, located in the west of the main island of the Pescadores, is an important naval base and the seat of the Penghu hsien government. The fact that this port lies in the Formosa Strait and between the China Mainland and Taiwan gives it strategic importance.

634 Each county (called gun in the five provinces and shicho in the three districts) was administered by an official whose duty was to police the county. The chief of a county supervised the town and village governments under him.

632 City governments were responsible
633 directly to the provincial government in which they were situated, while towns and villages were responsible to the provincial government through the county administration. Mayors of cities, as well as chiefs of town and heads of villages, were all appointed by the governor-general. There was an assembly in each city, town, and village. The city assembly had a membership ranging from twenty to forty and the town and village assemblies had eight to twenty members. One-half of the members of the local assemblies were appointed by the governor of the province and one-half were elected by the qualified electorate. The city assemblies functioned in the same manner as the provincial assemblies. They could act on the city budget and tax matters. They also elected six members to the city council which took the place of the assembly when the latter was not in session. The governor of a province or the mayor of a city held the veto power over the acts of the assemblies. The town and village assemblies were consultative agencies, authorized only "to announce their opinions in

630 answer to questions submitted to them by
633 the local government authorities." The heads of towns and villages had no obligation to seek or to follow the advice of local assemblies. The governor-general could dissolve the assemblies at any level at will.

631 The exceedingly limited extent of "self-
646 government,[1]" which the Japanese had much
641 publicized, was further minimized by the franchise. Suffrage was granted to all self-supporting male Japanese subjects 25 years of age or older, resident in the relevant districts for more than six months, who have been paying for six months or longer a minimum local tax of ¥ 5.00 a year.[6] Formosan Chinese were counted as Japanese subjects, but because the majority of them paid a city, town, or village tax under ¥ 5.00 a year,[7] the number

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6. Naito, op. cit., p. 73.

7. "The small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko (chio = 2.39 acres). But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote." Grajdanzev, op. cit., p. 163.

1 [During Japanese occupation from 1895 to 1945 -- Analyst]

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

a makeshift way of distinguishing urban places from rural Districts. Many subsidiary market towns, for example, must be overlooked for lack of data.

But in a population that was predominantly rural, these cities were the most "urban," the farthest removed from traditional peasant agriculture. Under the watchfulness of the Japanese, a town could not enlarge its economic importance for the rest of the island very far before it was given regular municipal administration. Hence we may treat them as representing the most extreme departures from rural conditions to be found in Taiwan, and can proceed to find out how far they deviated from the rest.

In 1932, two more cities were raised to municipal rank. The earlier and later population figures for all nine that were Municipalities in 1935 have been sorted out from the respective census reports, and appear in Table 24. It is clear that the cities of Taiwan were not great metropoleis. These nine were the largest, and many Westerners would regard only the foremost among them (Taipei) as being urban. One cannot gainsay their importance to Taiwan: they differed consistently enough from the rest of the island not to be lightly dismissed.

One distinction that is obvious in Table 24 is in the rate of growth. Though the cities varied considerably among themselves, every one increased its Taiwanese inhabitants more than the entire island did. Most cities maintained steady rates of growth, and therefore tended to keep their differences with the others.

The data are condensed and plotted on a logarithmic scale in Fig. 19, so as to contrast the rates of increase of city and non-city Taiwanese and Japanese. The inequalities in growth stand out clearly. Those cities that were expanding more slowly are likewise the ones that had relatively fewer migrants in the data above. They did not outgrow the non-city population by much of a margin, either in Taiwanese or Japanese. The differences in increase persisted over the entire recorded period, and carried over into the later years of accelerated economic growth. Indeed, from these data on population redistribution one could scarcely guess that the tempo of economic life had changed after 1935. Whereas these same cities had held 10 per cent of all Taiwanese in 1920, they contained only 14.7 per cent as late as 1940. For all their growth, cities did not greatly surpass the increase of all Taiwanese.

7: Joest--55 [7] E-5 (no date) 1882 Formosans
116, 167, 634

Every year several thousand Chinese migrate from the overpopulated mainland to the Chinese section of Formosa, much of which is still virgin soil. The district of Tai-wan is controlled by a Tau-tai in Taiwanfu; he has several privileges which date from the period of Coxinga's Privileges.

31: Hofmann--603-604 N-3 (1909) 1912 Formosans
116, 634, 669, 697, 177.63 Japanese
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In the house of the governor, Count Sakuma... I had the opportunity to meet the chief magistrates of the various provinces. Among these there was not one who did not speak either English or German. All of them had been sent to Europe by the government of Formosa to complete their studies there. In every respect, the achievements of the Japanese colonial administration are most impressive, and they become even more so if one takes into consideration the conditions under which the Japanese first took over the administration of the island. In 1895 there was complete anarchy among the Chinese elements of the population. There were organized bands of guerilla soldiers in all the regions that were accessible to foreigners, so that before the administration could proceed to the task of suppressing the Malayans in the mountain regions, [604] it was necessary to break the resistance of the Chinese. I saw some of the leaders of these guerilla bands, who had not been condemmed to capital punishment, in the large reformatory in the capital. There the prisoners were engaged in occupations such as cabinet making, in which they showed a great deal of skill and understanding.

634 Each county (called gun in the five provinces and shicho in the three districts) was administered by an official whose duty was to police the county. The chief of a county supervised the town and village governments under him.

632 City governments were responsible
633 directly to the provincial government in which they were situated, while towns and villages were responsible to the provincial government through the county administration. Mayors of cities, as well as chiefs of town and heads of villages, were all appointed by the governor-general. There was an assembly in each city, town, and village. The city assembly had a membership ranging from twenty to forty and the town and village assemblies had eight to twenty members. One-half of the members of the local assemblies were appointed by the governor of the province and one-half were elected by the qualified electorate. The city assemblies functioned in the same manner as the provincial assemblies. They could act on the city budget and tax matters. They also elected six members to the city council which took the place of the assembly when the latter was not in session. The governor of a province or the mayor of a city held the veto power over the acts of the assemblies. The town and village assemblies were consultative agencies, authorized only "to announce their opinions in

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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Annex "A," Subparagraph 2b. 2,
Political Background

PROVINCIAL AND LOCAL GOVERNMENT AND POPULAR ELECTIONS

I. THE PROVINCIAL GOVERNMENT

631 Formosa was made a province upon its
635 retrocession to China after World War II. The Taiwan Provincial Government holds jurisdiction over the main island of Formosa, twelve smaller islands in adjacent waters, and the sixty-four islands of the Penghu group known to the Western world as the Pescadores. The total area of these islands is 13,880 square miles and the population, excluding the military, was 8,695,843 in February 1955.[1]

The capital of the province is Taipei, which is also the capital of the Nationalist Government of the Republic of China in refuge. The provincial capital, according to a recent air defense plan, will move to Taichung when the necessary construction work in the latter city is completed.[2]

634 Taiwan Province is divided into sixteen administrative areas called hsien (a hsien is roughly comparable to a county in the United States) and five municipalities under the direct jurisdiction of the provincial government. The

1. Report of the Department of Civil Affairs, Taiwan Provincial Government.

2. According to a Taipei broadcast on Dec. 27, 1955, provincial capital was to move to Taichung in April 1956.

634 The following hsien are on the western slope of the mountain ranges: from north to south, Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua, Nantou, Yunlin, Chiayi, Tainan, Kaohsiung, and Pingtung. Three hsien cover the eastern slope of the mountains; these are Yilan, Hualien, and Taitung. The Pescadores form a separate hsien, Penghu. Two of the five municipalities, Keelung and Taipei, are located at the northern tip of the island, the remaining three, Taichung, Tainan, and Kaohsiung, are on the western side of the island. The scenic resort, Yangmingshan, where President Chiang Kai-shek resides, is a northern suburb of Taipei and forms a special administrative district.

632 The sixteen hsien are each divided into chen (towns) and hsiang (groups of villages or rural districts). Chen and hsiang are further subdivided, respectively, into li (wards) and ts'un (villages). The five municipalities are dividied into ch'ü (districts or sections) and ch'ü are divided into li. A ts'un (village) is composed of 100-200 households and a li (ward) of 150-300. The smallest community organization is called lin (neighborhood) and consists of 6-15 households. In the province of Taiwan there are 82,290 lin which form 3,066 ts'un and 3,489 li. These ts'un and li combine to form 77 chen and 235 hsiang.[3]

631 At the head of the provincial government is
633 the governor, who is the chairman of the Provincial Council. The Taiwan Provincial Council is composed of twenty-one members, six of whom are concurrently commissioners of provincial departments.

3. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China 1953], Taipei, 11/30/53, p.643.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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II. HSIEN AND MUNICIPAL GOVERNMENTS

[636] 634 The province of Taiwan is divided into 16 hsien and 5 municipalities. At the head of each hsien government a hsien-chang (magistrate) and each municipality is headed by a shih-chang (mayor). In the hsien or municipal government, there are a number of bureaus in charge of civil affairs, finance, education, economic reconstruction, police, land, and public health. The number of bureaus varies according to the importance of the district and the size of its population. Each hsien or municipality has a representative body of the people called the hsien assembly or municipal assembly. The subdivisions of hsien and municipality are chen, hsiang and ch'ü, each headed by a chief. They have each a representative body of the people called chen or hsiang assemblies.

631 Local self-government was promulgated in Formosa in April 1950. All members of the councils of towns and rural districts, members of hsien and municipal assemblies, the heads of towns, rural districts, mayors of municipalities, and hsien magistrates were elected by direct suffrage. A second election took place in 1954. The term of office for magistrates, mayors, and heads of towns, rural districts,

63 and sections of a municipality is three years and the term office for the assemblies and local councils is two years. If a magistrate or a mayor commits a crime or fails to effectively carry out the order of a superior authority he may be dismissed by the provincial government or recalled by a referendum of the voters. In such case, a new election must be held within a month. Similarly, the administrative heads of a town, rural district, or section may be relieved of office by an order of the magistrate or mayor or by a referendum recall.

•634 The hsien and municipal assemblies are authorized to decide on all matters related to local self-government (i.e., education, public health, communications, public utilities, and local industries), to sanction local budgets, to audit local expenditures, to decide on the disposal of local public property, to call for administrative reports, to make interpellations, and to issue hsien or municipal ordinances. The assemblies hold a session every four months and no limit is imposed on the length of each session. If the hsien or municipal government should find the resolution of the representative assembly difficult to enforce, it may, with the approval of the provincial government, request a reconsideration. If two-thirds of the attending members of the assembly support the original resolution, it becomes binding. The hsien and municipal assemblies are not subject to dissolution; evidently they possess a much greater latitude of power than the provincial assembly. The citizens'councils of towns and rural districts meet once every three months.

"They look after affairs of local interest such as local contributions to public welfare and the relations with neighboring towns and rural districts."[11]

III. POPULAR ELECTIONS

Members of hsien and municipal assemblies are elected on the basis of one representative for every 10,000 persons. The only exceptions are those districts of Hualien, Taitung, and Penghu, where each member represents 5,000 persons. Every tenth member of hsien and municipal assemblies is a women. The minimum membership of each hsien or municipal assembly is fifteen.

Any citizen, irrespective of sex, religion, race, class, or party affiliation, who is over twenty years of age, and has resided in a single district for a period of six months or more, is eligible to vote and hold any local office except that of magistrate and mayor. In the election

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11. According to the measures for the enforcement of self-government of hsien and municipalities in Taiwan Province (as revised by the Executive Yuan on August 22, 1953), a magistrate or a mayor may be relieved of office by a resolution of the provincial council and with the concurrence of the provincial assembly. A recall motion must be initiated by one-fifth of the electorate and passed by majority of referendum votes.

634 of 1950, a candidate for magistrate or mayor had to be at least thirty years of age. In an election held in 1954, other qualifications were added: to be a candidate for the office of magistrate or mayor, a person must either be a college graduate or have passed a senior civil service examination or have met the requirements set by the Examination Yuan. Secret ballots were cast in all elections. The order of the candidates on public notices and on the ballots were determined by lot. For the benefit of those voters who could not read, pictures of the candidates were printed next to their names; thus the voters would have no difficulty in voting correctly for the candidate of their choice.[12]

646 635 President Chiang Kai-shek proclaimed three principles on which the government was to formulate the regulations governing elections: a law-abiding spirit, an avoidance of waste, and the election of the good and the capable.[13] Accordingly, candidates were not permitted to spend more than a certain amount of money in campaigning and were forbidden to bribe their constituents or make a campaign issue of the private lives of their opponents. Supervisory offices were established by the Taiwan Provincial Government, which declared that stern measures would be taken against those who "use force, threat or other illegal means

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12. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 473.
13. Ibid., p. 470.

59:Steiner S-4 (no date) 1951
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631 urban centers as administrative units. The island is presently divided into sixteen counties and five province-controlled municipalities. Under them are various districts, townships, and villages.[12]

632 634 666 Within this framework of centralized control is carried out the program of encouraging local self-government. As of May 6, 1951, all the twenty-one mayors and county magistrates had been successively elected to their respective offices by popular vote.[13] Besides, there are 6,304 village and *li* (urban units akin to wards) assemblies learning self-government by doing. Representing them in township and district assemblies are some 8,024 village and *li* delegates.[14] On county and municipal levels are some 541 popularly elected councilmen.[15] Of an estimated 2,650,000 men and women of twenty years of age and over who are qualified to vote, some 2,416,072 had registered.[16]

647 Along with the development in local self-government has been an increase in the participation of local inhabitants in the management of their provincial affairs. It may be recalled that under the Japanese, of 84,559 government personnel in 1945, 55.53 per cent were Taiwanese, and the rest Japanese.[17] In June 1950 the total number of govern-

[12] See Provincial Government of Taiwan, *Report on Administrative Reorganization**, Taipeh, 1949; also Democratic Publications Association, *Taiwan Reconstruction** (Taipeh, 1950), Vol. 1, pp. 1–12.

[13] The Broadcast of Voice of Free China, Taipeh, April 28, 1951 reported the conclusion of nineteen local elections with the remaining two to be completed by May 6, 1951.

[14] April 1948 figures. Also see *Taiwan Reconstruction**, cited note 12 *supra*, pp. 7–12. The terms of office of the delegates have since been extended by the National Government to such time as "formal assemblies shall be constituted."

[15] *Ibid.*

[16] 1947 figure. See *Taiwan Reconstruction**, cited note 12 *supra*, p. 7.

[17] For a breakdown of government person-

[P. 216 (A)]

4:Grajdanzev--161-162 S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"The most important person in the province is the governor, and in the district, the chief of the district. Their powers and position are similar to that of the governor-general but on a smaller scale. They can impose upon any person without recourse to the Courts a prison term of two months and/or a fine of ¥70. They may ask military force for the maintenance of order, they supervise all administrative bodies in their respective provinces or districts, etc. These bodies are: the secretariat, the bureau of Internal Affairs, [162] bureau of Police Affairs, Police Headquarters, Taxation bureau, agricultural experimental stations, etc."

4:Grajdanzev--162 [2] S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"Since 1920 there has been an advisory body for each provincial governor or district chief, consisting of 20-40 members, half of whom are appointed by the governor-general and half chosen (by indirect election) by the municipal and county council. The governor of the province is the president of the provincial council. The officials administering the counties and whose duties are chiefly of a police character, the mayors of the cities and of rural communities are not elected, but are appointed by the government."

part in the legislation or administration of the island."[5]

On the local level, the provincial governors were appointed by the Japanese emperor upon the nomination of the governor-general.[1] They supervised all the administrative bodies in their respective provinces. They could impose upon any person, without recourse to the courts, a prison term of two months and/or a fine of ¥ 70. There was a provincial assembly in each of the five provinces. The provincial assembly had forty members, one-half of whom were appointed by the governor-general and one-half of whom were elected by the city, town, and village assemblies. The assembly exercised limited powers over the provincial budget, matters of tax collection, and of general finance. The provincial assembly also elected six members, who together with the provincial governor and vice-governor formed the provincial council. In the districts the assemblies consisted of twenty members. The district assemblies had no budgetary power; their functions were purely advisory.

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5. Andrew J. Grajdanzev, Formosa Today, New York, Institute of Pacific Relations, 1942, p. 161.

1 [During Japanese Control 1895-1945--Analyst]

625 committee and inhabitants' teams that exist under the Communist regime in Mainland China today. With the efficient espionage built on the pao-chia system, the Japanese were able to control every household in Formosa just as the Communists are using the inhabitants' organizations to maintain an effective check on every household in Communist-dominated China.

635 After World War II, the Chinese govern-
631 ment took over the administration of Formosa and made the island one of the thirty-five provinces of China. However, the head of the provincial government was named administrator-general, and he was also commander-in-chief of the garrisons. The administrator-general exercised considerably wider power than a provincial governor; he supervised both the work of provincial machinery and the administrative functions assumed by the central government in the province. This arrangement was intended to be a temporary one during the period of the transfer of

authority.[10] The administrator-general was assisted by a secretary-general. There were nine departments in the provincial government which included the secretariat, civil affairs, education, finance, agriculture and forestry, industry and mining, communications, police, and accounts. In addition, there were the food bureau, the bureau of monopolies, and the trade bureau.

The five provinces of Taipei, Hsinchu, Taichung, Tainan, and Kaoksiung and the three districts of Taitung, Hualien, and Penghu were converted into eight hsien [counties], each under a hsien-chang [magistrate], and the nine cities -- Keelung, Changhua, Tainan, Chiayi, Kaohsiung, and Pingtung -- in the five provinces were brought under the direct control of the provincial government at Taipei. Two new cities, Yilan and Hua-lien, were established and were placed under the

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10. T'ai-wan Min-cheng Ti-i-chi [First Collective Report on the Civil Affairs of Taiwan], published by the T'ai-wan Sheng Hsing-cheng Chang-kuan Kung-shu Ming-cheng ch'u [The Department of Civil Affairs of the Office of Administrator-General], Taipei, May 1946, p. 104.

The election of hsien and city assemblies was completed before April 7 and the provincial assembly (called the Provincial Political Council) was formally inaugurated on May 1. Although the functions of the local assemblies were principally consultative, they represented a great improvement over the Japanese system in two ways: first, the base for suffrage had been extended to include a greater number of voters, and, secondly, all the members of the assembly were elected. The election of district heads, magistrates, and mayors was deferred, because the authorities asserted the people at that time lacked administrative experience to undertake the work.[12]

After the local insurrection of February 27, 1947, the provincial administration was brought into conformity with that of other provinces of China. The post of administrator-general was abolished. A provincial council of fourteen members or commissioners, with the governor as chairman, was established. Half of the provincial commissioners were chosen from local residents, the Formosan Chinese. The monopoly bureau, whose restrictive activities were immediately responsible for the outbreak of riots, was

12. Ibid., p. 103.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

abolished. A new tobacco and wine bureau was created and placed under the finance department. A camphor company was formed under the department of reconstruction (industry and commerce), and a bureau of supply replaced the trading bureau. In 1950 the number of provincial commissioners was further increased to 23, of whom seventeen were Formosan Chinese. Local elections were held in 1950 and 1953-54. Members of assemblies of rural districts, towns, cities, and hsien and heads of villages, rural districts, and towns, such as mayors and magistrates, were all elected by direct vote. Members of the Provisional Provincial Assembly[13] were elected indirectly by the various hsien and municipal assemblies in 1950. In the second election of 1953-54, they were directly elected by the people. (Details of the organizations of the provincial and local government as well as the popular elections, will be considered in another chapter.)

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13. "Local self-government in Taiwan is, for the time being, confined to the hsien and municipal level. Since the provincial government is still under the direct control of the Central Government, the principal council is known as the Provisional Provincial Assembly; China Handbook, 1954-55, Taipei, China Publishing Co., 1954, p. 469.

Annex "A," Subparagraph 2b. 2,
Political Background

PROVINCIAL AND LOCAL GOVERNMENT AND POPULAR ELECTIONS

I. THE PROVINCIAL GOVERNMENT

631 Formosa was made a province upon its
635 retrocession to China after World War II. The Taiwan Provincial Government holds jurisdiction over the main island of Formosa, twelve smaller islands in adjacent waters, and the sixty-four islands of the Penghu group known to the Western world as the Pescadores. The total area of these islands is 13,880 square miles and the population, excluding the military, was 8,695,843 in February 1955.[1]

The capital of the province is Taipei, which is also the capital of the Nationalist Government of the Republic of China in refuge. The provincial capital, according to a recent air defense plan, will move to Taichung when the necessary construction work in the latter city is completed.[2]

634 Taiwan Province is divided into sixteen administrative areas called hsien (a hsien is roughly comparable to a county in the United States) and five municipalities under the direct jurisdiction of the provincial government. The

1. Report of the Department of Civil Affairs, Taiwan Provincial Government.

2. According to a Taipei broadcast on Dec. 27, 1955, provincial capital was to move to Taichung in April 1956.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

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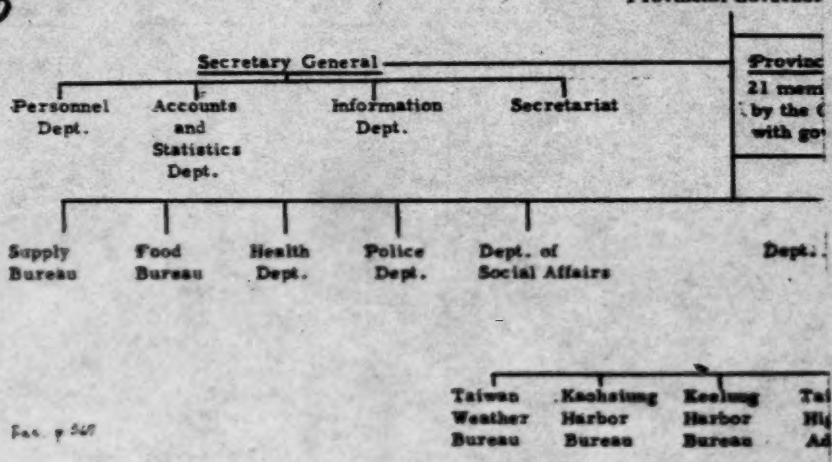
635

STRUCTURAL CHART OF TAIWAN



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[Facing p. 367 - part a]

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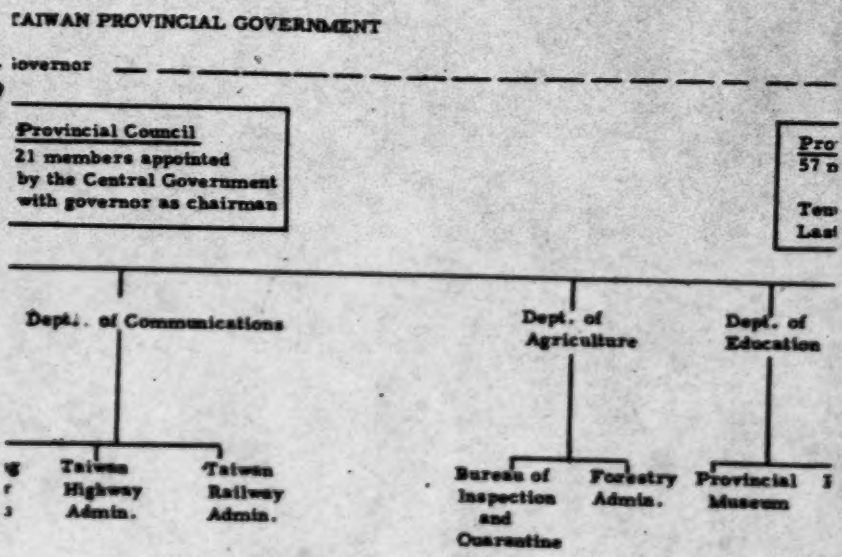

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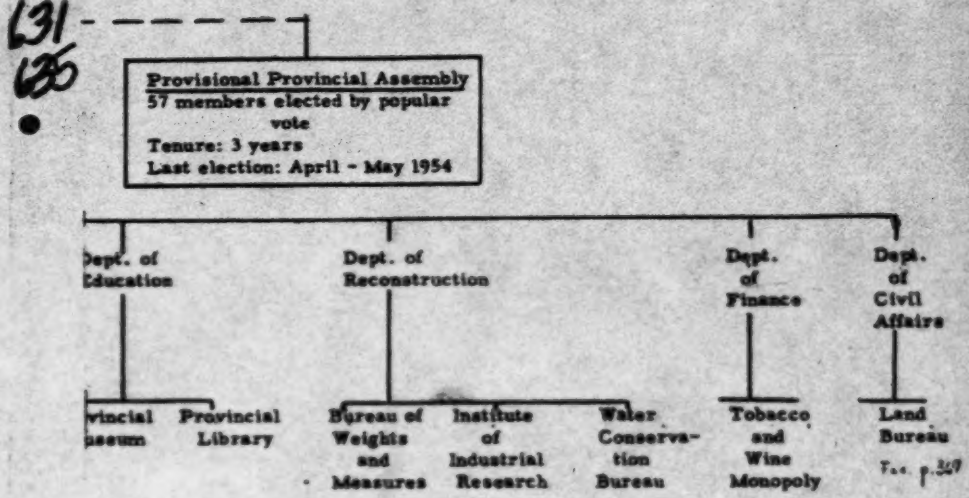

[facing p. 367 - part c]

634 following hsien are on the western slope of the mountain ranges: from north to south, Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua, Nantou, Yunlin, Chiayi, Tainan, Kaohsiung, and Pingtung. Three hsien cover the eastern slope of the mountains; these are Yilan, Hualien, and Taitung. The Pescadores form a separate hsien, Penghu. Two of the five municipalities, Keelung and Taipei, are located at the northern tip of the island, the remaining three, Taichung, Tainan, and Kaohsiung, are on the western side of the island. The scenic resort, Yangmingshan, where President Chiang Kai-shek resides, is a northern suburb of Taipei and forms a special administrative district.

632 The sixteen hsien are each divided into chen (towns) and hsiang (groups of villages or rural districts). Chen and hsiang are further subdivided, respectively, into li (wards) and ts'un (villages). The five municipalities are dividied into ch'ü (districts or sections) and ch'ü are divided into li. A ts'un (village) is composed of 100-200 households and a li (ward) of 150-300. The smallest community organization is called lin (neighborhood) and consists of 6-15 households. In the province of Taiwan there are 82,290 lin which form 3,066 ts'un and 3,489 li. These ts'un and li combine to form 77 chen and 235 hsiang.[3]

631 At the head of the provincial government is 635 the governor, who is the chairman of the Provincial Council. The Taiwan Provincial Council is composed of twenty-one members, six of whom are concurrently commissioners of provincial departments.

3. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China 1953], Taipei, 11/30/53, p.643.

631
636 The Provincial Council meets once a week to listen to the reports of the various departments of the provincial government and discuss proposals brought up by the governor or the provincial departments. Although resolutions are passed or submitted to the Executive Yuan in the name of the Provincial Council, it appears in actual practice that the powers of the members of the council are limited to deliberation and final decisions do not depend on majority rule. The governor passes or vetoes each resolution.

According to the Chinese Constitution,[4] each province is to enact its own self-government law and the provincial governor is to be elected by the people of that province. In Formosa, since the provincial self-government law has not been enacted, local self-government is at present confined to the hsien and municipal levels. The provincial government remains under direct control of the central government. The governor is nominated by the president of the Executive Yuan and appointed by the president of the Republic. The department heads and members of the provincial council are selected by the governor and recommended to the Executive Yuan for appointment.

The Taiwan Provincial Government has a secretariat, headed by a secretary-general, and a number of administrative departments, each

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4. Constitution, 1947, Articles 112 and 113.

63/ under a commissioner or a director. The pro-
36 vincial legislature, called the Provisional Provincial Assembly, is the representative body of the people.[5] In 1951 its members were elected by the hsien and municipality assemblies. In 1953 the law was altered to permit direct election by the people.[6] The present assembly, composed of 57 members, was elected by popular vote in April-May 1954. A hsien or municipality with a population of 150,000 or less is entitled to elect one member to the assembly. If it has a population exceeding 150,000, it is entitled to elect one additional member for each additional 150,000. If the remaining population exceeds 75,000, the hsien or municipality may elect another additional member. When a hsien or a
[62] municipality elects four or more representatives, one of the members must be a woman. In the present assembly there are six woman members. The autochthonous tribes living on the plains elect one representative, those living in the mountains elect two representatives. The tenure of office of the present assembly is three years.[7]

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5. So called because the provincial government is under the direct control of the central government, and the provincial council does not exercise full power.

6. Regulations governing the organization of the Provisional Provincial Assembly, promulgated by the Executive Yuan on August 22, 1953.

7. The tenure of the First Provincial Assembly, elected in 1951, was two years.

63/636 Nominally the Provisional Provincial Assembly possesses broad legislative powers. The provincial government has to present to the assembly for discussion and decision all measures affecting the rights and obligations of the people, the provincial budget, and the disposal of public property. However, the prerogatives of the assembly is circumscribed by a provision in the organic law of the assembly that in the event of a disagreement between the provincial government and the provisional provincial assembly, the former may request a reconsideration.[8] Should the assembly uphold its original resolution, the provincial government may submit the dispute to the Executive Yuan for final judgment. Moreover, when the assembly is in recess, the provincial government with the approval of the Executive Yuan may take any emergency action and report the matter to the assembly at its next session. Since the assembly meets for a period of ten to fifteen days every six months,[9] the provincial government is not seriously restricted by the assembly. The Executive Yuan has the right to dissolve the Provisional Provincial Assembly and order a new election, if it considers the assembly is acting in contradiction to national policy.[10]

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8. Article 23.

9. In case of necessity a session may be extended, but the extension may not exceed seven days.

10. Article 24 of the Regulations Governing the Organization of the Taiwan Provisional Provincial Assembly.

II. HSIEN AND MUNICIPAL GOVERNMENTS

[636] 634 The province of Taiwan is divided into 16 hsien and 5 municipalities. At the head of each hsien government a hsien-chang (magistrate) and each municipality is headed by a shih-chang (mayor). In the hsien or municipal government, there are a number of bureaus in charge of civil affairs, finance, education, economic reconstruction, police, land, and public health. The number of bureaus varies according to the importance of the district and the size of its population. Each hsien or municipality has a representative body of the people called the hsien assembly or municipal assembly. The subdivisions of hsien and municipality are chen, hsiang and ch'ü, each headed by a chief. They have each a representative body of the people called chen or hsiang assemblies.

631 Local self-government was promulgated in Formosa in April 1950. All members of the councils of towns and rural districts, members of hsien and municipal assemblies, the heads of towns, rural districts, mayors of municipalities, and hsien magistrates were elected by direct suffrage. A second election took place in 1954. The term of office for magistrates, mayors, and heads of towns, rural districts,

634 of 1950, a candidate for magistrate or mayor had to be at least thirty years of age. In an election held in 1954, other qualifications were added: to be a candidate for the office of magistrate or mayor, a person must either be a college graduate or have passed a senior civil service examination or have met the requirements set by the Examination Yuan. Secret ballots were cast in all elections. The order of the candidates on public notices and on the ballots were determined by lot. For the benefit of those voters who could not read, pictures of the candidates were printed next to their names; thus the voters would have no difficulty in voting correctly for the candidate of their choice.[12]

646 635 President Chiang Kai-shek proclaimed three principles on which the government was to formulate the regulations governing elections: a law-abiding spirit, an avoidance of waste, and the election of the good and the capable.[13] Accordingly, candidates were not permitted to spend more than a certain amount of money in campaigning and were forbidden to bribe their constituents or make a campaign issue of the private lives of their opponents. Supervisory offices were established by the Taiwan Provincial Government, which declared that stern measures would be taken against those who "use force, threat or other illegal means

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12. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 473.
13. Ibid., p. 470.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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66 635 to interfere with the election campaign of the candidates, obstruct the casting and counting of votes, and hamper the performance of duties by those in charge of the election affairs."[14] Generally speaking, the elections were conducted in an orderly manner. No report of election "irregularities" has appeared in newspapers. Mr. Hsü Fu-lin, acting chairman of the Democratic Socialist Party, in answer to the query of an American newspaper correspondent, said that there had been no discrimination against the candidates of his party during the election campaign. A British newspaperman observed that "if Formosan elections cannot be regarded as free by the standards of the West, they have nevertheless been considerably more democratic in character than anything yet known in the Far East outside Hong Kong. The secret ballot prevails, but no candidate fundamentally opposed to the regime would have the temerity to stand for election."[15]

[161] The Civil Affairs Department of Taiwan Provincial Government reported the population of Taiwan Province to be 8,438,016 at the end of 1953. This number included 741,016 foreign-born (Mainlanders) but excluded military

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14. A General Report Made by Governor O.K. Yui before the Fifth Session of the Provisional Provincial Assembly of Taiwan on Dec. 14, 1958, Taipei, Dept. of Information, Taiwan Provincial Government, 1954, p. 31.

15. H. Maclear Bate, Report from Formosa, London, Eyre & Spottiswoode, 1953, p. 23.

personnel, According to the regulation governing the election and recall of assembly members Mainlanders who have resided in Formosa for six months or more have the right to vote and stand for election. Members of the police and military forces and students may vote but are not eligible candidates for office.[16] The number of qualified voters at the end of 1953 was 3,715,552, approximately 45 per cent of the total civilian population.[17] The ratio of actual voters to qualified voters at the time of the two popular elections held in Formosa was as follows:[18]

Election	Year	Percentage of Participation
Provisional Provincial Assembly	1954	74.41
Hsien and Municipal Assemblies	1950	80.73
Hsien and Municipal Assemblies	1953	79.72
Magistrates and Mayors	1950	80.87
Magistrates and Mayors	1954	75.33

The first Provisional Provincial Assembly was elected by the hsien and municipal assemblies After the first election, the percent of partici-

16. Tai-wan Sheng Cheng-fu Kung-pao [Official Gazette of Taiwan Provincial Government], Taipei, Secretariat of Taiwan Provincial Government, Autumn issue, No. 48, August 25, 1953, p. 611. [17,18 - next page]

pating voters decreased slightly, but the actual number of people who cast their votes in subsequent elections increased. For instance, in the election of hsien and municipal assemblies the total number of votes cast in 1950 was 2,769,696; the number of votes cast in 1953 totalled 2,961,941. Of a total of 1,846 candidates, 860 members of the hsien and municipal assemblie were elected in 1953. Seventy-four members were women.

The educational background of local legislators is much lower than that of the members of the Legislative Yuan. Over ninety per cent of the members of the current Legislative Yuan are college graduates; of the 860 members of the hsien and municipal assemblies, only 202 are graduates of universities or technical colleges, 342 are graduates of high schools, and the remainder attended primary schools or were privately tutored.

The occupations of the members of local legislatures have been reported as follows:[19]

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17. Number of civilian population on Formosa in February 1955 was 8,695,843; number of qualified voters: 3,997,226, according to report of Civil Affairs Dept. of Taiwan Provincial Government.

18. The China Handbook 1954-55, pp. 474-76.

19. Reports of the election offices, Dept. of Civil Affairs, Taiwan Provincial Government.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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Farming	273
Mining	15
Manufacturing	31
Transportation	16
Trade	228
Professionals (doctors, lawyers, etc.)	126
Civil Service	104
Others*	67

* Including 39 housewives and 17 retired industrialists and merchants

Of the 860 members of the hsien and municipal assemblies, 806 are native-born and 54 are Mainlanders. The magistrates and mayors elected to office in 1954 are, with two exceptions, all native-born. The exceptions are Kuan-i Hsieh, the mayor of Keelung, the largest port city of Taiwan Province, and the magistrate of Penghu hsien, Yü-lin Li. Hsieh and Li came to Formosa after World War II. The preponderance of Formosa-born candidates elected to the local governments and local assemblies suggests that the Nationalist Government is willing to encourage self-rule in Formosa. After the local election of 1950, one American observer concluded: "That the Taiwanese are making headway toward local political responsibility is clear." 20

20. Fred W. Riggs: Formosa Under Nationalist Rule, New York, Institute of Pacific Relations, 1952, p. 52.

631 At the provincial level, 16 of the 21 members
635 of the provincial council are native-born, and the secretary-general, the commissioners of the provincial departments of civil affairs and reconstruction, and the directors of the department of health and the food bureau are natives of Formosa. It seems likely that as Formosa-born persons gain experience in government they will demand broadened jurisdiction for the provincial assembly and the election of a Formosan as governor of the province.

642 The central government may assign to them.
631 The central government has the power of redemarcating the administrative divisions of the country at any time. For instance, before the last world war, Manchuria consisted of three provinces, but after the war the number of provinces was changed to nine. In normal times, the central government retains legislative and supervisory powers over practically all matters, and so far no occasion has arisen to call for the redefining of relations between the national and local governments.

631 On Formosa, since the loss of
635 Mainland China to Communism, a peculiar situation has been in existence. Taiwan Province has become the only territory over which the national government of the Republic of China exercises effective control. Two levels of governmental mechanism -- the central government and the provincial government -- have been operating side by side. Except the departments of foreign affairs and defense, administrative functions of all other departments of the central government are overlapping with those of the provincial government. Many foreign visitors are under the impression that most of the administrative powers of the provincial government are being exercised directly by the central government and that only limited residual powers are left to the provincial government. But the facts do not seem to

631 substantiate this contention. For instance,
635 in the realm of finance, all taxes with the exception of customs duties, are collected by the provincial government. The Bank of
[652] Taiwan, a provincial bank, takes over all the functions of the central bank. It issues currency notes, supplies foreign exchange, and acts as the fiscal agent both of the national and provincial governments. With
871 regard to education, only the Taiwan National
631 University is under the supervision of the
635 Ministry of Education of the national government. All other schools in the province, including the College of Engineering and the Normal University are under the direct jurisdiction of the provincial government. Actually the different ministries in the national government have undergone so much consolidation after they had been moved to Formosa, that most of them are now maintaining only a skeleton staff.[4]

631 The relative importance of the Taiwan
635 provincial government does not, however, diminish the highly centralized authority of President Chiang Kai-shek, for the provincial

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4. There are now 12,000 employees in the national government vs. 113,000 in the provincial government. Time, op. cit., p. 34.

631 government enjoys no autonomous power.
635 The governor and all the personnel in key positions of the provincial government are all chosen by the President or at least appointed
643 with his approval. Just like the men in high posts of the national government and the military command, only those considered absolutely loyal are appointed by him. President Chiang Kai-shek has often been criticized in his choice of personnel for rating personal loyalty to himself above everything else. This should not occasion surprise if one is familiar with Chinese history. Ever since the earlier Han Dynasty (202 B.C.-23 A.D.) Confucianism has been the dominant political philosophy of China. Confucius was born in a time of growing political and social unrest. He sought to re-establish order and peace by advocating a beneficent monarchy with all its subjects loyal to the sovereign. Through the milleniums, in the interest of maintaining order and peace as well as perpetuating their rule, Chinese rulers honored and supported Confucius. The emperors always singled out personal loyalty as the criterion for appointment, and President Chiang is merely upholding a deep-rooted political tradition.

Then, China became a republic in 1912. For sixteen long years there were incessant strifes created by different military factions, and chaos gripped the country. With a thousand cadets of the Whampoa Military

697 an infirmary. Efforts have been successful in preventing epidemics and infectious diseases among the prisoners.

697 The number of deaths[8] in prisons and 165 detention houses has been progressively reduced during the past five years although the number of inmates has remained more or less constant. The following table attests to the improved conditions in Formosan prisons. */

DEATH RATE IN FORMOSAN PRISONS

At End of Year	Number of Inmates In Prisons	Number of Inmates In Detention Homes	Total No. of Deaths During the Year
1949	2,909	1,691	70
1950	2,619	1,209	23
1951	3,667	2,043	19
1952	2,906	1,954	13
1953	3,021	2,346	8
1954	—	—	—

*/ Yearbook of the Republic of China, 1953, 1954.

II. THE POLICE SYSTEM

625 The Ministry of Interior of the Executive 635 Yuan exercises general supervision over the

8. In 1946 there were 863 deaths caused by epidemics in Formosan prisons. The number of deaths in prison in 1947 was 222 and in 1948, 156.

635 police system of the entire country, but the
635 actual administration of police affairs is delegated to the provincial government.[9] In Taiwan Province, there are twenty-one police bureaus (one in each hsien and city, and one in Yangmingshan Special District), 90 branch bureaus, 202 police stations, and 1,268 substations, all of which are under the direction of the police department of the provincial government.

635 The functions of the police, as enumerated in the Police Law, are: (a) to issue police order; (b) to punish contraventions of police regulations; (c) to assist in the investigation of crimes; (d) to search, detain, or arrest suspects; (e) to execute administrative orders; (f) to preserve order, to regulate traffic, to protect health, to take census, to guard against fire, disaster, moral turpitude, and defacement of private and public properties.[10] The punishment for violating police regulations is limited to a fine under NT$100 or a detention of not more than fourteen days. Criminal cases are sent to law courts for prosecution.

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9. Police Law 1953, Article 3.
10. Ibid., Article 9.

648 Files Office (Tzu-liao Shih), attached to the
635 President's Office (Tsung-t'ung Fu). There are security agencies, called investigation and statistics bureaus, in the Ministry of Defense, the Kuomintang, and the Ministry of the Interior (in charge of police). These agencies operate secretly and are known to have made arrests, conducted trials in camera, and even imprisoned and executed political offenders.

Formosa's public security agency is the Peace Preservation Corps, organized in 1949 for the express purpose of maintaining peace and order on the island. Its main objective is to suppress all subversive activities before they can threaten national security. Detachments of the corps are located at strategic points for the protection of railways, bridges, waterworks, power stations, mines, and industrial plants. Mountainous areas are regularly patrolled by members of the corps, and no one is allowed to enter the mountain regions without express permission. The Peace Preservation Corps also regulates all arrivals and departures from the island to prevent smuggling as well as the infiltration of Communist agents.

[635] The governor of Taiwan Province (ex officio) is nominally the commander of the Peace Preservation Corps, but in fact the corps receives orders directly from Chiang Ching-kuo.

In 1950, an underground Communist organization, whose membership included a deputy chief-of-staff, the wife of the general in

636.10 --------636.88

4:Grajdanzev--24-25 S-4 (no date) 1942 Formosans-1-3
116, 162, 168, 656, 177.16 Japan
636.16

"Racial Composition of the Population

Since Taiwan is a colonial territory, it is of more than ordinary interest to study the evolution of the racial composition of its population.

After more than forty years of Japanese domination the island thus remains Chinese in character. In 1938 Chinese made up 94 per cent of the population, while the Japanese, who constituted about 2 per cent of the total in 1905, now made up 5.3 per cent. Presumably this figure does not include Japanese soldiers stationed in Taiwan. At the time of the occupation [25] of the island the Japanese entertained high hopes for Japanese immigration

Racial Composition of The Population of Taiwan (1905-1938)

	Oct. 1, 1905 Census		Oct. 1, 1935 Census		Dec. 31, 1937		Dec. 31, 1938	
	Thousands	%	Thousands	%	Thousands	%	Thousands	%
Chinese	2,979.0	97.8	4,990.1	93.86	5,261.5	93.85	5,392.8	93.88
Japanese	59.6	1.93	271.4	5.12	229.3	5.33	308.8	5.37
Foreigners*	8.2	.27	54.1	1.02	46.2	.82	43.4	.75
Total	3,046.9	100.0	5,315.6	100.0	5,609.0	100.0	5,747.0	100.0

* Almost entirely Chinese who are citizens of the Republic of China.

Note:—For 1935, 1937 and 1938 'Chinese' includes also aborigines, numbering about 140,000.

into Taiwan. Climatic conditions are suitable, the density of the population at that time was relatively low and there was no doubt that the island could support much larger numbers than were there. Subsidies were granted to settlers in general and to fishermen in particular and it was thought that in this way the island would be speedily 'japanized.' The results of the first seven years had already brought disappointment:

	Total Japanese arrivals	Total Japanese departures	Remainder
1898	13,214	3,078	10,136
1899	20,743	7,903	12,840
1900	20,995	11,291	9,704
1901	17,841	14,054	3,787
1902	13,821	11,478	2,343
1903	15,892	13,149	2,743
1904	11,564	12,155	591

After the rush of the first three years, when the Japanese administration of the island was organized and many persons were needed for the governmental apparatus, the number of immigrants fell sharply. As was shown above, the growth of the Japanese population

4:Grajdanzev--24-25 S-4 (no date) 1942 Formosans-3
116, 162, 168, 656, 177.16 Japan
636.16

on the island was not due to immigration alone, but also to natural increase. After subtracting this natural increase, the average annual number of immigrants is only 4,000 to 5,000."

4:Grajdanzev--25-26 S-4 (no date) 1942 Formosans
116, 168, 464, 656, 609, 177.16 Japan
636.16

"Since the occupation of the island, the Japanese authorities have forbidden the free immigration of Chinese. Coolies were [26] admitted in limited numbers each year for seasonal work but they were compelled to return to the mainland after the expiration of their contract. Besides the coolie class some Chinese could enter Taiwan for business purposes with the permission of Japanese consular authorities, but they remained Chinese citizens and were treated as foreigners. These two groups of Chinese make up most of the 'foreigners'. The fall in their numbers in 1937 and 1938 is connected with the Sino-Japanese war, for many then preferred to return to China and the total number of 'foreigners' is now comparatively small. Thus the purpose of the Japanese authorities —to exclude the Chinese from the island—has been accomplished, but this has been more than offset by the natural increase of the Chinese population."

4:Gradanzev--27-28 S-4 (no date) 1942 Formosans-1-2
Japan

116, 167, 177.16
636.16

"Below we give a short survey of the efforts of the Japanese government to colonise the island with Japanese settlers. These were to be of two kinds: (a) farmers, (b) fishermen. Before 1907 no plans for colonization could be worked out because the country was not yet pacified and Japanese immigrants could not appear in the countryside unless supported by armed forces. In 1907 the government elaborated and put into force a plan for the emigration of farmers to Taiwan. Grants of land—about 38,000 hectares—were made to thirty-eight settlements, but only eight settlements were actually made, and even these ended in failure. Taiwan attracted many Japanese adventurers (see figures of immigration for 1898-1904 above) who sought a paradise in the new possession. Finding no outlet for their talents, they became restless, and the government-general decided to repatriate them to Japan, and the would-be farmers departed with them.

The second attempt, started in 1910, was relatively more successful. The government gave to immigrants in eastern Taiwan land, houses, roads, schools, hospitals, irrigation works, etc. on condition that they would repay all advances in ten years, but demanded that each immigrant should have been an independent farmer in Japan and have at least ¥250. The limitations were imposed because the official explanation of the first failure was that the immigrants had no money of their own and were poor tenants in Japan. Under this scheme only 3,368 persons were settled in three different villages. These villages still exist, but after twenty-five years have only 3,117 inhabitants. Conditions of

life on the land cannot have been too attractive.

Since 1915 the Taito Sugar Company, with the support of the government, has tried to attract Japanese colonists for the production of sugar cane. The Taito Colonization Company was established and became active, but all its efforts were unsuccessful, and up to 1936 only seventy-eight families among those who came under these schemes remained on the land. Yanaihara explains this failure by the low price for sugar cane offered by the company and by the difficulties of specialized [28] farming, but a more fundamental cause was that in a colonial society a mass immigration can succeed only if the immigrants lower their standard of living to that of the natives.

In 1931 the indefatigable government-general worked out a new plan of immigration, and up to 1936 brought to Taichu province 156 families, giving each 12.25 acres of land, a monetary subsidy and loans free of interest. Some of the immigrants were settled near Takao."

4:Grajdanzev--28 S-4 (no date) 1942 Formosans
116, 167, 311, 609, 177.16 Japan
636.16

"It should be noted that, even after the pacification of the island, Japanese immigrants were treated in a hostile manner by the Chinese population. Under this pressure many farmers were compelled to leave their villages, some of them renting their land to Chinese and becoming absentee landowners. The total number of Japanese occupied in agriculture in Taiwan in 1938 (including members of their families) was 8,065.

The colonization schemes for fishermen were not much more successful. In 1909 the government-general began its campaign, promising subsidies and other advantages. But those who answered the call preferred some occupation in Taiwan other than that of fishermen. In 1926 in Taihoku province 49 families (172 persons) were settled and most of them continue to work there. Since 1932, the government has again made efforts to attract fishermen to Taito province, and, up to 1937, 54 families had settled there. The plan for 1938 and 1939 foresaw the settlement of 25 families for each year. Such are the very modest results of the continuous efforts of the Japanese government.

Takahashi is of the opinion (1) (and his opinion reflects the ideas prevailing among

1. See his Gendai Taiwan Keizairon, pp. 8-9.

Japanese economists) that there is little room for the Japanese in Taiwan as long as the island remains an agricultural region; hence his belief that Taiwan should be industrialized."

4:Grajdanzev--28-29 S-4 (no date) 1942 Formosans
116, 168, 609, 701, 177.17 Japan
636.17

"Greater numbers of Japanese in Taiwan are necessary both for military reasons and for the speedy 'japanization' of the islanders. The military considerations advanced by Takahashi [29] are very interesting for they show that, in spite of forty-five years of Japanese domination, there is still a certain anxiety concerning the loyalty among the Japanese rulers of the Chinese. The island is highly militarized and accustomed to martial discipline and yet the Japanese still consider it necessary to strengthen it militarily. But even Takahashi puts greater stress on the 'japanization' of the natives than on the Japanese immigration. After forty-five years of Japanese domination, after their continuous efforts to increase the number of Japanese there and to 'japanize' the natives, the island remains predominantly Chinese in character, the Japanese forming only about five per cent of the total population, and this state of affairs is bound to continue as long as the natural increase of the Chinese remains at its present high level."

15: U.S. Navy--23 [8] (no date) 1944 Formosans
116, 167, 221, 443, 177.16 Japanese
636.16

"The Japanese put an end to unregistered immigration and emigration when they took over the island in 1895.

All Chinese wishing to immigrate were required to register with a Japanese consular agent in China, and to register in Taiwan after arrival. Actually, a considerable clandestine unregistered traffic continued by small boats plying the Straits.

Until 1937 there was a seasonal movement of labor. Workers crossed from the mainland to work through the tea, sugar or pineapple seasons. After they had made enough to live on for some months, they returned to their legal homes on the China coast. A considerable number of merchants and day laborers engaged in urban enterprises were accustomed to pass back and forth between Canton and Taiwan, entering principally through Takao. As of July, 1935, there were on the island 11,327 households of Chinese holding Chinese citizenship, totaling 41,651 persons. Since 1937 (the outbreak of the China War) seasonal migration has been suspended."

15: U.S. Navy--23 [10] (no date) 1944 Formosans
116, 167, 511, 609 Japanese
636.16

"Immigration of Japanese agricultural workers has been encouraged both by the Government, directly, and by the development companies in which the Government has large interests. Attempts have been made to establish agricultural villages here and there, in the hope that such settlements would help advance the assimilation and control program. These settlements have been a failure. Thirty-eight were projected, eight were actually established, and all had failed by 1910. The native Formosan-Chinese populace was too hostile and the competition in living standards too great for the Japanese immigrants to bear. A second colonization plan, begun in 1910, succeeded in establishing three villages with a total of 3,368 persons settled. These have not flourished, though they continue to exist. They now have fewer settlers than in 1910.

The Government has made several attempts to attract and establish Japanese fishermen, but with practically no success, despite the government subsidies granted to them."

15: U.S. Navy --23-24 (no date) 1944 Formosans
116, 167, 441, 464, 177.16 Japanese
636.16

"The majority of Japanese immigrants go to the island for [24] administrative work or business management. Japanese officialdom some years ago arrived at the reasonable conclusion that since the increase in the Formosan population was proportionately so much greater than the increase of the Japanese, only a program of industrialization (with accompanying influx of Japanese technical labor) would serve to strengthen substantially the Japanese population of the island. Presumably, large numbers of Japanese have immigrated to manage the new technical establishments known to have been established on a fairly large scale in and around Takao, near Shinchiku, and elsewhere since 1941."

15: U.S. Navy--32 [7] (no date) 1944 Formosans
116, 464, 167, 177.16 Japanese
636.16

"The industrial program which has been developing since 1930 has received special stimulus since the China war broke out. Initially it had been retarded by an acute shortage of skilled or semi-skilled labor. To remedy this, a program for encouraging the migration of skilled and semi-skilled Japanese workmen from Japan to the island was inaugurated in 1937 by the Taiwan Government. The mining industry suffered most severely, as indicated by the fact that the percentage of increase in labor employed in the mines is greater than the percentage of increase in production."

15: U.S. Navy--32 [10] (no date) 1944 Formosans
116, 166, 464, 177.16 Japanese
636.16

"The labor shortage is especially acute on the east coast where major industrial developments are planned for the next few years. To alleviate the shortage a bureau has been set up which attempts to engage workers on the west coast, send them around to the east, and there settle them in advantageous places.

In January, 1939, an employment bureau organized in Karenko (capital ¥200,000), brought 500 labor immigrants from the west coast of the island and put them to work in the Japan Aluminum Company's factory. They were given land (1/2 acre to each house) and were required to raise hogs, for there is a shortage of pork on the East Coast. A government bureau plans to continue this resettlement work."

15: U.S. Navy --21 [5] (no date) 1944 Formosans
116, 157, 167, 625, 177.18 Japanese
636.18

"The Japanese are exceptionally thorough and successful organizers, and have brought under their own control the economic life of the island. The police force and many of the urban commercial people came originally from Southern Kyushu and Shikoku, and speak the local dialects of those regions. The Japanese of the metropolitan areas in the homeland speak frankly of the hardness and unattractiveness of the colonial Japanese character in Taiwan."

15: U.S. Navy --21 [9] (no date) 1944 Formosans
116, 563, 177.18 Japanese
636.18

"Many Japanese are sincere in their effort to raise Formosan-Chinese living standards and honest in their desire to have the island become a real part of the Empire in spirit as well as in political name and military bondage. Hundreds of Japanese doctors, teachers, and minor officials have devoted their lives to the welfare of Taiwan. Unfortunately they have been a minority and have had little influence on the makers of overall policy."

15: U.S. Navy --22 [4] (no date) 1944 Formosans
116, 198, 484, 563, 177.19 Japanese
636.19

"By making use of the Japanese language necessary in business, education and communication, the administrators of the island have created the foundation of a unity unknown in pre-occupation days. The ease of travel throughout the island is tending to blur rapidly the lines of cultural differences among the educated Formosans. All three Chinese groups are represented among the settlements along the east coast, to which many have been encouraged to move by Japanese interests."

15: U.S. Navy --24-25 (no date) 1944 Formosans
116, 191, 212, 872, 186, 177.19 Japanese
636.19

"Japanese, spoken by the 323,148 Japanese, is the official language of the island, and is spoken by a high percentage of the middle-aged and younger Formosan-Chinese in urban centers, but by few of the older agricultural community. About 42 percent of the Formosan-Chinese children attend elementary public schools to learn the Japanese [25] language and doctrines. They learn very little Japanese and at the same time lose the opportunity, when young, to learn something of written Chinese. Hence these younger Chinese are technically 'literate', and can understand orders issued in simple Japanese. Japanese is supposed to be compulsory for all who know it, and it is true that Japanese has become the lingua franca of the island. It may be said that Japanese, as the official language, will be understood by someone in any large gathering of people or in every village outside of the most remote savage territory, although the Formosan-Chinese avoid using it when they can."

15: U.S. Navy -25 (no date) 1944 Formosans
116, 191, 177.19 Japanese
636.19

"Japan is engaged in the stupendous task of changing the language of nearly six million people. While the Formosans continue to use their native tongue in social and business intercourse with one another, it is undoubtedly true that the number of those who have some knowledge of Japanese is increasing at a very rapid rate."

15: U.S. Navy --25 [2] (no date) 1944 Formosans
116, 162, 191, 177.19 Japanese
636.19

"The percentage of Japanese-speaking Formosans is said to have increased from .4 percent in 1905 to 8.5 percent in 1930, to 37.8 percent by 1937 and to be over 45 percent at the present time.

Table 20: Numbers of Formosan men and women who speak Japanese.

	Men	Women	Total	Percentage of total Formosan population
1905	10,801	469	11,270	.4
1915	50,143	4,194	54,337	1.6
1920	87,897	11,168	99,065	2.9
1930	394,677	70,750	365,427	8.5
1937	---	---	---	37.8
1938	---	---	---	41.9
1939	---	---	---	45.6 "

15: U.S. Navy —25 [3] (no date) 1944 Formosans
116, 191, 554, 662, 177.19 Japanese
636.19

"No information is available as to the standard used in determining knowledge of Japanese. Consequently the official figure of 45.6 percent may be an exaggeration. It is nevertheless true that the campaign to promote the use of Japanese has greatly intensified since the beginning of the China 'Incident' in 1937.

Various methods are used. Town and village police stations record the names of inhabitants considered conversant with Japanese. Periodical inspection of homes and oral questioning determines eligibility for the book. Whenever a Formosan needs recourse to the local authorities for licenses, business purposes, appeals, or other matters, reference is invariably made to the 'blue book'. If the applicant's name appears in the book, he is usually granted his request; if not, he is refused. Obviously there is room for graft and the shutting of official eyes in judging eligibility for the book. A foreigner with a wide acquaintance among Formosan-Chinese states that he knows of a number of instances where a man of some financial influence in the community is listed in the 'blue book' although his knowledge of Japanese is decidedly open to question. Nevertheless, it is understood that the system, only recently inaugurated, is producing results. Formosans have come to realize that without a listing in the book privileges and opportunities are denied."

15: U.S. Navy--25 [4] (no date) 1944 Formosans
116, 191, 624, 177.19 Japanese
636.19

"The hosei or head of the Ho must have a knowledge of Japanese. One can not now hold office or participate in local meetings or assemblies without being able to speak Japanese, the 'national language.' Newspapers daily publish reports from various localities emphasizing local pride in the spread of Japanese. An example is an item from Rato, a town in Taihoku Province, stating that a forthcoming election would remove from town and village offices every non-Japanese speaker. A census in Heito, Takao Province, revealed that only 32 percent of the Formosan population knew the national language. To remedy the situation, a school was opened for every ten homes and instruction was to be given by members of the young men's association to persons over 10 years of age."

15: U.S. Navy--25 [5] (no date) 1944 Formosans
116, 191, 208, 554, 177.19 Japanese
636.19

"Use of Japanese only is permitted in banks and government offices. Even though a Formosan speaks with a clerk who is also Formosan, the language must be Japanese. If the former is unable to converse, an interpreter is required. To stimulate language learning, insignia bearing the legend 'This household speaks the national language' are placed above the door of Formosan homes. Other signs such as 'Speak only the national language' are seen frequently in buses and public places.

A commandant of the Keelung Base said to the press, 'The basis of Japanization is dissemination of the national language. To do this, I believe we must immediately mobilize the motherhood of Taiwan under the slogan 'Raise our children in Japanese'. Even though one may know the national language, to use Taiwanese at all does not befit a 'soldier of the Imperial Army.'"

15: U.S. Navy--26 [2] (no date) 1944 Formosans
116, 191, 177.19 Japanese
636.19

"While the people of Taiwan are far from using Japanese in their daily life, knowledge of the language is increasing rapidly. Within a few generations it would doubtlessly supplant Formosan-Chinese among the educated to a large degree."

15: U.S. Navy--26 [4] (no date) 1944 Formosans
116, 198, 873, 177.19 Japanese
636.19

"English has been taught in the private mission schools and in the government schools for many years. It has been a compulsory subject in all middle and higher Schools, i.e., affecting the student age-group from 13 years upward. Pidgin English is not generally known; those who speak it will be found among the clerks and compradores who have worked for foreign firms.

The Imperial University at Taihoku, the High School at Taihoku and the Higher Commercial Colleges at Taihoku and Takao have trained small numbers of Japanese and Formosan students in Malay, Dutch, German, Thai, French, and two dialects of Chinese."

4:Grajdanzev--139 S-4 (no date) 1942 Formosans
116, 171, 208, 658, 177.20 Japan
636.20

"Analogous to the war expenditures are the related expenditures on propaganda. In this group we included expenditures on broadcasting, including construction of new stations, on 'social education,' and on the 'spiritual mobilization of the population'. There may be some who wonder whether the expenditures on radio-broadcasting stations may be properly considered as expenditures on propaganda. But while in Japan the users of radio receivers must pay a certain annual fee, in Taiwan broadcasting is free because the government considers it a powerful instrument for 'spiritual mobilization' and for the Japanization of the population."

4:Grajdanzev--85 S-4 (no date) 1942 Formosans
116, 221, 226, 433, 471, 177.22 Japan
636.22

"Fishing, which did not demand an elaborate equipment, was an important auxiliary occupation for the Chinese farmers, especially in slack seasons. The sea around Taiwan is rich in fish and the Chinese are expert fishermen. It is natural, then, that fishing has become an important element in the economy of the coastal farmers. But at the time of their conquest of Taiwan the Japanese were not interested in the fisheries because at that time the seas around Japan proper and near Kamchatka had not been sufficiently utilized. Petty regulations, the taxing of fishermen, and other measures brought a decline in this ancient Chinese occupation and only recently, when the Japanese felt a need for more fisheries, and when their huge corporations with their mechanized equipment turned to the South, did the government become interested in fishing. The results were the same as in all other spheres of the economic life of Taiwan: Japanese fishing grew at the expense of Chinese."

4:Grajdanzev--68 S-4 (no date) 1942 Formosans
116, 231, 492, 177, 23 Japan
636.23

"Although it has been said that Taiwan is well stocked with domestic animals and fowls, this requires some qualification. The animals bred are for draft purposes and for production of foodstuffs. In Taiwan either the water buffalo or some type of cow is used for draft purposes. Horses, donkeys and mules are almost entirely absent. The immigrant from Fukien had no place for the horse in his economy, but the Japanese government, in its efforts to supply the army with horses, worked out a ten-year plan and a thirty-year plan for Taiwan. According to the first, the number of horses was to be increased to 9,000; according to the second presumably to be applied simultaneously, the number of horses was to be raised to 110,000 head. In a region where rice occupies sixty per cent of the area, horses cannot be used for work and it is hardly conceivable that the poor farmers of Taiwan will begin to raise Arabian and Anglo-Norman horses as the plan foresees (1). The actual number of horses in 1938 was rather more than 300 while forty

1. Taiwan Jijo, p. 479; figures for the plans are taken from Sekai Nenkan, 1939.

years ago there were two hundred to three hundred horses."

4:Grajdanzev--70-71 S-4 (no date) 1942 Formosans
116, 231, 177.23 Japan
636.23

"The government also expends much effort in encouraging sericulture. Its experts point out that conditions in Taiwan [71] are very favorable for this industry: the mulberry tree has leaves the year round, there are no pests as in Japan, and production costs are low. But the farmers do not seem to take willingly to this occupation, for in 1933 the value of raw silk produced in Taiwan was ¥74,000 whereas in 1937 it had fallen to ¥50,000."

4:Grajdanzev--45-46 S-4 (no date) 1942 Formosans
116, 241, 651, 661, 177.24 Japan
636.24

"Beneficial as these irrigation works are, in many cases they curtail the farmer's freedom to select his crops. The government often compels the farmers to raise crops which they do not want to raise (as, for example, sugar cane). Takahashi tries hard to prove that this compulsion, which in Taiwan is [46] called simply exploitation (sakushu), is to their benefit, (1) but his arguments are not convincing.

1. Takahashi, op. cit., p. 280."

4:Grajdanzev--46-47 S-4 (no date) 1942 Formosans-1-3
116, 171, 241, 454, 433, 177.24 Japan
636.24

"(3) Increased agricultural production may also be achieved by raising yields per unit of area. Below we give a comparison of yields in Taiwan and in Japan, and in the case of sugar cane, the area of which in Japan is too small, a comparison with Hawaii and the Netherlands Indies, where conditions are similar to those in Taiwan, while groundnut production in Taiwan is compared to that of Kwantung.

Crop Yields In Quintals Per Hectare in Taiwan and Other Countries.

		1928-32 average	1933-37 average	1937
Wheat	Taiwan	8.7	9.7	10.7
	Japan	17.7	19.1	19.1
Barley	Taiwan	6.4	8.0	7.4
	Japan	19.9	20.6	20.9
Maize	Taiwan	11.3	10.8	11.6
	Japan	14.1	14.7	16.7
Rice	Taiwan	22.2	25.1	26.1
	Japan	35.0	36.8	38.6
Sugar cane	Taiwan	684.4	654.4* Four-year average 1933-36.	...
	N. E. I.	1,308.0	1,374* Four-year average 1933-36.	...
	Hawaii	1,349.4	1,515* Four-year average 1933-36.	...

		1928-32 average	1933-37 average	1937
Soya beans	Taiwan	5.6	5.7	6.2
	Japan	10.0	10.0	11.2
Groundnuts	Taiwan	16.2	17.1	18.4
	Kwantung	19.0	20.7	...
Sesamum	Taiwan	3.5	3.9	4.2
	Japan	7.3	7.5	7.5

The yields per hectare of the most important plants in Taiwan's economy are therefore thirty to fifty per cent less than in Japan, or, in the case of sugar, in Hawaii or the Netherlands East Indies, and yet all available sources mention the fertility of the soil in Taiwan, while climatic conditions are at least as good as in Japan or the Netherlands Indies.

The explanation lies in the primitive methods of Taiwan [47] agriculture, including the slight use of fertilizers. Judging by the cultivated area and the number of farmers, the island should have at least 300,000 to 400,000 ploughs, but in 1929 (1) almost all (except

1. The last data available, Nogyo nenkan, p. 642.

18,315 'improved' ploughs for deeper ploughing and 614 of the European type) were of the

primitive Chinese pattern. While in Japan proper an average of ¥170 to ¥180 per hectare is spent each year on commercial and home-prepared fertilizers, in Taiwan less than half that sum is spent for this purpose. These two examples—ploughs and fertilizers—for which quantitative data are available show clearly that Taiwan farming is under-capitalized, especially when we consider that the farmer is obliged to pay ¥2,000 per ko for good land.

This does not of course mean that there is no improvement in the agriculture of Taiwan. The government devotes much effort to increasing the productivity of the farms and the farmers are eager to respond. Yields are now higher than they were twenty years ago, as one may see from the tables given later in this chapter. But progress is slow. It is doubtful whether yields in Japan in 1895—the time of the annexation of the island—were higher than in Taiwan, whereas now they are considerably greater and relatively Taiwan is lagging further and further behind."

4:Grajdanzev--52-53 S-4 (no date) 1942 Formosans
116, 243, 311, 656, 177.24 Japan
636.24

"Thus from 1905 to 1920 the area under rice expanded slowly and the yield per ko showed no increase, while from 1920 to 1935 the area under rice increased by thirty-seven per cent and the yield per ko of paddy increased also by thirty-seven per cent. The explanation of this difference does not lie in Taiwan, but in Japan proper. After 1920 the leaders of the Japanese government became worried over the rice supply of the Empire. The rapid growth of population and the insufficiency of domestic production brought a sharp increase of rice imports from abroad. From the annual average of ¥16.6 million in 1913-17 Japan's imports of rice rose to an annual average of ¥72.0 million in the period 1918-22.

Besides the difficulty of balancing payments abroad, the government did not like this dependence on foreign supplies in time of war. A program for the increase of rice production in Japan proper, Korea and Taiwan was worked out and the necessary measures applied, such as the construction of dams and canals for irrigation purposes, the enlargement of the net-[53] work of agricultural experimental stations, the distribution of small subsidies to new producers of rice as well as to those who would produce new varieties of rice selected by the stations. The fact that these measures were quite effective shows not only the efficiency of the administration but also the ability of the Chinese farmers to act in response to economic factors."

4:Grajdanzev--54-55 S-4 (no date) 1942 Formosans -1-2
116 243, 435, 655, 177.24 Japan
636.24

"Space does not permit us to analyse the rice situation in detail. The table below shows the rapid process of displacement of other kinds of rice in Taiwan by horai.

Crop Area Under Various Kinds of Rice in Taiwan
(In thousand ko)

	1905	1915	1920	1925	1930	1935
Common Taiwan rice	393	423	417	370	370	263
Clutinous, round	24	39	53	81	68	73
Glutinous, long	...	...	...	...	19	18
Horai	0	0	0	72	135	305
Total	417	462	472	523	592	659

Yields of Various Sorts of Rice in Taiwan were as Follows
(1930-35 average)

	(koku per ko)
Common Taiwanese	12.1
Round glutinous	10.2
Long glutinous	11.7
Horai	14.6

As may be seen, the difference is quite pronounced—from 2.5 to 4.4 additional koku per ko, or an increase in yield of twenty to forty per cent as compared with other

varieties.

But on the other side, the production costs of one ko of common rice in 1925 were Y223.8, while for horai the amount was Y342.0, and—what is also very important—whereas thirty-four per cent of the production costs of common rice consisted of the farmer's own labor, home-prepared fertilizers (which the farmer does not buy) etc., these costs in the production of horai amounted to only twenty-two per cent. In other words a much greater part of the expenses on horai consisted of sums paid for commercial fertilizers, etc. and as a result, the farmer does not receive so much profit from horai, but is compelled to plant it because he cannot sell his own [55] kind of rice in the Japanese market. The expansion of area under horai is therefore not so much a sign of prosperity, as it would at first sight appear, as a sign of the growing need of the farmer for money to pay taxes, to pay for irrigation, and to pay for the tobacco which he formerly produced himself (and is now a state monopoly)."

4:Grajdanzev--57 S-4 (no date) 1942 Formosans
116, 249, 474, 177.24 Japan
636.24

"The culture of sugar cane and the development of the sugar industry is considered one of the most spectacular achievements of the Japanese administration in Taiwan. Here we shall discuss only the culture of sugar cane; the sugar industry as such will be examined later in the section on industry. Sugar cane is an indigenous culture and was not introduced into Taiwan by the Japanese. The Dutch found it there in the 17th century and encouraged it. Before the advent of the Japanese it was produced by Chinese producers' cooperatives, which well deserve a special investigation because of their original character. They not only raised sugar cane, but also extracted the sugar in their old-fashioned mills. The industry had so developed that in 1893, ninety-eight million pounds of sugar were exported and probably not less than that amount was consumed in Taiwan, so that total production may be estimated at about 200 million pounds. This amount was not reached again until twenty years later. (1) With the coming of the Japanese the guerilla

1. Japanese sources say that at the time of Japan's occupation of Taiwan the annual output was only about 80,000,000 kin (104 million pounds). This can hardly be true if in 1893 exports alone equalled 98,000,000 pounds. In 1880 exports equalled 141.5 million pounds.

war continued for several years and ruined the industry."

"At the time of annexation the Japanese [58] government was anxious to improve their 'unfavorable' balance of trade with foreign countries, and the cultivation of sugar cane in Taiwan appeared to be an excellent means of doing this. Japan's imports of sugar at that time were in excess of twenty million yen—about ten per cent of her total imports, and at times equal to the 'unfavorable' balance of trade. Sugar cane is grown in Japan, but climatic conditions and limited area make it impossible to increase the total production significantly. At the most it can supply only a small percentage of the domestic demand for sugar. But Taiwan with its tropical climate could be successfully used for this purpose.

As early as 1896 seeds of improved types of sugar cane were imported from the Hawaiian Islands. In 1898, Kodama, the Governor-General of Taiwan, and his energetic Governor Goto began conferences with Japanese financiers on the question of investment in the sugar industry of Taiwan. A special investigation of the outlook for sugar cane culture in Taiwan was entrusted to Dr. Inazo Nitobe, who presented his report in 1901. In this report Dr. Nitobe recommended that the irrigated area and the area under cultivation be increased through various measures of encouragement, assistance, and direct government action, the establishment of sugar research stations, and the introduction of improved varieties of sugar cane, while other recommendations were made concerning sugar manufacture. The government followed these recommendations, established experimental

stations, imported new varieties of sugar cane from Hawaii and Java, and paid special subsidies and grants to the manufacturers and farmers to induce them to follow its policy. Up to March 31, 1932, it had paid about thirteen million yen in subsidies. Moreover, in 1903 a relatively moderate protective tariff on sugar imported into the Japanese Empire was introduced, the rate being 0.8 sen per kin (0.6 kg.) on No. 20 standard and higher. This rate was increased to 4.65 sen per kin in 1911 on No. 21 standard and higher, to 5.3 sen in 1927 on No. 22 standard and higher, and to 7.15 sen in 1932. As a result—this is the official version—wealth came to the sugar [59] industry and to the island 'and this has resulted in the present industrial prosperity'."

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-1-2
116, 249, 433, 458, 654, 177.24 Japan
636.24

"There can be no doubt as to the importance of sugar cane cultivation and of the sugar industry in Taiwan and the degree of success achieved by the Japanese government and Chinese cultivators.

However, a close examination of the table [See page 59, category 116--analyst] reveals some interesting features. It was pointed out how much effort was expended by the officials on the improvement of sugar cane culture. But in spite of all the efforts of the government and of the experimental stations the yield per ko did not show any signs of improvement during the first fifteen years. If the development was as steady as is officially described, why then was the increase of production up to 1921 taking place exclusively as a result of the increase in the planted area?

Further, the increase in sugar production may also come through the increase of sugar content in the juice of the sugar cane. It is interesting to note that in this respect too, little, if any, improvement is noticed up to 1922, but that after that year the sugar content rose from 9.5 per cent in 1922 to 13.2 per cent in 1935 and in this year was considerably higher than in Java or Cuba (12.3 and 11.6 per cent respectively). Finally, the table shows that after the peak of production (and area) was reached in 1917-18, production fell, then rose slowly up to 1928-29, fell sharply by almost thirty per cent and then began to rise again.

The explanation of these fluctuations is that the Taiwan sugar industry (and, as a consequence, also the cultivation of sugar cane) passed through several crises of the most severe character. 'Overproduction' is a word familiar to this industry, and to the planters also. Of course, it must be emphasized that this 'overproduction' is of a special character, because the consumption of sugar in Japan is relatively low and, though physically the demand of the population for sugar [61] is not satisfied, there is insufficient purchasing power available to buy it.

All this is very important for the problem in hand. The government's efforts were probably as great from 1900 to 1922 as afterward, subsidies were given more lavishly than later on, but the results in the first twenty years were rather meagre. In other words, the development was due not so much to the government's and the manufacturers' efforts as to some other factors inherent in the development of the economy of Taiwan and Japan."

4:Grajdanzev--62-63 S-4 (no date) 1942 Formosans
116, 241, 312, 471, 177.24 Japan
636.24

"By putting irrigation works at the service of the farmers (at a price) the government, the local bodies, and the companies [63] impose a condition that a certain part of the newly-irrigated area should be devoted to sugar cane. This stipulation may be to the advantage of the farmer or to his disadvantage, but it is clear that he is not free to decide."

4:Grajdanzev--65 S-4 (no date) 1942 Formosans
116. 245. 177.24 Japan
636.24

"Tea is an old Taiwan crop brought by the Chinese emigrants from Fukien. It was flourishing before the coming of the Japanese and in 1893 about twenty-one million pounds of tea (about sixteen million kin) were exported. It is largely a plantation culture and is now almost completely in Japanese hands, but exports under Japanese rule have not shown improved results. The total area under tea is 45,000 to 46,000 ko. In 1927 the Mitsui Gomei Kaisha alone held 17,000 ko of tea plantations and the Taiwan Takushoku Seicha Company 1,000 ko (1). Japanese plantation holdings are now probably much larger.

1. Yanaihara, op. cit., p. 34.

Tea plantations, which are chiefly in Taihoku and Shinchaku prefectures, occupy hill slopes and generally do not compete with other agricultural plants for area."

4:Grajdanzev--66-67 S-4 (no date) 1942 Formosans
116, 245, 255, 464, 471, 177.24 Japan
636.24

"Pineapples were cultivated in Taiwan before the occupation of the island by the Japanese, but only after the introduction of canning did the industry begin to expand rapidly. The fruit is raised on the hill slopes and thus does not compete with [67] cereals or sugar cane. The authorities estimate that more than 20,000 ko can be used for pineapple plantations, but the area under cultivation is now only 9,000 ko. Data on production are given below.

Pineapple Production in Taiwan

	1921	1935	1936	1937	1938*
Area under pineapples (1,000 ko)	1.3	7.0	8.0	8.9	9.9
Crop (1,000,000 kin)	8.9	87.1	110.2	107.8	116.0
Value (1,000 yen)	367	2,626	3,129	3,115	...
Value of exports of (¥1,000) canned pineapples	865	7,306	5,857	7,600	10,620*

* Exports of canned and fresh pineapples.

Sources: Nogyo Nenkan; for 1938, Taiwan Jijo.

Production, chiefly of the plantation type using hired labor, is chiefly in Japanese hands."

4:Grajdanzev--67-68 S-4 (no date) 1942 Formosans
116, 248, 433, 656, 177.24 Japan
636.24

"As will be seen, cotton does not occupy an important place in Taiwan's economy. But it does play an important part in Japanese imperial policy. As was mentioned, the Japanese authorities did not spare efforts to encourage the production of sugar cane and rice in Taiwan, not because it was in the interests of the island, but because it benefited Japan proper. Since 1927 the sugar industry has suffered from overproduction and in 1935-36 another spectre appeared on the Japanese horizon--the overproduction of rice. A discussion began as to how the production of rice in Taiwan might be limited. A rice monopoly was suggested and was later applied, but for a somewhat different purpose. Instead of rice, the authorities proposed to encourage the production of textile fibers and oilseeds in Taiwan and, partly owing to the shortage of foreign exchange in time of war, more attention was given to cotton than to anything else. A plan was worked out for the production of 100 million kin of cotton at the end of the ten-year period beginning with 1937, on an area of 100,000 ko, i.e. more than ten per cent of the cultivated area of the island. The first year's crop (according to the Japan Year Book, 1939-40 [68] is estimated at about 6 million kin, or, already six per cent of the goal. We do not know on what the data of the Japan Year Book are based, but in Taiwan Jijo, published in December 1939, the plan provided for an area of only 50,000 ko in 1946 and the production of only 35 million kin. According to the same source, there were 4,800 ko under cotton in 1938 and the crop was 1,816,983 kin--as one may see, very far from 6 million kin. The average yield was 2.26 quintals per hectare--a low figure for a region of intensive agriculture."

4:Grajdanzev--71 S-4 (no date) 1942 Formosans
116, 171, 241, 311, 433, 511, 177.24 Japan
636.24

"It is worth while to observe that in our investigation of agricultural production in Taiwan the figures analyzed were averages, and no question was raised as to whether these averages maybe considered representative. The one-sided development of agriculture was emphasized, especially the cultivation of rice and, to a lesser extent, of sugar cane. It is known that one-sided development of agriculture results in soil exhaustion unless sufficient quantities of fertilizers are used, but it was shown that the application of fertilizers is practised on a much smaller scale than in Japan. It was shown also that cultivation is on a low level, yields are low, technique is backward, the draft animal supply is insufficient and per capita consumption of cereals is considerably lower than in Japan.

The expansion of rice production which took place was due chiefly to the increase of the irrigated area and to the increase of acreage from which two crops can be obtained —largely through irrigation and improvement of fields. In the production of sugar cane considerable success has been achieved in increasing the yield and sugar content of the cane. However, in the production of both rice and sugar cane the farmers received a disproportionately small share of the gains."

4:Grajdanzev--149 [2] S-4 (no date) 1942 Formosans
116, 433, 439, 177.24 Japan
636.24

"In 1939 about 81 percent of Taiwan's exports consisted of agricultural raw materials and products manufactured from them such as sugar, tea, and tobacco. In fact the island is practically an agricultural appendage of the Japanese economy."

15: U.S. Navy--33 [2] (no date) 1944 Formosans
116, 651, 241, 177.24 Japanese
636.24

"Compulsory service takes an indirect, though no less effective form in the forced contribution of produce. For instance, a village headman notifies the farmers that their district is expected to provide a certain quota of hay for army horses, which must be forthcoming by a certain date. Castor beans are another example. By requiring this crop (which has no value in the economy of the individual farmer) the production has increased from 126,893 pounds in 1936 to 4,148,364 in 1938, which represents an impressive labor contribution. Through this method a goal of 23,000,000 pounds has been set for 1949. Each year more time and more labor and more space must be given to producing castor oil for the air service. Each household tends a few plants from which the children carry the beans to school for collection. In many instances no compensation is given for the produce, and in the instances where compensation is given, it is wholly inadequate to reimburse the costs of production."

15: U.S. Navy--27 [13] (no date) 1944 Formosans
116, 291, 511, 177.29 Japanese
636.29

"For years the Japanese have tried to encourage the wearing of Japanese clothing, or at least to abandon traditional Chinese dress for western style clothing. After the war with China began in 1937 the requirement was made mandatory, but had little or no effect. The population is generally too poor to change its entire wardrobe at the wish of the Japanese."

15: U.S. Navy--27 (no date) 1944 Formosans
177.30 Japanese
636.30

"The old Chinese queue ('pigtail') is very rarely seen, having been abolished by the Japanese."

4:Grajdanzev--45 S-4 (no date) 1942 Formosans
116, 312, 471, 655, 177.31 Japan
636.31

"In any case the success in irrigation should be recognized as conspicuous, and it is not less striking that it was achieved with the relatively modest investment of about fifty million yen by the state since 1908. But the state has gradually withdrawn from the field, leaving irrigation works to private enterprise and to special irrigation associations. In 1937 the irrigated area was divided among three groups as follows: 140,500 ko were irrigated from the public canals, 132,000 ko from canals belonging to private persons, 259,000 ko from those of irrigation associations. The last are under the influence of landowners and of the owners of enterprises processing agricultural products."

4:Grajdanzev--87-88 S-4 (no date) 1942 Formosans
116, 167, 313, 423, 659, 177.31 Japan
636.31

"When the Japanese occupied the island, the new administration immediately became interested in its forest resources. One part of forests was in the possession of the Chinese farmers, but the other, more important one was the area of the aborigines. The Chinese were required to register the documents of ownership of forest lands, and since in most cases they had no such documents—their possession and use of forests being based on [88] custom—this device enlarged the government forest reserves (1). It has

1. This is described in Section 3, Ch. 11, p. 1 of T. Yanaihara, Teikoku Shugishita no Taiwan, pp. 23-26.

already been mentioned that in order to use the forests, formerly occupied by the aborigines, the government began to settle the latter by force in the plains. It is said that the settlement of one family of aborigines on the plains cost only ¥70, and this may be compared with the ¥1,000 or more which are spent on the settlement of a Japanese family. Many hundred thousands of ko of forest were acquired in this way."

4:Grajdanzev--106-107 S-4 (no date) 1942 Formosans
116, 316, 433, 454, 177.31 Japan
636.31

"Mining occupies a relatively unimportant position in Taiwan. In 1936, the last year for which data are available, the gross value of mineral products was Y28,727,000, less than ten per cent of the value of industrial production and less than one per cent of total production. But as regards the capital invested, the attention given by the government to oil and, recently, to gold, and the subsidies lavished on actual and potential producers of oil, it occupies quite a prominent position. The caiptal of the mining industry at the end of 1937 was Y46,635,000 (1). There were twenty-four companies, [107] but, just

1. It is not clear whether this is subscribed or paid-up capital, or whether this sum includes reserves and other investments.

as in other fields, three companies dominated the field; Taiyo Kogyo, Taiwan Kogyo, and Keelung Tanko (coal), (2) each having capital of over Y5,000,000.

2. The paid-up capital of this corporation is Y7 million and out of 140,000 shares 43,473 are in the hands of Mitsui Kosan and 41,656 in the hands of Mitsui Bussan."

4:Grajdanzev--109 S-4 (no date) 1942 Formosans
116, 135, 315, 382, 177.31 Japan
636.31

"Since 1908 the Taiwan government-general and the Japanese navy have paid special attention to oil production in Taiwan, but up to now this branch of mining has been more productive of subsidies to oil producers than of oil itself. It was mentioned above that in 1936 the value of oil produced in Taiwan was ¥312,000 and that of gasoline, ¥456,000. However. in the 1937 budget of the government-general ¥1,005,000 was earmarked as subsidies for oil producers and prospectors. Daily production of oil in the last few years has been about 5,000 American gallons."

4:Grajdanzev--149 S-4 (no date) 1942 Formosans
116, 314, 439, 655, 177.31 Japan
636.31

"The government, desiring to utilize the unique position occupied by Taiwan in the supply of camphor, made it a government monopoly. However, in the last few years synthethic camphor production has made striking progress and the monopoly is now definitely broken. This does not mean that natural camphor will lose its market for the expanding celluloid industry can successfully absorb the surplus, but the former advantageous position of the Japanese government is lost."

8: Chen--455-456 N-3 (no date) 1951 Formosans--1-2
116, 241, 312, 177.31 Japan
636.31

"To a certain extent, irrigation in Formosa was well developed long before the Japanese occupation. As recorded in the twenty-seventh volume of the 'General History of Taiwan' in the later years of the Tsing dynasty, the total number of irrigation reservoirs and ditches was 234. After the occupation the Japanese paid considerable attention to irrigation and drainage. In 1901 'Regulations Governing Public Irrigation Systems' were promulgated, and since then the area under irrigation and drainage has increased annually (Table VIII). In 1903 the total area under irrigation and drainage was 150,456 hectares, 28 per cent of the total cultivated area; in 1942 it had increased to 545,094 hectares, about 64 per cent of the total cultivated area. In area under irrigation and drainage Tainan is first among the hsiens (1948); Taichung comes next; then follow Hsinchu, Kaohsiung, Taipei, Hwalien, and Taitung; Penghu has no irrigation (Table IX). In percentage of cultivated land under irrigation and drainage Tainan is again highest, Taitung lowest.

Among irrigation works in Formosa, the Kianan system, in western Tainan, is the most famous. Construction was begun in 1920 and was finished in 1930, at a total cost of 54,013,000 yen. Today 140,000 hectares of cultivated land are irrigated from the Chenven and Chuhsiu Rivers. Since completion of the Kianan system, land price and land rent within its irrigating area have greatly increased. In 1920 the average land price was

313 yen per hectare, in 1935 it was 1144 yen; land rent rose from an average of [456] 36 yen per hectare to 128 yen; and the value of the yield per hectare increased from an average of 90 yen to 361 yen.

Before the Kianan irrigation system was completed, the average per hectare yield of the rice grown in the western part of Tainan was only 19 quintals. After its completion, because there were still limitations on water supply, paddy rice was grown with sugar cane and sweet potato in a three-year rotation; the yield increased to 27 quintals per hectare. The annual profit on paddy rice, when grown alone, had been 194 yen, totaling 582 yen in three years, but the profit on the rotation was 524 yen for the first year, 272 yen for the second year, and 454 yen for the third, totaling 1250 yen — more than twice the original three years' profit."

31: Hofmann--612-613 N-3 (1909) 1912 Formosans
116, 137, 311, 499, 563, 177.31 Japanese
636.31

The pigtail which to us symbolizes Chinese traditions, in the cities exerts its rule in the literal as well as the figurative sense, it is a rule which cannot be stamped out. Chinese and Japanese are separated from each other by a difference in culture and beliefs which cannot be reconciled with each other. On the whole the Chinese element predominates and numerically they are so far superior that an amalgamation between the rulers and the subjects in the near future seems out of the question. The Japanese farmers, merchants, and small business men cannot compete with the Chinese; the Chinese are an astute people and they are moreover, better adapted to the [613] climatic conditions on this island. This is another motive for the Japanese to exploit the interior and to penetrate still further into the regions of the aborigines; here they plan to set up business enterprises on a large scale, but for this again they must use cheap Chinese labor. One of these enterprises is the construction of a railroad in the mountains so that the large forested regions in the vicinity of the Niitakayama (cf. Fig. 2, Mount Morrison) may be exploited. The forests are called the Arisan Forest; they have played an important role in Japanese politics during the last few years. The Fujita Company had acquired a concession for timber here; the government had to buy this land again from the company, which had already begun to build a railway, so that the price which had to be payed in all amounted to about two million yen, a sum which had to be granted by the Japanese Diet.

15: U.S. Navy--28-29 (no date) 1944 Formosans
116, 346, 363, 499, 177.33 Japanese
636.33

"In many villages, especially the elongated type built between rivers and irrigation canals, the temples of the patron saints are constructed at corners or bends in the main streets, making them visible from some distance. These have proved a great obstacle in the construction of new streets for motor-[29]ized traffic. Public opinion strongly opposes drastic changes.

The Japanese have not always been considerate of popular sentiment in clearing lands adjacent to some Japanese enterprise. In road-building, Formosan cemeteries have frequently been disturbed and the owners of burial plots forced to move graves to land of little economic use. Many temples and large mansions obstructing government projects have been torn away with little effort to explain or to compensate."

15: U.S. Navy --24 [3] (no date) 1944 Formosans
116, 166, 369, 464, 177.36 Japanese
636.36

"The industrial centers at Keelung, Shinchiku, Takao and Karenko have attracted many voluntarily. The better paid technical and supervisory personnel are Japanese, but the common labor is Formosan-Chinese drawn from local rural communities. There is evidence that the creation of a number of new air establishments has necessitated the development of servicing communities near them, either at the fields' borders or in nearby villages. The development of a town at Toshien, just north of Takao, is the most important example of a 'war town' on the west coast. Karenko's new industries and the hinterland development of villages on a Japanese pattern and with Japanese names are examples of a more permanent new development."

15: U.S. Navy--29
116, 361, 369, 177.36
636.36

(no date) 1944

Formosans
Japanese

"Many city or town planning ordinances are in effect in Taiwan. The Japanese have drawn up overall schemes for the modernization of urban life everywhere, but these have gone into effect only in the larger settlements. Hence a sharp contrast is presented between the excellence of some city arrangements and the extreme primitiveness of nearby settlements."

15: U.S. Navy--29 [2] (no date) 1944 Formosans
116, 361, 349, 177.36 Japanese
636.36

"Before the Japanese took over the island, all the cities and many of the towns were surrounded by great walls, pierced by well-defended gates. The Japanese have torn down most of the walls, preserving only the gates as decorative monuments. Settlement and development have gone forward rapidly. The result is a quadrilateral or circular arrangement of city streets within the old town areas and a very irregular pattern of streets and alleys developed outside. The Japanese have been cutting through old settlements and imposing a well-developed grid and radiation system of streets and roads upon many towns."

4:Grajdanzev--190-191 S-4 (no date) 1942 Formosans
116, 392, 724, 177.39 Japan
636.39

"Any good [Military--analyst] base must also have a well developed industry, especially a metal industry. Taiwan's supply of munitions, tanks, airplanes comes from the industrial centers of Japan Proper. It is, of course, impossible to change this situation. However, the more can be made or repaired, or assembled in Taiwan, the better. It was shown above that in spite of the rapid growth of industry in the last years the metal and machine industry of the island is small in size. We have no data on the years 1939, 1940 and 1941 when industrialization of the island was declared to be one of the basic policies in the construction of the base for southern advance. Yet indirect data (changes in bank credits, movement of railway goods, imports of the island, etc.,) do not suggest any very rapid change. Undoubtedly some growth took place, and it was well-oriented, but there were many obstacles to the realization of the plans: shortage of metals and machinery; shortage of labor, in some cases due to the unwillingness of the military authorities to pay higher wages; difficulties in the public finances of Taiwan [191] Government-General in view of the several bad harvests of rice and extraordinarily low production of sugar. All this suggests that by 1941 the development of machine and metal industry has hardly made great progress since 1938."

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-1-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

"The division of families occupied in agriculture into owners, part-owners and tenants may be seen from the following table: (1)

1. Here and in the following tables the official figures of families occupied in agriculture are used, though, as was pointed out, they are probably underestimates. The statistics of landowners in Taiwan should be more or less correct because the land is surveyed and change of title involves a complicated procedure. The statistics may be incomplete only as regards tenants and agricultural workers (which they omit completely), and if one takes these into consideration one comes to the conclusion that official statistics probably give a brighter picture than is justified.

Division of Agricultural Families in Taiwan
(thousands)

	1932	1933	1935	1937	1938
Owners	132.2	129.4	132.1	131.1	130.2
Part-owners	119.3	121.7	128.4	134.8	135.6
Tenants (2)	152.4	155.0	159.4	161.5	158.7
Total	403.9	406.1	419.9	427.4	424.5

Footnote (2) on next page.

Division of Agricultural Families in Taiwan [Cont.]
(thousands)

2. Those who have read Japanese Rule in Formosa by Yosaburo Takekoshi may be astonished to discover that there are tenants in Taiwan. Takekoshi wrote in 1905 '. . . The tenants [in Taiwan, after the reform by the Japanese administration] came to enjoy the absolute ownership of the land they or their ancestors have been farming for three centuries. Such a change certainly amounted to a social revolution. Most of the revolutions recorded in history required sacrifices, but the present one was entirely bloodless. This change has given the tenant absolute ownership, thus insuring securing of property. . . . ' (p 132). But what Takekoshi described as a social revolution, was actually only a very modest reform: the government abolished the rights of the taiso--owners who had only doubtful title to land. This reform made transfer of real estate more secure and paved the way for Japanese penetration.

As percentages of total

Owners	32.7	31.9	31.4	30.7	30.7
Part-owners	29.6	29.9	30.6	31.5	31.9
Tenants	37.7	38.2	38.0	37.8	37.4
Total	100	100	100	100	100

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-3
116, 114, 178, 423, 427, 177.42 Japan
636.42

Source: Takumu Tokei, 1938.

[77] As this table shows, about forty per cent of all farmers in Taiwan own no land at all and must rent it from landlords and farmer-owners; about thirty per cent have plots so small that they are compelled to rent land, and barely thirty per cent of the farmers till only their own land. These figures are striking. Taiwan does not know rich tenants of the British type. Those who rent land are mostly poor farmers, but even those who cultivate their own land, are not all rich. As to the relative changes, there is a noticeable fall in the percentage of owners in six years--from 32.7 per cent in 1932 to 30.7 per cent in 1938. For the same period the percentage of tenants is the almost the same (37.7 and 37.4 per cent respectively), while the percentage of part-owners rose from 29.6 per cent to 31.9 per cent. It would seem that the farmer-owners are gradually losing their position and sinking to the level of tenants, but a six-year period is not a sufficiently long time to ascertain definitely whether such a trend exists.

However, it is not only the number of owners and tenants which is important, but also the area which they respectively till. Statistics of area are divided into only two categories—owned and rented.

4:Grajdanzev--76-78 S-4 (no date) 1942 Formosans-4
116, 114, 178, 423, 427, 177.42 Japan
636.42

Area Owned and Rented in Taiwan in 1932
(1,000 ko)

	Dry fields		Paddy		Total	
	Area	%	Area	%	Area	%
Owned	230.2	60.0	132.2	33.3	362.4	46.5
Rented	153.8	40.0	264.0	66.7	417.8	53.5
Total	384.0	100	396.2	100	780.2	100

Source: Nogyo Nenkan, 1939-40, p. 641.

In 1932 the area cultivated by owners constituted 46.5 per cent, the area rented by tenants 53.5 per cent. But it is important to emphasize that owners cultivated chiefly dry land while the tenants cultivated paddy. Paddy brings much higher yields than dry fields; in 1937 the average yield of rice per ko of paddy was about 14 koku while that per ko of dry land was only 7.8 koku, and, further, many paddy fields [78] produce two crops a year. In other words, one ko of paddy yields, on the average, more than twice as much as one of dry land, so that the tenants produce about sixty-five to seventy per cent of the total crop of Taiwan on rented land, and the owners not more than thirty-five to thirty per cent."

4:Grajdanzev--80-82 S-4 (no date) 1942 Formosans-1- 3
116. 427. 466. 675. 177.42 Japan
636.42

"The tenancy contract in Taiwan, as it was a few years ago, had the following features: (1) (1) It was a short-term contract—for the most part for one year only and cases were

1. For a more detailed descripticn see K. Takahashi Gendai Taiwan Keizairon, pp. 293-303.

frequent where the landlords broke the contract before its expiry. It is possible for them to do this because the tenants are more numerous, there is stiff competition among them, and they cling to the plots which they are able to secure. There have [81] been cases when the term was six years and even ten years (opening of new land or reclaimed land), but these were exceptional. (2) It was almost exclusively an oral contract and in case of conflict the landlords were more successful than the tenants in securing their own interpretation of it. (3) The landlord usually received security from the tenant in money or in kind, amounting to from forty to sixty per cent of the rent, deposited with the owner at the time the contract is made. No interest is paid on this amount. This deposit represents a heavy additional burden on the tenants, who, as a rule, have no cash and are compelled to borrow the money at high interest rates while they themselves do not receive any interest on it. In many cases this results in sub-tenancy—a rich farmer renting land and sub-letting it to poor tenants.

4:Grajdanzev--80-82 S-4 (no date) 1942 Formosans-2
116, 427, 466, 675, 177, 42 Japan
636.42

Through the efforts of the government these general features were somewhat changed. The government policy was as follows: (I) the term of tenancy should be five to six years or more; (2) if, after the expiry of the contract, the contracting parties do not denounce the contract within six months, it must be regarded as automatically renewed; (3) in time of crop failure the rent is to be reduced by mutual agreement; (4) in case of arrears (without a justifiable reason) or misuse of soil, the contract may be voided by the landowner; (5) no transfer of land by the tenant can be made without agreement and approval by the landowner; (6) changes in the form of the plot and other changes influencing the productive capacity of the land must be approved by the landowner; (7) if improvements are approved by the landowner, he must bear the expenses of the improvements fully or in part; (8) no contract may be declared void before expiry without sufficient reasons; otherwise compensation must be paid; (9) disputes are to be settled by special arbitration committees.

It is unwise to attach too much importance to these government efforts, however good their purpose may be. True, in 1935 sixty-eight per cent of all area leased was leased under written contracts, while in 1938-39 the percentage had risen to 76.6 per cent. Arbitration committees are established, as well [82] as societies of landowners and tenants, the purpose of which is to bring social peace to the relations between the landowners and tenants as well as to effect a change in the ideology of the farmers. Money

grants from the government-general are made to aid these societies and officials appointed to direct them. But all this does not touch the core of the problem. The problem of tenancy is not to secure the tenant in his lease for one year, or how to distribute the costs of improvements, as this touches chiefly the misuse of power by the landlord. With a secure contract for three or five years, the tenant must still pay the rent, and he has no assurance that the lease will be extended after expiry of the contract. The policy states that in case of crop failure the rent should be reduced by mutual agreement, but in Taiwan it used to be customary for the farmer to pay the rent whether the crop failed or not, and there is no guarantee that this custom will not form the basis of the 'mutual agreement'. In this agreement there is no equality between the opposing parties. The same should be said about the arbitration committees--everything depends upon the degree of influence of the landowners in these committees."

4:Grajdanzev--126-128 S-4 (no date) 1942 Formosans
116, 426, 453, 656, 177.42 Japan
636.42

"Another bank whose loans are far above deposits is Nippon Kangyo Bank, or the Japanese Bank for the Encouragement of Business. Actually this bank is a mortgage institution and [128] is in the forefront of the organizations which extend Japanese control over real property in Taiwan."

4: Grajdanzev--47-48 S-4 (no date) 1942 Formosans
116, 433, 435, 177.43 Japan
636.43

"Furthermore, as will be shown later, the results of the improvements which did take place brought most profit to landowners, traders and the Japanese administration. This may appear to be contradicted by the fact that the gross value of agricultural production in Taiwan for the last five years increased from ¥237.9 million in 1933 to ¥413.7 million in 1937 (seventy-four per cent), and if later data were available they would certainly be still higher. Unfortunately, we do not have at our disposal an index of agricultural prices in Taiwan (1). However, we do know that the average price of [48]

1. The general index of wholesale prices in Taihoku had increased, compared with 1933, by 33 per cent in 1937 and 58 per cent in 1938. Taiwan Jijo, 1939 pp. 606, 607.

rice for the same period rose from ¥14.98 per koku to ¥22.74, or by fifty-two per cent, and rice makes up about half of the gross value of agricultural production in Taiwan. In the same years population increased by only thirteen per cent. By deflating prices to the level of 1933 and dividing by an index of population, we find some evidence that production per capita was less in real value in 1937 than in 1933. How generally this is true is difficult to say because of the paucity and unreliable character of the data. But one thing is clear: no rapid rise in the per capita value of agricultural production has taken place in the last few years."

4: Grajdanzev--51 S-4 (no date) 1942 Formosans
116, 243, 439, 177.43 Japan
636.43

"The unique position of rice in the economy of Taiwan justifies a more detailed discussion. Rice culture was important before the Japanese came to the island and rice exports to China were quite considerable. However, since the Japanese took control the production of rice has doubled in about a quarter of a century and more than half of the total production now goes to Japan. The credit for this achievement is usually given to the Japanese administration and the expansion has been taken as proof of the beneficent results of Japanese rule."

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464, 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

4:Grajdanzev--56 S-4 (no date) 1942 Formosans -1-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

"Taiwan is famous for its rice production of which it exports almost half. The opinion of Japanese economists is that exports of Taiwan's rice to Japan brought to the island such prosperity that some measures had to be taken to curb it. But the data presented in this table [See page 55--analyst] show quite a different picture. In 1905 the annual per capita consumption of rice in Taiwan was about 1.25 koku. Then it fell, but an increase in production brought it back to that level in 1925. At about that time the heavy exports of Taiwan's rice to Japan started: These exports brought a sharp fall in per capita consumption—it fell to 0.87 in 1935 and has remained on about the same level since that time. Now, 0.87 koku per year is about 0.8 pound per person per day. It was pointed out that the production of other cereals in Taiwan is almost nil. Only sweet potatoes form a significant addition to the diet (more than one lb. per person per day). Some wheat flour is imported but this amounts to only two to three per cent of the exports of rice (by weight).

These figures are for the total population. But the urban dwellers are probably better off than the farmers, so that the average for farmers should be less than 0.87 koku. Exports of rice from Taiwan to Japan cannot therefore be taken as a sign of Taiwan's prosperity, for they resulted in a fall in standards of living for the Chinese in Taiwan. Data for the last five years show that the annual average consumption of rice in Japan is about 1.10 koku, while in Taiwan it is 0.84. In other words, per capita consumption of rice in

4:Grajdanzev--56 S-4 (no date) 1942 Formosans-2
116, 171, 262, 439, 511, 177.43 Japan
636.43

Japan is thirty-one per cent higher than in Taiwan, though the Japanese consume in addition considerable amounts of wheat, barley, and other cereals, which are almost entirely absent in Taiwan, to say nothing of sweet potatoes."

4:Grajdanzev--56-57 S-4 (no date) 1942 Formosans
116, 241, 439, 441, 655, 177.43 Japan
636.43

"The price ruling on the Tokyo market is, however, not the price which the farmer in Taiwan receives. Between him and the Tokyo or Osaka market are landlords, usurers, a chain of local dealers in rice, big Japanese importers and exporters, and Japanese shipping companies. Each one of them m[illegible] profits, [57] and good profits, so that little remains for the farmer, and especially th[illegible] tenant-farmer.

However, the advice of Takahashi and others fell on fertile ground and, beginning with November 1, 1939, the export of rice from Taiwan to Japan became a government monopoly. The government-general decides how much rice should be produced, works out a plan of exports for each month, buys rice from the special local organizations, and sells it to a Japanese company, Nippon Beikoku Kabushiki Kaisha (Japan Rice Corporation). The other suggestion of the Japanese economists concerning the lowering of the price of rice in Taiwan may also be attempted, though it will be difficult to realize in a time of war inflation and rice shortage in Japan."

4:Grajdanzev--142 S-4 (no date) 1942 Formosans
116, 439, 177.43 Japan
636.43

"We use the term 'external trade' of Taiwan because trade with Japan, cannot from the legal point of view be considered as 'foreign' trade. Throughout the following pages 'external trade' includes the trade of Taiwan with all other countries (including Japan)."

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-1-3
116, 439, 656, 722, 177.43 Japan
636.43

"These tables [pages 143-144 in category 116--analyst] are of some value beyond the topic of immediate interest. Elaborate theories of international trade have been constructed, the purpose of which is to explain the movement of international trade as distinct from internal trade, but these theories pay little or no attention to factors of political control which are so often of paramount importance in this sphere. Before the occupation of Taiwan, Japan occupied a very modest [145] place in the trade of the island and even after the conquest, her share was at first small; in the period 1896-1900 imports from Japan made up on the average only 27 percent of the total and exports to Japan, only 19.6 percent. It is true that these figures are rather too low because of the absence of data on Japan's trade in 1896, but if these data were available, they would probably increase Japan's share by only 4 or 5 percent. The fact is that even after the occupation of the island, and in spite of the presence of large detachments of troops and swarms of Japanese officials and adventurers, trade continued for some time to flow chiefly in the old channels. However, this situation was soon changed. In 1926-1930 exports to Japan amounted to 85.5 percent of total exports and in 1937 reached a maximum of 93.2 percent, a figure probably unsurpassed in the history of other colonial countries. The same development was achieved in imports. In 1926-30 Japan's share was 68.3 percent, in 1931-35 it was 83.4, and in 1938 it reached a maximum of 89.4. The slight fall

4: Grajdanzev--144-146 S-4 (no date) 1942 Formosans-2
116, 439, 656, 722, 177.43 Japan
636.43

in Japan's share in 1938 and 1939 is apparent rather than real, for in these years Kwantung, Manchoukuo, and maritime China became to all intents and purposes Japanese colonies and for the Japanese in Taiwan it makes no difference from the point of view of profits and foreign exchange whether they trade with Japan or with these regions. In 1939 the share of this 'yen bloc area' of Taiwan's trade was 97.8 percent of her exports and 96.5 percent of her imports. For comparison let us look at the share of China. In 1896-1900 her share in Taiwan exports averaged 63.1 percent, in 1926-30, only 7.0, in 1936, 2.0, and in 1937, 1.3. The same picture appears in the case of imports, for which the corresponding percentages are 37.4, 13.8, 2.9, and 1.9. China is near, --just across the Taiwan Strait, her population is vast her cities are growing, her products are held in high esteem by the Chinese population of the island, she is in great need of Taiwan's products, and yet the trade between these two regions continued to fall catastrophically, But in 1937-1938 the most important points on the Chinese coast were occupied by the Japanese. By 1939 the area under the latter's domination has increased further, and a surprising change is occuring [sic]--the trade of Taiwan with China now shows a remarkable increase.[146]In 1937 exports from Taiwan to China were valued at 5,575,000 yen, but by 1939 they had risen to 33,840,000. Imports from China in 1938 were valued at 1,954,000 yen, in 1939, at 4,253,000. Although China experienced war in the last three years, though many of her cities were ruined, and the purchasing power of the population has fallen, the trade is better than at the start of the conflict. The reason for this reversal

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-3
116, 439, 656, 722, 177.43 Japan
636.43

lies not in the economic situation; it is rooted in the change in the political conditions for now maritime China is virtually a Japanese colony.

This will help us to understand why the foreigners--British, Americans, and others--were gradually ousted from Taiwan. Before 1895 British and American trade with the island was larger than that of Japan, the most important branches of trade, as well as shipping, were in British hands. The British owned Douglas Co. monopolized shipping, the Hongkong and Shanghai Banking Corporation dominated the financial sphere, Jardine Matheson, Dent, and Samuel Samuel traded in camphor, sugar, tea, and other products, while the trade in rice was chiefly in the hands of Chinese. Mitsui Bussan--the pioneer Japanese firm--did not appear on the island till 1898. The share of Great Britain in Taiwan's imports fell from 7.3 percent in 1896-1900 to 0.1 in 1936 and to almost zero in 1939, while in the same period that of the United States fell in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. from 5.3 to 1 and to 0.4. [sic] In 1896-1900 Taiwan's average annual imports from Great Britain were valued at 1,326,000 yen, in 1926-30 (in depreciated yen) at 3,083,000 yen and in 1936, at 392,000. The imports from the U.S.A. amounted to 957,000 yen in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. (The purchasing power of the yen of 1939 is probably not more than one-fourth of what it was in 1896-1900.)"

4:Grajdanzev--149-150 S-4 (no date) 1942 Formosans-1-2
116, 171, 435, 439, 177.43 Japan
636.43

"Two other aspects of Taiwan's exports should receive our attention. First, it is interesting to compare the gross value of Taiwan's production with its exports, keeping in mind that the gross value is considerably larger than its net value, i.e. by the cost of materials, fuel used in production, etc.

Comparison of the Gross Value of Production and Exports

	1903	1922	1929	1937
Gross value of production, million yen	84.5	354.2	598.6	890.5
Exports, million yen	20.7	158.4	272.0	440.2
Exports as percent of gross value	24.5	44.7	46.3	49.4

From this table it appears that in 1903 about one-fourth of the gross value was exported, while in 1937 the amount had risen to 49.4 percent. This probably means that in 1937 not less than three-fourths of the total net value of production of production[sic]of Taiwan was exported. Such a high ratio of exports to gross value of production is probably approached only [150] by Korea (1).

1. If Taiwan were to receive the equivalent in imports, the large exports would not constitute a problem. But we shall see later that this is not the case.

To see how far this situation was to the mutual advantage of the natives and the

Japanese, one should compare not only the ratio of exports to total production but also the absolute amounts which are not exported. In 1903 there remained 63.8 million yen worth of unexported goods, while in 1937 450.3 million were left. Let us now examine these figures in the light of price-changes. We have no index of prices for Taiwan in 1903, but we do have prices of rice--the most important product of the island--to which the authorities in 1937 gave a weight of 31 percent in the general index (2). A picul of

2. Actually it should be about 40 percent because the authorities gave sugar a weight of 25.3 percent, unduly large in view of the fact that more than 90 percent of the production is exported.

rice in 1903 cost 2.36 yen; in 1937, it cost 9.32 yen, or almost 4 times as much. If we also take into consideration the growth of population, the residual per capita gross production 'in rice prices' was 21.8 yen in 1903 and 19.8 yen in 1937. These are gross values of production, and since industry played a much greater part in 1937 than in 1903, the per capita net 'real' values in 1937 must actually be much smaller than in 1903. This is a startling conclusion. We emphasize again that these figures can only be approximate, yet they are sufficient to indicate the trend of events."

4:Grajdanzev--151-152 S 4 (no date) 1942 Formosans -1-2
116, 439, 722, 177.43 Japan
636.43

"In return for exports to the value of 593 million yen in 1939 Taiwan received only 409 million yen worth of imports (69 percent). In order to move these exports to Japan certain conditions are obviously necessary. Taiwan must import rails, railway equipment, harbor equipment, bags for rice and sugar, fertilizers, etc. Taiwan's exports--rice, bananas, sugar, tea, pineapples, fresh fish, etc. --are foodstuffs. But most of the imports enumerated are of no direct use to the islanders themselves; they are beneficial only insofar as they help them to secure other goods. They are really costs of production. In 1939 at least 60.7 million yen worth of fertilizers, including bean cakes and other cakes, (included in 'all others' in the table above) and about 8 million yen worth of gunny sacks were imported. Another group of imports is connected with the effort to turn the island into a powerful base for further advances into China [152] and the Southern countries. Port facilities far beyond the needs of Taiwan itself, powerful radio stations, fortresses, strategic railways, factories producing war materials are being built. Again we cannot determine exactly how great this group of imports is, though we can guess its growth by following the growth of 'ores, metals and manufactures thereof', etc. These two groups, which in themselves contribute little to the welfare of the islanders, increased from 28 million yen in 1925-1929 to 62 million in 1936, to 70 million in 1937, to 78 million in 1938 and to 86 million in 1939. To some extent this growth is purely illusory since it reflects the rise in prices in these years, but we know that in the Japanese colonies, just as in Japan, the consumption of metals, machines, for peace time uses,

4:Grajdanzev--151-152 S-4 (no date) 1942 Formosans-2
116, 439, 722, 177.43 Japan
636.43

etc., was reduced or stopped completely, so that the greater part is now available for military purposes."

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans -1-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

"The profits and emoluments which the Japanese get from Taiwan may be divided into two parts, that which they consume in Taiwan itself and that which is sent to Japan or invested in business. Consider first what the Japanese consume on the island. We shall assume that the workers and the lesser officials consume the whole of their income—any error which this hypothesis may involve will be small. Skilled Japanese workers in Taiwan earn about 700-800 yen a year and subordinate officials, who form the bulk of the Japanese population, earn about 1,200-1,500 yen a year. There are Japanese who earn and spend much less than the skilled worker and also rich Japanese who spend much more than 1,500 yen. Let us [155] assume that 1,500 yen is the average annual amount spent by a Japanese family in Taiwan and that in each family only one person is working (1). On these assumptions the disbursements of the Japanese popula-

1. It is interesting to note that the budget investigation conducted by the government-general in 1937-1938 based on 355 'representative' Japanese families comprising 1,397 persons arrived at an average of 184.56 yen per month or 2,215 yen per year. This investigation does not include the richest families but does include poorer groups (18 families with incomes below 840 yen a year) showing that our estimate of 1,500 yen is certainly not above the average, but quite probably below it. The same source gives budget figures for the Chinese on the island, but they cannot be used for purposes of accurate comparison because they embrace only the

higher brackets of wage earners and salaried men. Their average earnings are 137.33 yen per month, though the official average daily wage is 1.27 yen, but those receiving less than 40 yen per month comprise only one percent of the cases investigated.

tion in 1938 are estimated at about 90 million yen. Of course, a part of this outlay would be made if Chinese workers and officials, working as hard and as well as the Japanese (2), were substituted for the latter. The average Chinese worker does not earn more

2. An official source says of the Chinese in the service of the Post Office that they 'have shown themselves as satisfactory postal employees as the Japanese in the same capacity.' (Taiwan, its System of Communications and Transportation. p. 24.)

than 380 yen a year (3), and a Chinese official earns about 600 yen. Thus the same num-

3. Based on the official daily average of 1.27 yen multiplied by 300 (days).

ber of the Chinese would cost only about 36 million yen, or about 54 million yen less than the Japanese. We shall see that this is not the chief item in the list of benefits

4:Grajdanzev--154-155 S-4 (no date) 1942 Formosans-3
116, 171, 465, 511, 556, 563, 177.43 Japan
636.43

which Japan derives from possession of the island (4).

4. The budget investigation conducted in Japan in 1936-37 gives the average monthly income as 90.59 yen per family for 558 families, while that in Taiwan in 1937-38 gives an average 184.56 yen for 355 families. If the groups included are reasonably comparable, as seems probable, the difference between the average earnings of the two groups gives some indication of the net advantage of the Japanese occupied in Taiwan and their 'dividend' in the colonial profits."

4:Grajdanzev--155 S-4 (no date) 1942 Formosans
116, 434, 556, 177.43 Japan
636.43

"The amount of profits collected [by the Japanese--analyst] may be calculated more or less precisely. We know that the exports from Taiwan are greater than the imports into the island and there can be only one explanation: considerable real wealth is transferred from Taiwan to Japan each year, wealth which represents the profits and savings of the Japanese in Taiwan."

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year—a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

4:Grajdanzev--158 S-4 (no date) 1942 Formosans
116, 457, 563, 661, 177.43 Japan
636.43

"Of course, some part of the [trade--analyst] balance is made up by the remittances of the Japanese on the island to Japan-proper, remittances which may be presented as 'earned income' and not an income from investment. However, the thousands of Chinese citizens who reside on the island remit home to China only paltry sums. They are unable to earn as much as the Japanese, mainly because the privileged position of the Japanese is the result of the colonial status of the island. The services performed now by the Japanese in most cases could be as well performed by the islanders, but their part is to be servants of the ruling nation. It should be clear than that this 'earned income' can be considered as a special form of the general income from the colonial exploitation of the island."

4:Grajdanzev--158-159 S-4 (no date) 1942 Formosans
116, 171, 457, 477, 661, 177.43 Japan
636.43

"The usual explanation of Japan's ability to obtain year after year tens of millions of yen worth of goods over and above what is sent from Japan to Taiwan is that this balance represents the interest on Japanese capital invested in Taiwan and the profits of the Japanese businessmen there. But a closer analysis of the figures given above reveals that this explanation is not satisfactory. It is important to understand that we are concerned here with investments and the returns on them, not from the point of view of an individual, but from the point of view of two regions——Taiwan and Japan. From 1896 to 1908. [159] inclusive, Japan sent goods to the value of 31,655,000 yen over and above her imports from the island and this represents her real outlay in the colony. She now receives from Taiwan sums which in every year since 1914 have been greater than this original 31,655,000 yen; which in every year since 1924 have been more than twice as great; and which in every year since 1934 three times as great, and in 1939 were six times as great as the original sum. Is this the legitimate interest on capital and profits of the entrepreneurs which are due to their energy, foresight and managerial ability?

Of course, we know that high profits are made not only in Taiwan, but, say, in the United States as well. Does this fact refute our thesis of exploitation? In no way. The existence of monopolies in the United States is a fact known to all. However, these monopolies are not permanent. Some of them appear, some disappear, every year."

4:Grajdanzev--159 S-4 (no date) 1942 Formosans
116. 457. 652. 661. 177.43 Japan
636.43

"For our purposes it is irrelevant whether all or only a few of the Japanese firms on the island make high profits; whether there are bankruptcies among them or not. We are concerned here with Japan's position in Taiwan as a whole. The existence of the Japanese firms on the island which make less than 10 percent on the invested capital, of the Japanese entrepreneurs who fail and the Japanese adventurists who return to Japan disappointed and disillusioned does not refute our thesis. It was shown in some detail above that beside investment profits as such there is derived from Taiwan the income of Japanese officials, and income originating in taxation, monopolies, fines, etc., most of this due in the last analysis to one source—Japan's colonial power. All this brings us to the conclusion that the active balance of Taiwan's trade represents mostly an unusually high degree of exploitation of the Chinese on the island by the Japanese government and industrialists.

To those who ask whether the colonies are profitable or not, it may be said that the ruling group of Japan knows that they are. They are able in Taiwan to support 300,000 Japanese on a much higher level than those Japanese would enjoy in Japan and in addition to extract profits of more than 100 million yen a year."

15: U.S. Navy--27 [9] (no date) 1944 Formosans
116, 241, 433, 434, 177.43 Japanese
636.43

"Food is plentiful, but is subject to requisition by the Army. The farming population is able to raise a substantial amount of the food it consumes, but the Japanese frequently order the restriction of plots planted to these crops in order that more space may be devoted to a crop (castor oil beans for instance) required by the military. In 1940 the official daily ration of rice permitted to farmers in Taihoku Province was only 0.60-0.75 pounds, or 2-2 1/2 go per person. This is well below the usual consumption and has been the cause of bitter discontent and resistance."

4:Grajdanzev--48 [2] S-4 (no date) 1942 Formosans
116, 241, 439, 656, 177.45 Japan
636.45

"Rice, as we shall see, is a cash crop; probably not less than two-thirds of the crop finds its way to the market. Sugar cane which constitutes from 12.2 to 19.3 per cent of the total, has special importance because the whole crop is marketed. Sweet potatoes and vegetables are chiefly for home consumption. Next in importance, in the order named, are tea, bananas, groundnuts, pineapples, tobacco, jute, and cassava. This almost complete dependence on rice and sugar cane is the result of government policy, as before 1905 the distribution of cultures was not so specialised. But now Taiwan has become a part of the economy of Japan and its function is to serve that country's needs."

4:Grajdanzev--156-158 S-4 (no date) 1942 Formosans-1-3
116, 457, 177.45 Japan
636.45

"The trade balance of Taiwan with all countries other than Japan is usually 'passive', but this trade also does not present a special problem. If Taiwan, for example, bought beans from Manchuria for 20 million yen and sold goods to Japan to the [157] value of 80 million yen, we may consider that this means that value of 80 million yen worth of goods were sold from Taiwan to Japan. The freight payments which accrue chiefly to the Japanese need not trouble us because they are included in Taiwan's statistics of imports and excluded from the statistics of exports. Thus we find the commodity balance of trade almost exactly measures the amount of profits and other earnings of the Japanese individuals, companies, and the government-general which they put at the disposal of Japan proper(1). Invisible items of the balance of payment with foreign countries do

1. Actually the profits derived by Japan from Taiwan are even greater, because (a) the gold produced in Taiwan and sent to Japan is not included in the trade statistics and (b) there was very active smuggling by Japanese of goods from Taiwan to Chinese ports, estimated by Japanese authors at several million yen a year.

not complicate the picture. Naturally, there is not an exact correspondence between the amounts transferred to Japan and the balance of payments from year to year and especially from month to month; more goods may be sent this year than there are

profits and savings transferred, but in the following year the situation will be reversed if the normal functioning of the financial mechanism is to continue.

Let us now look at the balance of payments of Taiwan. In the first thirteen years of the Japanese administration (1896-1908) the balance was usually passive and the net aggregate amount of these passive balances was 31,655,000 yen (after deduction of active balances). It is fair to assume that this sum approximately represents net Japanese investments in Taiwan—a sum for which no equivalent was received up to 1908. Since that time the balance has been active. Admittedly, these investments do not include Japanese expenses of military occupation. But these were taken care of by the huge indemnity paid by China to Japan after the war of 1894-1895. This indemnity, as is well known, was in excess of the cost of war to Japan.

Active Trade Balance of Taiwan (1,000 Yen)

	Aggregate	Annual Average		Aggregate	Annual Average
1909-1913	26,384	5,276	1929-1933	354,672	70,934
1914-1918	167,117	33,423	1934-1938	481,642	96,328
1919-1923	212,148	42,430	1939	184,289	184,289
1924-1928	382,971	76,594			
			Grand Total	1,809,223	

[158] Thus from an annual average of 5.3 million yen in 1909-13 the active balance of Taiwan rose to 96,328,000 in 1933-1938 and reached a peak of 184,289,000 in 1939. In

4:Grajdanzev--156-158 S-4 (no date) 1942 Formosans-3
116, 457, 177.45 Japan
636.45

many cases the trade balance cannot serve as a good indicator of what a country pays to others for foreign investments. However, the case of Taiwan is different. The items complicating the balance of payment as apart from the commodity balance are almost absent here. There are few islanders abroad and there are few foreigners (except the Japanese) in Taiwan. There are no other foreign investments (other than the Japanese) on the island worthy of consideration. The islanders do not travel abroad, the foreigners do not travel in the island. Almost all economic relations are with Japan; the economic relations with other countries, insofar as they exist, are taken care of in the balance of payments."

15: U.S. Navy--31 [5] (no date) 1944 Formosans
116, 466, 656, 177.46 Japanese
636.46

"Through direct employment and through indirect control of the large agricultural and industrial companies, the Japanese government is the largest single employer of Formosan labor. Control and supervision has been strict since the Japanese occupation of the island, but the progressive invocation of the National Mobilization laws after the outbreak of the China 'Incident' has made government control of labor complete. Although there is evidence of chronic discontent among laborers on Taiwan since the 'liberal' days of the 1920's, government policy has been careful to prevent the development of any leadership. The usefulness of Taiwan as a base for military operations and as a link in the new imperial system depends upon the smooth functioning of transportation and communication and (to a growing degree) of industrial activity. All this in turn depends upon the strict control and obedient service of Formosan-Chinese labor, both skilled and unskilled. The Japanese fear any labor agitation, and realize that they are extremely vulnerable to slow-down tactics, if these should be initiated."

15: U.S. Navy--31 [8] (no date) 1944 Formosans
116, 167, 464, 177.46 Japanese
636.46

"Labor problems are dealt with by the several offices of the Government-General. There is no 'Labor Bureau' as such.

Before the China 'Incident' there were few restrictions upon the employment of an alien within Taiwan provided the alien had entered the country legally, held a visa from a Japanese consul and was duly registered in Taiwan. All Chinese laborers entering were required to be licensed for labor by the immigration authorities. The government itself has attempted to employ local labor or semi-skilled and skilled labor from Japan. After August, 1937, steps were taken to end the immigration of Chinese, and in 1938 it was announced that all Chinese nationals who thereafter left Taiwan for any point outside of the Empire of Japan would automatically be barred from re-entry."

15: U.S. Navy--32 [3] (no date) 1944 Formosans
116, 466, 467, 656, 177.46 Japanese
636.46

"In 1931 the upsurge of reactionary power at Tokyo made possible the outbreak of the Manchurian Incident and the stage was set for the war program. Labor leadership, labor organizations and union programs came to an end much more quickly in Taiwan than in Japan Proper. By the end of 1931 everything which smacked of opposition had been suppressed. The employers in the strategic industries, transportation and communications are official or semi-official bodies. Hence there can be no dispute over labor questions."

15: U.S. Navy--32 [6] (no date) 1944 Formosans
116, 745, 466, 177.46 Japanese
636.46

"Hours of labor average about ten per day, including Sundays, although most employees get two days off each month. There are no labor laws or workmen's compensation laws, as there are in Japan. Excepting in cases of Government laborers, as in the Monopoly Bureau or the Government Railways, there are no provisions for bonuses or overtime payment, but most Japanese employers follow the Government example and pay for overtime work. The Government provides free housing for certain classes of Government employees, and retires long-time employees on small pensions. Private industry makes no such provisions, except sometimes where the employer is a wealthy family bearing a paternal relationship toward workmen long in service. The Government also has a scheme for compulsory social insurance payments. No such provisions exist in private industry. If a laborer is injured on the job, it is customary for the employer to pay hospital expenses. If he is killed or totally disabled, the employer makes a money contribution, called 'consolation money' to the injured man or to his family. Thirty days' notice is usual in discharging an employee; in lieu of notice, thirty days' wages are generally paid."

15: U.S. Navy--33 (no date) 1944 Formosans
116, 466, 177.46 Japanese
636.46

"Under the National Mobilization laws which have been put into effect the conscription of labor by the Japanese has been complete. Even before this, the forced contribution of labor, directly or indirectly, was managed in various ways. Work on semi-public undertakings was called a patriotic duty. Schools, young people's associations, and local ward organizations were expected to contribute certain hours of labor or, in lieu of them, special donations. If an individual Formosan is absent from any announced 'voluntary' project, complete explanation must be made to the authorities concerned. Types of semi-public undertaking include road-building, flood prevention, irrigation works, construction and care of shrines, land clearance, airfield construction, and tree-planting. The figures which follow indicate labor contributions over a one-year period:

Table 26: Enforced contributions of labor.

	No. of Laborers	Hours of Labor
School groups (primary and middle schools, Native and Japanese)	629,510	3,101,869
Young Men's Organizations	221,574	1,567,248
Adults in various organizations	399,708	2,265,361

Men of the upper class, especially those with advanced education and experience outside of the island, live in constant fear of impressment and transportation to the front for Army labor service."

15: U.S. Navy--33 [4] (no date) 1944 Formosans
116, 563, 463, 465, 177.46 Japanese
636.46

"Formosan-Chinese furnish almost all labor. Japanese are generally employed as foremen or skilled labor, or in particularly vital operations. For instance, they provide the personnel on the moving stock of the Government Railway system. This accounts for the difference in wage scales whereby the Japanese laborer receives from 80 to 150 percent more than Formosan-Chinese who do the same work. A Japanese tailor, for instance, at one time received two yen a day as against 1.20 yen per day for a Formosan-Chinese; a worker in a pineapple cannery 1.50 as against the Formosan-Chinese wage of 70 sen."

4: Grajdanzev
177.47
636.47.

Formosans
Japan

[For penetration of Japanese corporations and enterprises into the economic life of Formosa, see Categories 47, 43, and/or 563.]

4: Grajdanzev
177.47
636.47

Formosans
Japan

[MC: for penetration of Japanese corporations and enterprises into the economic life of Formosa. See categories 47, 43, and/or 563]

4:Grajdanzev--61 S-4 (no date) 1942 Formosans
116, 249, 423, 471, 177.47 Japan
636.47

"The old type of sugar cooperatives dominating the industry before 1895 disappeared with the advent of capitalistic forms of enterprise in Taiwan. Production of sugar is now carried on in modern mills which are the property of the Japanese sugar companies possessing tremendous amounts of capital (several hundred million yen). Step by step these companies acquired a huge area of cultivated land——from 63.2 thousand ko in 1925 this area increased to 93.2 thousand ko in 1935. The latter figure amounts to more than ten per cent of the cultivated area of the island, but in the regions where sugar cane is cultivated the companies own more than twenty per cent of the area under cultivation (1).

1. Actually their influence is greater than these figures suggest because they rent about 20,000 ko of land.

However, it would be a mistake to think that this huge area is used by the manufacturers for sugar cane plantations. They plant only about 18,000 to 25,000 thousand ko with cane, while all other sugar cane is bought by them from the small farmers, i.e. about three-quarters of the total sugar cane production is supplied by 127,000 to 130,000 farmers, each planting on the average only half a ko."

4:Grajdanzev--61-62 S-4 (no date) 1942 Formosans-1-2
116, 241, 435, 452, 477, 655, 177.47 Japan
636.47

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple; it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--96-97 S-4 (no date) 1942 Formosans-1-2
116, 171, 454, 471, 473, 177.47 Japan
636.47

"It is also interesting to compare the size of the companies in Taiwan as regards capital with those in Japan proper and in Korea.

Industrial Companies, their Total and Average Capital in the Japanese Empire, December 31, 1937.

	Companies, number	Total paid-up capital and investments (million yen)	Capital per enterprise (1,000 yen)	Capital per capita of population (yen)
Japan proper	30,518	9,396.9	308	132
Korea	981	246.2	251	11
Taiwan	335	191.5	572	34
Kwantung	358	96.9	271	81
Karafuto	88	33.6	382	103

Source: Dainippon teikoku tokei nenkan, 1939.

It is clear that Taiwan and Korea are poorly supplied with capital per capita of population, but there is an important difference between them: the average capital per company in Taiwan is higher than in any other part of the Japanese Empire, including Japan proper. These are averages and include small as well as large companies, but behind them one may see the silhouettes of big corporations dominating the economic life of Taiwan,

corporations which have few equals even in industrially developed Japan (1).

1. By size of total paid-up capital the corporations and partnerships in industry in Taiwan were distributed as follows: [97]

Size	Number of companies	per cent of total	Total paid-up capital (1,000 yen)	per cent of total
Less than ¥10,000	50	14.9	253	0.1
¥ 10,000- 49,000	111	33.1	1,922	1.0
¥ 50,000- 99,000	34	10.2	1,276	0.7
¥ 100,000- 199,000	48	14.3	3,020	1.6
¥ 200,000- 499,000	40	11.9	4,878	2.5
¥ 500,000- 999,000	20	6.0	4,694	2.5
¥1,000,000- 4,999,000	25	7.5	24,077	12.6
¥ 5,000,000-9,999,000	2	0.6	5,700	3.0
Over ¥ 10,000,000	5	1.5	145,316	76.0
Total	335	100.0	191.1	100.0

Thus, 32 companies—9.6 per cent of the total number—had 91.6 per cent of the total capital of companies."

Distribution of Corporate Capital in Taiwan by Nationality in 1929 [Cont.]
(1,000 yen)

	Japanese	Chinese	Other*	Total
Mining	12,243	3,441	1,422	17,107
Total	225,745	57,033	5,161	287,939

* Chiefly Chinese from the mainland, citizens of the Chinese Republic.

The share of the Japanese was therefore 90.7 per cent in industry and 71.6 per cent in mining, while the corresponding shares for the Chinese were 8.5 per cent and 20.1 per cent. It is true that these figures do not include individual enterprises, which are chiefly Chinese, but it is quite evident that their inclusion would not greatly change the picture because the average capital of such enterprises is very small. On the other [111] hand this table does not include government enterprises which should be considered for all practical purposes as Japanese enterprises (the managerial staff is Japanese and the profits may be transferred to Japan at any time), and the capital of these government enterprises is huge. As is seen from the table, the capital of all corporations was about ¥288 million in 1929, yet in the same year the capital of the state railways alone was ¥122 million. Beside railways the government has many enterprises of all kinds. Since 1929 the situation has further changed to the disadvantage of the Chinese group for in the

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

last few years, as was shown above, huge new companies have been established and the capital of old ones increased. The new companies are Japanese. In 1929, for example, the capital of the Japanese companies occupied in the fisheries was ¥2,258,000; in 1939 two Japanese companies with headquarters in Japan proper, whose capital is ¥65,500,000 were operating in Taiwan. Of course, only a part of this capital is sunk in their Taiwan enterprises, but it is clear that the situation in 1939, in this as well as in many other respects, is less favorable to the Chinese than it was ten years before.

The same thing has occurred in mining, where the total capital is now ¥46.6 million, instead of ¥17.1 million as in 1929. The increase is due to the activities of the Japanese Koyo Kogyo, Taiwan Kogyo, and Keelung Tanko corporations."

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-1-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

"Our analysis of industry and mining must not be limited to a survey of present conditions and the plans of the government, etc. Properly speaking it should only begin here. The population of Taiwan is about five per cent Japanese and about ninety-five per cent Chinese and aborigines. In order to evaluate the place of these two groups in industry and mining we should know wage levels and working conditions as well as the all-important question of who are the entrepreneurs and who the wage earners. Unfortunately, some of these questions cannot be answered because of the absence of information.

The latest available report concerning the nationality of capital in Taiwan's companies refers to the years 1929.

Distribution of Corporate Capital in Taiwan by Nationality in 1929
(1,000 yen)

	Japanese	Chinese	Other*	Total
Agriculture	4,434	4,962	4	9,399
Industry	180,497	16,786	1,658	198,941
Commerce	23,128	28,082	2,033	53,242
Communications	3,186	2,571	25	5,781
Fisheries	2,258	1,190	20	3,467

4:Grajdanzev--112 S-4 (no date) 1942 Formosans -1-2
116, 171, 471, 563, 477, 655, 177.47 Japan
636.47

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929 Per cent	Korea 1938 Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital. and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

4:Grajdanzev--113 S-4 (no date) 1942 Formosans
116, 463, 471, 563, 177.47 Japan
636.47

"Our first question is now answered: the Chinese as a group receive very little from Taiwan's industry and mining in the form of interest on capital or entrepreneurs' profits. Any advantages which they may derive from these industries arise then chiefly from their position as workers. Let us see now what they receive in this capacity. In 1936, out of 81,589 workers occupied in industrial enterprises with five or more workers or having a prime-mover, 76,251 (93.5 per cent) were Chinese—almost the same percentage as in the population of Taiwan. The remaining 6.5 per cent were chiefly Japanese."

4:Grajdanzev--140 S-4 (no date) 1942 Formosans
116, 563, 656, 177.47 Japan
636.47

" 'Encouragement of industry', on which the government planned in 1939 to spend 11.5 million yen from the general budget and 6.5 million from local budgets, consists of subsidies to Japanese industrialists and entrepreneurs in general. The budget for 1939, for example, provided for the following grants to Japanese companies: 1,743,000 yen to oil companies, 1,447,000 to shipping lines, 1,640,000 to airlines, 72,000 to private railways, 629,000 to gold producers. It is clear that these expenditures enriching the Japanese entrepreneurs give at best, as was shown above, low-paid work for the Chinese."

"Independent trade and foreign business are at an end (1) and the handful of foreigners

1. Identical amounts of foreign trade may mean different things for a nation; thus if an American firm buys tea in Taiwan, transports it to the United States in an American ship and sells it to retailers, the net result for the United States is very different from the case where a Japanese firm buys tea in Taiwan, brings it to the United States in Japanese bottoms, and sells it to American retailers.

in Taiwan are in a precarious position. In his [147] book 'Taiwan under Imperialism' Tadao Yanaihara explains this in the following way (2): in their competition with foreign

2. Yanaihara, op. cit., pages 48-49.

and Chinese merchants the Japanese traders had great capital; they also entered the sphere of production; they had the advantage of the cooperation of the Taiwan Bank; they were helped by state monopolies; they enjoyed subsidies from the state; they were protected by the tariff wall. But nowhere in his book does Professor Yanaihara give proof that the Japanese merchants had greater amounts of capital when their enterprises were organized. The huge capital funds were not brought from Japan; they were created in Taiwan itself. Neither can any reason be found for combination of trade and production

as a cause of their success. According to his own statement (op. cit., page 48), the foreign traders and shipping were almost completely driven out (hotondo kuchiku serarete) by 1907. But at that time no Japanese took any part in the production of rice, whereas in tea production Mitsui Bussan Co. and Nozawa have participated only since 1907. As late as 1905 about 90% of the sugar was produced in primitive mills and only 4,535 tons in the mills of the newly-established Japanese enterprises, while the total exports of sugar for 1905 were but 42,600 tons. Pineapples and bananas were unimportant as articles of export in these early years: bananas appeared in the custom reports in 1907 (valued at only 44,129 yen), pineapples to the value of only 18,639 yen were exported in the same year. Since camphor became a monopoly, there is no question of competition with respect to it; while alcohol was practically not exported."

4:Grajdanzev--147 S-4 (no date) 1942 Formosans
116, 171, 477, 656, 177.47 Japan
636.47

"The establishment of a Japanese bank does not of itself mean that Japanese merchants would enjoy privileges in it in comparison with other clients. There remain then monopolies, subsidies, tariff walls and--we add--taxation policy, administrative pressure and other similar measures as causes of the Japanese commercial success. The same measures were applied in Korea, later on in Manchuria and are now being used in China."

4:Grajdanzev--171-172 S-4 (no date) 1942 Formosans-1-2
116. 452, 476, 563, 661, 177.47 Japan
636.47

"The growth of Taiwan's cooperative societies of all kinds is good testimony to the ability of the Chinese population to organize ~~and~~ to manage quite successful enterprises. The growth of the cooperative movement in Taiwan may be seen from the following table:

The Cooperative Movement in Taiwan

	1913	1918	1930	1935
Number of societies of all types	18	171	407	462
Number of members	2,760	70,428	265,248	342,122
Paid-up capital 1,000 yen	484	4,455	13,949	15,250

[172]

In 1936 the urban credit cooperatives had deposits of 20.7 million yen, while the rural cooperatives had 64.3 million yen. In May, 1940 the corresponding sums were 36.4 million yen and 122.7 million yen. All this is the more remarkable because the cooperatives were developed by the Chinese with little help from the Japanese or from the cooperative associations of Japan (1), and because the government put so many obstacles

1. This does not mean, of course, that the Japanese cooperative associations were unfriendly to the Taiwan cooperative movement. Quite the contrary. Throughout the history of the Taiwan cooperative movement the Chinese received every encouragement from the Japanese societies and from the certain Japanese individuals; but this help could not be great because of the conditions existing on the island. It is

important to emphasize that many individual Japanese physicians struggling with epidemics, teachers bringing education to far-away villages, political organizers helping the Chinese to organize their fight for freedom, and many others whose services to the Chinese were great and whose relation to the conquered people was that of sympathy and often of self-sacrifice, deserve the highest praise. However, it is not the individuals who count most, but the system, and however good the intentions of particular individuals might be, they could not and cannot change the governmental system existing on the island.

in the way of the development. The managerial and controlling staffs of the cooperatives in Taiwan must be approved by the government-general, so that 'undesirable' elements can be eliminated from the movement. The active members of the societies were often arrested and imprisoned and obstacles were put in the way of the creation of a powerful central body for the cooperative movement. But in spite of all obstacles the population of the island succeeded in building up a strong and useful organization."

4:Grajdanzev--172-173 S-4 (no date) 1942 Formosans
116, 452, 241, 476, 563, 177.47 Japan
636.47

"Since the start of the present war, however, through increasing supervision and various regulations, the government has turned the cooperatives into a piece of bureaucratic machinery, rather like the paochia. The chief function of the agricultural cooperatives, which form the backbone of the movement, has become the collection of rice and other products and their transfer to the government. According to the declared rations (1), the farmers in Taihoku province, for example, are to have only from two to

1. The ration figures are taken from the Ekonomisuto, Tokyo July 1, 1940.

two and half go of rice per day (0.6-0.75 lb.). But this is considerably below the usual consumption of [173] the farming population, so the farmers will not willingly surrender their 'surplus' and the cooperatives have been turned into organs for the compulsory collection of grain and other agricultural products. The only organization created by the islanders which had some semblance of independent existence is thus becoming a mere cog in the Japanese military machine."

4:Grajdanzev S-4 (no date) 1942 Formosans
177.47 Japan
636.47

[For penetration of Japanese corporations and enterprises into the economic life of Formosa See categories 47, 43, and /or 563--Analyst]

15: U.S. Navy --24 [5] (no date) 1944 Formosans
116, 166, 486, 659, 177.48 Japanese
636.48

"The movement of Formosan-Chinese or Japanese into the aborigine territory is supposed to be strictly regulated. Permits must be had for any forest operations which take laborers into the area for logging or for camphor extraction. Likewise, the movements of aborigines who wish to leave the territory for business or sightseeing (educational) visits to towns and villages is carefully checked by the Japanese police. The police stations are small centers for trade and local administration through which most such traffic must pass. Roads, paths and the pushcar lines converge on these centers.

Movement from the western and northern settled regions to the isolated East Coast is susceptible of complete control. The town of Suo is the last important settlement at the northeast. Koshun is the last important settlement at the extreme south. Through these two towns pass all round-the-island motor traffic. (A road crossing the southern peninsula from Shajo eastward may now cross above Koshun.) All persons entering the territory through these points are expected to be registered for police purposes.

Some foot traffic (confined largely to bearers of supplies and messengers for the interior police stations) passes across the island from the Taichu-Hori district over the Noko mountain ridge to Karenko. It is improbable that Formosan-Chinese, singly or in small groups, should attempt to cross the mountains on foot unless armed or escorted by armed police."

15: U.S. Navy--29 [5] (no date) 1944 Formosans
116, 486, 177.48 Japanese
636.48

"The movement of all persons into or out of a community is carefully registered and reported to the police. Every hotel or place of lodging, such as a temple along a mountain trail, must keep a registry open for inspection at all times. Regular nightly inspections of hotel registers are made by the police--in the towns by a special police detail.

A further special registration is required of each person crossing the border of the aborigine territory on the East Coast."

4:Grajdanzev--118 S-4 (no date) 1942 Formosans
116, 494, 496, 177.49 Japan
636.49

"All kinds of communications are in use in Taiwan—from the primitive sedan chair and jinrikisha (rickshaw) to the airplane, but modern means of communications are either in the hands of the Japanese government or of Japanese companies. There are 3,375 km. of improved roads. These play an increasingly important part in inland communications because the railroads do not link up the whole island in a complete network; the eastern part has no railroad connections with the rest of the island. The number of motor cars and buses is small (1). The buses on the roads are used by the government

1. No statistics are published by the government.

railways as feeders for the rail services."

4:Granjdanzev--118-119 S-4 (no date) 1942 Formosans
116, 454, 496, 655, 177.49 Japan
636.49

"In 1926 there were 950 km.(1) of government railroads in Taiwan; in 1938 there were

1. Taiwan. Its System of Communication and Transportation, 1929.

1,040 km. The lengths of private railways at the same dates were 525 km. and 521 km. respec-[119]tively—a slight decrease. In other words, in the last decade the construction of new railroads in Taiwan has almost stopped. At the end of 1938 the capital invested in the government railroads including expenditures on repairs and restorations was ¥172,499,691."

4:Grajdanzev--119 [2] S-4 (no date) 1942 Formosans
116, 171, 497, 511, 563, 177.49 Japan
636.49

"From the table given above [see table on page 118 under category 116--analyst] we see that a Japanese makes almost five times as many trips a year as does a Taiwanese --whereas the movement of the freight appears relatively as large as in Japan. The movement of passengers reflects the conditions of life of the natives while the movement of freight in Taiwan is the movement of Japanese freight to and from ports--coal, sugar, rive, fertilizer, lumber, and sugar cane (1) (in the order of freight carried)--

1. Sugar cane is in sixth place because the bulk of its [sic] transported on special railroads.

which, as will be shown later in more detail, serve chiefly the Japanese economic machine. The statistics of revenue show that the average cost per ton of freight in Taiwan is less than in Japan (¥2.26 as compared with ¥2.34). It may be said that this is quite reasonable because in Taiwan average distance over which the freight is moved is less. On the other hand, the average passenger cost per trip in Taiwan is twice as high. In spite of the smaller scale of operation, the railways of Taiwan bring a net return of eight to nine per cent as compared with six per cent in Japan (1937)."

15: U.S. Navy--30-31 (no date) 1944 Formosans
116, 494, 177.49 Japanese
636.49

"Ricksha men operate under license, and must maintain certain standards of dress and of vehicle maintenance set by the police. Indeed, the regulations are so precise that every [31] ricksha man changes from a winter blue costume to a summer white costume on exactly the same day, and vice versa."

26: Honda--469-470 N-3 (1896) 1897 Formosans
116, 491, 499, 177.49 Japan
636.49

The roads on the whole island are nothing more than narrow paths extending irregularly with corners and curves through fields. Bridges are as good as non-existent. For that reason we had to cover the entire distance to Mount Morrison on foot. [470] When the Japanese started building wide roads, the Chinese farmers were not particularly pleased and expressed the opinion that it was rather wasteful to build wide roads at the cost of useful fields; they felt that narrow paths were perfectly sufficient for pedestrians. Thus it is easy to imagine what difficulties of transportation the Japanese militia encountered when it was sent out to subdue the rebels.

4:Grajdanzev--121-122 S-4 (no date) 1942 Formosans
116, 504, 177.50 Japan
636.50

"The development of shipping demands good ports, and Taiwan is poor in natural harbors. But the government did not spare money or effort in the improvement of harbors, the best of which are Keelung and Takao through which most of the island's external trade passes. In 1929 Keelung's wharves were able to accommodate fifteen ships of 3,000 to 10,000 tons each and in addition six ships could be moored within the harbor, which was capable of handling 1,650,000 tons of cargo a year. Since that time considerable improvements have been made, and a plan of reconstruction, which [122] should be finished in 1943, foresees accommodation for forty ships at one time. Up to 1939, ¥36.4 million had been spent on the improvement of the harbor. In 1929 Takao harbor could accommodate seven ships of 5,000 tons each in berths, with seven more in the narrow but long harbor; recent construction permits accommodation of vessels of 10,000 tons, and, when the program is completed, it will be possible to accommodate twenty-nine ships at once. The cost of construction up to 1939 was ¥33.5 million. The other important ports which have undergone improvements are Karenko (east)--cost of construction ¥7.4 million; Bako (the Pescadores)--¥850,000; Soo (northeast)--¥669,000; Shinko (a fishing port in the east)--¥860,000; Shinko (west), where the works are to be finished in 1942 at an estimated cost of ¥15 million."

4:Grajdanzev--122-123 S-4 (no date) 1942 Formosans
116, 509, 177.50 Japan
636.50

"Taiwan is connected by regular airline with Japan proper and there is one air line which encircles the island. The first line connects Fukuoka (between Nagasaki and Moji, the centre of the Japanese lines radiating from Kyushu) with Taihoku (1,610 km.). Flights are made every day and, in 1938, 8,706 passengers were carried and 144,005 ton-km. of freight and mail were flown. The line is however not remunerative, although the flights of the Taiwan and Osaka businessmen and Japanese officials are subsidized by the government-general at the expense of Taiwan's taxpayers to the extent of ¥325,000 (1939).

The length of the island air lines in 1938 was about 600 km. Flights are made daily (only every second day to Pescadores) and stops are made at all important cities of the island. The number of passengers for 1937 was 6,450, but the movement [123] of freight in the same year amounted to only 570 ton-km. A subsidy of ¥360,000 was paid to these lines by the government-general in 1939, which means that each passenger was subsidized to the extent of ¥60 per flight."

15: U.S. Navy--22 [6] (no date) 1944 Formosans
116, 526, 177.52 Japanese
636.52

"There is a traditional form of Chinese boxing which has been discouraged by the Japanese because of its 'un-Japanese' character. It is in fact much like Japanese judo of which it is the ancestor."

15: U.S. Navy --23 [6] (no date) 1944 Formosans
116, 563, 582, 609 Japanese
636.58

"Fusion of ethnic groups. Special permission must be obtained from the government before a marriage between a Formosan-Chinese and a Japanese can be made legal. There are a few notable cases of marriages arranged between wealthy Formosan men and Japanese women, (as between a son of the wealthy Ko family in Taihoku, for instance, and the daughter of an impecunious Japanese nobleman). As a general rule the antipathy which one race holds for the other inhibits even casual sexual intercourse between the two. This, plus the fact that the Formosan-Chinese birth rate is much higher than that of the Japanese, precludes any hope for gradual fusion of the two peoples on the island."

15: U.S. Navy--29 [6] (no date) 1944 Formosans
116, 582, 177.58 Japanese
636.58

"There have been changes in such fundamental customs as betrothal and marriage under the impact of large-scale modernization programs and the realignment of social life to conform to Japanese ideas of colonial management."

4:Grajdanzev--163 [2] S-4 (no date) 1942 Formosans
116, 171, 625, 659, 871, 177.62 Japan
636.62

"Many times on the preceding pages it has been shown that Taiwan is more poorly supplied with this or that commodity than is Japan proper. But in one respect Taiwan is better supplied——with policemen. According to Dainippon teikoku nenkan (Statistical Year Book of the Japanese Empire) for 1937, there was one policeman for every 1,052 persons in Japan proper in 1937, while in Taiwan there was one for every 580 persons. According to the same source there were more policemen than teachers in Taiwan——9,972 policemen in 1937 as compared with 9,651 teachers of all kinds in 1936—while in Japan proper the number of teachers was almost six times as large as the number of policemen. The number of policemen in Taiwan is almost three times the number of physicians."

4:Grajdanzev--163-164 S-4 (no date) 1942 Formosans-1-2
116, 563, 625, 177.62 Japan
636.62

"Besides having this regular police force the whole country is organized for police purposes through the revival of the old Chinese system of paochia. As we saw, the Chinese of the island have no voice in the government of the island, but they [164] are widely used for police purposes through the paochia system, which is obligatory for the Chinese, but from which the Japanese are free. Ten Chinese families form a chia and ten chia a pao, so that a pao comprises one hundred families or about 500-600 persons. At the end of 1938 there were 53,876 heads of chia and 5,648 heads of paochia (called paocheng in Chinese or hosei in Japanese). All these persons are elected by the members of the chia or pao, but they must be approved by the governor (or the chief of the district). It should be noted, however, that although they have no right to elect their own representatives for the self-government, the members of the pao and chia have the right to elect their own policemen. This paradox is due to the fact that the duties of the chiachang (the head of the chia) and the paocheng are heavy, unpleasant, sometimes dangerous, and completely unpaid, while any expenditures which may be incurred are covered by a tax on the members. Only relatively prosperous men can afford to do this work and even they do it for the most part unwillingly. They police their community under the guidance of the professional policemen, report the number of residents, new arrivals and departures (very severe punishments follow failure to

report), organize groups to pursue 'bandits', take precautionary measures in case of epidemics, repair the roads and bridges, fight insect pests, collect the taxes, etc., etc. If a crime is committed or the chiachang neglects his duty, he is the first person to be held responsible, but he along with the whole group is also held jointly responsible. This system was established by the Japanese government at a time when in spite of all governmental efforts, the island was not pacified, and some extraordinary measures were necessary to bring peace. But now, after more than forty years have passed since its inception, the system is a sign of weakness on the part of the government; it shows its distrust of a people conquered so many years ago and a belief among the rulers that only through this system can peace and order be maintained on the island."

4:Grajdanzev--3 S-4 (no date) 1942 Formosans
116, 131, 631, 177.63 Japan
636.63

"The area of Taiwan, excluding the islands around it, is 35,760 sq. km. (13,807 sq. miles), a little more than the area of the Netherlands, or one-third as large as Virginia, and almost equal to the area of Kyushu or the Japanese part of Saghalien. The island stretches from north to south, the distance from its northern-most point to its southern promontory being 400 km. (249 miles) and, from east to west at the broadest part, 150 km. (93 miles). As an administrative area the Taiwan government-general includes adjacent islands and the Pescadores. The total number of these islands is 76, but their total area is only 64 sq. km. Recently the Spratley Islands off the coast of Indo-China were made a part of the territory of the government-general, but as yet they have not been adequately surveyed."

4:Grajdanzev--161 [2] S-4 (no date) 1942 Formosans
116, 631, 177.63 Japan
636.63

"Let us now examine the local government administration of Taiwan. It is divided into five provinces, three districts, fifty-one counties and nine cities. Districts are formed in less developed regions—Taito, Karenka (in the East) and Boko (the Pescadores)."

4:Grajdanzev--161-162 S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"The most important person in the province is the governor, and in the district, the chief of the district. Their powers and position are similar to that of the governor-general but on a smaller scale. They can impose upon any person without recourse to the Courts a prison term of two months and/or a fine of ¥70. They may ask military force for the maintenance of order, they supervise all administrative bodies in their respective provinces or districts, etc. These bodies are: the secretariat, the bureau of Internal Affairs, [162] bureau of Police Affairs, Police Headquarters, Taxation bureau, agricultural experimental stations, etc."

4:Grajdanzev--162 [2] S-4 (no date) 1942 Formosans
116, 635, 177.63 Japan
636.63

"Since 1920 there has been an advisory body for each provincial governor or district chief, consisting of 20-40 members, half of whom are appointed by the governor-general and half chosen (by indirect election) by the municipal and county council. The governor of the province is the president of the provincial council. The officials administering the counties and whose duties are chiefly of a police character, the mayors of the cities and of rural communities are not elected, but are appointed by the government."

31: Hofmann--603-604 N-3 (1909) 1912 Formosans
116, 634, 669, 697, 177.63 Japanese
636.63

In the house of the governor, Count Sakuma... I had the opportunity to meet the chief magistrates of the various provinces. Among these there was not one who did not speak either English or German. All of them had been sent to Europe by the government of Formosa to complete their studies there. In every respect, the achievements of the Japanese colonial administration are most impressive, and they become even more so if one takes into consideration the conditions under which the Japanese first took over the administration of the island. In 1895 there was complete anarchy among the Chinese elements of the population. There were organized bands of guerilla soldiers in all the regions that were accessible to foreigners, so that before the administration could proceed to the task of suppressing the Malayans in the mountain regions, [604] it was necessary to break the resistance of the Chinese. I saw some of the leaders of these guerilla bands, who had not been condemmed to capital punishment, in the large reformatory in the capital. There the prisoners were engaged in occupations such as cabinet making, in which they showed a great deal of skill and understanding.

"The administration of Taiwan is entrusted to the Taiwan governor-general, who is appointed by the Emperor of Japan. Before 1919 only generals or admirals could occupy this post (1) and nowadays, if the governor-general is at the same time a general or

1. Recently the opinion was expressed in the Japanese press that, in view of the importance of Taiwan as a base for the advance to the South, this practice should be restored.

admiral, he is also commander-in-chief of Japanese forces on the island. If, on the other hand, he is a civilian, he may demand from the commander of the army the use of troops for the maintenance of order. His powers are extensive. He supervises the work of all administrative machinery, promotes the officials, dismisses them from service, though in respect to certain ranks his action must be approved by Tokyo. He has a right to suspend or cancel any order or any administrative measure of provincial governors under him and he can impose on any person on the island, without recourse to the courts, a fine up to ¥200 and/or a prison term up to one year. Under him are his Secretariat, the Departments of Home Affairs, Education, Finance, Colonial Development, Police, Communications, Monopolies and the Research Institutes (Central, Sugar, Aquatic). His actions are supervised by the Japanese Minister of

4:Grajdanzev--160 S-4 (no date) 1942 Formosans-2
116, 643, 177.64 Japan
636.64

Colonial (Overseas) Affairs, but as regards special branches of his administration he is also responsible to the Ministers of Finance and Communications."

4:Grajdanzev--160-161 S-4 (no date) 1942 Formosans
116, 563, 646, 177.64 Japan
636.64

" 'For the consulting of the people's opinions' there is an advisory body to the governor-general, Hyogikai (1), established in June 1921. Only government-general

1. Usually translated 'council.'

officials, civil and military, and those private persons 'rich in knowledge and [161] experience' whom the governor-general choses to appoint have a right to represent the people's opinions; but all high officials, civil or military, are Japanese, and, as was mentioned, they are appointed as well as dismissed at the representation of the governor-general. This advisory body, consisting of a chairman, vice-chairman, and forty members is thus made up of persons whom the governor-general finds it convenient to appoint. The chairman is the governor-general himself, and the vice-chairman is his secretary-general. Each member is appointed for a two-years period, but with the permission of the governor-general may be released from duty before the expiry of that period. Clearly, this is a purely bureaucratic institution."

4:Grajdanzev--161 S-4 (no date) 1942 Formosans
116, 641, 643, 177.64 Japan
636.64

"The people of Taiwan have no representatives in the Japanese Imperial Diet, they have no representative body which takes part in the legislation or administration of the island.

Under these conditions the position of the governor-general acquires a special importance, and yet if we exclude Kodama, who spent eight years at his post (from February 1898 to April 1906), the average length of tenure is two years and one month, too short a time for a good knowledge of the local conditions. The tenure of the government-general is evidently subject to the vicissitudes of political conditions in Tokyo and has little to do with Taiwan."

4: Grajdanzev--162 S-4 (no date) 1942 Formosans
116, 563, 642, 177.64 Japan
636.64

"The officials of the Japanese Empire are divided into three groups--chokunin, appointed by the Emperor, sonin, highest officials, appointed with the Emperor's approval, and hannin, lower officials, for whom the sanction of the Emperor is not necessary. In the government-general there were in 1938 7 chokunin officials, 119 of sonin rank, and 648 of hannin rank, while in the provinces and districts five persons were of chokunin rank, 94 of sonin and 1,523 of hannin.

These numerous high officials are exclusively Japanese and in the counties and municipalities there are hundreds more. Lower positions are occupied not only by Japanese, but also by Chinese, but as it is pointed out in Sekai nenkan, 'from the political point of view all administrative organisations are almost exclusively (hotondo zembunga) staffed with Japanese, while from the economic point of view everything is under the domination of the Japanese economy' (1).

1. P. 179."

4:Grajdanzev--162-163 S-4 (no date) 1942 Formosans
116, 171, 632, 641, 177.64 Japan
636.64

"The municipal or village councils have from 8 to 40 deputies (according to the population), half of whom are appointed by the government and half elected. The electorate is made up of male Empire subjects who have attained the age of twenty-five years, who are not dependent, who have lived continuously for at least six months in that particular locality and pay at least five yen in municipal or village taxes (house tax, land tax, or business tax). [163]

Thus it is clear that the only places in which there is some semblance of elections are the cities or villages. As has already been pointed out, the small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko. But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote. We have no data for Taiwan, but the example of Korea shows that by this device two per cent of the population—the Japanese—form the majority of the electorate."

4:Grajdanzev--163 S-4 (no date) 1942 Formosans
116, 625, 642, 177.64 Japan
636.64

"Since the mayor and half the members of the Council are appointed by the government, since the mayor and all higher officials have the right to reject the decisions of the councils, since the provincial councils are appointed or elected indirectly and since the advisory council to the governor-general is appointed directly, we may say that after forty-five years of Japanesc rule, Taiwan is a colony in the government of which the islanders have no voice whatsoever and in which the Japanese themselves as citizens have little or no influence. The island is ruled by the governor-general with the help of the army and police."

4:Grajdanzev--185-187 S-4 (no date) 1942 Formosans-1-3
116, 453, 648, 177.64 Japan
636.64

"Taiwan 'the stone aiming at the south' was acquired by [186] Japan in 1895. The Bank of Taiwan, established in 1897, had among its tasks penetration of Southern China and Nan-Yo (1). In 1900 it established a branch in Amoy; in 1903—in Hongkong. In 1912 one

1. Nan-Yo includes Southeast Asia and the islands between Formosa and Australia. It is not clear whether the term includes Australia and New Zealand. Inclusion of Australia and New Zealand was denied by the former Minister of Foreign Affairs, Mr. Matsuoka, presumably to alleviate the fears of the Australians, but the maps published by the Japanese theorists of the southward advance include Australia and New Zealand.

in Bangkok. During the same period a well-planned net of agencies of the Bank was laid throughout the Malay archipelago. In 1919 with the assistance of the Bank of Taiwan the Chinese Southern (Hwa Nan) Bank was established with a capital of 10 million yen, and head offices in Taihoku, Taiwan. Its purpose was work among the Chinese emigrants in the colonial countries of Southeast Asia. In the same year the Bank of Taiwan established the South Seas (Nan-Yo) Warehouse Company with a capital of 5 million yen. As early as 1908 the government-general of Taiwan decided to earmark from its budget 700,000 to 800,000 yen annually for the purposes of education, health work, protection, cultivation

of friendship, and financial assistance to the Japanese in South China and Nan-Yo. But beside these purposes, about which some information will be given below, there was financial assistance not only to business men as such, but to business men of a special character. Malaya, Netherlands Indies, Australia, the Philippines, French Indo-China and Siam, not to mention South China, were systematically covered by a network of Japanese photographers, druggists, laundrymen and shopkeepers. There were hundreds of photographers who did not have as many as five clients a year; druggists who never sold any drugs to the natives or any one else; fishermen who were busy in surveying the coasts and taking soundings. We do not know how many of them were paid from the general budget of Japan proper; but we know that the sums appropriated annually by the Taiwan government-general were probably sufficient to support 3,000 such people throughout Southeast Asia (Y240 a year being enough for a frugal Japanese in [187] these southern countries.) To this network one should add the branch offices and agencies of the Bank of Taiwan, and the consulates of the Japanese Empire dotting the same area (2).

2. French officials in Indo-China complained that the Japanese knew more about Indo-China than they did. (Noted in Mirovoye Khozyaistvo, . . . , 1941). The same may be said about other countries of Southeast Asia.

The details of expenditures of the Taiwan government-general for this purpose

4:Grajdanzev--185-187 S-4 (no date) 1942 Formosans-3
116, 453, 648, 177.64 Japan
636.64

according to a Japanese source 'are not clear' (3), but it was said that 60% were spent

3. Taiwan Keizai Nempo, 1941, p. 778.

in South China and 40% in Nan-Yo."

4:Grajdanzev--187 S-4 (no date) 1942 Formosans
116, 208, 648, 177.64 Japan
636.64

"Under the auspices of the Taiwan government-general the Zenrin kyokai ('Good Neighbor Association') was established in 1917 and the Hakuai kai ('Philanthropic Association') in 1918. Their capital was supplied by the Government-General and the Bank of Taiwan; they opened schools and hospitals not only in South China, but also in Davao (the Philippines) and North Borneo. After 1918 the Zenrin kyokai started publication of newspapers for Chinese readers in Foochow, Swatow and other places."

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-1-2
116, 648, 177.64 Japan
636.64

"However, only after 1935 was the activity in Southeast Asia greatly intensified, the center, as before, being Taiwan. In 1935 the Government-General [of Japan--analyst] established a research institute for tropical countries. In 1936 a semi-private Taiwan Takushoku Kabushiki Kaisha (Taiwan Colonization Corporation) with a capital 30 million yen was organized, its purpose being not only the development of Taiwan, but also 'economic help' to the Japanese in South China and Nan-Yo and increase of trade with these countries. In 1936 the Japanese Overseas Minister, Mr. Nagata, answering an interpellation in the special session of the Diet, declared that 'the historical mission of Taiwan lies in the South, because of Taiwan's geographic position.' In 1937 the Government-General of Taiwan established a Foreign Affairs Division in charge of affairs of Kwantung, Swatow, Amoy, Hainan Island. The government stated the purpose as [188] being the spread of the knowledge of the Japanese language in South China and Nan-Yo through magazines, photographs, pictures, broadcasts, and in order—according to the statement of the Bureau of Information of the Government-General of Taiwan—to facilitate propaganda for the establishment of the East Asia Co-prosperity Sphere. In 1940 it established the Colonial Personnel Training School and rendered financial help to other institutions with similar purposes. The Bank of Taiwan was urged to give 'special loans' to the Japanese in South China (since 1935), in Nan-Yo (since 1936) and in

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-2
116, 648, 177.64 Japan
636.64

the Philippines (since 1938). On March 30, 1939 Shinnan Archipelago (Spratly Island and others)was annexed and declared a part of the Taiwan Government-General."

25: Plaut--28 [2] U-4 (no date) 1903 Formosans
116, 643, 648, 177.64 Japan
636.64

Finally on the 14th of April 1895, the treaty of Shimonoseki forced China to cede Formosa with all of its islands andthe Pescadores to Japan, and then the Japanese Government began rapidly and energetically to establish order in her new possession. The difficulties were formidable, for the Chinese residents of the island did not look upon the new masters with good grace; then, too, the Japanese were not sure about the best methods of procedure at first, so they were groping and uncertain, and several times they were forced to change their system. That was due to the fact that the local administration was often quite unsuitable for applying the good suggestions of the officials. But finally the administration was organized in an intelligent and permanent fashion, and since 1898 the island has progressed steadily under the energetic and intuitive guidance of the Governor General, Lieutenant General Kodama Gentaro, and the tireless labor of the skilled and discrete Civil Governor Dr. Goto Shimpei.

4:Grajdanzev--18 S-4 (no date) 1942 Formosans
116, 175, 177.65 China
636.65

"In 1884 began the Sino-French war, the purpose of which was to compel the Chinese government to agree to the French version of Tonkin's boundary. Activities spread to Taiwan, which was blockaded by the French navy. The war was not very glorious for French arms, but it brought home to the Chinese government the need for improvements in Taiwan. The island was raised to the rank of a province in 1887, and the energetic Liu Ming-chuan, commander of the Chinese forces during the French blockade, became the first governor. He worked out a plan of substantial improvements and during his short rule the construction of the first railway on the island was begun, a telegraph network was constructed and a cable connecting with Amoy laid; harbors were also improved and fortifications built. But all this was done without any attempt to improve the condition of the masses, to educate them, or to give them some voice in the government. The cost of the reforms Liu Ming-chuan wanted to place upon the local population through the introduction of 'likin' (1) and through a revision of the land tax. This caused disturbances

1. A tax on goods moved across administrative boundaries.

among the population. Liu Ming-chuan was removed from office and the Chinese administration of the island returned to the original state of inaction; but the menace was already at hand."

4:Grajdanzev--20-21 S-4 (no date) 1942 Formosans
116, 175, 563, 177.65 Japan
636.65

"Thus Taiwan became the first Japanese colony. Many problems faced the new masters of the island, one being the aborigines and the territory occupied by them. About half of the island, sparsely populated by aboriginal tribes, was practically outside Chinese authority and the occupation of the western part by Japanese in 1895 did not bring them nearer to [21] the solution of the problem. It took decades of effort and even now is not finally solved. The Chinese part was easier to control, but several years were spent in the suppression of rebellions, and special measures were required to keep order among the population. Even the pacified population presented many problems. They were foreign in speech, in customs, outlook and allegiance, and no policy worked out in advance could be applied at once."

4:Grajdanzev--21 S-4 (no date) 1942 Formosans
116, 175, 177.65 Japan
636.65

"Finally, a not less important problem was how to make the island pay, for the new masters came to the island not so much in order to benefit the islanders as to benefit themselves. Owen Rutter, explaining the existence of good roads, railways, good streets and other amenities of life in Taiwan, says that 'Money has been poured into Formosa by the Japanese; to them it is like a ewe lamb'. (1) In the following pages however it will be

1. Geographical Journal, London, 1928, p. 286, quoted in the discussion of the report of E. H. Bunsen.

shown that Japan spent relatively very little in Taiwan and received very much from it; that most of what has been done in Taiwan has been done on money raised there.

The history of the island after Japanese occupation will be given along with a description of various phases of human activity in Taiwan."

4:Grajdanzev--42 43 S-4 (no date) 1942 Formosans
116, 651, 177.65 Japan
636.65

"The former Chinese government was exceedingly inefficient and taxes were often paid by the farmers on one ko, where [43] actually there were two. After the Japanese survey this became impossible. The 'striking success' of the Japanese government was largely administrative; for the farmers it meant only the trebling of the land tax. As Takekoshi writes: 'To be more exact, before the survey the total area of the fields and fish nurseries was believed to be 890,000 acres which yielded ¥860,706 tax. The result of the measurement . . . shows that the real area is 1,535,163 acres, and the receipts from the land tax have jumped up to ¥2,989,287.' (1) "

1. Op. cit., p. 130.

4:Grajdanzev--64 S-4 (no date) 1942 Formosans -1-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon.

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane Culture in Taiwan

	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

4:Grajdanzev--64 S-4 (no date) 1942 Formosans-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4: Grajdanzev--68 [2] S-4 (no date) 1942 Formosans
116, 241, 471, 656, 177.65 Japan
636.65

"These examples--the cotton plan and horse-breeding plan--are extremely significant. The government officials work out plans which can hardly be called realistic and yet the successes of agriculture in Taiwan are very frequently ascribed to the government's efforts and plans."

4:Grajdanzev--131 S-4 (no date) 1942 Formosans
116, 439, 652, 177.65 Japan
636.65

"It might seem more appropriate to examine Taiwan's public finances in a later chapter after a survey of the administrative machinery and its functions. However, one important consideration makes it necessary to consider them here. Our investigation of Taiwan's economy cannot be considered complete without an examination of its external trade. which plays a very important part in the life of the islanders. But the exceptionally heavy movement of goods from the island to Japan cannot be understood simply on the basis of trade or the structure of Taiwan's economy. Certain non-economic factors must be examined before a satisfactory explanation of the movement of commodities can be made. By far the most important among these factors is the government budget, which involves tremendous sums--judging by the standards of the islanders."

4:Grajdanzev--131-132 S-4 (no date) 1942 Formosans
116, 652, 177.65 Japan
636.65

"In 1937, ... the gross value of production of the island was officially estimated at 890 million yen, while the gross revenue of the state for the same year was 203 million yen. If one takes into consideration the fact that the prevailing standards of life in Taiwan are oriental and that most of the families have little, if any, surplus, then a system which succeeds in squeezing out a gross revenue of 203 million yen for the state should be recognized as a remarkable achievement which the administrators of other colonial possessions might well envy. The fiscal system in Taiwan is a powerful instrument with which to extract from the population wealth which cannot be got by ordinary economic means. Of course, if the sums received in this way are applied for the benefit of the subjects themselves, a redistribution of income which fol-[132] lows may in certain cases be recognized as beneficial. If, for example, money which would otherwise be spent by the taxpayers on liquor is spent on the education of the taxpayers' children the results will be recognized as beneficial by most people. Thus we should know not only how much money is collected by the colonial administration, but also how it is spent."

4:Grajdanzev--132 S-4 (no date) 1942 Formosans
116, 127, 652, 177.65 Japan
636.65

"Before giving tables of the revenue and expenditures of the government-general, a few explanatory remarks should be made. (1) We give only net revenue (or expenditures) for the fiscal monopolies (1), railway communications, forests, hospitals, etc., because

1. In Taiwan fiscal monopolies include salt, camphor, opium, tobacco, and alcohol.

gross revenue figures give an exaggerated value to these items; (2) on the expenditure side we have changed the classification according to the purpose of the expenditures and all 'extraordinary' revenues and expenditures we combined with ordinary ones in order to give a more complete picture. The official heading, for example, 'grants to the sufferers from natural calamities' is misleading. One might assume that this represents aid rendered by the state to the local population, but on closer inspection one sees that a greater part of this item in the last year was made up of grants to the railways. Under the heading of 'building and repairs' (eizen hi) we find expenditures on airfields (more than one million yen) out of all proportion to the number of passengers carried (about 40 passengers per day), not including subsidies to airlines.

Unfortunately we cannot disentangle many other large items in view of the absence of information, and consequently, the amounts given represent a minimum for certain expenditures (war, police, 'subsidies' to business men, etc.) and if data were available they might be of much larger proportions."

4:Grajdanzev--132-133 S-4 (no date) 1942 Formosans
116, 631, 652, 177.65 Japan
636.65

"First of all let us compare the gross revenue of the government-general, provinces and municipalities, in order to secure a clear idea of their relative importance. [133]

Public Revenues for 1939 (Budget Estimates) (1)

1. Of course, there are probably cases of double counting in this table, e.g. a grant-in-aid from the government-general to provinces may appear in the budget of the government-general and also in the provincial budgets.

	In 1,000 yen	Percent of total
Government-general	208,602	74.4
Provinces	34,610	12.4
Municipalities	36,961	13.2

Thus three-fourths of all revenues pass through the hands of the government-general; compared to it the local administration is of trifling importance, and we may therefore concentrate our attention chiefly on the budget of the government-general."

4:Grajdanzev--133-134 S-4 (no date) 1942 Formosans-1-2
116, 651, 177.65 Japan
636.65

"The sources of revenue of the government-general for the last five years are as follows:

Revenue of the Government-General in 1,000 Yen (1)

1. Including net income from monopolies, railways, communications, forests, textbooks, weights and measures, hospitals.

	1935	1936	1937	1938	1939	1940
	settled		accounts	budget	budget estimates	approx. budget estimates
Taxes(a)	53,978	64,173	72,567	81,873	78,170	93,000
Net Revenue from railways, commun.	12,395	12,888	13,296	16,904	15,250	—
Loans (b)	—	—	—	—	6,400	6,000
Others	5,834	7,007	6,564	9,397	8,420	—
Surplus from the preceding year	29,441	32,605	41,833	46,392	18,373	25,934
Total	101,648	116,673	134,260	154,566	126,613	—

a) Including net profits of monopolies and receipts of stamp duty.
b) Loans were often floated by the government-general before 1939, but were not

included in the general budget because they were made for special purposes. This item, however, represents a deficit. The debt of the government-general, at the beginning of 1939, probably stood at about Y 94 million.

Insofar as the 'surplus from the preceding year' cannot be considered as an independent source of revenue, it is clear that the greater part of the revenue of the government comes from taxes (including fees and fines). If we add the taxes to be collected by the provinces and municipalities, the total amount [134] of revenue from taxes was 124.3 million yen for 1938 and 122.5 million yen for 1939--large amounts for an oriental island, agricultural in character, and with a population of only six millions(2). Compared with

2. An official investigation of farmer's budgets made in 1936 revealed that direct taxation of farmers in Taiwan is twice as high as in Japan (Nasu, op. cit.).

1935 the amount of taxes to be collected from the population in 1938 increased by 52%, and this increase was resumed in 1940 and 1941."

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-1-5
116, 434, 565, 651, 177.65 Japan
636.65

"Taxes may be of different types--some falling chiefly on the rich, whose ability to pay is, of course, greater than that of the average farmer. We do not have necessary information for a detailed analysis of how the tax burden is distributed between these two groups, but what is available gives clear indications. We have divided the taxes into two groups: (a) taxes on the recipients of large incomes; (b) taxes on the masses.

Taxation and Net Monopoly Receipts in 1,000 Yen

A. Taxes on the recipients of high incomes:

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Income Tax	3,873	5,285	9,538	13,024	12,395
Tax on capital		5	189	352	855
Mining Tax	200	203	291	353	327
Special profit tax	1,016	1,575	2,761	4,979	2,444
Tax on distribution of dividends		335	425	394	850
Inheritance tax			105	279	305
Total	5,089	7,403	13,309	19,381	17,176

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-2
116, 434, 565, 651, 177.65 Japan
636.65

B. Taxes on the masses of the population:

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Land tax	7,492	7,742	7,938	8,342	8,342
House tax					1,312
Business tax a)			2,931	3,290	2,726
Tax on sugar	3,320	3,461	4,050	6,702	5,215
Tax on alcohol b)	3,698	3,845	2,913	169	100
Taxes on other commodities	2	177	275	393	826
Customs duties and other duties connected with them	2,611	3,326	2,574	1,846	1,817
Stamp duty	5,107	7,271	7,220	7,653	5,926
Monopolies, net receipts	24,555	28,968	29,652	32,845	32,568
Net profits from text-book sales c)	103	29	75	74	24

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-3
116, 434, 565, 651, 177.65 Japan
636.65

[135]

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Profit on weights and measures d)	179	209	206	331	341
Fines and confiscations e)	1,091	529	224	362	224
Tax on railway fares				205	202
Admission ticket tax				116	124
Tax on construction					152
Amusement tax					188
Other taxes	731 f)	1,213 f)	1,200 f)	164	907
Total	48,889	56,770	59,258	62,492	60,994
The same as percentages of total					
Group A.	9.4	11.5	18.3	23.6	22.0
	90.6	88.5	81.7	76.4	78.0

a) We include business taxes in this group because it is legitimate to suppose that they are shifted by the business men to the population.

b) The fall of receipts from the tax on alcohol in the last two years is due to the introduction of a state alcohol monopoly.

c) Formally this is not a tax, but a surplus remaining after deduction of expenditures on printing of textbooks from receipts. However, state profits derived from the sale of textbooks to school pupils hardly can be considered otherwise than a tax.

d) As in the preceding item this represents a surplus from a form of fiscal monopoly.

e) Formally fines and confiscations are not taxes. But their regularity (they are foreseen in the budget) and their amounts show they are not 'casual' receipts. They fall, mainly, on the Chinese population.

f) Chiefly receipts from the taxation of surplus issues of Bank of Taiwan notes.

From this table it may be seen that about 80 to 90 percent of the taxes fall on the masses of the population and only 10 to 20 percent on the wealthier groups. The percentage of taxes contributed by the well-to-do rose from 9.4 in 1935 to 22.0 in 1939, but it would be a mistake to suppose that this implies a change of policy: the exigencies of wartime and the already oppressive burden of taxes on the masses make it more and more difficult to increase that burden. Under these conditions, heavier taxation of the rich is a necessity. but the government prefers to borrow from them, not to tax them: the loans amounted to six million yen in 1939 and are expected to amount to 17 million yen in 1941.

The actual tax-burden on the masses as compared with the wealthy is considerably

greater if we include provincial and [136] local taxes. We have no data on the exact distribution of local taxes, but provincial taxes can be measured. Provincial taxes are surtaxes, calculated as a percentage of the corresponding government-general taxes. Their rates are as follows:

Surtax on income tax	18%	of income tax
Surtax on land tax	90-100%	of land tax
Surtax on business tax	70-80%	of business tax
Surtax on house tax	120-150%	of house tax

These rates show that surtax on income tax (which falls chiefly on the recipients of high incomes) is only 18%, while surtaxes on taxes falling on the masses of population range from 70 to 150%."

4:Grajdanzev--136-137 S-4 (no date) 1942 Formosans-1-2
116, 651, 177.65 Japan
636.65

"The special tax is a combination of property and income tax, but it cannot play an important part in local taxation in Taiwan because as a rule the recipients of large incomes in Taiwan do not live there--their residences being in Japan proper. Consequently this tax falls chiefly on the middle and lower brackets, so that the chief burden of local taxation falls on the masses to an even greater degree than in the case of the taxes of the government-general.

We cannot calculate the general incidence of taxation in Taiwan, but we can get an idea of the burden it represents in the following way: land taxes in the 1939 budget total about 22,350,000 yen (1). In this figure are included taxes on improved land, forest land, fish

1. This figure is arrived at as follows: (a) the land tax of the government-general is 8,342,000 yen; (b) the provincial land tax is 7,805,000 yen; (c) we have no figure for the local land tax, but we assume that the relationship is about the same as in Japan proper, which would give a figure of 6,200,000 yen. Thus the total amount of taxes on land is about 22,350,000 yen.

ponds, and other land to the amount of [137] 3,060,000 yen (2). Thus, 19,280,000 yen are

2. The taxes of the government-general on lands of this kind amount to 1,143,000

yen, but insofar as provincial and local taxes bear a definite relation to the basic tax, the total is estimated to be about 3,060,000 yen.

paid on 856,900 ko of taxable land, i.e. 22.5 yen per ko. Since the agricultural population of the islands represents about 60% of the total population, the average amount of land per person in the agricultural population of Taiwan is about 0.37 ko (about 0.9 acres). A tax of 22.5 yen per ko is equal to one and a half to two months' wages of an agricultural worker (3); and the levy on land is only one among many taxes.

3. Daily wages of an agricultural worker are about 0.80 sen; monthly, 8 yen to 18 yen. Source: Taiwan Jijo.

But as was mentioned above, it is important to know for what purposes the sums collected are applied. The harshness of taxation may be mitigated by beneficial ways of spending the revenue."

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-1-5
116, 465, 652, 177.65 Japan
636.65

"The expenditures of Taiwan government-general may be classified as follows:
Expenditures of the Government-General (1,000 Yen) (1)

1. Source: Okurasho Nempo.

Purpose [a]	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Government-general	1,758	1,939	2,289	2,232	2,416
Grants to local governments	14,704	14,985	15,733	16,171	16,648
Pensions	4,915	4,898	5,088	5,190	5,414
Public finance [b]	9,210	8,623	9,412	9,920	14,315
Police, court, prison [c]	4,474	4,547	5,437	5,534	5,342
General hygiene, hospitals [d]	716	572	833	978	1,204
Education	4,720	5,096	5,499	4,119	4,840
University [e]	295	322	349	3,236	3,797
Research and Investigations	2,630	2,570	3,055	3,186	3,929

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-2
116, 465, 652, 177.65 Japan
636.65

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
Railroads and roads (new construction)	7,136	8,537	8,475	9,839	9,588
Ports, rivers	9,113	9,625	10,669	9,120	13,327
Communications (new construction)	717	1,623	1,718	1,442	1,798
Help to sufferers in natural calamities	2,894	435	600	1,272	326
Development of State lands	204	193	335	445	497
Rice control	405	1,180	1,218	121	2,217
War	287	2,017	8,727	18,299	21,150
Meteorological stations [138]	73	94	278	507	890
Propaganda	146	155	427	1,228	1,957
of which for 'spiritual mobilization'			37	57	60

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-3
116, 465, 652, 177.65
636.65

Japan

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
'Expenses of establishments (shisetsu) in South China and the South Seas'	583	618	1,080	2,046	4,074
Secret funds	181	176	176	159	190
Encouragement of industry	3,969	5,707	5,873	9,058	11,468
Temples and shrines	709[f]	134	349	377	599
Total	69,839	74,046	87,620	104,479	125,986

a) The classification offered here is in most cases quite different from the official one; see below for explanations.

b) Chiefly debt service and the cost of tax collection.

c) Not including those paid from the budget of local governments.

d) These are net expenditures, receipts from the patients are deducted.

e) As will be shown later, the University serves chiefly the Japanese. It existed before 1938, but the expenditures were not disbursed from the budget of the government-general.

f) Includes expenditures on the memorial exhibition ('Forty years of Japanese rule').

To this it is useful to add the table of expenditures of provincial and local governments:

Expenditures of Provincial and Local Governments (1,000 Yen)

	1938 budget	1939 budget estimates
Cost of government, including police	8,289	7,630
Debt service	4,389	4,413
Education	13,177	14,144
Hospitals and hygiene	5,447	5,193
Encouragement of industry	5,172	6,488
Guards	757	1,110
Public Works	7,156	7,052
Repairs	6,796	4,361
Shrines	146	103
Other expenditures	19,827[a]	21,159[a]
Total	71,156[a]	71,653[a]

a) This includes several millions in cases of double counting

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-5
116, 465, 652, 177.65 Japan
636.65

(grants from the provincial governments to local ones), but we have no means of tracing them."

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-1-2
116, 563, 659, 723, 177.65 Japan
636.65

"The expenditures on the government apparatus, including police, courts, prisons, and pensions are chiefly, in some cases [139] exclusively, expenditures on the Japanese staff and for the benefit of the Japanese. All important government positions are occupied by Japanese and their salaries are much higher than those of the Chinese. Expenditures on roads, railroads, and communications, of course, benefit the local population as well as the Japanese, but as was shown in preceding chapters, these improvements are used chiefly by the Japanese or for commerce with Japan which brings little net gain to the islanders. Expenditures on ports are out of all proportion to the needs of the island. Their function is, as the Japanese openly announce, to serve as a base for the advance to the South, and such expenditures have little to do with the welfare of the islanders. Expenditures on rice control are again expenditures in the interest of Japan proper for this system has in view simply the interest of Japanese. In the war expenditures we have included expenditures on airfields, on Red Cross activities, on air defense and contributions to the war chest of Japan. These expenditures grew from the modest figure of 287,000 yen in 1935 to 21,150,000 yen in 1939; thus Taiwan contributes to the conquest of China by the Japanese. In the war expenditures should be included expenditures on meteorological stations. Their remarkable growth from 73,000 yen in 1935 to 900,000 yen in 1939 is explained not by any interest in meteorological phenomena, but by the

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-2
116, 563, 659, 723, 177.65 Japan
636.65

needs of the Japanese military aviation. Taiwan lies in the path of typhoons and information on weather conditions there is of extreme value to the Japanese forces in China."

4:Grajdanzev--140 [2] S-4 (no date) 1942 Formosans
116, 346, 563, 659, 177.65 Japan
636.65

"The shrines and temples mentioned above are not Chinese temples, but Japanese shrines, including a shrine to the spirits of the war-dead on which 100,000 yen was expended in 1939. It may be interesting to note that construction of Japanese shrine in Taito (1937-1939) was to cost 1,078,000 yen, while the appropriations for the Chinese temple of Confucius in Taihoku (1935-1936) amounted to only 30,000 yen."

4:Grajdanzev--140 [3] S-4 (no date) 1942 Formosans
116, 652, 657, 177.65 Japan
636.65

"Expenditures on the health and education of the population occupy a rather modest place in the budget of the government-general, and their part in total expenditures is falling, as the following figures show: (percentages of total expenditures)

	1935	1936	1937	1938	1939
Education[a]	6.8	6.9	6.3	4.5	3.8
Health	1.0	0.8	1.0	1.1	1.0

a) Expenditures on the University are not included here as before 1938 they were not included in the general budget, and we have no data on them.

However, it should be pointed out that the bulk of these expenditures passes through local budgets--14,144,000 yen on education and 5,193,000 on health in 1939."

4:Grajdanzev--140-141 S-4 (no date) 1942 Formosans
116, 648, 652, 659, 723, 177.65 Japan
636.65

"The large expenditures on railways and communications, on research, on investments in the South Seas, etc., show what importance the Japanese attach to the part of Taiwan in the schemes for an advance to the South. The money [141] collected in the Taiwan budget--almost 200 million yen--is thus mainly used, on the one hand, for the construction of the all-important base for Japanese penetration in the South Seas, on the other, for the purchase of Taiwanese products to be sent to Japan (1).

1. In the last few years the Japanese government has started the practice of direct contributions by the Taiwan Treasury to the Japan's Treasury. The sum appropriated in Taiwan's budget for 1941, for example, is 24.5 million yen."

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans -1-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

"Political Movements (1)

1. The information concerning these movements is taken chiefly from Yanaihara, op. cit., and from Sekai nenkan, 1939.

As was shown in the historical section of this book, the island was not actually acquired by the treaty of Shimonoseki, but was conquered by the Japanese. This conquest took seven years and the Japanese recognize that the island was pacified only about 1902. However, in 1907 the Peipu rebellion broke out, the immediate cause being an attempt on the part of the officials to use the paochia in the subjugation of the savages. In 1912 the Linchi rebellion broke out in connection with the felling of the bamboo forest by Mitsui interests, and in 1915 [177] there was a new rebellion at Hsilaian. All these rebellions were suppressed by the government. These and other spontaneous movements, the information concerning which was withheld by the government, are classified by the Japanese as rebellions of the old type, to distinguish them from newer movements guided by persons with modern education and ideas. The first of these movements was led by a Japanese, Taisuke Itagaki, who came to Taiwan in November 1914 and organized Dokakai, the Assimilation Society. The purpose of Itagaki was not a revolutionary one; he wanted to see the Chinese of the island assimilated by the Japanese. He realized however, that this assimilation could not take place unless the Chinese of the island

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

were given equal treatment and equal opportunities in education. But such ideas appeared too dangerous to the government-general and the movement was suppressed in February 1915. Another stimulus to the awakening of political consciousness in the Chinese was given by Lin Hsien-t'ang, a wealthy Chinese who petitioned the government to permit him to open a private middle school in Taichu for the Chinese. The idea was evidently so strange and radical to the Japanese that they consider this application an important stage in the political development of the island. In 1918 the Chinese from Taiwan who studied in Tokyo organized the Domeikai, an organization the primary purpose of which was to effect the abolition of some especially harsh laws in Taiwan. In 1919 this organization started a monthly publication Taiwan Youth, which a few years later was changed into a weekly. At that time the attempt to transfer its publication to Taiwan failed, but the organ became the spearhead of the educational movement and in the 'liberal' years of 1927-30 this publication succeeded in moving to Taiwan and turned into a daily newspaper, the fate of which has already been described."

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-1-3
116, 553, 563, 723, 177.65 Japan
636.65

"In any case, the Japanese government understands the abnormality of the situation [i.e. the unexpressed and expressed hostility of the people of Taiwan toward the Japanese--analyst] and the dangers connected with [192] it. To this 'domestic' consideration a special consideration of grand strategy is added. The militarists of Japan realize that the successful management of the Eastern Asia Co-prosperity sphere cannot be realized without the goodwill of at least some groups of the local population. They plan to retain the semifeudal organization of the Dutch Indies, Thailand, Malaya, etc., but to supplement it on the one hand with direct control over rajahs, sultans, chiefs and so on, on the other hand with an indirect control through the Chinese. In each country of Southeastern Asia there are millions of Chinese, chiefly of Kwangtung and Fukien origin. Their numbers could be easily increased, because through administrative measures their immigration has been kept down. In some countries only a very small number were admitted annually; in other permits to immigrate were given more or less freely, but on condition of payment of a very high head tax. The Japanese can easily double or treble the number of immigrants, putting as the only condition of migration a guarantee of the 'political reliability' of the emigrant. The Chinese have played an extremely important part in the economic life of the countries of Southeastern Asia. This part would be greatly increased on the one hand through repeal of certain limitations upon the activities of the Chinese, on the other hand through the systematic financial assistance given by the Japanese banks to the Chinese businessman, especially to middlemen. Of

course, the activities of the Chinese would be controlled by the Japanese, and here the Chinese from Taiwan come into the picture. Many of them beside their own native language speak Japanese also. The number of such persons can be easily increased, especially if the youth of Taiwan knows that lucrative positions will be opened for them. Thus, two lines of control can be used: on the political side—local population—rajahs—the Japanese commissioners—Tokyo; on the economic side—local population—Chinese middlemen controlled by the Taiwanese or with the help of the Taiwanese—the Japanese monopolistic concerns. The local population will be then thoroughly con-[193] trolled by the Japanese; on the other hand it will be racially divided and unable to present a united front against its masters. The Chinese will know that their interests and privileges depend upon the favor of the Japanese, their economic interests will oppose the interests of the local population. The Japanese militarists hope in this way to reconcile the native population of the island to alien rule. They declare that the greatest immediate problem in respect to the Chinese population of the island is kominka or turning them into imperial people, or more simply, some kind of assimilation. A campaign for the spread of the Japanese language is being conducted; the Chinese are encouraged to change their names into Japanese; various patriotic and chauvinistic societies have been established in order to influence the mind of the Chinese youth. One should not conclude from these facts that the Japanese want to establish a racial equality in this

4:Crajdanzev--191-193 S-4 (no date) 1942 Formosans-3
116, 553, 563, 723, 177.65
636.65 Japan

'co-prosperity' sphere. The Japanese authorities complain that very few islanders change their names. Actually only a few hundred have used this privilege. However, this change of name is not so simple: each case has to be approved by the governor, and it is clear that approval is given only to those who can prove their complete fidelity to their masters."

4:Grajdanzev--193 S-4 (no date) 1942 Formosans
116. 177.65 Japan
636.65

"Thus, so long as the Japanese are successful in their aggression, their base in Taiwan is more or less secure; the experience which they have acquired in subdividing the Formosan people will help them considerably in Indo-China, the Philippines and other countries of Southeastern Asia. It is quite probable that some groups of the Chinese population of Formosa may be willing to 'cooperate' with their masters in subjugation of other countries. But if the victorious march of the Japanese is stopped or turned back; if the economic difficulties mount, as they certainly would in such an event, then Taiwan, with its restless and discontented population may become a base of doubtful value. But this will happen only when the military prestige of the Japanese has received a powerful blow from outside."

15: U.S. Navy--26 [12] (no date) 1944 Formosans
116, 511, 656, 177.65 Japanese
636.65

"The Japanese have immeasurably improved living conditions in Taiwan by systematically developing communications, public health measures, commodity distribution, agricultural planning and the like. Their efforts have been directed toward the improvement and control of the livelihood of the Formosan in order that he may better contribute to the total economic and strategic value of the island. Brigandage has been eliminated and the roads made safe. The whole organization of Formosan life has gone through much the same development and standardization that Japan has experienced since 1868, save that in Taiwan change has been an official policy executed methodically under police supervision with no regard to local opinion or tradition."

15: U.S. Navy--29 [4] (no date) 1944 Formosans
116, 364, 651, 656, 177.65 Japanese
636.65

"The Japanese have enforced rigorously a system of household registration. At the door of each dwelling there is displayed a plaque bearing the name of the head of the house. Near it are pertinent receipts or certifications received from the police which testify to registration at the nearest police station, house-inspection and approval, vaccinations or innoculations required of all members of the household, certain tax receipts, and such other data which the police may require from time to time to be displayed in a public and easily checked place. In the cities small insignia or notices indicate the public utilities available in each house."

15: U.S. Navy--31 [9] (no date) 1944 Formosans
116, 466, 651, 177.65 Japanese
636.65

"The hoko system of mutual responsibility within households and local communities is under closest police supervision and control. Through it the government can demand and receive contributions both of hours of labor and of taxes in kind. Close check can be kept also on all labor unrest and agitation."

25: Plaut--28-29 U-4 (no date) 1903 Formosans-1-2
116, 114, 654, 177.65 Japan
636.65

Anyone who knew the conditions [EJ: previous to Japanese occupation] realized that if the new order were to be a permanent one, it would have to be based on the existing circumstances; these circumstances were the culture, customs, laws and habits of the [29] most important and largest element of the population, or the Chinese, and so the first thing to do was to make a thorough study of the old system. A number of capable men were set to this task, and they collected a great deal of material. An imperial decree established a Commission to inquire into the old customs on Formosa, and it was under the direction of Okamatsu Santaro, Professor of Law at Kyoto University. This group was charged to examine the available information and to get some more. That was on the 25th of October 1901. That same year Professor Okamatsu published his first report by order of the Governor General, and in 1902 it appeared in English under the title of: "Provisional Report on Investigations of Laws and Customs in the Island of Formosa compiled by order of the Governor-General of Formosa by Santaro Okamatsu."

The report begins with a brief survey of the history, administration and judicial procedures of the island, then there is a detailed description of the legal status of the lands, their division according to the nature and utilization of the soil, the land tax, inheritance and loss, purchase, sale and lease, as well as of the legal forms relating to these contracts, and there is also a discussion of irrigation and the rights and taxes which it entails. In conclusion he has a brief discussion of the family rights of the Chinese

inhabitant. In an appendix he has added a glossary of the Chinese terms which were used in the work, and then there are 89 "References", or examples of documents in Chinese, as they are used in various legal affairs.

All in all, the report is a valuable contribution not only to our knowledge of Formosa, but to the study of comparative jurisprudence as well.

31: Hofmann--603 N-3 (1909) 1912 Formosans
116, 366, 543, 657, 177.65 Japanese
636.65

During my stay of one week in the capital and the neighboring regions, I was greatly impressed by the energy with which the Japanese had stimulated the culture of Taihoku. There were extensive government buildings, broad streets, water pipes, schools, barracks, hospitals, reformatories, railroads, telegraph and telephone connections; everything, in short, that is considered representative of western culture. Everywhere there are signs of Japanese patience, energy, and initiative which form a striking contrast to the confusion and negligence of the Chinese regime. There is a museum in Taihoku which is well worth seeing, with an extensive collection of the abundant fauna and flora of this island; it is because of the copious vegetation that Formosa for so many centuries has been the cynosure of all those nations who sought to expand their boundaries. There is also a botanical garden where a large number of useful and interesting plants has been systematically arranged and it is calculated to impress any visitor to the tropics. There is one hotel in Taihoku which, judged even by European standards, is excellent; it offers all the comforts of a tropical hotel.

4:Grajdanzev--171 S-4 (no date) 1942 Formosans
116, 208, 641, 625, 177.66 Japan
636.66

"Taiwan was conquered by the Japanese army. The regime which was established there was a military regime, and with few modifications it continues to be a military regime today. The government does not trust the Chinese, spies upon them, and is afraid of any movement which does not emanate from the government-general itself. Suppression of the Chinese culture and forcible japanization of the islanders is considered by the government as the best means of turning the islanders into loyal subjects of the Empire."

4:Grajdanzev--177-178 S-4 (no date) 1942 Formosans
116, 668, 177.66 Japan
636.66

"The World War brought in its wake unrest and political agitation. Lin Hsien-t'ang, together with many other Chinese, petitioned the Imperial Diet in February 1921 for the establishment of a parliament in Taiwan and for some kind of home [178] rule. The diet paid no attention either to this or to the following petitions, but the government-general arrested hundreds of persons in 1923 in order to stop the movement (1).

1. This is the Japanese version. Professor R. Goldschmidt, who visited the island in 1926 and who is in general an admirer of Japanese colonial methods, writes as follows: 'There are rumors that the movement was suppressed with 3,000 death sentences. But the notorious Japanese system of secrecy makes this difficult to verify.' (Translated from the German, Neu Japan, Berlin, 1927, pp. 109-110.)"

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -1-2
116, 467, 656, 668, 177.66 Japan
636.66

"In October, 1921, Lin Hsien-t'ang, Ts'ai Pei-ho (who was arrested in 1923), Chiang Wei-sui and others organized the Taiwan Bunkakyokai (Taiwan Cultural Society), which very soon became the centre of the national movement among the moderate elements. But in 1926 the Marxist groups made their appearance on the island for the first time when twenty Chinese formed the Taiwan Proletarian Youth League (Taiwan Musan Seinenkai). Since that time the political movement has separated into two branches—the Moderates centered around the Bunka Kyokai and were strongly represented in the Taiwan Agricultural Cooperatives, and the revolutionary Marxist organizations closely connected with the workers union (Taiwan Koyuso remmei), which in 1928 was reported to have had as many as 6,367 members and to have organized several successful strikes. However, after 1928 there began a new era of suppressions and arrests and one after another the Chinese organizations fell victims to it. The Marxist groups were the first to go. In 1931 the Taiwan Koyuso remmei was suppressed and finally in August 1937 even the most moderate movement of the right wing organizations, the purpose of which was the reform of local government, was dissolved on the claim that the government had already realized this reform.

This, of course, does not mean that all these movements were eradicated; they went underground, and continued their struggle, but the government suppression made even moderate groups more radical than they were before. In 1931 Taiwanese in Shanghai reorganized their Taiwan Youth Party into the Anti-imperialist League. It had close

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -2
116, 467, 656, 668, 177.66 Japan
636.66

connections with Taiwan, where its members from time to time were rounded [179] up by the police."

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress. The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

15: U.S. Navy --21 [3] (no date) 1944 Formosans
116, 186, 563, 177.66 Japanese
636.66

"The first generation of Japanese in the island came as adventurers who hoped to get rich quickly in the wake and under the protection of an occupying army. A domineering and ruthless attitude toward the native population has persisted, although the second or younger generation is beginning to identify itself with the island. It has been bred away from a strong homeland (Japan Proper) tradition. Although the essence of home and school training is emphasis on 'true Japanese spirit,' in practice the lives of these young Japanese are governed by the colonial situation in which they find themselves. They have a strongly developed 'exploitation' and imperialist outlook which prevents them from learning anything of the language or customs of the people among whom they live. Very few Japanese can speak elementary Formosan-Chinese."

15: U.S. Navy --ZZ [2] (no date) 1944 Formosans
116, 181, 668, 177.66 Japanese
636.66

"Formosans who have received the advantages of a Japanese education naturally expect opportunities in return. If such cannot be found in Taiwan, nor in China or Japan, discontent may increase. The Formosan temperament is not aggressive, but 'Old Formosa Hands' remark that this temperament often finds devious ways of achieving desired ends in spite of official control.

The Formosans lack leadership, for the Japanese have destroyed out-spoken opposition or have driven it underground and abroad. Only through pressure of Japanese occupation did there begin to develop a sense of the interests of the Formosan people as a whole, and the formulation of a political program embracing the welfare of the island vis-a-vis Japanese policy."

15: U.S. Navy --22 [7] (no date) 1944 Formosans
116, 181, 266, 578, 177.66 Japanese
636.66

"Through the past twenty years observers have commented on the passivity, and the subserviency of the Formosan-Chinese to Japanese rule. However sullen or resentful the general populace may be, they have been without effective means of resistance. This is not to be attributed to meekness or lack of spirit, but rather to the extremes of force and cruelty with which the Japanese established initial order and imposed their elaborate system of controls, reaching into every household on the island and placing upon the members collective responsibility for the acts of individuals. Even the most generous allowances cannot conceal the fact that before the Japanese came the Formosan-Chinese population as a whole was capable of extremes of ferocity in mob action among themselves, not stopping short of ritual cannibalism (the eating of the hearts and livers of victims to acquire strength and spirit), nor of the cold-blooded sale of the flesh of captured aborigines on the open market both on the island and across the channel along the coast of Fukien. In the years before 1941, educated Formosans commented frequently (and of course privately) upon the probable extremes of mob action likely to be directed against the Japanese if ever an opportunity should be presented. That the Japanese are aware of this was amply demonstrated on February 18, 1938, when the attack of a single bomber from China caused the authorities to barricade public buildings and to set up machine guns throughout the capital city before they sounded the air raid alarm. The guns were directed at the Formosan-Chinese population."

15: U.S. Navy--22 [9] (no date) 1944 Formosans
116, 186, 668, 563, 177.66 Japanese
636.66

"It is evident from an analysis of election returns that the greatest interest in politics and representative government is shown in the districts where the Hakka people are predominant, notably in Shinchiku Province. It is also notable that many of the leaders of fierce resistance to the initial Japanese invasion of the island were Hakka people or people from areas in which the Hakka predominate. Not only is government -processed opium said to be more easily accessible in Shinchiku Province, but it is in this district that the Japanese have taken greatest pains to destroy local religious cults, and to press the Japanization program."

4:Grajdanzev--105-106 S-4 (no date) 1942 Formosans
116, 376, 457, 177.71 Japan
636.71

"Cheap water power is an important asset to Taiwan in all plans for its industrial development. Prior to 1930 it was estimated that the twenty-three major streams can produce as much as 1,040,000 kw., but, according to Takahashi, recent estimates put the capacity at a much higher figure—about two million kw. Of this about 230,000 to 240,000 kw. was utilized in 1939. Development before 1933 was slow. In 1919 the capacity was 10,000 kw.; in 1933, about 40,000 kw. But in 1930-31 a project was worked out for the utilization of Jitsugetsutan (Lake Candidius), a lake in the mountains in the centre of the island located 726 m. above sea level. The project was elaborated chiefly for the purpose of creating an armament industry (1) but there was no money to finance it, so work on the

1. That the primary motives were military is definitely stated in Taiwan Jijo, 1939, p. 418, and Sekai nenkan, 1939, p. 177.

project stopped. Finally, money was found in the United States, where in July 1931 a loan of US $22,800,000 or ¥45,737,210 was arranged. In October 1931 work was resumed and in 1934 the project was completed. In July [106] 1937, a second project was finished at the same lake."

4:Grajdanzev--4 [2] S-4 (no date) 1942 Formosans
116, 101, 177.72 Japan
636.72

"Taiwan is therefore halfway between Shanghai and Hongkong and halfway between Tokyo and southern Indo-China. This makes it an extremely important point for the Japanese. Geographically it is nearer to China and to the Philippine Islands than to Japan. Since its conquest the Japanese have looked upon Taiwan as a base for their advance to the south, as a stepping-stone toward domination over the adjacent areas."

4:Grajdanzev--139-140 S-4 (no date) 1942 Formosans
116, 648, 659, 177.72 Japan
636.72

"Expenditures for the penetration of Southern countries and [140] 'secret funds' are scarcely likely to benefit the Chinese population of Taiwan."

4:Grajdanzev--170-171 S-4 (no date) 1942 Formosans
116, 175, 114, 204, 177.72 Japan
636.72

"Tadao Yanaihara, writing in 1929 when no Chinese newspaper was published, tried to find the cause of the difference between Taiwan and Korea (in the latter newspapers in Korean language are published). He thinks that the cause lies in the former independence of Korea and a resulting [171] Japanese deference to world public opinion, whereas Taiwan was a former Chinese colony and thus Japan did not have to make the same concessions to world opinion (1). We believe that this explanation is inadequate. The Japan-

1. Page 229. op. cit.

ese government had few scruples concerning world opinion for example in 1919 when it brutally suppressed the national movement of the same Korean people. The explanation is simpler. Korea was sold out peacefully by her rulers to Japan and at the time her people acquiesced in this sale. whereas the people of Taiwan did not recognize the cession of Taiwan to Japan. It is important to note that the act of cession took place not in Taiwan, but on the sea. The representative of the Peking government transferred Taiwan to the Japanese plenipotentiary on the open sea because Taiwan was in a state of turmoil. Abandoned by the government, betrayed by militarists, the islanders continued the unequal struggle for several years."

4:Grajdanzev--188 S-4 (no date) 1942 Formosans
116, 648, 652, 177.72 Japan
636.72

"All this [i.e. Japanese penetration to the South--analyst] required additional grants, and grants were forthcoming. In 1937 the Taiwan Government-General appropriated for the purposes of southern policy Y1,061,000; in 1938 Y1,552,000; in 1939 Y4,073,000; in 1940 Y5,387,000; in 1941 Y8,002,000. These figures may serve as an index of Japan's preparations for war in Southeast Asia. These sums were earmarked for work outside of Taiwan; but at the same time other amounts, enormous by Taiwan standards, were set apart from the Government-General budget for the construction of the base for southern advance in Taiwan. These expenditures from a minimum of 25 million yen in 1937 rose to a minimum of 50 million yen in 1941."

4:Grajdanzev--188-189 S-4 (no date) 1942 Formosans
116, 723, 177.72 Japan
636.72

"As for the future, the Japanese writers are not sure themselves whether Taiwan will not follow the fate of Okinawa Islands which, after the acquisition of Taiwan became a forgotten geographic name. But there is little doubt as to the importance of the island for the southern advance now and in the immediate future. First of all, the geographic position of Taiwan is favorable. Takao, in the southern part of Taiwan, is nearer to Manila than to Yokohama, and is just half way between Yokohama and Saigon, southern Indo-China. Takao is 1,495 miles from Yokohama and 1,800 miles from Singapore. [189] For certain purposes Hainan Island, seized by the Japanese in 1938-39 is an even better base for Japanese action in Southeast Asia, and there is no doubt that many of the transports of troops that are now attacking the Philippines came from Hainan. However, Haikow, the chief port of Hainan, was occupied by the Japanese only on February 10, 1939, and there was not time enough to make it a good modern base, especially because of the continued unrest and guerilla activities in the interior of the island. Taiwan for many years was being systematically prepared as a base for the army and navy operations in the South while the United States undertook an obligation not to fortify its bases in the western Pacific."

15: U.S. Navy --26 [8] (no date) 1944 Formosans
116, 596, 736, 626, 177.73 Japanese
636.73

"There are social welfare departments in the Government which endeavor to care for persons without support or livelihood. The family system absorbs the majority of such cases, for a moral obligation lies upon the entire family to support and to share with all members. Property and the income from it is held in common. An able-bodied person who shirks his duties and tends to become a charge upon the family is open to reproof by the elders and by the family council. In extreme cases a member may be cut off from the clan in disgrace and so have no further claim upon it.

Those who are ill, the aged and the physically handicapped can claim the same support from the family group. Hence few appear as public charges."

15: U.S. Navy --26 [9] (no date) 1944 Formosans
116, 732, 759, 548, 874, 177.73 Japanese
636.73

"Schools for the blind, the deaf, and the dumb are maintained at Government expense at Taihoku and Tainan. In addition to instruction in Braille, pupils are taught various skills, of which the most important are weaving, chiefly of panama hats, and massage. Graduates of the school who have passed the required masseur's examination are licensed to practice, and are assigned districts or routes over which they go every evening from nightfall until midnight, with a whistle or pipe and a tune peculiar to each masseur. They travel, both men and women, in pairs or with a small child or elder person as a guide. Many are not wholly blind, but qualify to practice. Sometimes they work at home or in shops at various tasks during the day, making the evening work as a masseur a supplementary livelihood. Many Chinese hotels or lodging houses have masseurs regularly employed. A certain amount of illegal solicitation for prostitution is carried on by them as well as by the masseurs who travel a regular beat through the city streets."

15: U.S. Navy --26 [10] (no date) 1944 Formosans
116, 732, 743, 735, I77.73 Japanese
636.73

"There is a Government hospital for the insane at Taihoku. The general impression is gained, however, that the mentally deficient and the hopelessly crippled are not usually placed in institutions but are simply cared for in a haphazard fashion by their families. Occasionally such persons are found living or begging along the roads leading to popular temples and shrines."

4:Grajdanzev--173 S-4 (no date) 1942 Formosans -1-2
116, 744, 759, 177.74 Japan
636.74

"In all books and articles published under the auspices of the Japanese government the remarkable successes of the Taiwan government with respect to the health of the population are described, and there is no doubt that improvements took place in Taiwan after 1896—it would be strange if this were not so. More than 300,000 Japanese live there now and their health depends to an important degree upon the health of the surrounding population, especially in case of epidemic diseases. First of all, for the sake of comparison, we give the basic figures for Taiwan and Japan.

Number of Physicians, Dentists, etc. in Japan and in Taiwan, 1936

	Japan	Taiwan	
	1936	1936	1938
Physicians	61,799	1,834	1,983
Dentists	22,072	402	407
Pharmacists (yakusaishi)	28,156	190	213
Nurses	124,402	...	170
Midwives	61,732	1,744	1,796
	Per 10,000 of population		
Physicians	8.8	3.4	
Dentists	3.1	0.7	
Pharmacists	4.0	0.3	

4:Grajdanzev--173 S-4 (no date) 1942 Formosans-2
116. 744. 759. 177.74 Japan
636.74

Nurses	17.7	0.3
Midwives	8.8	3.2

Source: Dainippon teikoku nenkan and Taiwan Jijo."

15: U.S. Navy --26 [6] (no date) 1944 Formosans
116, 741, 596, 177.74 Japanese
636.74

"The Japanese officially list 1,676 organizations or facilities for philanthropic and social welfare work in Taiwan. These include semi-official organizations such as 'Improvement of Village' associations, pawnshops, public markets, and others which under government supervison perform the work which would be financed elsewhere either through the government budget directly or through spontaneous private charity. There is less need for such organizations in a social system which is built on family units in which the individuals share and share alike."

15: U.S. Navy --26 [13] (no date) 1944 Formosans
116, 625, 556, 744, 177.74 Japanese
636.74

"The Japanese policeman undertakes to instruct rural peoples in sanitation, house-building, religious observance and many other things elsewhere usually left to private initiative. Large-scale public works projects have raised the whole standard of health and public welfare. Extremes of wealth and poverty are not very apparent in normal times."

15: U.S. Navy--28 [2] (no date) 1944 Formosans
116, 744, 177.74 Japanese
636.74

"Compulsory house-cleaning as a public health measure is rigorously enforced by the Japanese. Towns and country districts are systematically organized for semi-annual house-cleaning days and cooperation is expected of everyone. The movable contents of every house and most shops must be taken out into the open air and the premises must be cleaned thoroughly. Before replacement a police inspection is obligatory, and a certificate of approval must be issued and posted at the door of each building."

15: U.S. Navy--28 [3] (no date) 1944 Formosans
116, 515, 735, 744, 177.74 Japanese
636.74

"General standards of personal cleanliness are not high, but the universal shabbiness must be attributed to poverty rather than to sheer neglect. The principles of elementary hygiene are not widely understood. The Japanese have been making some progress in establishing habits of public cleanliness and have been trying to introduce new measures of household hygiene (careful disposal of waste, daily bathing). The problem is very great, however, among six million people. Although general standards are lower than the average in America, they are as high as standards maintained in backward districts in the South or in city slums, and are infinitely better than standards existing among Chinese villages on the China coast across the Straits of Taiwan."

4:Grajdanzev--140 [4] S-4 (no date) 1942 Formosans
116, 654, 177.81 Japan
636.81

"Attention should also be paid to the considerable amounts spent by the government on research and investigation. A special institute has been established, which centralizes the research on the island and considerable sums are spent on research into new uses for natural gas, on sugar and sugar cane research, and on war industries."

4:Grajdanzev--165 S-4 (no date)1942 Formosans
116, 208, 563, 658, 871, 177.87 Japan
636.87

"In the sphere of education the island has passed through two periods, one before 1919 and another since that year. Before 1919 the policy of the government with respect to the Chinese of the island was vacillating. It was ready to recognize the existence of the Chinese in the Japanese Empire as a separate entity, and was ready even to help them preserve their Chinese character. A special society was created to investigate Chinese customs and habits and these were to be taken into consideration in court practice. Later, the failure of this policy was recognized and the avowed end became the japanization of the inhabitants of the islands in order to make them loyal subjects of the Empire. The elementary school was to become the chief instrument in this japanization. While before that period the education of the Chinese was completely neglected, since then school expenditures have grown and the number of pupils has increased from year to year. But this does not mean that there is any equality between the Japanese and Chinese as regards education. A literate population is necessary for the japanization of the islanders. Knowledge of the Japanese language is indispensable for workers, policemen, for the paocheng, for clerks, for all who work for their Japanese rulers. It does not mean, that there is any intention of raising the Chinese to an equal position with the Japanese."

4:Grajdanzev--166-167 S-4 (no date) 1942 Formosans-1-2
116, 563, 872, 177.87 Japan
636.87

"The growth in the number of pupils in elementary schools may be seen from the following table:

Primary Schools in Taiwan

	1935	1936	1937	1938	1939
Number of schools	781	783	789	796	812
Number of teachers	6,255	6,659	7,239	7,888	8,718
Number of pupils, 1,000	373.9	407.6	450.0	505.5	557.1
Number of pupils as percentage of children of school age	41.5	43.8	46.7	49.8	...
Graduates, 1,000	42.3	45.7	50.3	59.0	...

Source: Taiwan Jijo.

From this it appears that in five years the number of pupils in primary schools increased from 373.9 thousand to 557.1 thousand. About half the Chinese children of school age (8-14) are now in primary schools. This increase is partially due to the absorption of new pupils by schools, and partially to the fact that the schools have been increasing the length of the courses they offer from four to six years. If one takes into consideration the fact that during these six years the pupils must master thousands of characters as well as a foreign language and that most of the teachers are foreigners

(to them), it is clear that a six-year course is not a long one. These statistics do not include the schools for Japanese children. Theoretically there is complete equality in Taiwan and there are no special schools for the Japanese, but there are schools where instruction is carried on in the Japanese language. With the permission of the governor of the province Chinese may also be admitted to such schools, even if they do not know the Japanese language, but this permission is not given willingly. Many parents among the lower groups of Chinese [167] officials want to send their child to a Japanese school so that he or she will have a thorough knowledge of the language of the rulers and a better chance to get a higher paid job. But in 1936, out of 42,576 pupils in these schools, there were only 2,975 Chinese. There is another important fact with respect to the Japanese pupils; while in 1938 only fifty per cent of the Chinese of school age were in school, 99.4 per cent of the Japanese of this age were attending school in 1936."

4:Grajdanzev--167 [21 S-4 (no date) 1942 Formosans
116, 563, 873, 177.87 Japan
636.87

"A further important test of any system of education is the number of students in secondary schools and in universities. As was mentioned, literacy is a necessity under modern conditions, even in the colonies. But to give a secondary education and especially a university education to the colonial peoples en masse is quite a different proposition. On April 1, 1939, there were 5,125 Japanese and 4,117 Chinese in the Taiwan secondary schools for boys. It will be recalled that the number of Chinese on the island is almost twenty times as great as the number of Japanese, and the proportion between the children of the two groups is even greater. In the girls' secondary schools the situation is even less favorable to the Chinese—5,312 Japanese pupils as compared with only 2,541 Chinese (1939)."

15: U. S. Navy --21 [10] (no date) 1944 Formosans
116, 871, 177.87 Japanese
636.87

"The Japanese educational program calls for a great deal of physical training, marching, drilling, and calisthenics. Swimming, and judo and kendo (traditional Japanese military games) are also taught in all schools but are popular only among the Japanese."

15: U.S. Navy --25-26 (no date) 1944 Formosans
116, 191, 875, 883; 177.87 Japanese
636.87

"Sessions of the koshusho [MC: 'National Language Training Schools' established to teach Japanese to the Formosans.] are held in schoolrooms, public halls, special buildings built for the purpose, or private homes. Teachers are almost invariably Formosan-Chinese, usually members of the local young men's association who have been graduated at least from the primary schools. Quality of instruction necessarily varies greatly. A young Formosan-Chinese states that in some districts, members of the young men's association are particularly active and enthusiastic. In such cases, instruction and results at the training school may be satisfactory. In other districts there is little local interest and the quality of instruction is poor. Often the instructors themselves have an inadequate knowledge of Japanese. It is stated that occasionally a Japanese with earnest conviction to aid in the process of assimilation will volunteer [26] to teach. Such cases are extremely rare, however. Instructors receive no pay."

15: U.S. Navy--25 [6] (no date) 1944 Formosans
116, 191, 873, 177.87 Japanese
636.87

"There are 7,306 'National Language Training Schools' (Kokugo-koshusho) which exist for the purpose of teaching Japanese to adults. According to statistics as of March, 1938, the number of schools and students was as follows:

Table 21: Number of Language Schools and Students

	Number	Pupils	Annual Cost
Elementary training schools.....	3,454	34,865	¥1,576,975
Training schools.....	3,852	257,277	---
	7,306	292,142	

According to the Taiwan Government General, Bureau of Education, in 1939 the number of institutes remains the same, although the pupils now number 470,000."

15: U.S. Navy --26 (no date) 1944 Formosans
116, 873, 177.87 Japanese
636.87

"Texts used in the training schools are published especially for the purpose by the Taiwan Educational Association. The language used is extremely simple and few Chinese characters are introduced. The subject matter includes lessons on Japanese etiquette, polite phrases, Japanese holidays, and shrine worship, as well as consideration of Formosan village and rural daily life."

15: U.S. Navy--32 [5] (no date) 1944 Formosans
116, 467, 668, 871, 177.87 Japanese
636.87

"Formosan peasant and trade unions were not organized along class lines, owing perhaps to the essential democracy of the Chinese guild system. Members of the middle and well-to-do classes actively supported the peasants and workers in their agitation for better working conditions and attempted to work for legislation to that end. The biggest handicap to any such movement has been the lack of education for peasants and workers, especially of education which could be gained outside of the Japanese 'National Schools.'"

4:Grajdanzev--161 S-4 (no date) 1942 Formosans
116, 641, 643, 177.64 Japan
636.64

"The people of Taiwan have no representatives in the Japanese Imperial Diet, they have no representative body which takes part in the legislation or administration of the island.

Under these conditions the position of the governor-general acquires a special importance, and yet if we exclude Kodama, who spent eight years at his post (from February 1898 to April 1906), the average length of tenure is two years and one month, too short a time for a good knowledge of the local conditions. The tenure of the government-general is evidently subject to the vicissitudes of political conditions in Tokyo and has little to do with Taiwan."

4:Grajdanzev--162-163 S-4 (no date) 1942

116, 171, 632, 641, 177.64
636.64

Formosans
Japan

"The municipal or village councils have from 8 to 40 deputies (according to the population), half of whom are appointed by the government and half elected. The electorate is made up of male Empire subjects who have attained the age of twenty-five years, who are not dependent, who have lived continuously for at least six months in that particular locality and pay at least five yen in municipal or village taxes (house tax, land tax, or business tax). [163]

Thus it is clear that the only places in which there is some semblance of elections are the cities or villages. As has already been pointed out, the small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko. But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote. We have no data for Taiwan, but the example of Korea shows that by this device two per cent of the population—the Japanese—form the majority of the electorate."

4:Grajdanzev--171 S-4 (no date) 1942 Formosans
116, 208, 641, 625, 177.66 Japan
636.66

"Taiwan was conquered by the Japanese army. The regime which was established there was a military regime, and with few modifications it continues to be a military regime today. The government does not trust the Chinese, spies upon them, and is afraid of any movement which does not emanate from the government-general itself. Suppression of the Chinese culture and forcible japanization of the islanders is considered by the government as the best means of turning the islanders into loyal subjects of the Empire."

632 answer to questions submitted to them by
633 the local government authorities." The heads of towns and villages had no obligation to seek or to follow the advice of local assemblies. The governor-general could dissolve the assemblies at any level at will.

631 The exceedingly limited extent of "self-
666 government,"[2] which the Japanese had much
• 641 publicized, was further minimized by the franchise. Suffrage was granted to all self-supporting male Japanese subjects 25 years of age or older, resident in the relevant districts for more than six months, who have been paying for six months or longer a minimum local tax of ¥ 5.00 a year.[6] Formosan Chinese were counted as Japanese subjects, but because the majority of them paid a city, town, or village tax under ¥ 5.00 a year,[7] the number

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6. Naito, op. cit., p. 73.

7. "The small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko (chio = 2.39 acres). But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote." Grajdanzev, op. cit., p. 163.

2 [During Japanese occupation from 1895 to 1945 -- Analyst]

631 of eligible voters among the Formosan Chinese
666 was extremely small. In 1935, the year in
641 which the so-called local self-government was introduced, there were 40,297 qualified voters among 270,674 Japanese residents, but only 187,155 qualified voters among 4,674,300 Formosan Chinese. The total membership, including government appointees of provincial, district and city assemblies as instituted in 1935, was 252 Japanese and 169 Formosan Chinese. Thus, not only were all administrative offices almost exclusively staffed by Japanese, but even in provincial and municipal representative bodies the Japanese members also far outnumbered the Formosan members.

625 For administrative control of the populace, the Japanese relied upon an elaborate police system. This system[8] comprised a civilian police force, numbering over 12,000 in 1940, supplemented by a special police force of over 5,000, functioning in the areas occupied by the aborigines and by a military police force numbering some 6,000. To facilitate the task of the police force, the old Chinese pao-chia system of collective responsibility was revived and strengthened. Approximately ten households formed a chia and ten chia a pao.

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8. Ballantine, op. cit., p. 28.

642 organizations and professional associations are represented both in the National Assembly and the Legislative Yuan.[16] Political parties, if lawfully organized, are given equal status and are allowed equal opportunity to participate in elections. All organizations must be registered with the proper authorities by their sponsors. Whoever joins an association formed with the object of committing or inciting rebellion is subject to imprisonment.[17]

641 It is definitely stipulated in the Chinese 533 Constitution that all citizens of the Republic of China, irrespective of sex, religion, race, class, or party affiliation, shall be equal before the law. A minimum quota of seats are reserved for women delegates in all representative bodies.[18] And to insure the election of women candidates, votes cast for them are computed separately. There is no religious or racial discrimination in China. A quota of seats in the National Assembly and the Legislature is expressly reserved for "people living in the interior areas," i.e., the minority races.[19]

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16. Law of Election and Recall of National Assembly Delegates, 1947, Article 4; and Law of Election and Recall of Legislators, 1947, Article 4.

17. Criminal Code, 1935, Article 154, and Rebellion Act, 1950, Article 5.

18. Constitution, Article 134.

19. Constitution, Article 135.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

659 a system of collecting population data, as an integral part of their wider goals in the island. Factual materials of this order have not existed either before or since their occupation.

The complete monument to their enumerative capacities in Taiwan is a series of seven censuses, the first one in 1905, the next in 1915, and one every five years thereafter stopping with 1940. Some were more detailed and are therefore more useful than others. All maintained uniformly high standards in the completeness of reporting, in the consistency of defining ethnic classes, and in the accuracy of information such as age reporting. In these respects they often ranked in quality well above the more advanced censuses of the Western world. The first two censuses, in 1905 and 1915, were carried out before a genuine enumerative census was ever conducted in Japan Proper[5] and probably served as testing-grounds for the initial Japanese census of 1920.

One of the first official acts of the Japanese was to make a register of the population under their control. This was undertaken for purposes of regulation, and not to satisfy disinterested curiosity about the inhabitants. To judge by its published results, the early registry was incomplete, especially in its vital statistics. But the rules regarding nationality were important for later demographic data, because they provided the first basis for distinguishing ethnic groups in the population.

659 641 The authorities began by requiring all persons who acknowledged the legal status of Taiwanese "nationals" to be so documented with the police. The remaining people of Chinese origin were thenceforth classed as aliens, and were given stricter treatment before the law than the rest. This legal concept of "nationality" (*Minseki*) was unchanging for each individual over time.[6] Reflecting as it did an official system of ethnic discrimination, this scheme was maintained with some rigor by the police. The classification was extended into census practice, and the system of control later became the basis for collecting census and vital statistics data. It kept distinct four principal groups of people—"Taiwanese" (or "Islanders," as they were called until 1939 in the statistics), Japanese, Koreans, and Mainland Chinese.

[5] The Russo-Japanese War intervened in 1905, the World War in 1915. See Taeuber, Irene B., and Beal, Edwin G., Jr. (October, 1946), p. 9.

[6] The privilege of adopting Japanese nationality was extended to natives of Taiwan only in later years, and was not widely used.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

By these actions the Japanese set apart from all others those who were descended from the original residents of Taiwan. This segregation in the statistics extended from the most obvious differentiation—that of Japanese nationals—down to fine distinctions within the Taiwanese population itself.[7] It was consistent in both the population censuses and vital statistics, making it possible to amalgamate the two systems of record-keeping continuously as long as they were maintained.

TABLE 1

TAIWANESE BORN OUTSIDE OF TAIWAN, 1920 AND 1930

Proportion of All Persons Who Have Been Born "Abroad," by Age and Sex

	Census of 1920		*Census of 1930*	
	Male	*Female*	*Male*	*Female*
All ages	0.2	0.1	0.1	0.0
0-9	0.0	0.0	0.0	0.0
10-19	0.0	0.0	0.0	0.0
20-29	0.1	0.0	0.0	0.0
30-39	0.1	0.0	0.0	0.0
40-49	0.5	0.1	0.1	0.1
50-59	1.3	0.2	0.3	0.1
60-69	1.9	0.3	0.8	0.1
70 and above	2.6	0.7	1.0	0.3

Sources: *Census of 1920, Descriptive Report with Appendix*, Table 79.
Census of 1930, Statistical Tables, Table 55.

Regulating the conduct of "alien" Chinese nationals in Taiwan was not the sole purpose in establishing the legal status of residents. The authorities also set out to halt the further migration of people from the mainland. In this they were apparently successful. Taiwanese were required to verify their nationality by certain proofs, chief of which was evidence of having been born in Taiwan. Taking this as a criterion, there seems to have been little admixture from the mainland to the category of "Taiwanese." For example, tables showing Taiwanese who were born "abroad" were published with the censuses of 1920 and 1930. If the information was accurate, practically the entire population of Taiwanese born after 1895 was ac-

[7] This fine detail was confined to a slightly different classification, based on "race." It provided categories within the group with Taiwanese nationality—aborigines, Taiwanese of Fukien origin, and Taiwanese of Kwangtung origin. The two classifications were not precisely the same, the one based on "nationality" being the more consistent at different times.

4: Grajdanzev--162 S-4 (no date) 1942 Formosans
116, 563, 642, 177.64 Japan
636.64

"The officials of the Japanese Empire are divided into three groups--chokunin, appointed by the Emperor, sonin, highest officials, appointed with the Emperor's approval and hannin, lower officials, for whom the sanction of the Emperor is not necessary. In the government-general there were in 1938 7 chokunin officials, 119 of sonin rank, and 648 of hannin rank, while in the provinces and districts five persons were of chokunin rank, 94 of sonin and 1,523 of hannin.

These numerous high officials are exclusively Japanese and in the counties and municipalities there are hundreds more. Lower positions are occupied not only by Japanese, but also by Chinese, but as it is pointed out in Sekai nenkan, 'from the political point of view all administrative organisations are almost exclusively (hotondo zembunga) staffed with Japanese, while from the economic point of view everything is under the domination of the Japanese economy' (1).

1. P. 179."

4:Grajdanzev--163 S-4 (no date) 1942 Formosans
116, 625, 642, 177.64 Japan
636.64

"Since the mayor and half the members of the Council are appointed by the government, since the mayor and all higher officials have the right to reject the decisions of the councils, since the provincial councils are appointed or elected indirectly and since the advisory council to the governor-general is appointed directly, we may say that after forty-five years of Japanesc rule, Taiwan is a colony in the government of which the islanders have no voice whatsoever and in which the Japanese themselves as citizens have little or no influence. The island is ruled by the governor-general with the help of the army and police."

186 too anxious for complete independence; at any
178 rate, not before they can successfully defend the island against aggression.

C. Toward the Government:

186 Except an insignificant number of aborigines
142 the Formosans are Chinese or of Chinese descent. Even under Japanese rule, they never forgot their own national origin. Poetry and songs composed during that period were replete with reminiscences of their mother country. That is why in 1945, the Formosan Chinese were overwhelmed with joy at the prospect of the island's being returned to Chinese rule after half a century of Japanese colonial dominance. But their enthusiasm was dampened by the abuses of Chen Yi's administration. The Nationalist government after 1949 made a determined effort to win back popular support. Economic reconstruction has been vigorously pushed forward to enable the island to achieve self-sufficienty and stability. Large government corporations have been converted to private firms and turned over to the local people. The political basis of the provincial government has been altered to permit increasing participation by Formosans.

In spite of the special concessions granted by the Nationalist Government in the past five years some Formosans, according to the sentiment expressed in the Provincial Assembly, complain that they have not been making as much headway politically as they would like. Others are not happy because the popularly elected mayors and magistrates do not have full authority in the settlement

186 642 of local affairs, since governments on the local level as provided by the Chinese Constitution exercise only those powers delegated to them by the central government. There is also the complaint, though not necessarily substantiated by fact, that the "elected Formosans often held office in name only and that Kuomintang men appointed under them held the real power."[15] To remedy such complaints and to make the Formosans more enthusiastic about self-government, two measures may be desirable: (a) extension of the powers of the Provincial Assembly, and (b) selection of personnel for top provincial posts, including that of the governor, by popular suffrage.

642 433 To gain more support from Formosans, the Nationalist government must also seek to improve further their economic well-being. Although the general industrial level has risen forty per cent above the Japanese peak year of 1941, neither in agriculture nor in industry have the gains kept pace with the increasing population. The per capita production is still below that of the Japanese period. Moreover, the rising cost of living has made the economic life of the island unstable. With American aid, the Nationalist Government has been trying to step up the industrial production of the island, but the prospect of arresting inflation is not very bright.

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15. Preston Schoyer, "Present Conditions on the Island," The Reporter, Vol. 12, March 10, 1955, p. 18.

642
433 For the main cause of inflation is the huge deficit in the national budget, which is strainted by nearly one million men in the armed forces.

701 The upkeep of such a huge military force accounts for the most crucial question raised by political observers: are the Formosan people willingly supporting the military program of the government? Contrary to speculation, the answer is affirmative. Foreign visitors are practically unanimous in stating the lack of interest among the Formosans in the liberation of the Mainland. This is true although such sentiment has not been openly expressed as the result of the rigid government control of all media of public expression. Nevertheless, another facet of the question, the need of a strong military force to defend the island, has never been debated. The farmer in Formosa now owns the land he cultivates, however small the acreage, and enjoys the fruits of his own labor. He certainly does not cherish the propsect of being chained to a collective farm, and laboring under the whip of political cadres. The industrial developments of recent years have provided opportunities for an increasing number of people and given rise to a new business and industrial class. The Formosans are both resourceful and industrious. They will be loath to see their prosperous land overrun by Communism, suffer deprivations similar to those found on the Mainland. It is quite certain that Formosans will resist Communist aggression, and that they will defend the offshore islands too. The best evidence of the unequivocal support of the Formosans to the government is the response of young Formosans

701 to military call. Up to now, 90,000 Formosans have been drafted into the army to replace aging Nationalist veterans.[16]

648 642 It seems clear that the Formosans do not have much sympathy for the Communists, although they realize that there is little prospect of their island becoming really independent. They also realize that, as more and more of them are being absorbed into the government and as the Mainlanders are aging, it is only a matter of time before they will win full control of the island.[17] They may differ with the Government in regard to its policy of liberating the Mainland, but they take comfort in President Chiang's assurance that it would not take place yet for some years. As more and more Formosans are inducted into the armed forces, more changes will take place in the Nationalist overall policy for the island. The principal aspirations of the Formosans at this moment are: more self-government, greater freedom of expression, and greater economic security. Their immediate apprehension is a runaway inflation. They are fearful that the Nationalist Government might plunge the island into bankruptcy, as it did on the Mainland in the years following the war, paving the way for Communist conquest.

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16. Time, op. cit., p. 34. 72,000 young Formosans were drafted from February to July 1955.

17. Manchester Guardian, Vol. 78, No. 13, Sept. 29, 1955, p. 14.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 2a,
Political Background

CONSTITUTIONAL SYSTEM

642 The Republic of China, which overthrew the Manchu Dynasty, was founded on January 1, 1912, after a successful revolution led by Dr. Sun Yat-sen. Due to the lack of a democratic tradition among the people, no constitutional government followed. The country was torn asunder by ambitous warlords, who waged incessant wars among themselves. National unity was not restored until 1928 when a new government, under Chiang Kai-shek, successor to Sun Yat-sen as leader of the Kuomintang, was established in Nanking and supported by the country as a whole. Dr. Sun Yat-sen laid down a program of political reconstruction for the guidance of his followers,[1] advocating that, following the unification of the country by military success, there should be an interim period of political tutelage in preparation for constitutional democracy.

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1. Sun Yat-sen, Fundamentals of National Reconstruction (English translation), Taipei, China Cultural Service, reprint, 1952, p. 20.

642 During the interim period, the Kuomintang should assume the role of a tutor, directing the national policy and training the people in democratic ways.[2] Accordingly, the Nationalist Government was organized by the representatives of the Kuominantg. But, since it followed closely the pattern conceived by Dr. Sun with regard to the division of powers, the structure of the government did not differ materially from the present government under the new constitution. In 1932 the Central Executive Committee of the Kuomintang passed a resolution, prescribing twenty-five principles, on the basis of which the Legislative Yuan was to draw up a draft constitution. A preliminary draft was completed on March 1, 1934, and the final draft, the "May 5th Draft Constitution," was promulgated by the National Government in 1936. Another plenary

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2. During the period of political tutelage, the National Congress of the Kuomintang took the place of the People's Congress in formulating government policies. When the National Congress of the Kuomintang was not in session, the political powers were exercised by the Central Executive Committee of the Kuomintang. A Provisional Constitution of the Political Tutelage Period was promulgated on June 1, 1931.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

642 session of the Kuomintang called for the convocation of the National Assembly on December 12, 1936. Because of unsettled political conditions, the election of delegates could not be completed in time, and the convocation of the National Assembly was postponed until October 15, 1937.

The Japanese invasion assumed nationwide proportions in July 1937, when several coastal provinces were occupied by the invaders. The national capital was evacuated from Nanking to Chungking. The convocation of the National Assembly becoming impossible, the introduction of a permanent constitution was postponed until the Japanese were defeated.

After the war, a constitutional convention met at Nanking on November 15, 1946. The Constitution of the Republic of China was adopted on December 25, 1946, promulgated by the National Government on January 1, 1947, and scheduled to be enforced on December 25 of the same year. On March 29, 1948, the First National Assembly, composed of 3,048 delegates[3] elected by popular vote in accordance

3. The first general election in Chinese history was held on November 21, 1947.

642 with the provisions of the new constitution, was convened in Nanking. Chiang Kai-shek was elected president and Li Tsung-jen vice-president. It also approved temporary provisions in the Constitution granting emergency powers to the president during the anti-Communist campaign.

CONSTITUTIONAL RIGHTS OF THE PEOPLE

In the Chinese Constitution, the freedoms, rights, and duties of the people are enumerated in Articles 7 through 21. They follow more or less the British or American Bill of Rights. But martial law, put into effect since May 19, 1948, has restricted to a considerable extent these freedoms.[4] We shall presently examine the rights of the people as guaranteed by the Constitution and indicate whenever they are affected by the provisions of martial law.

Article 8 of the Constitution protects the freedom of the person. It provides that no person, except in cases of flagrante delicto as provided by law, be arrested or detained except through a judicial or a police agency in compliance with legal procedure. No persons

4. Article 8 of the martial law was revised in 1949 by a presidential order.

may be tried or punished except by a law court in accordance with legal procedure. When a person is arrested or detained on suspicion of having committed a crime, the agency executing the arrest and detention shall inform the said person and his relatives or friends of the cause of his arrest or detention and turn him over to a competent court for trial within twenty-four hours. The person under arrest, or any other individual, may also petition a competent court for a writ of habeas corpus, to be issued within twenty-four hours, demanding the surrender of the person under arrest. However, the Chinese Constitution and laws have not expressly provided whether the right of the writ of habeas corpus should be suspended in case of rebellion or invasion, as public safety may require, as provided in the Constitution of the United States.[5]

Article 9 of the Chinese Constitution provides that except for those in active military service, no person may be subject to trial by a military court. Under martial law, a civilian will be subject to military trial if he is under suspicion of having committed a crime against

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5. Constitution of the United States of America, Art. I, Sec. 9, Par. 2.

642 the Act of Communist Espionage or the Act of Rebellion.[6]

The inviolability of the domicile and the freedom to change one's domicile are guaranteed by Article 10 of the Constitution, except when a person is domiciled in a military area or in area under compulsory evacuation, as provided by the Air Defense Law.[7]

The Constitution guarantees that the people shall have freedom of speech, freedom of academic instruction, and freedom of publication. A new Press Law was enacted by the Legislative Yuan in April 1952. It provides a system of registration for all publications, including newspapers, magazines, and other printed matter.[8] It stipulates certain cases in which a publisher shall be punished or his publication shall be suspended, such as to attempt to commit or to incite others to commit, crimes of treason, insurrection,

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6. Regulations Governing the Separation of Jurisdiction between Judicial and Military Courts, 1954, Article 2.
7. Air Defense Law, 1948, Article 6.
8. Press Law 1952, Article 9.

642 or espionage; to interfere with the lawful exercise of public functions or voting; to disturb, or to incite others to disturb, public order; and to commit, or to cause others to commit, acts of moral turpitude.[9] The new Press Law also provides that in time of war or emergency, when the government, as authorized by the Constitution, takes measures to deal with any unforeseen crisis, it may ban or limit the publication of certain items which tend to endanger public security, such as military, political, or diplomatic secrets.[10]

The Chinese Martial Law, in force since May 1948, authorizes the military authorities to restrict freedom of speech, academic lectures, newspapers, magazines, pictorial posters, slogans, and other writings and publications deemed harmful to the military cause.[11]

Article 12 of the Chinese Constitution guarantees the people the freedom of private correspondence. But under martial law,

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9. Ibid., Articles 33, 34.
10. Ibid., Article 35.
11. Martial Law, 1948, Article 11.

642 mails and telegrams in time of war may be censored or confiscated by military authorities. The correspondence of a prisoner may be censored or barred by the officer in charge of the prison, at his discretion.[12]

Freedom of religious belief is guaranteed by Article 13 of the Constitution. In schools, no course on religion may be required which might be considered as infringing upon freedom of religious belief. Under martial law, any religious activities that may disturb the public order may be banned by the military authorities.[13]

Article 14 of the Chinese Constitution guarantees freedom of assembly and the formation of associations. However, any assemblage may be dispersed or limited by the military in war time.[14] As to the forming of associations, the Chinese government has encouraged the people to exercise this freedom in professional and trade spheres.[15] Trade and labor unions have been established under the patronage of the government. Labor

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12. Prison Administration Law of 1947, Article 67, 68

13. Martial Law, 1948, Article 11.

14. Ibid.

15. Wen-jen Tsao, The Constitutional Structure of Modern China, Melbourne University Press, 1948, p. 65.

642 organizations and professional associations are represented both in the National Assembly and the Legislative Yuan.[16] Political parties, if lawfully organized, are given equal status and are allowed equal opportunity to participate in elections. All organizations must be registered with the proper authorities by their sponsors. Whoever joins an association formed with the object of committing or inciting rebellion is subject to imprisonment.[17]

641 It is definitely stipulated in the Chinese 643 Constitution that all citizens of the Republic of China, irrespective of sex, religion, race, class, or party affiliation, shall be equal before the law. A minimum quota of seats are reserved for women delegates in all representative bodies.[18] And to insure the election of women candidates, votes cast for them are computed separately. There is no religious or racial discrimination in China. A quota of seats in the National Assembly and the Legislature is expressly reserved for "people living in the interior areas," i.e., the minority races.[19]

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16. Law of Election and Recall of National Assembly Delegates, 1947, Article 4; and Law of Election and Recall of Legislators, 1947, Article 4.

17. Criminal Code, 1935, Article 154, and Rebellion Act, 1950, Article 5.

18. Constitution, Article 134.

19. Constitution, Article 135.

642 The Chinese Constitution provides that the people be given the right to existence, the right to work, and the right to own property.[20] The right of existence implies that the people shall be guaranteed a minimum standard of living. As to the right of work, the state shall provide opportunity of employment to the people who are capable of work, commensurate with their capacity and ability, so that they may render their services to the community and support themselves.[21] The state shall accord special protection to working women and children who work (Article 153) and shall give assistance and relief to the aged, the infirm, the disabled, and the victims of natural calamities. To promote social welfare, the state shall put into operation a Social Insurance System (Article 155).

651 No one shall be arbitrarily deprived of
423 his property. However, privately owned land
642 and other property are liable to taxation. If any land has an increase in value, through neither the exertion of labor nor the employment of capital, the state shall levy thereon an increment tax, the proceeds of which shall be used for public welfare.[22] The government

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20. Ibid., Article 15.
21. Ibid., Article 152.
22. Ibid., Article 143.

642 may regulate the distribution of land in the
651 interests of the tiller-owner and tenant-
423 cultivators and may limit the amount of land ownership.[23]

642 Under the Chinese Constitution, any
694 citizen has the right to present petitions to file complaints, or to institute legal proceedings. The Law of Petition was promulgated on December 18, 1954. It provides that a person has the right to voice his opinion concerning the policy of the government on matters of public interest to the representative agency or a competent authority, but the petition must be in written form and must not interfere with the exercise of judicial functions.[24] Any citizen may file a complaint against a wrongful decision on the part of a government body. The prescribed procedure is for the injured party to bring his complaint to a higher government body such as the provincial government, if the case is caused by an administrative act on the part of a hsien or a municipal government.

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23. Ibid., These provisions are inserted in accordance with the equalization of land ownership, one of the basic policies of Dr. Sun Yat-sen.

24. Law of Petition, 1954, Articles 2-6.

642 694 If he is not satisfied with the decision of the provincial government, he may file a further complaint with the proper department of the Central Government. If the charge is against a wrongful decision, the decision on the second complaint by a superior government body will be final. But if the complaint is against an unlawful decision or an illegal execution, the dispute may be referred to the administrative court for final judgment.[25]

642 871 The Chinese Constitution provides that the people shall have the right to receive as well as the obligation to accept public education.[26] The state has the responsibility of providing the necessary educational institutions so that all the people may have a chance to receive elementary education; and the state may compel children of school age to attend school. Articles 159 and 160 of the Constitution specify that all citizens shall have an equal opportunity to receive education and that primary education shall be free of charge. Children from poor families shall be supplied with textbooks at the expense of the government.[27]

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25. Law of Administrative Procedure, 1942, Article 1.

26. Constitution, Article 21.

27. Constitution, Article 160.

642 According to Article 23 of the Constitution, all the rights and freedoms enumerated above may not be restricted by law, except in order to prevent infringements upon the freedom of other persons, to avert an imminent crisis, to maintain social order, or to improve general welfare. One condition under which civil liberties may be restricted is during the time of declaration of martial law by the president; another is the exercise of the emergency power granted the president in the temporary provisions adopted by the first session of the National Assembly.

SUFFRAGE AND THE RIGHT TO HOLD OFFICE

66 642 Any citizen of the Republic of China over twenty-years of age has the right to vote. All elections stipulated in the Constitution, except as otherwise provided, shall be universal and by secret ballot.[28]

Any citizen over the age of twenty-three years has the right to be elected to office, except as otherwise provided by law. All candidates in the election prescribed by the Constitution shall openly campaign for election. Intimidation and material inducement

28. Ibid., Article 129.

are strictly forbidden, and disputes concerning elections shall be settled by the courts (Articles 130-33). The delegates to the National Assembly and members of the Legislative Yuan are elected directly by the people; but the president and vice-president are elected by the National Assembly, and the members of the Control Yuan are elected by the provincial and municipal assemlies. In local elections of 1950 and 1953-54 on Formosa, the magistrates, mayors, and members of the provincial hsien and municipal assemblies were directly elected by the people in secret ballot. The Constitution also provides that a person after being elected may be recalled by the constituency (Article 133). Beside the rights of suffrage and recall, the people also possess the rights of initiative and referendum. However, although the Constitution states that the exercise of the rights of initiative and referendum shall be prescribed by law (Article 136), no law in this regard has been promulgated.

In the selection of public functionaries, the Constitution specifies that a system of competitive examinations shall be enforced, quotas of candidates shall be prescribed severally according to provinces and areas, and examinations shall be held by regions. No person may be appointed to a public office unless he has been qualified through

641 84 persons passed the higher examination and 216 passed the general examination. Other examinations were held for postal clerks, telegraph operators, engineers, and other postal personnel. Those who passed these examinations were eligible for promotion. Telegraph and other public utilities are state enterprises and their employees are considered public functionaries.

INTERPRETATION AND AMENDMENT OF THE CONSTITUTION

642 In a democratic country, the most important function of a written constitution is to safeguard the political or public rights of the people. Although the rights and freedoms of the Chinese people are defined in the Chinese Constitution, there is no well-established glossary of legal concepts. For example, just what is meant by "freedom of speech?" What are its dimensions and how far may it be restricted? Such questions will continually demand renewed discussion. Since the Constitution provides that individual freedoms and rights may not be curtailed or restricted by legislation, except in consideration of the social interest and general welfare (Article 23), we must ask what, exactly, constitutes "social interest" and "general welfare"? It is obvious that the guaranty of freedom may be infringed upon if the meaning and scope of social interest

or general welfare are not judicially established and defined.[31] Hence how the Constitution is interpreted is of paramount importance.

In Article 173 of the Constitution, it is provided that the "interpretation of the Constitution shall be undertaken by the Judicial Yuan." Laws that are in contravention of the Constitution shall be null and void. When doubt arises as to whether or not a certain law is in contravention of the Constitution, the Judicial Yuan is to render its opinion thereon.[32]

Amendments to the Chinese Constitution may be made in the following manner. When the National Assembly is in session, an amendment may be proposed by one-fifth of the total number of the delegates to the National Assembly and it must be passed by three-fourths of the delegates present at a meeting having a quorum of two-thirds of the entire Assembly. When the National Assembly is not in session, an amendment may be drawn up

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31. Kwan-sheng Hsieh, A Brief Survey of the Chinese Constitution, Taipei, China, Cultural Service, 1954, pp. 45-46.
32. Constitution, Article 171.

45:Stanford U: S-4, 5 1956 AD1 Formosa
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and submitted to the National Assembly for consideration at its next session by the Legislative Yuan. Such an amendment must be proposed by at least one-fourth of the members of the Legislative Yuan and resolved by three-fourths of the members present at a meeting having a quorum of three-fourths of the members of the entire Legislature. The proposed amendment to the Constitution is to be published at least six months before the convocation of the National Assembly.[33]

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33. Ibid., Article 174.

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Annex "A," Subparagraph 2b.1,
Political Background

STRUCTURE AND FUNCTIONS OF THE CHINESE NATIONAL GOVERNMENT

642 186 The Chinese Nationalist Government is a democratic republic. The national flag has a red background which denotes the spirit of liberty and sacrifice, a white sun with twelve points, which represent twelve hour-periods of day, symbolizing unceasing progress, and a blue sky which signifies equality and justice for all.

I. THE NATIONAL ASSEMBLY

646 The existing Chinese government derives its powers from the National Assembly which, according to the Constitution, exercises political powers on behalf of the people. (A chart showing the organization of the Chinese national government is appended at the end of the present chapter.)

The delegates to the National Assembly are elected on the basis of regional and vocational representation. There should be at least one delegate from each hsien or municipality. When the population of a hsien or a municipality exceeds 500,000, there should

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III. THE FIVE GOVERNMENT DEPARTMENTS

• 642 One of the special features of the governmental organization of the Republic of China is that, instead of the conventional three political divisions in Western countries representing the legislative, executive, and judicial powers, the National Government of China has five branches. The two additional departments are in charge of the censorial power or the power of impeachment, and the power of examination or the power of regulating the personnel of the government. For tens of centuries preceding the establishment of the Republic, "while the emperor, as the sources of all powers, was the only person rightfully to exercise the legislative, executive, and judicial powers, the power of examination and the power of impeachment, however, were exercised by his Ministers in a way independent of him, to insure an efficient and honest government."[6] Dr. Sun Yat-sen, founder of the Chinese Republic, pointed out in his Fundamentals of National

6. Hsieh Kwan-sheng, A Brief Survey of the Chinese Constitution, Taipei, China Cultural Service, 1954, p. 4.

642 Reconstruction[7] that it had been an admirable system and should be preserved in the new Constitution of China. Therefore the framers of the Chinese Constitution have carefully worked out a new system of the division of powers, slicing out of the legislative branch the power of impeachment and out of the executive branch the power of examination of civil servants and delegating those powers to two independent branches of the government. Thus, the Chinese national government has five departments -- the Legislative, the Executive, the Judicial, the Censorial (named Control Yuan), and the Examination Yuan.[8] These five branches of the national government represent five independent political functions from which the new Constitution of China is known as the "five-power constitutional system."

A. The Legislative Yuan

646 The Legislative Yuan is the highest law-making organization in Nationalist China.

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7. Sun Yat-sen, Fundamentals of National Reconstruction (English translation), Taipei, China Cultural Service, reprint 1952, p. 38.

8. Yuan, literally meaning a hall, court, or college, is a government department on the highest level.

C. The Judicial Yuan

692 642 The functions of the Judicial Yuan according to the Constitution[18] are: (a) the interpretation of the Constitution and other laws and decrees; (b) the adjudication of administrative suits and disciplinary punishment of public functionaries. In other countries the last-named functions -- jurisdiction over administrative cases and disciplinary actions against government employees -- normally fall within the authority of the administration.

The President and Vice-President of the Judicial Yuan are nominated and appointed by the President of the Republic with the consent of the Control Yuan. They with a number of Grand Justices form the Council of Grand Justices.[19] The Council of Grand Justices is charged with the power and responsibility of interpreting the Constitution. It is also concerned with the interpretation of laws and ordinances with a view to adjusting

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18. Constitution 1947, Articles 77 and 78.

19. According to Article 3 of the Organic Law of the Judicial Yuan, the Council of Grand Justice is to be composed of seventeen judges of high standing. Twelve of them were appointed in 1948 but only two accompanied the National Government to Formosa. Seven new justices were appointed in 1952.

692 differences and bringing about their uniform
642 application. The tenure of office of a Grand Justice is nine years.

692 Under the Judicial Yuan there are the Supreme Court, the Administrative Court, and the Committee on the Discipline of Public Functionaries. The judicial system in China is based upon the principle of three trials in three grades of courts -- the District Court, the High Court, and the Supreme Court. The Supreme Court is the highest tribunal of the land. It consists of a number of civil and criminal divisions,[20] each of which is formed by a presiding judge and four associate judges. The judges are appointed for life, and they are above party affiliations.[21]

The Administrative Court is concerned with legal proceedings against government agencies. Any individual who is convined that his proper rights or interests have been injured by an unlawful decision or act of a government agency, and who has failed to receive satisfactory redress from the superior

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20. Before the removal to Formosa it had thirteen civil divisions and fourteen criminal divisions. At present it maintains three civil divisions and two criminal divisions.

21. Constitution, 1947, Articles 80 and 81.

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STRUCTURAL CHART OF THE CHINESE M

640 National Assembly
first session 1948 — 3,045 delegates
second session 1954 — 1,578 delegates

President of the Republic of China
Chiang Kai-shek

Vice-President — Chen Cheng

The Executive Yuan
President - O. K. Yui
Vice-President - Huang Shao-ku

Executive Yuan Council
The President and Vice-President of the Yuan, the 10 ministers of State and 5-7 Ministers without portfolio

Overseas Affairs Commission
Chairman - Cheng Yin-fun

Mongolian and Tibetan Affairs Commission
Chairman: Liu Lien-ke

Judicial Yuan
President - Wang Chung-hui
Vice-President - Hsieh Kuan-sheng

Supreme Court

High Courts

District

Ministry of Economic Affairs
Minister - Kiang Piao

Ministry of Finance
Minister - Hsu Peh-yuan

Ministry of of Foreign Affairs
Minister - George K.C. Yeh

rincial Governments and
icipalities under the direct
isdiction of the Executive
s

on and city governments

[Facing p. 372 - part a]

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.642 THE CHINESE NATIONAL GOVERNMENT

Committee on the Discipline of Public Functionaries

Cou
Jus
Pre
Pre

District Courts

Ministry of Foreign Affairs	Ministry of Interior	Minister of Defence	Ministry of Education	Ministry of Communications	M M
Minister - George K.C. Yeh	Minister - Wang Teh-pu	Minister - Yu Ta-wei	Minister- Chang Chi-yun	Minister - Yuan Shou-chien	

[Facing p 372 - part b]

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•642

National Asse
first session
delegates
second sessio
delegates

President of
Chin
Chiang Kai

Vice-Presiden

Control Yuan
President - Yu Yu-jen
Vice-President - Liang Shang-tung
Total membership - 223
Current membership in Formosa - 155

Examination Yuan
President - Moh Teh-hui
Vice-President - Wang Yun-wu

Council of the Examination Yuan
The President and Vice-President of the yuan and 19 Examining Commissioners

The Exe
Preside
Vice-Pr
Shao-

Executi
The Pres
Presid
the 10
State
withou

Ministry of Audit

Ministry of Personnel
Minister - Ley Fa-tsang

Ministry of Examination
Minister - Shih Shang Kwan

Overseas Affairs Commission
Chairman - Cheng Yiu-fun

Provincial Assemblies and Assemblies of Municipalities and the Executive Yuan

Provincial Governme
Municipalities unde
jurisdiction of the
Yuan

Hsien and city councils

Hsien and city gove

[Facing p. 372 - part c]

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642

Legislative Yuan
President - Chang Tao-fan
Vice-President - Huang-Kuo-shu
Total membership - 773
Actual in Formosa at present
523

Discipline
aries

Council of Grand Justices
President and Vice-President of the Yuan and 17 Grand Justices
Actual in Formosa
9 Grand Justices

Ministry of Education
Minister-
Chang Chi-yun

Ministry of Communications
Minister -
Yuan Shou-chien

Ministry of Justice
Minister - Ku Feng-
hsiang

[facing p. 372-part 2]

fol. p 372

Annex "A," Subparagraph 2c,
Political Background

POLITICAL DYNAMICS

642 On Formosa, "Chiang Kai-shek still runs a one-party government, and, in many respects, a one-man government. He is the President of China, Director-General of the Kuomintang, and Commander in Chief of the armed forces."[1]

Ever since the second century B.C. China has been a unified country with a centralized government which might be a benevolent or malevolent autocracy, but the highly centralized policy has held the vast Chinese nation intact for thousands of years. Only during the years when the central government was weak, in times of chaos that the provincial governments asserted their power beyond limits. Dr. Sun Yat-sen remarked in his San-min Chu-i [Three People's Principles]: "The different provinces in China were always under one central government. They were not separate states, neither are they now in such a different position that unified rule is less possible. History tells us

1. "Man of the Single Truth" Time, Vol. 65, No. 16, April 18, 1955, p. 32.

642 that whenever the country was unified, we had a time of peace and tranquility, and whenever the country was split, we had anarchy."[2] Federal system, such as existing in the United States, in which vast powers are reserved to the local constituents, is alien to the Chinese conception of government.

642 63 It is true that the Constitution of the Republic of China has devoted five articles[3] to the enumeration of the powers of the central and local governments, but it does not attempt to define the relation between the central and local governments. What those articles attempt to do is the distribution of administrative duties among the different levels of government according to expediency or convenience. Generally speaking administrative duties are distributed on the principle that whatever can most efficiently be done by the central government will be distributed to the central government. Provincial and hsien governments handle only matters of local interest and anything else that

2. Dr. Sun Yat-sen: Discource on Democracy, San-Min Chu-i [The Three People's Principles].
3. Constitution 1947, Articles 107-111.

642 the central government may assign to them.
631 The central government has the power of redemarcating the administrative divisions of the country at any time. For instance, before the last world war, Manchuria consisted of three provinces, but after the war the number of provinces was changed to nine. In normal times, the central government retains legislative and supervisory powers over practically all matters, and so far no occasion has arisen to call for the redefining of relations between the national and local governments.

631 On Formosa, since the loss of
635 Mainland China to Communism, a peculiar situation has been in existence. Taiwan Province has become the only territory over which the national government of the Republic of China exercises effective control. Two levels of governmental mechanism -- the central government and the provincial government -- have been operating side by side. Except the departments of foreign affairs and defense, administrative functions of all other departments of the central government are overlapping with those of the provincial government. Many foreign visitors are under the impression that most of the administrative powers of the provincial government are being exercised directly by the central government and that only limited residual powers are left to the provincial government. But the facts do not seem to

36: Rowe S-4 (no date) 1955 AF1 China AF1
Form 250 AD1

was that the Taiwanese were accustomed to the peace and order of a country under a foreign tyranny, and could not, at first, understand the "lack of uniformity" and "the complexities" of democratic rule (thanks to the Japanese, on the other hand, they had no illusions about or yearnings after Communism). Finally, the men who governed Taiwan immediately after the retrocession gave every evidence of being more interested in increasing their power and lining their pockets than in providing good management. When, therefore, the Nationalist government moved to Taiwan in 1949, it found that it had taken on numerous grave local problems in addition to those it had brought with it from the mainland.

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Political Reform

The Kuomintang, the leading political party, prepared itself to deal with these problems by putting itself through a reorganization. Its younger, more liberal leaders were, to this end, appointed to a Central Reform Committee, the main task of which was to strengthen and tighten party organization and eliminate corrupt elements, opportunists, and bureaucratic politicians. On 1 September 1950, the Nationalist government was ready to announce a new political program. Its objectives were to

CF [665]

> encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; to establish a democratic industrial system in which the workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprise; to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; to carry out local self-government and to protect civil rights.

CF 666 185

Local self-government and land reform were the fields in which the government brought about the most spectacular changes. It first removed all the social barriers and segregation measures that had been created and maintained by the Japanese. The native Taiwanese were no longer barred from institutions of higher learning, or from the worthwhile positions in commerce and politics. They were encouraged to participate in local self-government, and to think for themselves. By 6 May 1951, 21 mayors and magistrates in 16 counties and 5 municipalities had been elected to their respective offices by popular vote. There are now 6304 village and *li* (comparable to urban wards) assemblies, in which the Taiwanese are learning the art of self-government. Representing them in town and district assemblies are 8024 village and *li* delegates. On the county and municipal levels, there are about 541 popularly elected councilmen. Of an estimated 2,650,000 qualified men and women voters, some 2,416,072 are registered. In keeping with the government's policy of economy, the total number of government employees was reduced in June, 1950 to 81,000. The percentage of indigenous citizens in the government service rose to 65.46 percent.

There has also been a marked change in the importance and responsibility of the posts held by Taiwanese. In the category of first class officials, indigenous personnel have increased from 0.92 percent under Japanese rule to 17.45 percent in the present government. In the category of second class officials, indigenous personnel rose from 1.29 percent to 25 percent.

CF 423 421

Land Reform

The other outstanding reform accomplished by the government has been the carrying out of a new land reform program, which has greatly benefited the lot of the farmers, who are no less than 60 percent of the population. For the 70 percent of the farmers who are

52:Steiner S-4 (no date) 1951
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Nationalist Government Policies, 1949–1951

By GUNG-HSING WANG

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THE political pattern of Nationalist China in contemporary Taiwan (Formosa) is set by a series of events which took place between January 21, 1949 and March 1, 1950. The first was the date on which President Chiang Kai-shek "stepped down" from office to clear the way for a negotiated peace with the Communists. Advocated by the peace party and the moderates within the Kuomintang (KMT) and backed by popular support, the attempt failed in the face of mounting Communist military successes. During the interval, Acting President Li Tsung-jen steered the ship of state against overwhelming odds of financial, military, and political difficulties. His administration was inconclusive when in November 1949 he left for the United States for reasons of health.

Succumbing to the circumstances, a dual process, characterized by the transfer of top-ranking Nationalist personnel, armed forces, and financial assets to Taiwan and a partial disintegration of the KMT, dominated the Nationalist political sky. Of the former, the transfer began with the appointment of General Chen Cheng as Governor of Taiwan on January 5, 1949. It reached a climax on December 7, 1949, when the seat of the National Government was established in Taiwan. The process was completed on March 1, 1950, when President Chiang Kai-shek announced his resumption of office.[1] With reference to the disinte-

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NOTE: Citations and references marked with an asterisk (*) refer to Chinese-language sources.

[1] For constitutional provisions regarding presidential term of office, see The Constitution of The Republic of China, 1947, Arts. 47,

[P.213 (4)]

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD1

665 youth, intellectuals, and agricultural and industrial workers. It commands the party members to go to the masses and work for their well-being.[7]

A new political program was announced on September 1, 1950.[8] Its general objectives are to restore national sovereignty and to put democracy into practice. Specifically, it proposes: (1) to encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; (2) to establish a democratic industrial system in which workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprises; (3) to welcome foreign investment and technical co-operation; (4) to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; (5) to carry out local self-government and to protect civil rights; and (6) following restoration of mainland China, to punish Communist leaders, to extend amnesty to those who follow them under duress, and to allow farmers to continue tilling the land they have been tilling.

Relations Between National and Provincial Government

642 The practical effects of the program may be reflected in varying degrees by what has been taking place in Taiwan.[9] Organically speaking, the National Goverment looks after foreign affairs, national defense, the administration and adjudication of national laws, national revenues, and foreign trade policies. The powers of the provincial government consist of those which are inherent

[7] *Ibid.*

[8] *The Present Political Platform of the Kuomintang*, Taipeh: Government Spokesman's Office, Sept. 1950.

[9] Taiwan: population, 7,026,883 (1949); area, 35,961 sq. km. For other essential facts, see *China Handbook 1950*, pp. 33–39.

[p. 215 (A)]

and those which are delegated to it by the central government. Such matters as local self-government, division of administrative areas, forestry, industry, mining and commerce, educational system, banking, commodity control, navigation, public enterprises, land registration, and police system are legislated by the central government and may be delegated to the provincial authorities for execution. Matters pertaining to agriculture, commerce, industry, education, finance, taxation, and enterprises and cooperatives which are provincial in nature may be legislated by the provincial government.[10] In actual practice, important legislation concerning Taiwan is enacted by the National Government and administered by the provincial authorities. 642

The Taiwan Provisional Assembly, functioning as constituted May 1946, exercises a limited range of legislative powers. It considers "administration policies and activities and the provincial budget." Pending its development into a constitutional representative body, its decisions are subject to the veto of the National Government.[11]

The Governor of Taiwan is appointed by the Nationalist Government. Under him are various departments, bureaus, agencies, and province-operated enterprises. To draw an over-all picture of specific Nationalist policies pertinent to political, economic, social, and military activities on the island, the following analysis, necessarily brief, may be helpful.

Administrative Structure

The political organization of Taiwan follows a pattern of centralization, using 631

[10] For the division of powers, see Constitution of the Republic of China, Arts. 107–109.

[11] For details regarding the Assembly, see Chinese Constitution, Arts. 112–120; also Han Lih-wu, *Taiwan Today*, Taipeh, 1950—quotation at pp. 31–32.

[p. 215 (B)]

4:Grajdanzev--160 S-4 (no date) 1942 Formosans -1-2
116. 643, 177.64 Japan
636.64

"The administration of Taiwan is entrusted to the Taiwan governor-general, who is appointed by the Emperor of Japan. Before 1919 only generals or admirals could occupy this post (1) and nowadays, if the governor-general is at the same time a general or

1. Recently the opinion was expressed in the Japanese press that, in view of the importance of Taiwan as a base for the advance to the South, this practice should be restored.

admiral, he is also commander-in-chief of Japanese forces on the island. If, on the other hand, he is a civilian, he may demand from the commander of the army the use of troops for the maintenance of order. His powers are extensive. He supervises the work of all administrative machinery, promotes the officials, dismisses them from service, though in respect to certain ranks his action must be approved by Tokyo. He has a right to suspend or cancel any order or any administrative measure of provincial governors under him and he can impose on any person on the island, without recourse to the courts, a fine up to ¥200 and/or a prison term up to one year. Under him are his Secretariat, the Departments of Home Affairs, Education, Finance, Colonial Development, Police, Communications, Monopolies and the Research Institutes (Central, Sugar, Aquatic). His actions are supervised by the Japanese Minister of

4:Grajdanzev--160 S-4 (no date) 1942 Formosans-2
116, 643, 177.64 Japan
636.64

Colonial (Overseas) Affairs, but as regards special branches of his administration he is also responsible to the Ministers of Finance and Communications."

4;Grajdanzev--161 S-4 (no date) 1942 Formosans
116, 641, 643, 177.64 Japan
636.64

"The people of Taiwan have no representatives in the Japanese Imperial Diet, they have no representative body which takes part in the legislation or administration of the island.

Under these conditions the position of the governor-general acquires a special importance, and yet if we exclude Kodama, who spent eight years at his post (from February 1898 to April 1906), the average length of tenure is two years and one month, too short a time for a good knowledge of the local conditions. The tenure of the government-general is evidently subject to the vicissitudes of political conditions in Tokyo and has little to do with Taiwan."

25: Plaut--28 [2] U-4 (no date) 1903 Formosans
116, 643, 648, 177.64 Japan
636.64

Finally on the 14th of April 1895, the treaty of Shimonoseki forced China to cede Formosa with all of its islands andthe Pescadores to Japan, and then the Japanese Government began rapidly and energetically to establish order in her new possession. The difficulties were formidable, for the Chinese residents of the island did not look upon the new masters with good grace; then, too, the Japanese were not sure about the best methods of procedure at first, so they were groping and uncertain, and several times they were forced to change their system. That was due to the fact that the local administration was often quite unsuitable for applying the good suggestions of the officials. But finally the administration was organized in an intelligent and permanent fashion, and since 1898 the island has progressed steadily under the energetic and intuitive guidance of the Governor General, Lieutenant General Kodama Gentaro, and the tireless labor of the skilled and discrete Civil Governor Dr. Goto Shimpei.

631 The governor-general was the head of
643 the government-general of Formosa. Appointed directly by the Japanese emperor, he wielded extensive and autocratic powers. He supervised the work of all administrative machinery, nominated all officials under him, and, with the exception of a few of the highest rank such as the governor of the provinces and districts, he could promote or dismiss the officials under him. He appointed half of the membership of the provincial assemblies. He had the right to suspend or cancel orders of the provincial governors, veto measures of the provincial assemblies, and dissolve the assemblies. He could impose on any person on the island, without recourse to the courts, imprisonment up to one year or a fine up to ¥ 200. He was assisted by a director-general of civil administration who supervised the secretariat, the various administrative bureaus, and the Central Research Institute, and an Office of Imperial Affairs which co-ordinated military and civil affairs.[2] When the governor-general was a military man, he was also the commander-in-chief of the armed forces on Formosa. If he was a civilian, he might request the local commander to make use of the military or

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2. Joseph W. Ballantine, Formosa, a Problem for United States Policy, Washington, D.C., The Brookings Institution, 1952, p. 27.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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643 naval forces for the maintenance of order.

647 Under the governor-general, were a secretariat, several administrative departments, which included home affairs, education, finance, police, communication, agriculture, and industry, and monopoly bureaus and research institutes. There was also an
645 advisory council with forty councilors, all appointed by the governor-general, who was its chairman. The term of office for the councilors was two years. "In case of necessity, however, the governor-general of Taiwan is authorized to relieve any councilor of his post before the expiration of his office term."[3] The prerogatives of the council were "to announce its opinions in reply to questions submitted thereto by the governor-general regarding important matters of administration."[4] The councilors were appointed from among high-ranking government officials and resident citizens "rich in scholarship and experience." "Clearly, this is a purely bureaucratic
646 institution. The people of Taiwan have no representatives in the Japanese Imperial Diet; they have no representative body which takes

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3. The Organization of the Council, Imperial Ordinance No. 248, June 1, as revised on June 28, 1930 by Imperial Ordinance No. 128, Article IV.

4. Ibid., Article I.

646 the tenure of the First National Assembly has been prolonged by a special act of the Legislative Yuan. The second session of the National Assembly was convened in Taipei on February 19, 1954 and was attended by 1,578 delegates. On March 10, it adopted a resolution to recall Vice-President Li Tsung-jen for dereliction of duty.[3] On March 22, the National Assembly re-elected Chiang Kai-shek as the President and two days later elected Ch'en Ch'eng as Vice-President of the Republic of China.

II. THE PRESIDENT

643 Under the Constitution the President is the head of the State with power to represent the nation in foreign relations. He commands the army, navy, and air force, and promulgates laws and issues mandates with the counter-signature of the President of the Executive Yuan. Subject to the restraints of the Legislative Yuan he exercises the power to conclude treaties, declare war, and make peace. He may declare martial law, and grant general amnesty, pardon, remission of sentences, and

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3. Li Tsung-jen has been living in the United States since December 1949 and has steadily ignored appeals by the Chinese government and the Kuomintang to return to Free China to direct the affairs of State.

643 restitution of civil rights. In accordance with law, the President appoints and removes civil and military officers, confers honors, and awards decorations.[4]

From the Constitution it may appear that the position of the Chinese President is similar to that of the French President or the British monarch. His decrees are not effective unless they are countersigned by the President of the Executive Yuan (a position corresponding to that of Prime Minister), whose appointment is subject to the approval of the Legislativ e Yuan. But unlike the French or the British system, the Chinese President is under no obligation, legal or political, to appoint the leader of the dominant party in the Legislature to be the President of the Executive Yuan. Chiang Kai-shek himself is the indisputable chief of the ruling party, the Kuomintang, so he is almost free to appoint anyone personally acceptable to him. Another source of the dominating power that President Chiang Kai-shek wields is his personal control over the armed forces. The air, ground, and naval commands on Formosa maintain their highly

4. Constitution, Articles 35-42.

643 autonomous character, and real military control is exercised directly by the President.[5]

645 The tenure of office of the President and Vice-President is six years, with eligibility for a second term. The office of the President is called Tsung-t'ung-fu. Supervising the President's secretariat are a Secretary-General, a deputy Secretary-General, and a Director of Military Affairs (often referred to as Personal Chief of Staff to the President), under whom there are three bureaus in charge of civil affairs, military affairs, and general administration, respectively. Attached to the Tsung-t'ung-fu are a number of tzu-cheng (senior political advisers) most of whom are retired high officials. The present Secretary-General is General Chang Ch'ün, a former Prime-Minister, and General Huang Chen-ch'iu, former Vice-Minister of National Defense, is the Director of Military Affairs.

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5. Joseph W. Ballantine, Formosa, A Problem for United States Foreign Policy, Washington, D. C., Brookings Institution, 1952, p. 98.

645 important government bill is rejected by the Legislative Yuan and his request for reconsideration is overruled by two-thirds of the attending members. The Constitution provides 643 645 that the President of the Republic, in accordance with law, "appoints and removes civil and military officers,"[16] but it is not definitely stated whether the President of the Republic may dismiss at will a President of the Executive Yuan whom he has appointed with the consent of the Legislative Yuan. However, the President could always compel the Premier to resign by refusing to sign the decrees or orders presented by the latter for promulgation. So far no such case has occurred. There is no collective responsibility. The Premier alone is responsible to the Legislative Yuan. Theoretically, the Ministers of State do not have to resign in bloc when the President of the Yuan resigns; however, in practice, a new Premier has been free to choose new personnel to fill all the Ministerial posts. In the last reorganization of the Executive Yuan only one minister and one chairman of a commission[17] and four ministers without portfolio retained their posts.

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16. Article 41.

17. George Yeh, Minister of Foreign Affairs, and Cheng Yin-fun, Chairman of the Overseas Affairs Commission.

631 government enjoys no autonomous power.
635 The governor and all the personnel in key positions of the provincial government are all chosen by the President or at least appointed
643 with his approval. Just like the men in high posts of the national government and the military command, only those considered absolutely loyal are appointed by him. President Chiang Kai-shek has often been criticized in his choice of personnel for rating personal loyalty to himself above everything else. This should not occasion surprise if one is familiar with Chinese history. Ever since the earlier Han Dynasty (202 B.C.-23 A.D.) Confucianism has been the dominant political philosophy of China. Confucius was born in a time of growing political and social unrest. He sought to re-establish order and peace by advocating a beneficent monarchy with all its subjects loyal to the sovereign. Through the milleniums, in the interest of maintaining order and peace as well as perpetuating their rule, Chinese rulers honored and supported Confucius. The emperors always singled out personal loyalty as the criterion for appointment, and President Chiang is merely upholding a deep-rooted political tradition.

Then, China became a republic in 1912. For sixteen long years there were incessant strifes created by different military factions, and chaos gripped the country. With a thousand cadets of the Whampoa Military

643 Academy of which he was president, Chiang started from Canton in 1926 to pacify the country, and in two years he succeeded in establishing a national government at Nanking. In the ensuing years, however, revolts still broke out here and there. As late as 1936, Chiang himself was kidnapped by a former warlord[5] in connivance with the Communists. It was only in the face of Japanese invasion that threatened China's national existence that the country rallied to the support of the Nationalist Government. But, during the disastrous struggle with the Communists after the war, defections were common; even some of Chiang's most trusted commanders turned against him. His profound training in Confucianism together with his unpleasant memory of the recent defections of his trusted men, must have convinced him to value the personal loyalty of his subordinates above every other [redacted]

Although it could be said that Chiang's insistence on rating personal loyalty over efficiency or integrity might have in some measure contributed to his own downfall on the Mainland,[6] the same insistence may

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5. Chang Hsüeh-liang who is interned in Formosa at present.

6. It is common knowledge that some of his trusted friends and relatives abused Chiang's confidence in them to amass fabulous

(continued next page)

643 constitute the source of his strength. No matter what position Chiang Kai-shek may be holding in the government, his leadership is never disputed. Even during his retirement in his native village in 1949, he was able to conduct military operations against the Communists and direct the evacuation of government and military personnel to Formosa.

645 Another source of President Chiang's political power is his position as Director General[7] of the Kuomintang. The Kuomintang or the Nationalist Party was founded by Dr. Sun Yat-sen. Its predecessors, the Hsing Chung Hui (Revive China Society), the Hui (Common Alliance Society), and the Chung-kuo Ko-ming Tang (China Revolutionary Party), also organized by Dr. Sun, all contributed to the overthrow of the Manchu monarchy. The First National Congress of the Kuomintang was held in Canton in 1924. It adopted Dr. Sun's San-min Chu-i [Three People's Principles] as the creed of the Party. The three principles

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6. (continued) fortunes at the expense of the nation. They are the persons who have identified the nationalist government as a corrupt regime. Chiang Kai-shek himself has always led a life of simplicity, according to those close to him.

7. Tsung-ts'ai in Chinese.

52:Steiner S-4 (no date)1951
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625 wine, tobacco, and salt in violation of government monopoly, and violations of the 37.5 rent reduction program.

Conclusions

643 In describing the Nationalist government policies, 1949–51, the writer has sought to ascertain their nature and contents by recounting a chain of events which set the political pattern in contemporary Taiwan and by a survey of what has taken place since. From them may be drawn the following tentative conclusions:

1. Generalissimo Chiang Kai-shek and his supporters have been exercising a dominant role in National Government policies, 1949–51.

665 2. While there are three known political parties active in national politics in Taiwan, the Kuomintang, as presently constituted, is the ruling party.

631 3. The political framework in Taiwan may be described as one of over-all political control by the Nationalist government, centralized management by the provincial government, and local self-government, still in its preliminary stage, at the municipal and county levels.

652 4. The National Taiwan currency has exhibited a degree of stability which compares favorably with that in most postwar countries having suffered from war devastation.

5. Nationalist government assets and reserve, sale of government properties, and ECA assistance are contributing factors in balancing the provincial budgets in recent years.

427 6. The 37.5 rent reduction program has contributed towards rural well-being, along with the projects sponsored by the Joint Committee on Rural Rehabilitation.

433 7. There has been an upward trend in agricultural and industrial produc-

[p. 222 (13)]

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643 naval forces for the maintenance of order.

647 Under the governor-general, were a secretariat, several administrative departments, which included home affairs, education, finance, police, communication, agriculture, and industry, and monopoly bureaus and research institutes. There was also an
645 advisory council with forty councilors, all appointed by the governor-general, who was its chairman. The term of office for the councilors was two years. "In case of necessity, however, the governor-general of Taiwan is authorized to relieve any councilor of his post before the expiration of his office term."[3] The prerogatives of the council were "to announce its opinions in reply to questions submitted thereto by the governor-general regarding important matters of administration."[4] The councilors were appointed from among high-ranking government officials and resident citizens "rich in scholarship and experience." "Clearly, this is a purely bureaucratic
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3. The Organization of the Council, Imperial Ordinance No. 248, June 1, as revised on June 28, 1930 by Imperial Ordinance No. 128, Article IV.

4. Ibid., Article I.

643 autonomous character, and real military control is exercised directly by the President.[5]

645 The tenure of office of the President and Vice-President is six years, with eligibility for a second term. The office of the President is called Tsung-t'ung-fu. Supervising the President's secretariat are a Secretary-General, a deputy Secretary-General, and a Director of Military Affairs (often referred to as Personal Chief of Staff to the President), under whom there are three bureaus in charge of civil affairs, military affairs, and general administration, respectively. Attached to the Tsung-t'ung-fu are a number of tzu-cheng (senior political advisers) most of whom are retired high officials. The present Secretary-General is General Chang Ch'un, a former Prime-Minister, and General Huang Chen-ch'iu, former Vice-Minister of National Defense, is the Director of Military Affairs.

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5. Joseph W. Ballantine, Formosa, A Problem for United States, Foreign Policy, Washington, D. C., Brookings Institution, 1952, p. 98.

646 proposal to raise the rate of electricity, the bills were first severely criticized and rejected, but they were adopted when the Executive Yuan requested re-consideration.[11]

Although the censorial power is allocated to a different branch of the government, the Legislative Yuan has the right to interpellate the President and the heads of the various ministries and commissions of the Executive Yuan on their administrative policies and activities. This right of inquiry has been frequently exercised by the present Legislature. In one such inquiry, a serious case[12] of corruption involving the Minister of Economic Affairs was bared. Court action ensued and the Minister of Economic Affairs was compelled to resign.

B. The Executive Yuan

645 The Executive Yuan, comparable to the cabinet in other countries, is the highest administrative organ in Nationalist China. All

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11. The Executive Yuan may request the Legislature to reconsider a resolution only with the approval of the President of the Republic. The President has no veto power, nor has he any power to dissolve the Legislature Yuan.

12. The case of the Yangtze Lumber Company.

645 the provincial governments and a number of large municipalities[13] are under the direct supervision of the Executive Yuan.

There are eight ministries and two commissions under the Executive Yuan.[14] The President and the Vice-President of the Executive Yuan, together with the eight ministers, two chairmen of the commissions, the ministers and chairmen of the commissions are called the Ministers of State, and five to seven ministers without portfolio form the Executive Yuan Council to which all statutory and budgetary bills, important state affairs, and matters of common concern are submitted for discussion and decision. Assisting the President and Vice-President of the Executive Yuan, and of the other four Yuan, are a Secretary-General and a Deputy 600 Secretary-General. Directly under the

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13. Twelve large metropolises like Shanghai, Canton, and Peiping are under the direct jurisdiction of the Central Government. Other cities are under the jurisdiction of the provincial government.

14. Before the removal of the Central Government to Formosa, there were fourteen ministries and three commissions. The reorganization took place in March 1948.

Directly under the
Executive Yuan there are also a number of subordinate organs. They are: the office of the Comptroller-General, the Government Information Bureau, the Council for United States Aid, the Economic Stabilization Board, the Planning Board, and the Commission on Rationing for the Central Government Personnel.

The President of the Executive Yuan or the Premier is nominated and appointed by the President with the consent of the Legislative Yuan, but other members of the Yuan, including the Vice-President, the ministers of various departments and heads of the commissions, and the ministers without portfolio, are nominated by the Premier to the President of the Republic; appointments are made by the latter without consulting the Legislative Yuan. Therefore, legally speaking, the President of the State is responsible to the people as represented by the National Assembly, the Premier (President of the Executive Yuan) is responsible to the President and the Legislature jointly, and the Ministers are responsible to the President and the Premier jointly.

According to the Constitution,[15] the President of the Executive Yuan resigns if an

15. Article 57.

645 important government bill is rejected by the Legislative Yuan and his request for reconsideration is overruled by two-thirds of the attending members. The Constitution provides 643 645 that the President of the Republic, in accordance with law, "appoints and removes civil and military officers,"[16] but it is not definitely stated whether the President of the Republic may dismiss at will a President of the Executive Yuan whom he has appointed with the consent of the Legislative Yuan. However, the President could always compel the Premier to resign by refusing to sign the decrees or orders presented by the latter for promulgation. So far no such case has occurred. There is no collective responsibility. The Premier alone is responsible to the Legislative Yuan. Theoretically, the Ministers of State do not have to resign in bloc when the President of the Yuan resigns; however, in practice, a new Premier has been free to choose new personnel to fill all the Ministerial posts. In the last reorganization of the Executive Yuan only one minister and one chairman of a commission[17] and four ministers without portfolio retained their posts.

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16. Article 41.

17. George Yeh, Minister of Foreign Affairs, and Cheng Yin-fun, Chairman of the Overseas Affairs Commission.

4:Grajdanzev--160-161 S-4 (no date) 1942 Formosans
116, 563, 646, 177.64 Japan
636.64

" 'For the consulting of the people's opinions' there is an advisory body to the governor-general, Hyogikai (1), established in June 1921. Only government-general

1. Usually translated 'council.'

officials, civil and military, and those private persons 'rich in knowledge and [161] experience' whom the governor-general choses to appoint have a right to represent the people's opinions; but all high officials, civil or military, are Japanese, and, as was mentioned, they are appointed as well as dismissed at the representation of the governor-general. This advisory body, consisting of a chairman, vice-chairman, and forty members is thus made up of persons whom the governor-general finds it convenient to appoint. The chairman is the governor-general himself, and the vice-chairman is his secretary-general. Each member is appointed for a two-years period, but with the permission of the governor-general may be released from duty before the expiry of that period. Clearly, this is a purely bureaucratic institution."

45:Stanford U. S-4, 5 1956 AD1 Formosa
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3. The Organization of the Council, Imperial Ordinance No. 248, June 1, as revised on June 28, 1930 by Imperial Ordinance No. 128, Article IV.

4. Ibid., Article I.

•646 part in the legislation or administration of the island."[5]

635 On the local level, the provincial governors were appointed by the Japanese emperor upon the nomination of the governor-general.[1] They supervised all the administrative bodies in their respective provinces. They could impose upon any person, without recourse to the courts, a prison term of two months and/or a fine of ¥ 70. There was a provincial assembly in each of the five provinces. The provincial assembly had forty members, one-half of whom were appointed by the governor-general and one-half of whom were elected by the city, town, and village assemblies. The assembly exercised limited powers over the provincial budget, matters of tax collection, and of general finance. The provincial assembly also elected six members, who together with the provincial governor and vice-governor formed the provincial council. In the districts the assemblies consisted of twenty members. The district assemblies had no budgetary power; their functions were purely advisory.

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5. Andrew J. Grajdanzev, Formosa Today, New York, Institute of Pacific Relations, 1942, p. 161.

1 [During Japanese Control 1895-1945--Analyst]

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 2b.1,
Political Background

STRUCTURE AND FUNCTIONS OF THE CHINESE NATIONAL GOVERNMENT

642 186 The Chinese Nationalist Government is a democratic republic. The national flag has a red background which denotes the spirit of liberty and sacrifice, a white sun with twelve points, which represent twelve hour-periods of day, symbolizing unceasing progress, and a blue sky which signifies equality and justice for all.

I. THE NATIONAL ASSEMBLY

646 The existing Chinese government derives its powers from the National Assembly which, according to the Constitution, exercises political powers on behalf of the people. (A chart showing the organization of the Chinese national government is appended at the end of the present chapter.)

The delegates to the National Assembly are elected on the basis of regional and vocational representation. There should be at least one delegate from each hsien or municipality. When the population of a hsien or a municipality exceeds 500,000, there should

be one additional delegate for each additional 500,000 . The number of delegates to be elected by occupational groups (trade unions and professional associations), as well as by racial minorities, are "prescribed by law."[1] The first National Assembly, elected in November 1947 before the Mainland of China was overrun by the Communists has 3,045 delegates.

The functions and powers of the National Assembly are enumerated in the Constitution[2] as follows: (a) election of the President and the Vice-President, (b) recall of the President or the Vice-President, (c) amendment of the Constitution, and (d) ratification of Constitutional amendments proposed by the Legislative Yuan.

Delegates to the National Assembly are elected to serve a six-year term. The term of the present Assembly expired in 1954. Because the China Mainland is occupied by the Communists and a new election is impossible,

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1. Subject to change. The number of representatives may be increased or reduced by legislation before the election.
2. Constitution, Article 27.

646 the tenure of the First National Assembly has been prolonged by a special act of the Legislative Yuan. The second session of the National Assembly was convened in Taipei on February 19, 1954 and was attended by 1,578 delegates. On March 10, it adopted a resolution to recall Vice-President Li Tsung-jen for dereliction of duty.[3] On March 22, the National Assembly re-elected Chiang Kai-shek as the President and two days later elected Ch'en Ch'eng as Vice-President of the Republic of China.

II. THE PRESIDENT

643 Under the Constitution the President is the head of the State with power to represent the nation in foreign relations. He commands the army, navy, and air force, and promulgates laws and issues mandates with the counter-signature of the President of the Executive Yuan. Subject to the restraints of the Legislative Yuan he exercises the power to conclude treaties, declare war, and make peace. He may declare martial law, and grant general amnesty, pardon, remission of sentences, and

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3. Li Tsung-jen has been living in the United States since December 1949 and has steadily ignored appeals by the Chinese government and the Kuomintang to return to Free China to direct the affairs of State.

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642 Reconstruction[7] that it had been an admirable system and should be preserved in the new Constitution of China. Therefore the framers of the Chinese Constitution have carefully worked out a new system of the division of powers, slicing out of the legislative branch the power of impeachment and out of the executive branch the power of examination of civil servants and delegating those powers to two independent branches of the government. Thus, the Chinese national government has five departments -- the Legislative, the Executive, the Judicial, the Censorial (named Control Yuan), and the Examination Yuan.[8] These five branches of the national government represent five independent political functions from which the new Constitution of China is known as the "five-power constitutional system."

A. The Legislative Yuan

646 The Legislative Yuan is the highest law-making organization in Nationalist China.

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7. Sun Yat-sen, Fundamentals of National Reconstruction (English translation), Taipei, China Cultural Service, reprint 1952, p. 38.

8. Yuan, literally meaning a hall, court, or college, is a government department on the highest level.

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Its members are elected directly by popular vote -- five for each province or municipality -- with a population of less than 3,000,000. Where the population exceeds 3,000,000, there should be one additional member for each additional million persons. Mongolia, Tibet, and other racial minorities as well as professional groups elect their own members to the Legislative Yuan as separately prescribed by law.[9] Any citizen over the age of twenty-three is eligible to be a member of the Legislative Yuan.

The present Legislative Yuan was elected in May 1948. Its total membership is 773, including:

560	representing 35 provinces
62	representing 12 municipalities
22	representing Mongolia
15	representing Tibet
6	representing minority racial groups
19	representing overseas Chinese
89	representing various professional groups
773	Total

9. Chinese Constitution, 1947, Article 64.

646 Actually 760 members were elected, of whom 684 members attended the first session at Nanking in 1948. Now 523 members are in Formosa; this number includes 110 new members who[10] fill the vacancies caused by death or deprivations of membership of the members remaining on the Mainland.

The term of office of a member of the Legislative Yuan is three years, with eligibility for re-election. The term of the first Legislative Yuan expired on May 6, 1951, but, in view of the extraordinary circumstances which render a new election impossible, the term of office has been extended several times.

The Legislative Yuan has extensive legislating powers, including the sanction of national budgets, ratification of treaties and agreements, adoption of laws, consent or rejection for the nomination of the President of Executive Yuan by the President. In practice, after the government was moved to Formosa, the Legislative Yuan has adopted most of the bills presented to it for consideration with only slight amendments. On a few occasions, such as the government

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10. There were formerly alternate members, i.e., people who during the election, received the second highest number of votes.

646 proposal to raise the rate of electricity, the bills were first severely criticized and rejected, but they were adopted when the Executive Yuan requested re-consideration.[11]

Although the censorial power is allocated to a different branch of the government, the Legislative Yuan has the right to interpellate the President and the heads of the various ministries and commissions of the Executive Yuan on their administrative policies and activities. This right of inquiry has been frequently exercised by the present Legislature. In one such inquiry, a serious case[12] of corruption involving the Minister of Economic Affairs was bared. Court action ensued and the Minister of Economic Affairs was compelled to resign.

B. The Executive Yuan

645 The Executive Yuan, comparable to the cabinet in other countries, is the highest administrative organ in Nationalist China. All

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11. The Executive Yuan may request the Legislature to reconsider a resolution only with the approval of the President of the Republic. The President has no veto power, nor has he any power to dissolve the Legislature Yuan.

12. The case of the Yangtze Lumber Company.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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631
643 naval forces for the maintenance of order.

•647 Under the governor-general, were a secretariat, several administrative departments, which included home affairs, education, finance, police, communication, agriculture, and industry, and monopoly bureaus and research institutes. There was also an
645 advisory council with forty councilors, all appointed by the governor-general, who was its chairman. The term of office for the councilors was two years. "In case of necessity, however, the governor-general of Taiwan is authorized to relieve any councilor of his post before the expiration of his office term."[3] The prerogatives of the council were "to announce its opinions in reply to questions submitted thereto by the governor-general regarding important matters of administration."[4] The councilors were appointed from among high-ranking government officials and resident citizens "rich in scholarship and experience." "Clearly, this is a purely bureaucratic
646 institution. The people of Taiwan have no representatives in the Japanese Imperial Diet; they have no representative body which takes

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3. The Organization of the Council, Imperial Ordinance No. 248, June 1, as revised on June 28, 1930 by Imperial Ordinance No. 128, Article IV.

4. Ibid., Article I.

646 are strictly forbidden, and disputes concerning
642 elections shall be settled by the courts (Articles 130-33). The delegates to the National Assembly and members of the Legislative Yuan are elected directly by the people; but the president and vice-president are elected by the National Assembly, and the members of the Control Yuan are elected by the provincial and municipal assemlies. In local elections of 1950 and 1953-54 on Formosa, the magistrates, mayors, and members of the provincial hsien and municipal assemblies were directly elected by the people in secret ballot. The Constitution also provides that a person after being elected may be recalled by the constituency (Article 133). Beside the rights of suffrage and recall, the people also possess the rights of initiative and referendum. However, although the Constitution states that the exercise of the rights of initiative and referendum shall be prescribed by law (Article 136), no law in this regard has been promulgated.

647 In the selection of public functionaries, the Constitution specifies that a system of competitive examinations shall be enforced, quotas of candidates shall be prescribed severally according to provinces and areas, and examinations shall be held by regions. No person may be appointed to a public office unless he has been qualified through

examinations.[29] Ever since A.D. 132, competitive civil examination has been an established system in China for the selection of men of talent to fill important posts in the government. This provision simply confirms an age-old Chinese practice. In 1953, several civil service examinations were held. In the examination for civil service employees and for professional practitioners and technicians (lawyers, physicians, etc.), 2,400 persons participated in the higher examinations and 988 persons passed. In the general examinations, 155 out of 1,150 participants passed.[30]

In order to qualify for public office, Formosan-born Chinese took a special civil service examination in 1954, at which time

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29. Constitution, Article 85.

30. A high-school graduate is qualified to take the general examination. A college graduate or one who has successfully passed the general examination may participate in the higher examination. Those who have passed the general examinations may fill clerical positions, and the successful candidates of higher examinations may fill higher posts in the government.

641 84 persons passed the higher examination and 216 passed the general examination. Other examinations were held for postal clerks, telegraph operators, engineers, and other postal personnel. Those who passed these examinations were eligible for promotion. Telegraph and other public utilities are state enterprises and their employees are considered public functionaries.

INTERPRETATION AND AMENDMENT OF THE CONSTITUTION

642 In a democratic country, the most important function of a written constitution is to safeguard the political or public rights of the people. Although the rights and freedoms of the Chinese people are defined in the Chinese Constitution, there is no well-established glossary of legal concepts. For example, just what is meant by "freedom of speech?" What are its dimensions and how far may it be restricted? Such questions will continually demand renewed discussion. Since the Constitution provides that individual freedoms and rights may not be curtailed or restricted by legislation, except in consideration of the social interest and general welfare (Article 23), we must ask what, exactly, constitutes "social interest" and "general welfare"? It is obvious that the guaranty of freedom may be infringed upon if the meaning and scope of social interest

644 Directly under the Executive Yuan there are also a number of subordinate organs. They are: the office of the Comptroller-General, the Government Information Bureau, the Council for United States Aid, the Economic Stabilization Board, the Planning Board, and the Commission on Rationing for the Central Government Personnel.

645 The President of the Executive Yuan or the Premier is nominated and appointed by the President with the consent of the Legislative Yuan, but other members of the Yuan, including the Vice-President, the ministers of various departments and heads of the commissions, and the ministers without portfolio, are nominated by the Premier to the President of the Republic; appointments are made by the latter without consulting the Legislative Yuan. Therefore, legally speaking, the President of the State is responsible to the people as represented by the National Assembly, the Premier (President of the Executive Yuan) is responsible to the President and the Legislature jointly, and the Ministers are responsible to the President and the Premier jointly.

According to the Constitution,[15] the President of the Executive Yuan resigns if an

15. Article 57.

D. The Control Yuan

647 The functions of the Control Yuan are threefold. (1) It exercises a censorial power over the behavior of public functionaries, both in the central government and in the local governments, for dereliction of duty or for violation of law. An impeachment, when instituted, is referred to the Judicial Yuan for displinary action, and if it involves a criminal offense, the case is turned over to the law court. An impeachment of the President or the Vice-President of the Republic by the Control Yuan, however, must be presented to the National Assembly for consideration. (2) Through the Ministry of Audit, the Control Yuan supervises the execution of the government budget. It has the power of investigation before and after public money is spent. It checks receipts and disbursements of government offices and public enterprises, and it examines their final financial statements. The Ministry of Audit reports any irregularity in financial matters on the part of an official or a government body to the Control Yuan, which institures impeachment proceedings. (3) In the appointment of the President, Vice-President, and Grand Justices of the Judicial Yuan, and the President, Vice-President, and members of the Examination Yuan by the President of the State, previous consent of the Control Yuan is necessary. A nominee must pass a Review Committee before

45;Stanford U. S-4, 5 1956 AD1 Formosa
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647 being accepted by the general meeting of the Control Yuan.[24]

The members of the Control Yuan are elected by the provincial and municipal councils, the district councils of Mongolia and Tibet, and overseas Chinese groups in the following proportions: five members from every province,[25] two members from every special municipality,[26] eight members each from Mongolia, Tibet, and Chinese nationals residing abroad. The tenure of the members of the Control Yuan is six years. The total maximum membership of the Control Yuan is 223. Actually before the National Government was moved to Formosa, 180 members had been elected. The current membership is 155.[27] Like the members of the Legislative Yuan, members of the Control Yuan cannot be held responsible outside the Yuan for opinions expressed or votes cast in the Yuan, and they cannot be

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24. Law governing the Application of the Power of Consent adopted by the Control Yuan in June 1948.

25. Of the five members from each province, one must be a female.

26. Municipality under the direct jurisdiction of the Executive Yuan.

27. China Handbook 1954-55, Taipei, China Publishing Co., 1954, p. 168.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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647 arrested or detained without the permission of the Yuan.

E. The Examination Yuan

The Examination Yuan is the fifth independent branch of the Chinese National Government. According to the Constitution, its function is "to attend to matters such as examination, appointment, registration, ranking, checking of records, salary scales, promotion and transfer, safeguarding tenures, commendation, compensation, retirement, and pension;[28] in other words, it deals with all affairs pertaining to government personnel.

The President, Vice-President, and a number of members (examining commissioners) of the Examination Yuan are appointed by the President of the Republic with the consent of the Control Yuan. Their term of office is six years. The Examination Yuan has two ministries, one in charge of matters pertaining to examination, and the other in charge of registration of records and review of qualifications of government employees. Several examinations are given each year.

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28. Constitution 1947, Article 83.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Generally speaking, there are two kinds of examinations: (1) to qualify candidates for election to public office or for appointment to government posts and (2) to qualify specialists and technicians for professional practice. The Chinese Constitution expressly stipulates that no person may be appointed to a public office unless he has been qualified through examination.[29] Architects, lawyers, accountants, doctors, pharmacists, nurses, wireless operators, and navigators, in order to obtain their licenses, must either successfully pass a public examination or satisfy the Committee of Review of the Ministry of Examination with sufficient testimony of their educational attainments and past experience. A higher examination and a general examination are usually given simultaneously for each field. High school graduates may take part in the general examination, while college graduates, qualified technicians, public functionaries who have served in the government for three years in a minor capacity, and those who have passed the general examination are permitted to take the higher examination. Those who pass the general examination are qualified for clerical work. Those who pass the higher examination are qualified for higher posts in the government or for professional practice.

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29. Article 85.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 2g,
Political Background

PROPAGANDA

PROPAGANDA AGENCIES

208 647 The principal propaganda agencies of the Chinese government in Formosa are the Fourth Section of the Kuomintang Central Committee, which is in charge of publicity, operates newspapers in Formosa and abroad, publishes magazines and books, and promotes radio programs; and the political department of the Ministry of National Defense, which makes frequent airborne leaflet raids and broadcasts daily to the China Mainland. In addition, it runs a motion picture studio, stages plays, operates mobile units which urge the people to support the government, publishes periodicals, and distributes reading matter to the armed forces.

PROPAGANDA POLICY AND ACTIVITIES

Propaganda to the Mainland

208 123 Propaganda is directed to the China Mainland by airborne leaflets and radio broadcasts. In 1954 some 375,000 leaflets were dropped every two weeks over Chekiang,

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 2h,
Political Background

BIOGRAPHICAL SKETCHES

647 This study has been divided into three sections -- namely, biographical sketches of key personalities in the central government, sketches of important men in provincial and local governments, and sketches of men important in commerce, industry, and in academic life.

When possible, these brief sketches include information as to the date and place of birth, education, experience, general career, and current position. Those selected are considered to be of current importance in political, military, and economic spheres. The limitations imposed by the nature of this study have, in some cases, made necessary the omission of certain personages who were prominent on the China Mainland and now live in semi-retirement in Formosa and promising personalities whose current position may be secondary but who may prove of importance in the future. However, the sketches presented should offer a valuable background to those who wish to become familiar with the men who affect the course of events in Formosa today.

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647 In order to save space, certain abbreviations have been used in the biographical sketches which follow.

CAC -- Central Advisory Committee of Kuomintang
CAF -- Chinese Air Force
CEC -- Central Executive Committee of Kuomintang
CRC -- Central Reform Committee of Kuomintang
CSC -- Central Supervisory Committee of Kuomintang
CUSA -- Council for United States Aid
JCRR -- Joint Commission for Rural Reconstruction
KMT -- Kuomintang

Names are spelled as they most frequently appear in publications regarding Formosa or as preferred by the person concerned.

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA A71

631 urban centers as administrative units. The island is presently divided into sixteen counties and five province-controlled municipalities. Under them are various districts, townships, and villages.[12]

632 Within this framework of centralized
634 control is carried out the program of en-
666 couraging local self-government. As of May 6, 1951, all the twenty-one mayors and county magistrates had been successively elected to their respective offices by popular vote.[13] Besides, there are 6,304 village and *li* (urban units akin to wards) assemblies learning self-government by doing. Representing them in township and district assemblies are some 8,024 village and *li* delegates.[14] On county and municipal levels are some 541 popularly elected councilmen.[15] Of an estimated 2,650,000 men and women of twenty years of age and over who are qualified to vote, some 2,416,072 had registered.[16]

647 Along with the development in local self-government has been an increase in the participation of local inhabitants in the management of their provincial affairs. It may be recalled that under the Japanese, of 84,559 government personnel in 1945, 55.53 per cent were Taiwanese, and the rest Japanese.[17] In June 1950 the total number of govern-

[12] See Provincial Government of Taiwan, *Report on Administrative Reorganization**, Taipeh, 1949; also Democratic Publications Association, *Taiwan Reconstruction** (Taipeh, 1950), Vol. 1, pp. 1–12.

[13] The Broadcast of Voice of Free China, Taipeh, April 28, 1951 reported the conclusion of nineteen local elections with the remaining two to be completed by May 6, 1951.

[14] April 1948 figures. Also see *Taiwan Reconstruction**, cited note 12 *supra*, pp. 7–12. The terms of office of the delegates have since been extended by the National Government to such time as "formal assemblies shall be constituted."

[15] *Ibid.*

[16] 1947 figure. See *Taiwan Reconstruction**, cited note 12 *supra*, p. 7.

[17] For a breakdown of government person-

[P. 216 (A)]

52:Steiner S-4 (no date)1951
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FORMOSA AD 1

647 ment employees was reduced to 81,006, while the percentage of indigenous citizens in government service had risen to 65.46. A more significant change, perhaps, is in the increase of indigenous personnel in positions of responsibility. Among the first-class officials, local personnel has increased from 0.92 per cent under the Japanese to 17.45 per cent under the Nationalists. During the similar period, the second-class officials of indigenous origin rose from 1.29 per cent to 25.02 per cent.

563 Of 113,900 aborigines in Taiwan, 91,-
657 070 of them live in the central mountainous region. Since 1946 they have been exempted from tax payments. Redistricted into a number of villages and subvillages, they have been developing local self-government through village assemblies. There are at present 159 free primary schools among them, educating some 20,000 of their children. In addition, 924 graduates have been awarded government scholarships to enter secondary schools. Among them are also 140 public health clinics serviced by 321 medical people.[18]

Finance

652 The people of Taiwan suffered much when their currency was linked with that of mainland China. From one Taiwan dollar for thirty Chinese dollars (*fapi*) in 1946, the rate climbed to T$1,835 for one Chinese "Gold Yuan" in August 1948.[19] By the time the Gold Yuan collapsed several months later, there was little purchasing power left in the Taiwan dollar worth salvaging. A fresh start was made in June 1949 when the

nel figures on which this analysis is based, see *Taiwan Today*, cited note 11 *supra*, pp. 30–31.

[18] For figures in this paragraph, see *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 20–21.

[19] For a general description of Taiwan provincial finance, see *Taiwan Reconstruction**, pp. 33–77; also cf. *Taiwan Today*, cited note 11 *supra*, pp. 44–76.

[p. 216 (B)]

4:Grajdanzev--139-140 S-4 (no date) 1942 Formosans
116, 648, 659, 177.72 Japan
636.72

"Expenditures for the penetration of Southern countries and [140] 'secret funds' are scarcely likely to benefit the Chinese population of Taiwan."

4:Grajdanzev--140-141 S-4 (no date) 1942 Formosans
116, 648, 652, 659, 723, 177.65 Japan
636.65

"The large expenditures on railways and communications, on research, on investments in the South Seas, etc., show what importance the Japanese attach to the part of Taiwan in the schemes for an advance to the South. The money [141] collected in the Taiwan budget--almost 200 million yen--is thus mainly used, on the one hand, for the construction of the all-important base for Japanese penetration in the South Seas, on the other, for the purchase of Taiwanese products to be sent to Japan (1).

1. In the last few years the Japanese government has started the practice of direct contributions by the Taiwan Treasury to the Japan's Treasury. The sum appropriated in Taiwan's budget for 1941, for example, is 24.5 million yen."

4:Grajdanzev--185-187 S-4 (no date) 1942 Formosans-1-3
116, 453, 648, 177.64 Japan
636.64

"Taiwan 'the stone aiming at the south' was acquired by [186] Japan in 1895. The Bank of Taiwan, established in 1897, had among its tasks penetration of Southern China and Nan-Yo (1). In 1900 it established a branch in Amoy; in 1903—in Hongkong. In 1912 one

1. Nan-Yo includes Southeast Asia and the islands between Formosa and Australia. It is not clear whether the term includes Australia and New Zealand. Inclusion of Australia and New Zealand was denied by the former Minister of Foreign Affairs, Mr. Matsuoka, presumably to alleviate the fears of the Australians, but the maps published by the Japanese theorists of the southward advance include Australia and New Zealand.

in Bangkok. During the same period a well-planned net of agencies of the Bank was laid throughout the Malay archipelago. In 1919 with the assistance of the Bank of Taiwan the Chinese Southern (Hwa Nan) Bank was established with a capital of 10 million yen, and head offices in Taihoku, Taiwan. Its purpose was work among the Chinese emigrants in the colonial countries of Southeast Asia. In the same year the Bank of Taiwan established the South Seas (Nan-Yo) Warehouse Company with a capital of 5 million yen. As early as 1908 the government-general of Taiwan decided to earmark from its budget 700,000 to 800,000 yen annually for the purposes of education, health work, protection, cultivation

of friendship and financial assistance to the Japanese in South China and Nan-Yo. But beside these purposes, about which some information will be given below, there was financial assistance not only to business men as such, but to business men of a special character. Malaya, Netherlands Indies, Australia, the Philippines, French Indo-China and Siam, not to mention South China, were systematically covered by a network of Japanese photographers, druggists, laundrymen and shopkeepers. There were hundreds of photographers who did not have as many as five clients a year; druggists who never sold any drugs to the natives or any one else; fishermen who were busy in surveying the coasts and taking soundings. We do not know how many of them were paid from the general budget of Japan proper; but we know that the sums appropriated annually by the Taiwan government-general were probably sufficient to support 3,000 such people throughout Southeast Asia (Y240 a year being enough for a frugal Japanese in [187] these southern countries.) To this network one should add the branch offices and agencies of the Bank of Taiwan, and the consulates of the Japanese Empire dotting the same area (2).

2. French officials in Indo-China complained that the Japanese knew more about Indo-China than they did. (Noted in Mirovoye Khozyaistvo, . . . , 1941). The same may be said about other countries of Southeast Asia.

The details of expenditures of the Taiwan government-general for this purpose

according to a Japanese source 'are not clear' (3), but it was said that 60% were spent

3. Taiwan Keizai Nempo, 1941, p. 778.

in South China and 40% in Nan-Yo."

4:Grajdanzev--187 S-4 (no date) 1942 Formosans
116, 208, 648, 177.64 Japan
636.64

"Under the auspices of the Taiwan government-general the Zenrin kyokai ('Good Neighbor Association') was established in 1917 and the Hakuai kai ('Philanthropic Association') in 1918. Their capital was supplied by the Government-General and the Bank of Taiwan; they opened schools and hospitals not only in South China, but also in Davao (the Philippines) and North Borneo. After 1918 the Zenrin kyokai started publication of newspapers for Chinese readers in Foochow, Swatow and other places."

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-1-2
116, 648, 177.64 Japan
636.64

"However, only after 1935 was the activity in Southeast Asia greatly intensified, the center, as before, being Taiwan. In 1935 the Government-General [of Japan--analyst] established a research institute for tropical countries. In 1936 a semi-private Taiwan Takushoku Kabushiki Kaisha (Taiwan Colonization Corporation) with a capital 30 million yen was organized, its purpose being not only the development of Taiwan, but also 'economic help' to the Japanese in South China and Nan-Yo and increase of trade with these countries. In 1936 the Japanese Overseas Minister, Mr. Nagata, answering an interpellation in the special session of the Diet, declared that 'the historical mission of Taiwan lies in the South, because of Taiwan's geographic position.' In 1937 the Government-General of Taiwan established a Foreign Affairs Division in charge of affairs of Kwantung, Swatow, Amoy, Hainan Island. The government stated the purpose as [188] being the spread of the knowledge of the Japanese language in South China and Nan-Yo through magazines, photographs, pictures, broadcasts, and in order—according to the statement of the Bureau of Information of the Government-General of Taiwan—to facilitate propaganda for the establishment of the East Asia Co-prosperity Sphere. In 1940 it established the Colonial Personnel Training School and rendered financial help to other institutions with similar purposes. The Bank of Taiwan was urged to give 'special loans' to the Japanese in South China (since 1935), in Nan-Yo (since 1936) and in

4:Grajdanzev--187-188 S-4 (no date) 1942 Formosans-2
116, 648, 177.64 Japan
636.64

the Philippines (since 1938). On March 30, 1939 Shinnan Archipelago (Spratly Island and others)was annexed and declared a part of the Taiwan Government-General."

4:Grajdanzev--188 S-4 (no date) 1942 Formosans
116, 648, 652, 177.72 Japan
636.72

"All this [i.e. Japanese penetration to the South--analyst] required additional grants, and grants were forthcoming. In 1937 the Taiwan Government-General appropriated for the purposes of southern policy Y1,061,000; in 1938 Y1,552,000; in 1939 Y4,073,000; in 1940 Y5,387,000; in 1941 Y8,002,000. These figures may serve as an index of Japan's preparations for war in Southeast Asia. These sums were earmarked for work outside of Taiwan; but at the same time other amounts, enormous by Taiwan standards, were set apart from the Government-General budget for the construction of the base for southern advance in Taiwan. These expenditures from a minimum of 25 million yen in 1937 rose to a minimum of 50 million yen in 1941."

7: Joest--55 [9] E-5 (no date) 1882 Formosans
116, 648

In Taiwanfu there is a British consul who also manages the affairs of the German Consulate (during 1880, two German steamers and 64 German sailboats called at Formosa); most of the time, however, the consul lives in Takao, a small town 36 miles to the south.

25: Plaut--28 [2] U-4 (no date) 1903 Formosans
116, 643, 648, 177.64 Japan
636.64

Finally on the 14th of April 1895, the treaty of Shimonoseki forced China to cede Formosa with all of its islands andthe Pescadores to Japan, and then the Japanese Government began rapidly and energetically to establish order in her new possession. The difficulties were formidable, for the Chinese residents of the island did not look upon the new masters with good grace; then, too, the Japanese were not sure about the best methods of procedure at first, so they were groping and uncertain, and several times they were forced to change their system. That was due to the fact that the local administration was often quite unsuitable for applying the good suggestions of the officials. But finally the administration was organized in an intelligent and permanent fashion, and since 1898 the island has progressed steadily under the energetic and intuitive guidance of the Governor General, Lieutenant General Kodama Gentaro, and the tireless labor of the skilled and discrete Civil Governor Dr. Goto Shimpei.

621 for tax collection, conscription and cases of capital crime which were handled directly by the prefectural government. In this respect the situation in Formosa under the Manchu regime was the same as that on the Mainland. Within the village, the elder was elected, and approved by the local government. He had some assistants under him. Public affairs and minor crimes were decided and disposed of by the village elders. At times the new settlers drew up rules for the administration of local affairs, and affairs for common interest were discussed and decided upon by the council of householders.

648 Manchu control of Formosa was always
631 tenuous. Uprisings were frequent, and after the
669 first quarter of the 18th century internecine wars occurred incessantly. As the government was not strong enough to keep peace and order, self-defense was left to kinship groups or groups of the people of the same native town. In this situation the influential kinship group was very significant. If it was strong, not only could it defend its kinsmen better, but it could even suppress other groups and enjoy various privileges. A strong clan insured survival and prosperity, and this was the reason why an abundance of male descendants became the ideal of life among the Formosan Chinese. This
[161] may account for the enormous rate of natural growth of Formosa's population which is still going on unabated. On the other hand, for defense against raids of aborigines and pirates, even the influential clan had to get the co-operation of other people. This led to territorial consolidation within the village.

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87 In addition to training, Boy Scouts in Formosa render social service by contributing radios and books to the armed forces and by such services as maintaining order in public meetings.[15]

B. Education of Overseas Chinese

87 Education of overseas Chinese is under the charge of the Ministry of Education. It is under-
• 648 taken on the premise that overseas Chinese support the government of their motherland and wish to preserve their traditional culture. Chinese Communists are now making a tremendous effort to indoctrinate overseas Chinese and to attract them to study on the Mainland.

There are about 2,338 primary and secondary schools[16] of overseas Chinese over the world, more than 90 per cent of which are in Southeast Asia. The ministry supplies textbooks to 1,817 of these schools and also distributes periodicals and books intended to familiarize the Chinese with Chinese culture and institutions. The ministry plans to establish a university in Formosa for overseas Chinese; in the meantime, the National Middle School for Overseas Chinese, with an enrollment of 200 students from Vietnam, Korea, and other countries began instruction on October 21, 1955.

The ministry has continually helped the overseas students by assigning them to various

15. Ibid.
16. Asia Foundation Bulletin, Aug. 5, 1955.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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schools on the island, assisting them in finding part-time employment, and offering them counseling while at school. It is reported that, during 1951-54, there were 2,350 overseas Chinese attending colleges and universities in Formosa through the encouragement of the ministry.[17] About one-fourth attended National Taiwan University.

An Overseas-Chinese Teachers' Department is being established at the Provincial Normal University, where 50 teachers, to be selected from middle schools of overseas Chinese, are to complete a two-year training program.

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17. Ibid., May 31, 1955.

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buildings as sites for temporary huts and shacks. Lack of building material, adequate lighting and toilet facilities, and proper water supply created many crowded and unsanitary slum areas in large cities. This situation has been steadily meliorated in the last five years as Formosa's economic rehabilitation progressed and personal income rose. However, some shacks and huts, somewhat refurbished and assuming an air of permanence, are still found in the cities. Typical of them are the shelters on Chungua Road alongside the railroad in Taipei. They are built of old bricks, thin boards, corrugated iron, and bamboo. In some extreme cases, one room no bigger than 9 by 15 feet serves the living needs of as many as twenty people -- from cooking and dining to sleeping in shelves along the walls.[6] The congestion, poor lighting, inadequate ventilation, dampness, and smoke create the worst imaginable sanitary conditions.

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To relieve the crowding and improve living conditions, several housing programs have been launched through the cooperation of the government, U. S. Aid agencies, and the dwellers concerned. In Keelung, where hundreds of dockworkers' families had lived in sheds and empty crates, 102 new houses were built in 1954 under the Keelung Harbor Docks' Self-Help Housing Program. The program was implemented technically and financially by the Mutual Security

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6. Mutual Security Mission to China, Foreign Operations Administration, Housing, (unpublished pamphlet), Taipei, 1954, p. 1.

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Mission to China (MSMC) in cooperation with the Dockworkers' Union and the Keelung Harbor Bureau. The occupants of the new housing contributed 60 days of unskilled labor for its construction, and are now making amortization payments of 15 per cent of their monthly family incomes, so that in less than ten years they will own the houses they now occupy. The houses are built of cinder-blocks and reinforced concrete, and each provides 288 square feet of living space partitioned into two bedrooms, a living room, kitchen, and toilet. The building cost of a house, including the installation of electricity and running water, is about US$400.[7] The Keelung idea has been extended to Kaohsiung Harbor dockers in the South, and to salt-field and mine workers. More than 295 houses were being built in late 1954 for those three groups of workers.

In the meantime, the MSMC is giving technical assistance and providing a long term loan at low interest to implement the work of the National Housing Program Working Group, currently the National Housing Committee (NHC) of the Chinese Government. The Committee administers the national housing program and undertakes such responsibilities as arranging long-term, low-interest loans for housing investment, promoting self-help building for which the government supplies equipment and technical information, and encouraging cooperative housing programs, etc. Under the auspices of the committee, a National Housing Exhibition featuring 52 selected, low-cost housing

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7. Ibid., p. 4.

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designs -- actually built -- was opened in October 1955 in Taipei.[8] The model houses are built of reinforced concrete, kiln brick wall, cement or brick floor, new style tile roof, and are equipped with electricity and running water. The houses range from four-to seven-room units. The best and most expensive type of design provides for a living room, three bedrooms, a kitchen, a dining room, and a bathroom equipped with flush-toilet -- rarely found in Formosan homes. It is believed that the self-help, low-cost housing program as well as the efforts of NHC will go a long way toward improving housing conditions in Formosa.

II. ENVIRONMENTAL SANITATION

A. General Sanitary Conditions

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Climate and economic conditions are the main determinants of the living environment of the Formosan people. Although sanitation is being constantly improved, it is still far from adequate and, with the housing situation, presents a most serious problem in the field of public health. The long summers, relatively warm weather throughout the year, and usually abundant rainfall, provide conditions favorable to the spread of communicable diseases. The rapid increase of population, especially in urban areas, unmatched by proportionate expansion of housing, public sanitation, and fresh water supply facilities has created such new problems as congestion in living quarters, lack of sufficient water, and shortage of public toilets. These conditions aggravate the previously existing situation of poor housing, drainage systems, and waste-disposal facilities.

8. Chung-yang Jih-pao [Central Daily News], Oct. 17, 1950.

874 degree requires seven years of work -- three in pre-medical courses at the College of Sciences and four in specialized studies at the school. In the 1954-55 school year, the school had 175 pre-med students and 361 medical students, 66 of them studying pharmacy. The National Defense Medical College trains doctors and medical technicians for the armed forces. The private Takau Medical College, recently established, has an enrollment of 61 students. It admits graduates of senior middle schools for six years of professional education in general medicine, dentistry, and pharmacy. The National Army Defense Nursing Schools offers nursing diplomas and bachelor degrees in nursing. For the degree, graduation from a senior middle school is required for admission to a four-year course. The Provincial Technical School of Nursing, established in 1953, gives training in nursing education. It admits about forty students yearly.[22] In addition, there are four provincial nursing schools which offer courses in nursing only; two of the schools are at Taipei, one at Tainan, and the other at Taichung. The Provincial Taipei School of Nursing is the only institution on the island that maintains four-year diploma programs in nursing and midwifery.

874 648 In addition to recently expanding its medical facilities, the NTU School of Medicine has made progress in medical education through a United St ates two-way technical assistance group. Under

22. The statistics in this paragraph are from the Department of Education, Taiwan Provincial Government, T'ai-wan-sheng Chiao-yü T'ung-chi, [Statistics of Education in Taiwan Province, School Year 1954], Taipei, 1955, Tables 10, 18, and 21.

874 the program, key local faculty members are sent
649 to the United States for training, and United States medical consultants are sent to the NTU School of Medicine for short periods to teach and to assist in the revision of curriculum and teaching methods. In co-operation with Duke University 32 man-months of United States consultant work at the school was scheduled for the fiscal year 1955 and 36 man-months for fiscal 1956. With the help of these and other U.S. technical assistance consultants, much of the school's curriculum has already been completely revised along modern lines. It is expected that the personnel of the school now receiving training in the United States will eventually take over the work of incorporating new medical knowledge and teaching methods into the curriculum. Recent improvement of school facilities includes the renovation of all key buildings and the establishment of a clinical pathology laboratory and a completely equipped therapeutic and diagnostic X-ray building at the NTU Hospital.[23]

874 A nursing program has been developed to provide more nurses by establishing new schools and to improve the existing training of personnel by short training courses as well as education abroad. A new program at NTU to provide college-level

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23. Mutual Security Mission to China, International Co-operation Administration, op. cit., pp. 3-4.

701 to military call. Up to now, 90,000 Formosans have been drafted into the army to replace aging Nationalist veterans.[16]

•648 642 It seems clear that the Formosans do not have much sympathy for the Communists, although they realize that there is little prospect of their island becoming really independent. They also realize that, as more and more of them are being absorbed into the government and as the Mainlanders are aging, it is only a matter of time before they will win full control of the island.[17] They may differ with the Government in regard to its policy of liberating the Mainland, but they take comfort in President Chiang's assurance that it would not take place yet for some years. As more and more Formosans are inducted into the armed forces, more changes will take place in the Nationalist overall policy for the island. The principal aspirations of the Formosans at this moment are: more self-government, greater freedom of expression, and greater economic security. Their immediate apprehension is a runaway inflation. They are fearful that the Nationalist Government might plunge the island into bankruptcy, as it did on the Mainland in the years following the war, paving the way for Communist conquest.

16, Time, op. cit., p. 34. 72,000 young Formosans were drafted from February to July 1955.

17. Manchester Guardian, Vol. 78, No. 13, Sept. 29, 1955, p. 14.

III. ATTITUDE OF THE MAINLANDERS

648 The Mainlanders are different from the native Formosans in that most of them own property and many of them have a part of their immediate family on the Mainland. They regard their stay in Formosa as temporary. They came to the island with the same implicit faith in the future as that which induced them to evacuate the coastal provinces during the Japanese invasion. They believe that western democracy and Communist cannot coexist for long. Sooner or later showndown fights will occur. They know fully well that the Nationalist forces are not strong enough for a full-scale assault on the continent, but they do not despair. It was their strong determination that tided them over the darkest days of war against Japan before Pearl Harbor. The Communist regime will crumble as a result of its own weaknesses, or the Western democracies will be compelled to take drastic action against it. Somehow their dream of returning to the Mainland will come true. It goes without saying that they are one hundred per cent behind the Nationalist government. Unlike the native Formosans, they are prepared to sacrifice their personal freedom for the time being if by doing so their hope of returning to the Mainland will be realized.

When the Mainlanders migrated to Formosa, they had just gone through a long war with Japan. They were bitter toward anyone who had collaborated with the Japanese. They did not realize that

64 the Formosans, unlike the willing collaborators on the Mainland, were in a different position. The Formosan Chinese were forced by circumstance to accept Japanese education and to carry out Japanese orders. At any rate, the unwarranted prejudice of the Mainlanders for the Formosans created a rift between them, and it was the cause of the February 28, 1947 incident. But time has healed such a breach. Meanwhile the Chinese language has replaced Japanese as a medium of education and communication. Some Mainlanders have learned the local dialects, while many Formosans have quickly taken up Kuo-yü, the Chinese national spoken language. Practically every trace of Japanese influence has been eradicated. The lines of distinction between the Mainlanders and Formosans gradually fades away, and, in the course of time, it will disappear totally, especially since so many inter-marriages have taken place. According to the statistics of the Provincial Department of Civil Affairs, [18] the sex ratio of Mainlanders in Formosa in 1952 was 146 males to every 100 females, and the predominance of the former was even greater between the ages of 25 to 55. This figure has not taken into account of 750,000 men in the armed forces. Consequently more and more Mainlander bachelors have been married to Formosan girls. In the survey of 6,609 marriages during the early months of 1953 made in five localities, [19] 15 per

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18. Arthur F. Raper, etc., op. cit., pp. 239 and 242.

19. Conducted by F.O.A. Mutual Security Mission to China. Ibid., p. 244.

648 cent of them involved Mainland men and Formosan women, and 0.3 per cent involved Formosan men and Mainland women. Among the 1790 court marriages in Taipei in 1955, 1074 brides were Formosans and 714 were Mainlanders, while 1709 bridegrooms were mainlanders and only 81 were Formosans.[20] However, the majority of the civilian Mainlander population belong to the higher age group.[21] Most of them are married, but their families were broken up at the time of their exodus to Formosa. The strong attachment of the Chinese individuals to their families and their ancestral homes makes it impossible for them to forget the liberation of the Mainland, however remote such an eventuality may appear. "It was quite obvious to all but the blind and the bigoted that the Nationalists want nothing more than to be back in China and to leave Formosa as a loyal and prosperous province with a liberal degree of local autonomy."[22]

IV. ATTITUDE OF THE ABORIGINES

563 The aborigines were the victims of ruthless persecution under Japanese rule. The whole aboriginal population was placed under rigid police control. A 316-mile picket line with electrified wire fences and guard houses girdled the districts where the "savages" dwelt. Yet the Japanese failed to subjugate them. As late as 1930, 190

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20. Pan-Asia News Alliance, Taipei, dispatch of Jan. 10, 1956.

21. More than three times as many males as females in the 40-49 group.

22. H. Maclear Bates, Report from Formosa, London, Eyre & Spottiswoode, 1952, p. 120.

605 874 The exact number of personnel belonging to the police force on Formosa is not available. According to the China Handbook for 1954-55, the total police force numbered a little more than 20,000 in 1953. There are two schools devoted to the training of police personnel: the Central Police Academy trains officers, the Taiwan Police Academy trains enlisted men. In 1953, ten officers were selected for advanced training in the United States and Japan.

III. MEASURES AGAINST COMMUNIST ACTIVITIES

668 648 The Communists in Peking see Formosa as a potential threat to their regime in contradistinction to the Chinese people on the Mainland, who look to Formosa in the hope of ultimate emancipation. As long as Formosa remains free, it is a thorn in their flesh. The Nationalist Government may use the island as a staging area in preparation for an attack on the China Mainland, much as the Allies made use of Britain prior to the invasion of Nazi-dominated Europe. In consequence, Communists never relent in their effort to infiltrate into the island.

648 625 The Nationalist Government, alert to the presence of saboteurs and spies, has organized a security network under the direction of Lt. General Chiang Ching-kuo, son of Chiang Kai-shek. The security network is controlled by the

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11. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 184.

648 Files Office (Tzu-liao Shih), attached to the
625 President's Office (Tsung-t'ung Fu). There are security agencies, called investigation and statistics bureaus, in the Ministry of Defense, the Kuomintang, and the Ministry of the Interior (in charge of police). These agencies operate secretly and are known to have made arrests, conducted trials in camera, and even imprisoned and executed political offenders.

Formosa's public security agency is the Peace Preservation Corps, organized in 1949 for the express purpose of maintaining peace and order on the island. Its main objective is to suppress all subversive activities before they can threaten national security. Detachments of the corps are located at strategic points for the protection of railways, bridges, waterworks, power stations, mines, and industrial plants. Mountainous areas are regularly patrolled by members of the corps, and no one is allowed to enter the mountain regions without express permission. The Peace Preservation Corps also regulates all arrivals and departures from the island to prevent smuggling as well as the infiltration of Communist agents.

[635] The governor of Taiwan Province (ex officio) is nominally the commander of the Peace Preservation Corps, but in fact the corps receives orders directly from Chiang Ching-kuo.

In 1950, an underground Communist organization, whose membership included a deputy chief-of-staff, the wife of the general in

648 625 charge of training the new army, and the managing director of the Taiwan Sugar Corporation, was exposed by the Peace Preservation Corps. According to the China Handbook 1954-55, approximately one-hundred espionage cases, involving some 4,500 people, have been uncovered in the past four years.[12] The Pan-Asia Alliance News Agency reported on January 3, 1956 that, according to an official release, Communist agents were most active in Formosa just before the conflict in Korea began, but since the launching of the Counterespionage Campaign in 1950, a number of Communist cells have been discovered. In 1955, two conspiracies were suppressed, although the government report does not give further details. One of these cases may have involved the attempt of Major Kuo T'ing-liang to assassinate President Chiang in May 1955. The case was widely publicized because it resulted in the resignation of General Sun Li-jen, former commander-in-chief of the Nationalist land forces, who had been Kuo's superior for many years.

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In 1951, the Nationalist Government called upon Communists to renounce their affiliation with the Party; in return, they would receive assurance from the government that their life and property would be protected.[13] Several hundred

12. China Handbook, 1954-55, p. 184.

13. Procedures for Communists and Fellow-travelers to Surrender, promulgated on Sept. 16, 1951.

648 Communists have since surrendered to the
668 government.[14]

625 The tightness of security control and
648 the severity of punishment have gained for Formosa the unpleasant appellation of a "Police State." It might be true that in proportion to the size of the territory and the population the number of secret service men is unduly large. This will be no surprise if we take into consideration the fact that the security agents of the Nationalist Government formerly patrolled all of China, a territory 160 times larger than the island of Formosa, and that when the continent was overrun by the Communists, the great majority of those security men had to withdraw to Formosa, for they, more than other groups, were most hated by the Communists. Nevertheless, the swarming of secret service men in Formosa has created the impression that everyone on the island is being haunted by the shadow of a Police State.[15] It is also possible that some searches and arrests have been unwarranted. But overcaution is inevitable as Nationalist China is at war with a ruthless and unscrupulous enemy. After all, under martial law, persons endangering the safety of a nation may be sentenced to death

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14. China Yearbook, 1953, p.825:203 Communists surrendered between May 1952 and April 1953. China Handbook 1954-55, p.184: "More than 100 Communists gave themselves up in 1953."

15. [see following page]

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or to imprisonment for not less than ten years.

The Nationalist Government has been frequently accused of showing little mercy to its enemies, of "imposing more death sentences than anyone else outside the Iron Curtain."[16] In referring to such criticism, Lih-wu Han, former Minister of Education, explains that the government cannot afford to be other than strict and severe. Extreme penalties are necessary because the safety of the island and its people is at stake. Exposure by the government of Communist espionage clearly indicates the nature and extent of the danger. "The electric plant would have been

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15. "The P. D. (Political Department of the Ministry of Defense) is undermining the Army. Instead of seeing comrades to their right and left, soldiers see political spies marching beside them." Robert S. Elegant, "How Good is Chiang's Army," The Reporter, Vol. 5, No. 13, Dec. 25, 1951, p. 18. "Throughout my stay I was haunted by the shadow of a Police State malevolent in its objectives and far-reaching in its methods." H. Maclear Bate, Report from Formosa, London, Eyre & Spottiswoode, 1952, p. 22.

16. H. Maclear Bate, ibid., p. 49.

625 blown up and water works wrecked if the Com-
649 munists had had their way. The lives of responsible personages would have been in constant danger, too. Then, the risk of internal trouble during a possible invasion from outside would have been very grave."[17] It appears that, in order to save Formosa from Communist domination, rigid government control may not be entirely indefensible.

722 During the past few years, as conditions
698 on the island grew more stable, the Nationalist
693 Government has been taking measures to guard against unwarranted arrest and imprisonment. In a decree issued on January 29, 1951, the Executive Yuan prescribed that public defenders should be provided in the military court to defend persons accused of violating martial law in cases where the minimum punishment would be not less than five years' imprisonment. A spouse, lineal blood relative, collateral blood relative within third degree, or a statutory agent may be present at the trial and testify on behalf of the accused.

722 Since 1949 Formosa has been subject to
698 martial law. Article 8 provides that the following offenses committed in strategic zones may be tried by the military court: (a) offenses against the internal security of the state, (b) against the external security of the state, (c) against public order, (d) against public safety, (e) forgery, counterfeiting of currency, valuable securities, documents, (f) murder or homicide, (g) restraining personal liberty, (h) snatching, robbery, and piracy, (i) intimidation and kidnapping, and (j) malicious mischief. If provisions

17. Lih-wu Han, op. cit., p. 49.

Annex "A," Subparagraph 2e,
Political Background

FOREIGN POLICY

648 On October 10, 1952 the Kuomintang convened a congress of its members in Formosa at which the party formulated the following foreign policy: [1]

> "In a spirit of independence and self-reliance we will uphold the UN charter, promote international justice, and help preserve world peace.
>
> "We will strive to strengthen our relations with all other anti-Communist countries and do our best to bring about solidarity and closer co-operation among the anti-Communist countries in the Pacific.
>
> "In the interests of the fight against Communism, we are willing to co-operate and trade with those countries which, though having no diplomatic relations with us, do not belong to the Communist bloc."

This policy guides Nationalist China in its foreign relations. The government of the Republic of China has consistently supported the activities of the United Nations and participates in all con-

1. Declaration of 7th National Congress of Kuomintang, Oct. 20, 1950.

• 648 ferences sponsored by the United Nations and its agencies. Because of financial difficulties Free China withdrew from the International Civil Aviation Organization and the World Health Organization in 1950, and from the Food and Agricultureal Organization in 1951. However, Free China was able to send representatives to the Sixth World Health Conference in 1953 and to the International Civil Aviation Organization in 1954.

When the United Nations resolved to resist the Communist invasion of South Korea, Free China offered troops to join the operations against the North Korean aggressors. Again when the war with the Communists was approaching a critical point in Indo-China and the fall of Dien-Bien-Phu was imminent, Nationalist China expressed readiness to send help to the anti-Communist forces. Although neither of these offers were accepted, Free China cooperated with the United Nations in other ways. The Chinese people on Formosa sent medical personnel and supplies to the South Korean camps, sent packages to the troops and wrote letters to Communist Chinese prisoners of war in Korea urging them to quit the Communist cause. A personal message was broadcast by President Chiang Kai-shek to the prisoners at Cheju Island, expressing his concern for their welfare and exhorting them to stand firm in their choice of freedom. The material support given them by Free China was a factor in the decision of 14,209 Chinese POWs to refuse repatriation

• 648 in spite of Communist coercion.[2] On the day of their release, January 20, 1954, the Nationalist Government sent a team of officers to Korea to escort them to Formosa, where new living quarters -- "freedom villages" -- had been built to accomodate them. Bowing to the general opinion of the United Nations, Nationalist China evacuated Chinese guerrilla forces from the Yunnan-Burma border. These guerrillas had been marauding the Communist border province of Yunnan and had been joined by many refugees who escaped from Communist China. Unable to dislodge them by military means and fearing that Communist China might pursue the guerrillas into Burmese territory, the Burmese government complained to the UN Assembly, which urged Nationalist China to withdraw its forces. Representatives of Burma, Thailand, the United States, and Free China worked out a plan for the evacuation of the guerrillas and the transfer was completed on May 1, 1954.[3]

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2. Some 98 per cent of the Chinese Anti-Communist POW's chose to live in Formosa.

3. A total of 6,526 men and their dependents were brought by plane from the Burma-Yunnan border to Formosa. On May 29, 1954, the commander of the Chinese anti-Communist guerrillas in Burma announced the dissolution of his Headquarters, saying that all troops formerly under his command had been transferred to Formosa.

• 648 Nationalist China has steadfastly resisted the efforts of the Soviet Union to unseat her in the United Nations. As long as Formosa officially represents China in the international organization, the ten million Chinese living in Southeast Asia refuse to co-operate with the Peking regime. Soviet representatives have raised the question of China's representation in successive UN meetings.[4] In 1950, having failed to expel Nationalist China, the Russian representation boycotted the Security Council for seven months.[5] Because of the opposition of the representatives of the United States and South American countries, Russian attempts to force recognition of Red China were thwarted each time by an overwhelming majority.[6]

Unable to replace Free China in the world organization, Russia, however, succeeded in smuggling the Chinese Communist regime into international conferences. The Geneva Conference on Korea and Indo-China in April 1954, the Afro-Asian Conference at Bandung in April 1955, and the current Geneva Conference on the ambassadorial level are the results of Communist endeavors to override the legitimate government of China.

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4. Up to the end of 1954, Soviet Russia had raised the subject of Chinese representation in UN Gen"l Assembly and other international gatherings not less than one hundred and eighty times. Chung-hua Nien-pao [China Annual], 1954, Vol.1, Taipei, China News Press, Feb.1955, p.10.

5. Russian representative, Jacob Malik, walked out of the Security Council on January

[continued next page]

.648 The National Assembly at its second session on March 25, 1954 declared that "the government and people of the Republic of China will never recognize any international conference without the concurrence of the Chinese government." The foreign minister, George K. C. Yeh, also issued the following statement: "The Chinese Government has no intention of participating in any conference to which the Chinese Communist aggressors will be invited. The Chinese Government and people cannot recognize the validity of any decision affecting their interest which may be reached at such a conference."

The enmies of Nationalist China in the United Nations are not confined to Soviet Russia and its satellites; recently, another group of nations, the so-called neutrality bloc, dominated by India, proposed the recognition of two Chinas and the admittance of eighteen nations into the United Nations. If two Chinas were recognized by the United Nations, Nationalist China would be completely overshadowed by the Communist regime, since Red China is the stronger of the two. It would be tantamount to the replacement of Nationalist China by a Communist regime. In a public address, President Chiang Kai-shek

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5. [continued] 13, 1950, and did not return until August 1, when he was to assume the presidency of the council.

6. Forty-four nations in the UN General Assembly voted in favor of Nationalist China, eleven opposed, and six abstained in September 1955.

648 condemned the idea of two Chinas.[7] He cited an old Chinese proverb: "The loyal and the traitorous cannot co-exist." In view of the avowed policy of the Nationalist Government not to sit at the same conference table with the Communists, it seems certain that Nationalist China will withdraw from the United Nations if Communist China should be admitted.[8]

The question of the simultaneous admission of eighteen new members into the United Nations disturbed the representatives of Free China. Practically all of the member nations, with the exception of Nationalist China and Cuba, endorsed the deal. The United States, which has previously voiced strong objection to the admission of Outer Mongolia, reversed her position before the resolution came to the floor of the General Assembly. Among the proposed members, Nationalist China would have four friends -- Ireland, Italy, Spain, and Portugal. But eight others -- Albania, Bulgaria, Hungary, Roumania, Nepal, Ceylon, Finland, and Outer Mongolia -- would certainly side with the Soviet Union if the subject of admitting

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7. Address by President Chiang Kai-shek on the International Situation on February 8, 1955. English translation appears in Free China Review, Taipei, Vol. 5, No. 3, March 1955.

8. The International News Agency reported on December 26, 1955 from Washington, D. C., that the idea of an independent Formosa has made some progress in the diplomatic world.

648 Red China should be broached at the next session. If Outer Mongolia, a Soviet puppet state "with few, if any, outward appearances of nationhood,"[9] and a participant in the aggression in Korea, should be recognized as a full sovereign nation and granted membership in the UN, the admission of Communist China into the UN would follow. However, if Nationalist China should exercise her veto which had not been used before,[10] the government would risk offending many prospective members, whose friendship it did not wish to lose. The resolution was passed by the General Assembly of the United Nations by an overwhelming majority. When the resolution came before the Security Council, the Nationalist Government, fearing that a reversal of its position might affect the morale of people on Formosa and the overseas Chinese, vetoed the entry of Outer Mongolia. In reprisal, Soviet Russia barred admission of Japan into the UN, as Japan had warned Nationalist China the Russians were likely to do. The most influential Japanese newspaper, the Yomiuri Daily, on December 7, 1955, went so far as to say that Nationalist China would be "digging her own grave," should the government

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9. Time, Vol. LXVI, No. 26, Dec. 26, 1955, p. 16.

10. Soviet Russia was responsible for 77 of a total of 80 vetoes cast by the permanent members of the UN Security Council.

648 oppose the entrance of Outer Mongolia. The repercussions of this event upon the future of Nationalist China may be far-reaching. In spite of the exclusion of Outer Mongolia, the Soviet bloc in the United Nations increased from five to nine members. To the Afro-Asian bloc, often hostile to Nationalist China, six new members were added. Japan threatened to reconsider her trading policy with Formosa but has since commenced renegotiations in Taipei.[11] Other members also expressed resentment at Nationalist China fordefying the General Assembly.[12] What consequence this turn of history will have upon

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11. Japan is the largest consumer of Formosan sugar, rice, and pineapple, amounting to more than 50 per cent of the total volume of Formosa's foreign trade in 1954. UP correspondent William Miller report on Dec. 27, 1955, from Taipei, "that unconfirmed reports here said Japan has considered not renewing her trade agreement with the Nationalist Chinese after its expiration date next March." On Jan. 2, 1956, Premier Hatoyama of Japan announced that in view of the close diplomatic relations between Japan and Communist China, he had no objection to paying a visit to Peking. Asahi Daily, Jan.3, 1956, p. 1.

12. French Premier Edgar Faure said in a campaign speech on Dec.26, 1955: "Look at the membership veto just made in the United Nations. Is it realistic to consider that China is still represented by Formosa?" United Press, Paris, Dec. 27, 1955.

the position of Nationalist China will be revealed when the United Nations reconvenes in 1956.

Free China on Formosa at present maintains diplomatic missions in Argentina, Australia, Belgium, Bolivia, Brazil, Canada, Chile, Colombia Costa Rica, Cuba, the Dominican Republic, Ecuador, Egypt, France, Greece, Honduras, the Holy See, Iran, Iraq, Italy, Japan, Korea, Luxembourg, Mexico, New Zealand, Panama, Peru, the Philippines, Portugal, San Salvador, South Africa, Spain Thailand, Turkey, the United States of America, and Venezuela.

Diplomatic representation will soon be exchanged with Vietnam. Free China is also seeking to establish diplomatic relations with West Germany, Iceland, Laos, and Cambodia. Negotiations for a military alliance with Korea and Vietnam are pending.[13] Great Britain, in spite of the fact that she has recognized the Peking regime, maintains a consulate in Taipei to look after her commercial interests.[14] Formosa is also trading with the Netherlands and Burma, although neither country maintains diplomatic relations with Nationalist China. On the other hand, Communist

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13. Negotiations to resume diplomatic relations with West Germany have not been successful, because the latter covets trade with Communist China. Central Daily News, Taipei, Oct.22, 1955.

14. According to reports of the Inspector of Customs, Formosa's trade with Great Britain, Hong Kong, and Singapore totalled NT$401,000,000 in 1954;trade with the United States was NT$ 380,800,000 in the same year.

48 China has offered lucrative trade agreements to many countries on friendly terms with the Nationalist Government. Each of the nations attending the first Afro-Asian Conference at Bandung received an invitation to visit Peking. It appears possible that Egypt will shift diplomatic relations from Nationalist China to the Communist regime. A trade agreement between Egypt and Communist China to exchange small arms for cotton has been consummated. The next Afro-Asian Conference is scheduled in Cairo in May 1956. Egypt will play host to the Peking regime. The presence of the diplomatic representative of Nationalist China may create problems if Egypt maintains its status quo.

The main efforts of Nationalist Chinese diplomacy are directed toward the formation of anti-Communist alliances in the Pacific. In July 1949, during a visit to President Quirino, President Chiang Kai-shek proposed a closer collaboration between Free China and the Philippines against the Communist menace. In a joint statement on July 11, 1949, they declared that the Far Western countries "should at once organize themselves into a union for the purpose of achieving solidarity and mutual assistance to contain and counteract that common threat." Following his Philippine visit, President Chiang went to South Korea. On August 8, 1949, together with President Syngman Rhee, a joint appeal was issued to President Quirino to convene a conference for the purpose of organizing an anti-Communist alliance in the Pacific. Both the

British and American governments were cool toward the idea of forming a military alliance. The conference in May 1950 held at Baguio and attended by representatives from Thailand, Australia, India, Pakistan, Ceylon, Indonesia, and the Philippines, changed its objective to economic and cultural co-operation. Nationalist China and South Korea declined to take part, and the conference concluded without being able to report any substantial achievement.

The invasion of South Korea began on June 25, 1950. Nationalist China immediately offered to dispatch 33,000 troops, but the offer was rejected by the United Nations. President Truman ordered the Seventh Fleet to neutralize the Formosa Strait.[15] As the Communist menace in the Pacific became more manifest, the United States concluded a series of bilateral security pacts with the Philippines, Australia, New Zealand, Japan, and South Korea. Nationalist China was not included nor was she included in the Southeast Asia Treaty Organization. Nationalists feared that the United States might yield to the

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15. On January 6, 1950, President Truman, in a public statement, declared: "The United States will not pursue a course which will lead to involvement in the civic conflict in China. Similarly, the U.S. Government will not provide military aid to the Chinese forces on Formosa."

pressure of Great Britain and the other powers and use Formosa as the price for peace in the Pacific. In December 1953, Nationalist China proposed a security treaty with the United States. The Sino-American Mutual Defense Treaty was signed on December 2, 1954 after a year's negotiation. This treaty forges the last link in "the island chain of the Western Pacific that constitutes, for the United States and other free nations, the geographical backbone of their security structure in that ocean."[16] In a subsequent exchange of notes, Nationalist China promised not to embark on offensive military operations, or to remove military supplies and equipment from the Formosan area, without agreement of the United States.

There is no question that the Sino-American Mutual Defense Treaty has had great value in stabilization of the present position of Formosa. The people on Formosa have complete confidence in the military power of the United States; the United States made it known that it would tolerate no interference from the Communists in the evacuation of military personnel and civilians from the island, and the Communists avoided that area during the evacuation.

There are, however, two factors making for uncertainty in the Sino-American Mutual Defense Treaty. First, Article 10 provides that the treaty may be terminated by either contracting

16. President Eisenhower's message to the U. S. Congress on the Formosan situation, January 24, 1955.

power on one year's notice. Although similar provisions are found in treaties the United States has signed with Korea and the Philippines, the people on Formosa are apprehensive that a change in the world situation may cause the United States to abandon the determination to defend Formosa. Since the treaty does not specify a set duration, the United States is free to annul responsibility on comparatively short notice. Secondly, Article 6 states that the territories covered by the treaty are confined to Taiwan and the Pescadores; any extension of the coverage must be made by separate agreement. Although Public Law 4 enacted by the Congress on February 7, 1955 authorized the President of the United States to use armed forces wherever necessary to ensure the security of Taiwan and the Pescadores, the defense of offshore islands, namely Quemoy and the Matsus, is not specifically mentioned. The intention of the United States have never been clarified.

The importance of these offshore islands to Free China is not sufficiently understood abroad. Quemoy and the Matsus are used to block the ports of Foochow and Amoy and harass Red China's coastal trade and they can be used as advance posts in preparation for the invasion of the Mainland. As long as they are retained by the Nationalist Government, the possibility of the liberation of the Mainland is kept alive. The loss

of these islands would be a serious blow to the prestige of Chiang Kai-shek's government on Formosa. Chiang Ching-kuo, in answer to a question about Quemoy and the Matsus, said: "The most important thing, the thing that really means life or death to us, is the morale on Taiwan. If we lost the offshore islands, our morale -- the soldiers' and also the people's -- would be very, very low. Our people on the Mainland would feel frustration, and they would begin to believe there is no hope for their liberation."[17]

Moreover, if the islands should fall into Communist hands they would form convenient stepping stones to the Pescadores and Formosa. Their loss would attest to the superior striking power of the Communists and would immediately arouse widespread apprehension on Formosa. It is therefore understandable why Nationalist China attaches great importance to the defense of Quemoy and the Matsu islands, and fervently hopes that the United States will never be a party to the surrender of these strategic outposts to Communism.[18]

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17. Robert P. Martin, "Here's how Chiang's Son Plans to Win Back China," U. S. News, Vol.39, No.23, Dec.2, 1955, p.90.

18. In a press conference on Feb. 14, 1955, President Chiang Kai-shek declared that it was the generally accepted opinion by qualified military experts that defense of Kinmen (Quemoy) and Matsu was essential to the defense of Taiwan and Penghu. Free China Review, Vol.5,No.3, March 1955, p. 57.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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648 Under the Japanese from 1895 to 1945, the economy of Formosa was geared entirely to that of the colonial power. The island was developed as a major source of foodstuffs to feed the rapidly growing population of Japan. All possible arable land was brought under cultivation. The production of rice more than doubled between 1905 and 1935; the sugar crop tripled between 1910 and 1940.[4] Great strides were made in modernizing communications and transportation throughout the island, including the construction of a network of railways and roads. After 1937, some effort was directed toward the industrialization of the island. Factories were built, electric power developed, highways and railways improved, and harbors enlarged. A number of large plants were established to use the raw materials of Southeast Asia in the production of semi-finished goods to supply Japanese industry. The chief emphasis was on metals and chemicals. No attempt was made to achieve industrial self-sufficiency on the island. Fertilizer and textiles, two of the most important industrial products in an agrarian economy were totally neglected.

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4. Norton S. Ginsburg, Economic Resources and Development of Formosa, New York, Institute of Pacific Relations, 1953, p. 24.

[178] Economic dependency on Japan was accentuated
648 by the employment of only Japanese in both
439 technical and managerial positions. From the beginning of the Japanese control, trade was confined almost exclusively to territories within the Japanese empire and managed for the most part by Japanese personnel. Japan took between 90 and 95 per cent of Formosa's exports and supplied 85 to 90 per cent of the island's imports. Some sugar and coal were shipped to China, and small quantities of tea and camphor were sent to the United States.
648 Banking and currency were linked to the
454 Japanese system, and all capital investment was controlled by the Japanese.[5] "Every year, for at least fifteen years previous to the war, Japan is believed to have gained directly 150 million yen from her investments in Taiwan, and for the fifteen years before that lesser but still significant sums".[6]

648 Some of the Japanese industrial projects
727 were never completed. Others wer destroyed

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5. By 1939, 90% of all the capital invested in the island was held either by the Japanese government or Japanese nationals; the remaining 10% held by Formosans was mostly invested in small shops. Taiwan, A Geographical Appreciation, Ottawa, Department of Mines and Technical Surveys, Government of Canaca, 1952, p. 16.

6. Ginsburg, op. cit., p. 25.

45:Stanford U: S-4, 5 1956 AD1 Formosa
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648 or severely damaged by Allied bombing during
727 World War II. Further depreciation and deterioration of Japanese installations were caused during and immediately after the war by typhoons and floods coupled with lack of maintenance and repair. Even the railway system, the principal means of freight and passenger transportation, was capable of handling only a fraction of the freight and passenger demand. "Rails were worn thin, one-third of the cross ties were rotten, rolling stock was seriously depleted or in need of complete overhaul."[7] The war and
D7 the repatriation of Japanese nationals after-
433 ward also caused disruption of rural services in credit collection, processing, and marketing of farm produce. Due to a scarcity of imported fertilizers, production of the two principal cash crops, sugar and rice, dwindled considerably. The production of rice fell from 1,100,000 metric tons in 1943 to 600,000 metric tons in 1945 and sugar production dropped from 1,022,000 metric tons in 1942-43

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7. "Economic Progress on Formosa" Chinese-American Economic Co-operation, pub. by Mutual Security Agency Mission to China, Taipei, Vol. 1, No. 2., Feb. 1952, p. 12.

185 First of all, the presence of President Chiang
458 Kai-shek strengthened the political stability of the island. Then the arrival of technical and experienced personnel and capital equipment from the Mainland greatly facilitated the island's economic rehabilitation. With the gold evacuated from the Central Bank of China at Shanghai, the Nationalist Government was able to institute currency reform. Steps were immediately taken to increase the production of food-stuff, and a program was initiated to relieve the Formosan farmers' burden of high rents and high taxes. Taxation was simplified by discontinuing numerous special levies. To insure the cultivator a fair share of his crop, a land reform program was undertaken. Land rents were cut from their previously usurious rate of about 60 per cent of the main crop to a maximum of 37.5 per cent. A limit was set on the ownership of tenanted land. Any land holding in excess of the stated limit was bought by the government and resold to the tenant.

648 In 1950 economic improvement quickened. At the outbreak of the Korean conflict, the United States government assigned the Seventh Fleet to patrol duty in the Formosa Strait. Fear of Communist invasion, which had been the underlying cause of the constant flight of capital, was dispelled. Public confidence was further enhanced by the revival of American economic assistance in June of the same

• 648 year.[9] The aid program permitted prompt and substantial importation of fertilizer, the repair and rebuilding of basic industries, and the rehabilitation and improvement of communication facilities. Since 1950 the United States government has made special annual appropriations for extending aid to China.

American aid to China has three basic objectives: (1) To help achieve economic stability on Formosa; (2) To support military defense; and (3) To improve Formosa's economic productive capacity for self-support.[10] To implement these objectives, the U. S. Foreign Operations Administration (FOA), now the International Co-operation Administration (ICA), maintains a Mutual Security Mission to China (MSMC) in Taipei. The mission to China, through its commodity program, finances the importation of essential commodities such as fertilizer, cotton, soybean, wheat and flour, rubber, metals and machines, and petroleum products to meet

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9. The U.S. Foreign Economic Assistance Act signed by President Truman on June 5, 1950 authorized a program of economic assistance "in any place in China and in the general area of China which the President of the United States of America deems to be not under Communist control."

10. Office of Information, FOA-MSMC, "A Background Summary of the U.S. Economic Assistance Program in Free China." Chinese

(continued next page)

the immediate needs of both the people and Formosan industry. MSMC also supplies urgently required replacement parts and materials for the restoration and development of basic industries and public utilities. The proceeds from sales of American aid commodities are deposited in a special account with the Bank of Taiwan. By agreement, the government of China deposits in Chinese currency an amount equivalent to the cost of the American commodities. These deposits, called the counterpart fund, are used to carry out FOA-approved projects, to meet the expenses of aid agencies, to help the Chinese government reduce its budgetary deficits, and to promote production by extending loans to public and private industries. To administer this fund the Chinese government has established within the cabinet an agency called the Council for United States Aid (CUSA), of which the Chinese premier is the chairman ex-officio.

The mission to China also provides technical assistance to public and private enterprises on Formosa. Under a MSA- and MSMC-financed contract between J.G.

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10. (continued) American Economic Co-operation, Taipei, Feb. 1955, p. 1.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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648 White Engineering Corporation of New York
178 and the Chinese Government, six to nine consulting engineers are retained in Formosa to render technical advice in industrial reconstruction. The objective of the industrial program is to make Formosa self-supporting by fully utilizing its natural resources and developing its existing industrial facilities. Among the island's assets are its potential hydro-electric power, the mineral and forest resources, an industrious population, and the industrial base laid by the Japanese. In the past five years a series of specific projects designed to develop basic industries, electric power, transportation, mining, and fertilizer manufacturing have been carried
648 out. MSMC also renders financial assistance to various projects in social fields, such as public health, education, and public administration. It pays the Public Administration Service of Chicago, which has been retained to make studies and develop plans for improvement in these areas. Under the technical assistance program, a number of Chinese technicians have been sent to the United States and Japan for advanced training and observation.

The greatest achievement of American economic assistance is undoubtedly in the rural program, which affects directly or indirectly every phase of rural life on Formosa. Farm produce accounts for 80 per cent of the value of the island's total production, and three-quarters of grainfully employed Formosans

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648 improved crop seeds and animal breeds, and large quantities of insecticides for the control of crop diseases. Help has also been given in expanding and improving irrigation and flood control systems and in promoting soil conservation and reforestation. Through the establishment of health stations and improvement of hospital facilities, JCRR assists government agencies in eradicating malaria, controlling tuberculosis, and improving rural health in general.[11] The practical benefits of JCRR activities to the farm households are widespread and evident, and the above-mentioned improvements have been accomplished with relatively little money.

648 433 With American aid, substantial progress in economic reconstruction has been achieved in the past five years. Industrial production at the end of 1954 exceeded the peak production under the Japanese by 50 per cent.[12] Electric power has been doubled. Textiles, which were practically non-existent before the war, are now actually overproduced. Rice production in Formosa has been increased

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11. Chinese American Joint Commission on Rural Reconstruction, General Report IV, Taipei, 1954, p. 3.

12. For details, see chapter on Industry.

648 both in yield per acre and in total amount,
433 so there is at present not only a sufficient supply to feed the increased population, but also a substantial amount for export.

648 United States aid appropriations for China
457 from 1951 to 1954 was as follows:

1951	US$ 98,034,000
1952	81,479,000
1953	105,503,000
1954	111,821,000
	US$ 396,837,000

In fiscal year 1955, the allotment totaled US$102,000,000, distributed among the following programs:[13]

Military program	US$ 37,000,000
Commodity aid	34,000,000
Industrial construction	28,000,000
Technical assistance	3,000,000
	US$ 102,000,000

648 From the disorganized and demoralized
199 condition of Formosa in 1949, the joint Chinese
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13. As reported by Martin Wong, Secretary-general of the Council for U.S. Aid on Aug. 12, 1955.

178 and American efforts have effected tremendous
648 change. However, in spite of steady gains,
433 the economy of Formosa has not achieved complete stability. Industrial and agricultural production is higher than before the war, but because of the tremendous increase in population, per capita production is still below the pre-war level. The Nationalist Government has been able to meet yearly budgetary deficits only by relying on American aid and resorting to the printing press. Forty per cent of the annual imports into Formosa are financed by United States aid. Inflation is steadily mounting. The economic situation would be very grave without United States assiatance.

185 On the avowed basis that "a nation's
433 progress and prosperity cannot be a gift from others, but must be sought through production and reconstruction,"[14] the Nationalist Government formulated a four-year plan for economic reconstruction in 1953. The plan aims at developing the island's economy production to a self-sufficient level. By the time the plan is fully implemented, the government intends that Formosa, without

14. Report of Premier Chen Cheng (now Vice-President) before the National Assembly, March 4, 1954.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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[162]
241 The importance of agriculture to the national
434 economy is made more obvious by the fact that a large percentage of Formosan industries involve the processing and transporting of agricultural commodities. Agriculture products also provide an important source of foreign exchange for the island. In 1953, total
[163] exports amounted to approximately US$130,000,000, of which over 90 per cent was derived from the export of agricultural products.

241 The climate in Formosa is eminently suitable for agricultural production. The tropical and sub-tropical atmosphere and abundant rainfall in most parts of the island encourage the cultivation of rice, sweet potatoes, sugar cane, tea, bananas, and vegetables. Rice cultivation is carried on in all parts of the island; sugar cane, sweet potatoes, and peanut are grown in the central and southern sections; tea is cultivated in the northern districts.

648 During the Japanese occupation of
241 Formosa, the policy of economic development was geared to the economic needs of the Japanese Empire. When a shortage of rice was felt in Japan, rice was produced in

648 241 greater abundance in Formosa. Japan's inability to purchase sugar in the international market was balanced by the great quantity of sugar produced in Formosa. Japan's greatest economic efforts on the island were concentrated upon agricultural production in order to exploit to the full Formosa's agricultural potential.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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C. Production of Sugar Cane

249 Sugar cane is the raw material for
648 Formosa's sugar industry. Postwar increase
433 in production is all the more remarkable since in the years before the war the Japanese did all they could to exploit the potentialities of sugar cane production to meet the sugar requirements of Japan proper.

Sugar cane is usually planted in the summer June to September. About a year and a half are required before the cane is ready for harvest. Under the International Sugar Agreement concluded in London in 1953, Formosa is permitted to export 600,000 metric tons of sugar annually. Government policy has been adapted to meet this quota and allow for domestic consumption. Land once used for sugar cane is now being used to produce other products.

D. Production of Wheat

243 Wheat produced on Formosa accounts
433 for less than one per cent of the total value of the island's farm production. For this reason it has been generally believed that Formosa lacks the conditions suitable for

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

[921] 669 people were forced to sell their land cheaply to sugar corporations. The influence of the revolution lead by Dr. Sun Yat-sen on the mainland was also felt. After 1916, the uprisings were suppressed by a forceful police system. Since 1921 the revolts of the aborigines have been largely mitigated.(6) After the 1920's peace was generally preserved in Taiwan, and the resistance of the people changed gradually from revolt by force to organized political and social movements.

005 Peoples' attitudes are much influenced by peace and war. Disturbances do not give the people the needed security of life and property. They must keep a cautious and watchful attitude at all times. It is impossible to invest the surplus of their production for the extension of their business. They have to exchange the surplus of production for gold and silver, and bury it under the ground for safety. Direct and immediate self-sustainance was their main daily concern, and the idea of future development was unfamiliar to them. This society is appruximataly the same as the "militaristic type of society" defined by Herbert Spencer, and no development can be expected from it. In peace time people need not spend their time and energy defending themselves against thieves and bandits. They can concentrate their strength on their work. They can extend their business and gradually plan for the future. Again, we may use Spencer's definition and classify this state as an "industrial type of society". Once 178 established, its development will be accelerated. In Taiwan, after peace and order were established by the colonial government police system, production was extended, ●648 and the population gradually increased.

The various kinds of social change in Taiwan were basically influenced by the colonial policy of Japan. Before World War I the policy was typically colonial. After the war, the spirit of democracy permeated the whole world. In Japan, serious social problems broke out. Democratic and Socialistic movements likewise became widespread. Social movement of the modern type among students and young people broke out in China at about the same time. Under the influence of both China and Japan, political, social, and cultural movements started in Taiwan for the first time around 1920. At first the colonial government tried to suppress them by force, but the current was too strong and the government had to change its policy somewhat. From around 1920, the policy of assimilation was adopted, and there were some improvements in administration. Though the improvement was limited in character, it had a fairly significant effect on Taiwan, and its results were reflected in population data. From [161] 1926 on the system of modern Taiwan was generally molded, and after that date population growth was speeded up.

Japan started her invasion of Manchuria in 1931, intruded in northern China in 1937, and then struck Pearl Harbor in 1941. As the war for expansion was extended, Taiwan was considered a strategic base, and the colonial policy had to change again.

Note 6: Yanaihara, T.: Taiwan under Imperialism. 1929, Tokio, pp. 241-242. Shiomi, T.: "Police System and Economy of Taiwan under Japanese Rule". Quarterly of the Bank of Taiwan Vol. 5, No. 4, 1953, Taipei, pp. 259-261.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Hitherto the development of chemical production, heavy industry, and consumer goods industries on Taiwan had declined, but now they were earnestly promoted. This gave another impetus to social change.

8. Elimination of Epidemics

After the occupation of Taiwan, two things troubled the Japanese most: the revolts of the Taiwanese and epidemics. One branch of the Japanese expeditionary army landed on the Pescadores on March 21, 1895. By mid-May, fully 1945 people out of 6,190 were afflicted by cholera, and 1,247 died. Another branch of the expeditionary army landed on Taiwan at about the same time and was also stricken with cholera, malaria, dysentry, typhus, pneumonia, and beri-beri. Only one fifth of the total army was free from illness by the end of September (5: Vol. 2, No. 12). During the early years of the Japanese occupation epidemics spread widely, and thus, elimination of epidemics was the first administrative task for the new rulers of Taiwan.

Plague, cholera, and small-pox were three serious epidemics in Taiwan. Plague broke out in Hongkong in 1894, invaded in Taiwan two years later, and had spread to many places during the next twenty-two years. During this time more than thirty thousand people were inflicted, and twenty-four thousand died. It was wiped out in 1917 (5: Vol. 2, No. 12). The activities of extermination and prevention by police power were conspicuous. They included the isolation of patients, destruction and burning of contaminated houses, extermination of rats, quarantine at sea ports etc. Though the means adopted were harsh and cruel, they were effective. Cholera was not as serious as plague in Taiwan. A greater prevalence of cholera occured in 1902, 1912, 1913, and 1920. After 1921 the preventative arrangements were more or less completed and by the cooperation of the people and the public health system, the occurence of cholera could be closely controlled.

During the early years of Japanese occupation small-pox was a serious problem. With the enforcement of vaccination, it began to decline after 1903. Since then, except for a greater prevalence in 1918–1920, small-pox has not been a menance in Taiwan (5: Vol. 2, No. 12).

Plague was wiped out in 1917. Cholera and small-pox were under control by 1920. Since then there has been no serious problem of epidemics in Taiwan. Incidentally, the cattle pest which ravaged Taiwan from 1896 and killed more than forty thousand head of cattle, was also exterminated in 1920.[7]

Whether or not a society is menaced by epidemic is always a significant social fact. We may say that freedom from epidemics is the first step toward modernization. In Taiwan, the course of this change can be traced in the data of population change. Before 1920 the death rate was high, and it also fluctuated frequently, and the extent of fluctuation was great. This is a sign of the uncertainty of life. In fact, living in a society where epidemics constantly spread, one could not estimate in the morning what would be happen before nightfall. Fatalism, such as shown in the saying "man proposes,

Note 7: Animal Resources of Taiwan, published by the Bank of Taiwan, 1952, p. 172, p. 286.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

175 village life and family relationships, the people of Taiwan retained the heritage of tradition and custom that they had brought from the mainland. These cultural institutions did not succeed so well in maintaining order in Taiwan as in China, for there were new situations to be met and resolved. Chief among these, for example, was the constant arrival of new persons for whom the obligations of a particular locality might not be binding. But once established in Taiwan, there is no evidence that these institutions underwent any major change throughout the 200 years while Manchu authorities ruled the island.

Historical accounts of this period are little but repetitions of the same events. They show a sequence of misrule, intrigue by privileged groups or classes, frequent bloody insurrections, and strife with the aborigines. The island gained a continual atmosphere of violence and unrest. By one important circumstance the disorders were prevented from being an invitation to social change—they were not revolutions, but rebellions. They arose from dissatisfaction with particular persons in the social order—landlords, officials, or members of rival clans or villages—rather than dissatisfaction with the social order itself.[3] As a result, the disorders often served in the end to establish tradition more firmly.

Taiwan under the Japanese

648 The most decisive event in the history of Taiwan after being opened to Chinese immigration was its annexation into the Japanese Empire. Japan in the 1890's was newly arrived as a nation to compete in Far Eastern political rivalries, and many of its leaders were eager to find areas for its expansion as a respectable colonial power. They magnified a relatively minor incident in Taiwan, together with other grievances, into a pretext for provoking war with China in 1894.[4] It was a brief war of several quick military victories for the Japanese. When peace was negotiated in 1895, they insisted that Taiwan be ceded to them, and in the same year they took possession of

[3] Rebellions were ultimately settled by reasserting the established order, though often not without the use of force in the form of troops. Many of them, however, were actually organized within its framework from the beginning. Much of the disturbance was apparently created by the type of large clan organization found in South China, and by secret societies that were able to develop rivalries on a large scale between formidable groups.

[4] Japanese forces had as early as 1874 made an exploratory expedition to Taiwan, under a similar pretext, that formed the basis for expansionist designs on the island and provided valuable information about its terrain.

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the island and set out to discover the responsibilities and rewards of colonial administration. 648

Japan embarked on this first colonial venture without having at the outset any very clear idea of what use to make of it. The first few years were taken up in consolidating their control over the population and in deciding what to do with the island. As their experiment progressed, the Japanese began to introduce some profound and subtle changes. Their objectives became clarified, and their policies toward Taiwanese more firm. Gradually they evolved a system of managing affairs in Taiwan that developed into one of the most successful colonial programs in the world. As long as they remained, Taiwan repaid them handsomely for their initial investment of care and expense.

Some of the more important aspects of this program will be discussed in subsequent chapters. Here it is appropriate to establish what were broadly the consequences in terms of population trends, and to discover what sorts of information about Taiwan's people can be gained from the records of this administration. The Japanese rationalized certain parts of Taiwan's agriculture, so that the island produced a substantial surplus of farm commodities each year. They established a strong and efficient government, the first that the island ever had. With a shrewd combination of police force and political guile, they imposed strict public order and penetrated every town and village with a structure of organized control. 648 178

They constructed excellent facilities for transportation and communication where there had been none before, founded modern business institutions and commercial centers, promoted some industrial processing of the island's products, rebuilt the major cities, and stamped out the principal epidemic diseases. In short, they transformed Taiwan from a "backward" and neglected land into a thriving region that could regularly export a large share of its agricultural produce. This was a success that would satisfy most of the countries striving for modernization today.

All these material accomplishments of the Japanese in Taiwan are well known. With some justifiable pride, they publicized this side of their rule and compiled an imposing set of statistics to document it. What we propose here is to examine the human side of these developments and to appraise some of its consequences in the 121

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

CHAPTER II

"Economic Development" in Taiwan

648 433 RULING TAIWAN was a task that the Japanese approached with high hopes. Because their goals were ambitious, the problems were more formidable than they might have been with a more modest and conventional colonial program. Their officials in Taiwan were the first overseas administrators in the Empire, and felt a responsibility to make the colony appear worth while at home.[1] Whatever their wider aims, their strongest aspirations for the island expressed themselves in energetic economic policies—policies pursued with such determination that they profoundly altered many aspects of Taiwan's economic life. In the course of their administration, Japanese nationals came to look upon enhanced production with a two-fold purpose: to secure profits for certain individuals and groups, and to promote the self-sufficiency and military strength of the Empire.

Here we shall examine the techniques of their economic program, survey its operation, and endeavor to make some appraisal of the accomplishments. A closer view of its significance for the everyday affairs of the population is reserved for the next chapters.

241 433 The situation that the Japanese first encountered in Taiwan was one of long-established tradition, in which a small amount of innovation could go a long way. Agriculture was the main source of livelihood for practically all Taiwanese. The particular manner in which farming is organized in Taiwan tends, as it does in most of the Far East, to shield it from the intrusions of the modern world. Under the Manchu regime the Chinese inhabitants of Taiwan had developed farming along the familiar lines of their forebears on the China coast. Farms existed on a local village scale and were operated [65] for local subsistence. Most of any exportable surplus of production was removed from the villages in the form of taxes or rent. What was [427] left became absorbed in the costs of civil disturbance, misgovernment, and expansion of settlement, rather than going toward broadening commercial or other opportunities of the cultivators themselves. 433 Whatever may bring about such a situation, it is one that tends to

[1] Most of the later Japanese publications about Taiwan's future also stressed the island's potentialities as a base for southward expansion of the Empire. The grandeur of these proposals suggests that some of them may have been invented in search of favor for their authors more than in serious expectancy of being carried out.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

471 the process of capital formation in Taiwan in basically the same way as at home, by prodding the economy at critical points with innova-
433 tions and developing special social policies to divert the gains from consumption to investment. The success of domestic saving in Tai-
439 wan is simply accentuated by the steady flow of commodity shipments to Japan, whereby Taiwan as an enterprise did more than pay its own way.

This success is best summed up in the yearly figures of trade with the outside world. From 1909 on, with the sole exception of 1913, there was an export balance every year in the value of Taiwan's external trade. Most of its entire trade was carried on with Japan—over 90 per cent after 1930 if Manchuria and Korea are included.[3] Related to the total value of exports, the balance amounted to a steady share of about 30 to 40 per cent of all exports to Japan, 25 to 30 per cent of all exports to the entire world, that were not paid for in the form of imports of commodities (see Table 4). It is not proper to infer from these figures that Taiwan occupied a "favorable" position, since apparently the balance was merely carried on the books of a few companies with home offices in Japan. This being the case, such figures probably even understate the amounts taken out.[4]

The Role of Government Policy

• 648 By implication, the foregoing account reveals that colonial rule
471 yielded quick and gratifying results in Taiwan. These were not

that they fell for Taiwanese. It does seem certain that on the average they must have risen somewhat, but that they did not move very far one way or the other. Undoubtedly some Taiwanese who took part in the new developments became richer, and many who did not became poorer. Agricultural output per farmer definitely increased, as the next chapter will show. There are figures (see Ch'en Cheng-hsiang, 1950, p. 151) that suggest a slight falling off of rice consumption per person, but they must be computed in a way that weakens their reliability. However, the large additions to Taiwan's economy under the Japanese were the new productive facilities, fixed equipment and market organization, which it is the purpose of this chapter to document. There is no way of showing how these improvements were shared by the Taiwanese, though we know that the Japanese took steps to keep the major shares to themselves.

[3] It is fairer to consolidate the "Yen Bloc" as a whole in computing these balances. To some extent imports from Manchuria and Korea were used to offset the account with Japan; this combined account shows a smaller balance than the account with Japan alone in most years. Separate data for Manchuria were not available in preparing Table 4. Aside from their monetary value on a balance sheet, the articles imported from Manchuria and Korea had a special importance, for they consisted mainly of fertilizers that were indispensable to Taiwanese agriculture.

[4] Grajdanzev (1942), p. 157, claims that the export balance cannot be materially reduced by taking account of hidden items; many of these, such as cash remittances to Japan, would actually increase it.

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648 achieved through the efforts of private individuals in a free investment market. The Government-General of Taiwan was given a free
471 hand by Tokyo in most internal affairs, and displayed great interest and vigor in regulating all areas of business activity that it could effectively control. A large part in the formation of capital in Taiwan can be attributed to official steps deliberately adopted with this end in view.

471 On the one hand, these measures consisted of widespread rationalizations in agriculture and large investments providing technical
654 economies to individual farmers; on the other, there were various devices to centralize the heavy investments in large blocs and thereby keep control over the entire venture. The former consisted mainly of improvements that could be initiated and carried out by Japanese without full participation by Taiwanese, and the latter of ways to guide the process and garner the returns. The one served to raise the average productivity of working Taiwanese without depending on them for inception; the other to avoid dissipating the earnings of the colonial enterprise as higher incomes among the Taiwanese, by confining them in the charge of a few Japanese.[5]

Although the Japanese treated their domestic agriculture in much the same way, they made use of their own farmers' earnings in furthering the growth of industry. The fiscal role of rural Taiwan corresponded to that of rural Japan, but in Japan the several lines developed together and were complementary. Fewer opportunities of this nature were exploited in Taiwan, for the complementarities were all external. This is shown in the other side of the picture of trade with Japan—that of imports and their composition. More than half of the value of imports from Japan during later years represented items that were clearly for current consumption.[6] There was surely nothing like the emphasis on heavy capital goods among the remainder that is found in the imports of Japan itself.[7]

Problems of Pacification

471 This study is concerned as much with broader aspects of organiza-
433 tion in economic life as with the economic activities themselves. Thus

[5] One of the organizational devices for diverting this income away from consumption was, as in Japan, to make it flow into corporate rather than individual hands, where its disposition was more easily regulated.

[6] I.e., articles such as food, clothing, paper, beverages, textiles, manufactured consumer commodities, and the like. One suspects that a large part of these went to maintain the comforts of the Japanese living in Taiwan.

[7] For example, see Reubens, Edwin P. (1950), pp. 109-112.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

it is pertinent to examine the stages by which the Japanese spread their influence over business affairs. Before the Japanese occupation, Taiwan was a busy farm area producing chiefly rice and other foodstuffs for itself and neighboring countries. It still held virgin lands that yielded well to the cultivation of Chinese farmers, and was known among Mainland Chinese as one of the few places where fortunes could be made or lost quickly. It was known elsewhere for other features not unrelated to these—foreigners established some renown for the island's production of marketable crops like tea and camphor, as well as for its beautiful scenery and adventure. Some early Taiwanese had always enjoyed years of prosperity, subject to the vicissitudes of weather,[8] warfare among powerful families or with the aborigines, and to the unpredictable greed of officials. 471 433

Although agriculture was the mainstay of livelihood, there were the subsidiary pursuits commonly found from place to place in China. Additional opportunities arose in connection with commerce, which was the most flourishing sphere of enterprise. The export trade in the few products shipped abroad was the only spot affected by foreign influence. A small number of Western traders had stayed in Taiwan, arranging for the sale and delivery of the island's produce to the outside world, but the scope of their business operations was limited to buying and shipping. Even tea-growing, which an Englishman had begun, was left entirely to the local population and Chinese middlemen, up to the stage of packing and sending the tea abroad.

The settled portion of the island, often down to the actual appearance of its villages, was a close replica of conditions on the mainland of South China, 100 miles away. The Manchu government adopted policies calculated to restrict rather than encourage any growth or diversification of economic activities. It abhorred the prospect of having the profits of any sponsored enterprise go to foreign merchants, and suffered an incapacity for such sponsorship inherent in its organization.[9] Observers of the period saw little likelihood of change.

Hence Taiwan when the Japanese acquired it was already a granary ready to function as a going concern, but with some impediments to being operated as such. In contrast to both China and Japan, it 471 433 648

[8] These hazards were many and frequent. Lack of systematic attention to irrigation had placed farmers at the mercy of floods, local droughts and destructive hurricanes, and severe earthquakes were common.

[9] This aspect of early political and business affairs in Taiwan is described at great length in Davidson, James W. (1903), Chs. 14, 15, and 17.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

471 was a newly settled land whose surface still showed little strain of intensive clearing and cultivation, and whose manifest possibilities 433 for wider exploitation in agriculture and other lines had scarcely 648 been tapped. Merely imposing public order and effective political administration could hardly have failed to ensure general prosperity, and the Occidental community at the time contemplated the experiment with great interest.

The new authorities did not leave much room for doubt about their intentions for the economy. Even while engaged in some dissension and maneuver for power between their own civil and military officers, they quickly set about constructing railroads as a state enterprise, reinstituting an official monopoly of camphor (amounting to a world monopoly since Taiwan with Japan was the sole important world producer), nurturing one large company for practical research and experiment in sugar production, reviving the former domestic monopoly of salt, and executing a complete and accurate land survey—Taiwan's first—in order to regulate some of the discordant relations of tenancy among farmers and landlords.

Most of the administrative changes were based on a notorious need for reform of pre-existing practices. But all of these reforms were two-edged. Besides regularizing commercial practices and "correcting abuses," the official monopolies and export associations slowly made it impossible for foreign concerns to remain in operation. The revenues from key lines of business soon became centralized in either the Government-General or corporations explicitly controlled by it. Those relations began to appear between state and business that determined the future course of the fields involved. The land survey [651] furnished a basis for levying a stiff land tax which brought forth a gratifying and dependable flow of revenue into the public treasury and helped to finance later development schemes.

648 If the overall design of economic expansion had been fixed in the minds of influential Japanese even before they took possession of Taiwan, and to some extent this seems likely, its timetable was not. They did not foresee, for example, that almost ten years of costly and arduous military campaign would be needed to subdue the aborigines and thousands of Taiwanese in the lowlands and foothills who had reverted to banditry. And it became apparent only after many Japanese lives had been forfeited to sickness that this "pacification" of the island had to be accompanied by full-fledged warfare against disease and a general sanitation program, in order that enough

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

Japanese government officers could be stationed over the island to establish political order firmly. 648

This delay in extending their mastery over the whole of Taiwan was a disappointment to the Japanese. It spurred them to concentrate their efforts at organization on measures other than force to bring the inhabitants under control. Once set in motion after some three years' experiment and delay, their methods brought swift results. They encircled and isolated the aboriginal tribes in the hills, and introduced a refinement of old Chinese forms of keeping local order—the so-called *pao-chia* system.[10] 648 631

Private Corporations and Japanese Investment

Other measures followed to make the Japanese rule more effective. As the exercise of authority became more a matter of routine, the policy turned more and more to exploring improvements and enlargements of production. This progress in government can be traced in the annals of specific achievements, like the drive to raise rice yields[11] and the public health program. By 1905 the Government-General felt itself well enough established to take a detailed census of the population; the descriptive report of its procedures is the best evidence of a firm degree of control and competence in performing complicated administrative tasks in Taiwan. 648 659

For the next 25 years or more, until they began to shift their energies to preparation for World War II, the Japanese proceeded to work out their policies for Taiwan (outside of the Aborigine Territory) with scarcely a serious check.[12] This long interlude between two periods of tight regulation is sometimes known as one of official "liberalism" or laissez-faire toward business affairs. It can be so designated, however, only in contrast to the strictness that preceded and followed. In steady succession the government completed several major projects. It finished the land survey of the entire island, essential to all their later engineering works as well as to the desired 654

[10] The *pao-chia* system was a scheme for assigning joint responsibility to village and familial groups for the conduct of their members. Its operation and the reasons for its effectiveness are taken up in the following chapter.

[11] Mendiola, N. B. (1949), p. 76 ff.

[12] The Taiwanese efforts at insurrection, as for example recounted in OFNAV, Civil Affairs Handbook (1944), pp. 173-177, tended to be exaggerated by their instigators. Due to their own clumsiness, these were quickly put down by the Japanese, though not without some local disruption. Inside the Aborigine Territory, on the other hand, the Japanese devoted many years of hard fighting and frustration to "pacification," and did not hold the entire island securely until the mid-1920's, nor peacefully until almost 1940.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

"ECONOMIC DEVELOPMENT" IN TAIWAN

Industrial Growth during the War

722 After setting the stage for limited industrialization by their treatment of large business in Taiwan, Japanese leaders after 1940 began actively to move the players. The centralized corporate structure had been expected to be adequate preparation for most of the demands of war. The Government-General made frantic last-minute attempts to expand specific fields in which Japan itself was short, particularly aluminum and coal. But before long the subordination of Taiwan's economy to heavy industry in Japan, which had seemed so satisfactory, turned out to be a source of weakness. Naval losses started to interfere with shipping between Japan and Taiwan. Many of the small but essential items supplied from the home islands (special equipment, replacement parts, fuels, and skills) became unobtainable. Certain large imports such as fertilizer were cut off.

None of these shortages was fundamentally important for the island itself, since food was sufficient for its population and little else had previously been imported. Lack of articles of the first sort did play havoc with some of the new industrial output, and caused much of the equipment to deteriorate. Exports of aluminum and coal slowed down to a trickle by 1944, and practically all shipping to Japan—even rice and sugar—was discontinued early in 1945.[29] By the time of Japan's surrender much of the highly organized economic life had come to a stop, but Taiwan suffered no devastating damage as a result of the war. Agriculture was still conducted as usual, except that without fertilizer and other accustomed capital the yields had fallen off substantially.

Accomplishments of Japanese Colonial Policies

648 659 Having described the workings of colonial administration in Taiwan, one should have some idea of its accomplishments before going on to discuss in later chapters its consequences in the lives of the Taiwanese. For this purpose, the abundance of records kept by the Japanese is often a hindrance rather than a help. In general the economic statistics are not up to the standards of the population data. Numerical tables are plentiful, but explanations of what the numbers mean are not. They disagree from source to source, seldom with any reason given for the discrepancies. One must therefore look for summarizing measures, and not for fine detail.

[29] See Cohen, J. (1949), pp. 154-158.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

121 eastern part of the mainland to Taiwan had been going on for several
167 hundred years, beginning in the 1600's and virtually ending about
177 1900 when it was almost completely stopped by the Japanese regime.
178 Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 During the Japanese occupation of Taiwan, except for the period
179 just before and during World War II when they attempted to Jap-
178 anize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese population has been significant. The combination of relatively efficient gov-
[744] ernment, orderliness of life, and public health measures, together with
[20] an extensive system of communications on a relatively small island has
[16] greatly facilitated rapid population increase on a stable land base and
[369] a rapidly increasing growth of urban centers.

Out of these developments, the most significant changes for the rural
369 population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and, with this an increased spread of urban influences or at least their
[167] effects into the rural villages. These increasingly significant extensions

1:Gallin E-4,5 (1957-1958) 1966
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some insights into what is now taking place on the Chinese mainland. For many of the changes now taking place both in Taiwan and on the mainland are primarily due to the same cause—the encroachment of urbanization on a traditionally agrarian culture, whether enforced by the Japanese, the Nationalist Chinese, or the Chinese Communists.

FIELD METHODS AND PROBLEMS

T 121

In the selection of a research site, I looked for a Taiwanese village with several attributes. These were that the inhabitants be of mainland origin, preferably descendants of early emigrants from the province of Fukien; that the village have agriculture as its primary means of livelihood; that it have a moderate-sized population, preferably between five hundred and one thousand inhabitants, to facilitate the achievement of familiarity with most of the people and with all aspects of village cultural life; that it be fairly traditional both culturally and socially and as typical as possible of the general villages in that area; and that housing be available inside the village for me, my wife, and our interpreter. It was also important that the village not be too near a major city, and yet not be geographically or culturally isolated from the main flow of Taiwanese life; it had to be identifiable as a definite community.

And, of course, it was important that the villagers be receptive to having a foreign observer move into the village.

F [133] [131]

It is no easy task to search for a village in which to carry on research in an unfamiliar country. The island of Taiwan, which on the map appears to be minute, is actually 250 miles long from north to south and 90 miles wide; it has an area of 13.8 thousand square miles.

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At the start of my search, I talked with the staff of the Joint Commission on Rural Reconstruction (JCRR), a Chinese and American agency which plays an important role in rural development in Taiwan. They briefed me on the cultural and geographic areas of rural Taiwan, and we decided that the *hsien* (counties) of Chang-hua, Taichung, and Yun Lin (all on the west-central coastal plain of Taiwan) offered the best possibilities for a suitable village. The next step was to travel by jeep within this area with JCRR field agents to visit many different kinds of villages and make a final choice. The interpreter, whom I hired at that time to live and work with my wife and me in the village, was a companion on these excursions. (For a discussion of translation methods and the use of the interpreter in the field see Appendix I.)

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T 121

During the time we were investigating the many villages, we also visited local Farmers' Associations and *hsiang* (district) public offices. We held many long discussions with local officials to get additional

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The Setting

T 128 In any community study there is always the question of where to begin outlining the picture of village life: on what does one focus first? While the question is perhaps just as urgent during the actual fieldwork, in the field it is possible to observe and ask questions on many subjects at the same time and to move from one subject to another in the course of an interview. But in attempting to put the ethnography down on paper, the decision must be made where to begin.

I have chosen to begin this book as I began my fieldwork—with a general picture of village life that will provide a context which can give meaning to particular aspects of village life. This picture will be followed in Chapters 3 and 4 by a description of the village livelihood, although it has perhaps been more common to begin Chinese ethnographies with a discussion of family and kinship (here Chapters 5 and 6). The importance of the economic sphere in Hsin Hsing is explicit in the very purposes of this book as noted in Chapter 1 and the conclusions of Chapter 9; its importance was implicit throughout the fieldwork as it will be throughout this book. We now turn then to the setting of the village so that specific topical chapters which follow will have some contextual meaning.

T 131 F 497 Travel to Hsin Hsing village from the capital city, Taipei, is neither easy nor brief. The approximately one hundred and seventeen-mile trip to Chang-hua, the closest major city, must be made mostly by train via the seacoast or by the interior route through Taichung City. This takes about three hours by diesel express or six hours or more by a local train. It is generally possible to find a seat on the diesel express, but on the local trains one must almost always stand a good part of the way.

F 311 F 499 175 648 Once out of Taipei the countryside is almost all rice paddies and farmland. Even in the mountain area between Taipei and Taichung, terraced rice paddies form a part of the green and lush vegetation typical of Taiwan. The train goes through a series of tunnels in these rugged mountains, and if one happens to be traveling with a Taiwanese companion, he will probably point out that these tunnels, like the railroad lines, were all built during the Japanese occupation.

1:Gallin E-4,5 (1957-1958) 1966
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With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable. 175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan. 175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Goddess Matsu. 464 369 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[2] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were 175 124 127 [161] [579] 241 312

1:Gallin E-4,5 (1957-1958) 1966
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the main products. Rice growing played little part in the economy. The almost total lack of irrigation, presumably combined with a high mortality rate, prevented any rapid increase in population. There were not even enough people to exploit the land fully.

The present area of Hsin Hsing was at that time the site of only a few scattered households. The inhabitants were so few and so weak, and the bandits so many and so strong, that Hsin Hsing and eleven nearby villages formed a mutual protection association. When a village was attacked by bandits, it sounded large gongs as an alarm signal; the signal was relayed from village to village, and the able-bodied men rushed to the aid of the community under attack. The associated villages still maintain an informal organization today, though its function is now the production of a joint annual religious procession (which will be discussed in Chapter 8).

The coming of the Japanese to Taiwan had major repercussions not only for Lukang but for the Hsin Hsing village area generally. Once their rule was established on the island, the Japanese moved quickly to bring about law and order by suppressing the bandits. They eliminated the lawless element from the countryside and brought new security to the village people.

The Japanese also took in hand the extreme complexities of a tri-level land tenure system of landlords, tenants, and subtenants. (See details in Chapter 4.) In order to establish clear property rights and increase the efficiency of tax assessment and collection, the Japanese carried out extensive land surveys from about 1898. In 1905 the "Land Investigation Regulations" were promulgated; they resulted in a greatly simplified land tenure structure which included only landlords and tenants. This basic system is still in force today. Even in more recent years, although the Land Reform Program of the Chinese Nationalist government modified the internal content of the land tenure structure, its form has remained roughly the same.

At the same time, the Japanese gradually extended the irrigation system to serve much larger areas (see *Pu Yen Chuang Yen Ke Chih*)[4] as part of their effort to integrate the colonial area of Taiwan into the Japanese economy. The development of a major irrigation system enabled the agricultural population to expand its rice production greatly, and this rice ultimately became its major export to the Japanese homeland (Barclay, 1954b:18–42).[5]

The expansion of the irrigation system, accompanied by a greater emphasis on agriculture in the area, occurred at about the time that the main impact of the closing of the port of Lukang began to affect the villagers, who thus lost the opportunity to supplement their livelihood by working in the port. The increased irrigation meant that wet-rice could be planted profitably. Wet-rice production demands a

1:Gallin E-4,5 (1957-1958) 1966
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greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

1:Gallin E-4,5 (1957-1958) 1966
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F 175 648 F 175 648 [illegible] 725 161 423 464 [178] [462] ists brought a change in regime to Taiwan. This is known as the "Restoration." At the outset the Taiwanese people welcomed the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been killed in the war in Southeast Asia. The other villagers from Hsin Hsing who had surrendered or been taken as prisoners while working in Japanese labor groups were returned to Taiwan in ships. The return of these men to the land was followed by a general population increase, and in the Hsin Hsing area this quickly aggravated the problem of land scarcity; tenancy became a greater problem than ever before. Families could neither buy nor rent enough land to support themselves adequately, and, in addition, the war period had brought about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

Tn 175 423 [648] [241] [434] Tn [161] After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

Tn 197

LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

1:Gallin E-4,5 (1957-1958) 1966
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to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the accent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1943, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1954b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

1:Gallin E-4,5 (1957-1958) 1966
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words in Japanese, such as expressions to be used when entering the predominantly Japanese-manned police stations and other official places. Some uneducated men, however, learned a modicum of Japanese when they served in the Japanese army labor corps during the war period.

Under the Japanese the teaching of the Chinese written language as well as the traditional Chinese classical literature in the schools was illegal. However, village men tell about a Chinese school "secretly" conducted in a temple in Lukang even through the late 1930's. There children and teenagers were taught to read and write Chinese and to study the Chinese classics. Only a very limited number of people from Hsin Hsing and the neighboring villages attended such schools, and there were few who attended the Chinese school who did not attend the Japanese primary schools as well.

In the Hsin Hsing area, then, except for the few Taiwanese who managed to attend secondary schools or colleges or who were laborers during the war, the number of persons able to read and speak Japanese (or read Chinese) was small. Grajdanzev, mostly on the basis of Japanese sources, noted that "after 1937 five and one half million Chinese (in Taiwan) could not read a newspaper in their own language, though most of them do not know Japanese" (1942:170). The effectiveness of the Japanese educational system for much of the population of the rural area has perhaps been exaggerated. Although the Japanese school system was greatly expanded between 1937 and 1943, it appears that it did not have time to develop any depth in its effect on the peasant.

Under the Nationalist government's theoretically "compulsory" education, almost all students and former students of the present school system can now speak some Mandarin, which is the only language used in the school after the first or second year. Some of the younger middle-aged men have developed a functional knowledge of simple Mandarin as a result of recent work contacts in Taipei or service in the Chinese army.

The language situation in Hsin Hsing and the surrounding rural area is as follows (for 1958): Very young children speak only Taiwanese (Min-nan) up through the first few years of school. Children in higher grades and young people up to the age of about twenty-six speak Mandarin with varying degrees of fluency in addition to their native Taiwanese. Their fluency depends upon the amount of schooling they have had, how long they have been out of school, and the amount of contact they have had with the language at work or in other special situations after leaving school.

Some men and a few women between twenty-four and forty-five speak some Japanese in addition to Taiwanese. The men learned it

1:Gallin E-4,5 (1957-1958) 1966
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The men learned it either in the Japanese schools or in the Japanese army labor gangs. The caliber of Japanese spoken by this group depends usually on the amount of schooling they had or the amount of their contact with the Japanese. A few men in this age group speak some Mandarin, learned from contact with mainlanders or while working in Taipei or local government offices. They do not speak it fluently in most cases, since they only learned it recently. Very few women in this age group speak Mandarin at all. The age group also contains a small number of Mandarin-speaking mainland Chinese who work in the area in some official capacity.

Few villagers above the age of forty-five speak Japanese or Mandarin unless they learned either language through a government job or contact with the Japanese or mainland Chinese group. Villagers over forty-five usually speak only Min-nan.

ADMINISTRATIVE SETTING

The village is the smallest political unit in Taiwan. Several villages make up a *hsiang*, and several *hsiang*—plus several *chen* (township)—comprise a *hsien*. Sixteen *hsien*, including the Pescadores, now make up the province of Taiwan. Hsin Hsing village is one of twenty-two villages in Pu Yen Hsiang in Chang-hua Hsien.

The *hsien* is the highest level of government in which the residents of Hsin Hsing and other Taiwanese villages participate, which they do through the elections of *hsien* assemblymen. On the lower level, the villagers vote for their own village officials—*lin* (neighborhood) leaders, mayor, and village representative to the *hsiang* council. The latter council elects the *hsiang* mayor. The present election system, except for the village mayorality "elections" established during Japanese times, was instituted in the postwar period after the arrival of the Chinese Nationalists.

Under the Japanese colonial regime the population had no way to express itself politically on the district, county, or national level. Today, under the Chinese Nationalist government, although the rural population does have a voice in local and district political affairs, the people have little direct influence at the provincial level and no opportunity—either directly or indirectly—to participate in national governmental affairs. Even their influence on *hsien* politics (although assemblymen are elected directly by the people) is very slight.

The Kuomintang, the National People's Party, is considered and referred to as the "Ruling Party" in Taiwan. The party participates in elections for *hsien* assemblymen and for *hsien chang* (magistrate of the county) by running its own candidates who are usually heavy contributors to the party. In Chang-hua Hsien, these candidates are most

1:Gallin E-4,5 (1957-1958) 1966
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Changing Land Tenure and Its Effect on Community Organization

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The traditional (Ch'ing) land tenure system in Taiwan has undergone a number of modifications over the years. Each was instituted with the advent of a new regime, and marked the inception of major changes in other aspects of rural life. As we have seen, the colonial administration policies of the Japanese were instrumental in producing the first significant involvement of the Taiwanese peasant in the market economy. Nevertheless, it was not until the restoration of Chinese rule, when the population growth began to exert noticeable pressures and the Nationalist Chinese sponsored the Land Reform Program, that major changes took place in the economy which reached directly into most of the areas of Taiwanese rural life.

The system of land tenure in Taiwan has always been a controlling factor in the lives of the agricultural population, and to understand Taiwanese life fully it is necessary to understand the land tenure system and its history. From the late nineteenth century onwards the rural villagers suffered the results of the concentration of landownership into too few hands. This situation culminated finally in the Land Reform Program of 1949–1953, which, for the first time, secured the Taiwanese tenants' rights to the land they tilled through firm rental contracts, reductions in rent, and the Land-to-the-Tiller Program.

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Putting untilled land under cultivation became a great concern of the government at the time of the Manchu conquest of Taiwan in 1683, according to T'ang (1954:23–27). Under the Manchu (Ch'ing) dynasty, any person applying for rights to occupy uncultivated land was considered the owner as long as he kept his acres under proper cultivation. Not surprisingly, this program led to a situation in which people with enough capital, "a relatively small number of great families" (Ginsburg, 1953:32), obtained rights to large amounts of land

1:Gallin E-4,5 (1957-1958) 1966
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and then hired other people, usually immigrants from the mainland, to cultivate the land for them as their tenants.

As the population increased in the later years of the Ch'ing administration there was increasing pressure on the land, and many tenants began to sublease part of the land to others. These subtenants became the lowest rank in a three-stage hierarchal structure of land tenure (Ginsburg, 1953:26–27, 32–33; Grajdanzev, 1942:72–84; T'ang, 1954: 23–27).

In 1904, nine years after taking control of Taiwan, the Japanese government altered this hierarchal system of land tenure by buying out the original landowner and conferring the rights of ownership on the tenant. When, in 1923, the Japanese applied the Japanese Civil Code to Taiwan, full legal rights were given to the new owner (the former tenant), who was now officially known as "landlord."

This move benefited the original tenant who was given full ownership rights, but it did nothing to improve the lot of the mass of actual cultivators (now tenants instead of subtenants) whose land rent was no lower than before. As a result, "tenancy disputes" became more numerous beginning in 1927. In that year the Japanese authorities encouraged the formation of local associations of landowners and tenants which were charged with the responsibilities of promoting better relations between landlord and tenant, preventing tenancy disputes, and fostering agricultural production (T'ang, 1954:26). Although many such associations were formed, "the question of farm rents was entirely outside of the jurisdiction of these associations. It [the rent question] was not only left unsolved, but there was even a marked tendency for farm rents to keep on increasing" (T'ang, 1954:26).

In 1939, in the midst of the Sino-Japanese war, the Japanese government issued a rent control law which was applicable to Taiwan and Japan alike. This law had little effect in Taiwan because it did nothing to reduce rents; it only stabilized the situation. (See Grajdanzev, 1942:72–84, especially p. 82 for a discussion of the Japanese attempts to deal with Taiwanese land tenure problems.)

Although the farm tenancy system continued, after 1945 the Japanese rent control law of 1939 was no longer enforced when Taiwan reverted to Chinese rule. With the increase in the rural population and the general upset of the island's economy, farm rents began to rise, and demands increasing security and rent deposits were made. Worst of all, in many cases tenants were arbitrarily evicted (T'ang, 1954:25–28).

Tenancy had been a great problem in Taiwan under both the Japanese and the Chinese since landownership was concentrated in the hands of relatively few owners (Klein, 1958:53; see also his Tables 17 and 18). "The high rate of tenancy reflects the great scarcity of cultivable land in Taiwan in relation to the demand for it. Land-

1:Gallin E-4,5 (1957-1958) 1966
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the land reform act, and used the money for additional investments.

Many former landlords have done poorly at business, and some have even failed because of their lack of experience and training. Others have maintained their economic investments in the villages. Several formerly large landholders in the two villages adjacent to Hsin Hsing continue their activities in their villages and the surrounding area very much as before. Although their landholdings were cut significantly by the land reform, they nevertheless retain their maximum three *chia* of land. Also, in some instances, a number of landlords prior to the 1953 act managed to retain control of more than the three *chia* limit by legally dividing their family and then transferring portions of their land to the names of other members of their family. By virtue of their positions many landlords, especially those who worked as minor officials or civil servants in the local administration or who were well acquainted with officials, became aware of the ins and outs of the proposed land reform laws and so knew exactly how to manipulate their landholdings legally in order to retain as much land as possible.

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Even today landlords may, and do, buy land in excess of three *chia* and then hire laborers to till it for them. As long as they do not rent the land out they seem to be safe from legal action. A few landlords who manage to buy additional land are still doing so in the names of other members of their family and in such cases then actually rent the land out to tenants. But it appears that the fear of another Land Reform Program in the future, as well as the increased movement of the landlords' economic interests outside the rural area, serves to deter many landlords from attempting to reaccumulate landholdings, even by the devious but legal means.

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Another frequent activity of landlords who have chosen to maintain their economic interests in the Hsin Hsing area is that of moneylending. The small farmer, having little to offer as security, still continues to resort to the local moneylender for cash or other loans. The local moneylender lends fairly large amounts for longer periods of time than any agency of the government or association but, of course, at extremely high interest rates.

The landlords will continue to engage in moneylending as long as the farmer has credit difficulty. If a good profit can be made from moneylending, it is evident that the wealthy landlords will not willingly transfer their economic interests into more productive economic activities.

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Traditionally, the village landlord has played a major role in the leadership of his village and its immediate vicinity. During the Japanese period, such leadership roles were greatly reinforced by the Japanese, who preferred to handle village problems through the wealthy landlord class rather than by dealing directly with the "peas-

1:Gallin E-4,5 (1957-1958) 1966
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ants." The Hsin Hsing villagers readily recall that the local Japanese police and officials showed respect only for the well-to-do landlords. Consequently, if the villagers were to get along successfully with the Japanese, they had to work through their landlords. They usually elected a landlord to handle local village affairs and to represent village interests in dealing with the Japanese authorities.

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The arrangement was also to the landlord's advantage. As the official leader, he wielded greater power by which he could more easily manipulate the villagers, and even the tax collector, to his own advantage. His recognition as a leader by his fellow villagers and by the authorities also increased his prestige.

Not only was such a landlord the elected village political leader but he might often be an informal leader as well, a person who took an active part in most of the social and religious affairs of the village. He usually contributed money and time to help make these affairs a success. The efforts of the landlord helped to build up his reputation as a public-spirited citizen. Frequently, he assumed the role of mediator in discussions of village and intervillage problems and in disputes between his own villagers or even between members of other villages. When the landlord's efforts as a mediator extended beyond his own village, he enhanced his own reputation in the whole area and that of his village as well.

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These conditions continued after the restoration into the post-land reform period. Today, the landlord class continues in the rural area and wields power in local grass roots politics as well as in socioeconomic affairs. In most villages the recognized leaders are still those who are rich, maintain big landholdings, and have had a fairly good education. Such people may also have influence—perhaps by virtue of a relative—in some government agency. It is still a great advantage to a village to have a wealthy representative of the landlord class to deal successfully with authorities. Many, if not most of the government officials, are drawn from this class, since they are educated and usually wealthy.

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However, this picture is beginning to change. Village affairs are being profoundly affected as many former large landlords and traditional local leaders transfer their economic interests and activities away from the land to new business interests elsewhere. When a landlord gives up his major economic interests in the area, it is usually not long before village social, religious, and political activities become much less important to him. Because the personal advantage is gone, he is no longer concerned with maintaining his status or leadership role. He may even move his residence out of the village in order to be closer to his new economic interests.

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Villages suffering such a loss of local leadership have reacted in two

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eating, while continuing to push more food on him. When old people talk, even though the younger people may consider their words pure nonsense, they merely smile and agree. When the evening is over there is usually some young grandchild waiting to lead the old man back over the dark paths to his house.

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Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

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ILLNESS, DISEASE, AND MEDICINE

As has already been shown in Chapter 2, the tremendous increase in population on Taiwan is a reflection of the great reduction in the death rate, which results, primarily, from the lower incidence of fatal diseases. The control of disease has been effected by such factors as public health programs which have helped eliminate diseases like cholera and malaria, an increase in the number of Western-style doctors, an increased reliance on Western medicine and medical techniques, and somewhat better sanitation as a result of education of the public and governmental enforcement of health standards.

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It was during the Japanese period that Taiwan saw the advent of Western-style doctors and medicines, especially in the 1930's. However, they were few, and their practice was limited mainly to the wealthy. The benefits of their knowledge, therefore, and the everyday use of Western-style medicines did not reach many of the rural people. During this period the rural people continued to rely primarily on Chinese doctors and herbal medicines, as well as magical cures effected by shamans and healing priests. (The magical techniques are discussed more fully in Chapter 8.) However, public health measures introduced by the Japanese government to combat epidemic diseases did benefit

1:Gallin E-4,5 (1957-1958) 1966
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the rural people. Some forms of improved sanitation reached the rural areas through the schools and, perhaps more effectively, through the publishing of government edicts enforcing practices of sanitation. Semiannual government inspections forced villagers to clean up their houses and the villages twice a year. The inspections were carried out by the Japanese police and civil officials, and any family which did not pass the inspection was subject to fine and to reinspection, which meant that "the party was punished by having to clean up all over again." The policy of inspections instituted by the Japanese has been continued under the Nationalist Chinese regime.

During the latter part of the war, and especially after the restoration of Chinese rule to Taiwan, there was a marked increase in the incidence of disease, particularly communicable diseases. There was even a recurrence of cholera. This was a direct result of the poor living conditions brought about by the war and, with the coming of the Chinese government, a chaotic administration which was unable or unwilling to deal with health problems. However, the situation gradually began to improve after 1948 and 1949 when Taiwan became the new stronghold of the Nationalist Chinese regime. This improvement is evidenced by the general situation in the Hsin Hsing area. Beginning in the early 1950's the number of Western-style doctors practicing in the area increased. At this date, there are a number of such doctors, and the villagers consider their fees reasonable and within their means. The reason for this great increase lies in the different licensing practices of the Japanese and the Nationalist governments. Under the Japanese a man had to be a graduate of a medical school before he could practice medicine; under the Chinese government, the applicant is required only to pass a practical examination. This means that people who have worked in hospitals as aides or technicians and have had some opportunity to observe others practicing medicine may have accumulated enough knowledge to pass the examination and obtain a license. Therefore, while there are now a large number of licensed doctors practicing in the Hsin Hsing area, only a few who went to school in Japan have had formal medical training.

In addition to the great increase in the number of doctors practicing in the local area, in recent years there has also been a marked expansion in the number of private and public hospitals in the cities. These hospitals, which are sometimes very large, can accommodate many patients, house relatively modern facilities such as operating rooms, X-ray and other equipment, and provide modern drugs for patients. Although most of the patients treated in these hospitals are city people, village people sometimes go to them for treatment. They are usually referred there by a local doctor who is capable of diagnosing an illness as one requiring hospital care or who is honest enough to

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Hsin Hsing, Village in Change

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In the preceding chapters we have seen how the Hsin Hsing villager, a peasant who was tied to the land and the village community and primarily involved in a basically subsistence type of agriculture, is being transformed to one who is becoming more and more involved in the market economy of the country and who has widespread contacts with an urban way of life. We have seen how such developments are affecting village social organization, community and kinship solidarity, and some of the general patterns of village life. We have also seen that although many features of traditional Chinese culture are still evident in the Hsin Hsing village area (especially in the realm of religion, which continues to be a source of community unity), the impact of increased urbanization in Taiwan in recent decades has brought about important and rather rapid socioeconomic and cultural changes. This has been especially marked in the roles of the village and kinship organizations that were previously the peasants' chief sources of identification and security. We now turn to a description of modifications and changes in traditional values and behavior that further indicate the inexorable direction of change in Hsin Hsing.

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Social change is not new to Chinese society. It has been going on for a long time in Taiwan, as well as on the mainland of China, as a consequence of the continuing process of urbanization. However, the process in Taiwan has been accelerated as a direct result of Japanese rule followed by the present rule of the Nationalist Chinese government.

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Until the early part of this century, rural society in Taiwan had been relatively stable for many years. Population growth was slow, and there was enough land for the people. Members of the economic families had close relationships with the village as a community as well as with their localized kinship groups. As long as communications were poor, banditry a constant danger, and mobility limited, village unity was essential to security and even survival. Cohesive, tightly knit single fan villages were quite powerful and frequently the de facto govern-

1:Gallin E-4,5 (1957-1958) 1966
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ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

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NOTES

Chapter 1: Introduction

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[1] During the last six or seven years of their regime, the Japanese government attempted to strengthen support of the war effort amongst the Taiwanese population. To do this, they expanded the compulsory school system and put in force many new regulations, i.e., only the Japanese language was used in the schools, Shinto religious symbols such as the Shinto God's shelf (*kamidana*) and Japanese patriotic scrolls replaced the traditional Taoist gods' statues and scrolls, Japanese festivals were observed, and many Taiwanese had to take Japanese names. However, immediately after war's end, the Taiwanese reverted to their traditional Taiwanese (Chinese) customs.

Chapter 2: The Setting

[1] The amount and distribution of rainfall in the Hsin Hsing area is: January .79–1.97 inches, April 5.95–5.90 inches, July 7.86–11.80 inches, October .79 inches. The average annual rainfall in the Chang-hua Hsien area is 59.37–89.05 inches. [132]

[2] A great many of the overseas Chinese living in the Southeast Asian countries also came from the Ch'uan Chou and Chang Chou areas near Amoy. [174]

[3] The historical information gathered from older residents of the area was based mainly on their own experiences as children and on stories told to them by their elders. [167]

Some of the numerous gazetteers available are listed in the section of the bibliography on Chinese and Japanese Language Sources. Chen Shao-hsing, Professor of Sociology and Demography at National Taiwan University, first warned me in 1957 that some problems exist in using these and other such materials in attempting to gain detailed information about Taiwan generally, or about local areas particularly. Although Chen notes in his recent book (1964:196–197) that some earlier Ch'ing dynasty chroniclers, e.g., Chen Meng-lin, author of *Chu Lo Hsien Chih* (1718), and Chen Wen-ta, compiler of the *Taiwan Hsien Chih* (1720), were reliable, he also points out that some later ones such as Yu Wen-i (1758), Wang Ying-ts'eng (1764), Hsieh Chin-luan (1807), and Chen Shu-chün (1852) were unreliable. Chen (1964:196–197) points out that these latter authors cited what was mentioned in the Chen Wen-ta (1720) book regardless of the actual change in customs through time. Apparently, then, they employed the practice of compiling at least some of their data from previously written gazetteers rather than going out into the countryside to obtain the necessary information. But even the reliable gazetteers usually still presented a composite

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Since March 1948, a refining process has been instituted in the government-managed camphor industry.[57] In areas where Taiwan and Japanese economy complement each other, a trade agreement was signed with Japan on September 6, 1949 under which Taiwan sugar, salt, camphor, cement, and pears are to be exchanged for Japanese consumer and capital goods at an estimated annual volume of US$100,000,000.[58]

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Government-owned and -operated enterprises dominate Taiwan's industrial field. As of 1950, there were 79,058 publicly operated units employing 63,065 workers. Available statistics place privately owned industrial units at approximately 67,660 employing 53,310 workers. Production figure for public industries in 1949 is about NT$718,000,000 as against NT$600,000,000 for private enterprises.[59]

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This situation may be accounted for by the predominant position of Japanese-owned industries in Taiwan which were acquired by the Chinese Nationalist government following the Japanese surrender in September 1945. Since then, petroleum, aluminum, gold and copper mining, salt, coal mining, and steel works have been taken over by the National Government. Power, sugar, fertilizer, cement, alkali, pulp and paper, shipbuilding, and machine tools have been jointly operated by the national and provincial authorities on a capital division of 6 to 4. Some smaller mining units, camphor, tobacco and wine monopoly, and agricultural and forestry enterprises have been managed by the provincial government. The rest, being of smaller scale, have either been taken over by county or municipal govern-

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*Reconstruction**, Vol. 2, pp. 473–74, where the total 1948 demand was estimated to be 141,727 tons.

[57] For a general description, see *Taiwan Reconstruction**, Vol. 2, pp. 436–46.

[58] For detailed listings, see *Taiwan Reconstruction**, Vol. 2, pp. 357–61.

[59] *Taiwan Today*, pp. 121–22.

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is lacking and what there is has low morale; American allies are weak, apathetic, and unwilling to fight; American bases across the world are not impregnable; possession of the atom bomb is not a monopoly and, besides, atom bombs cannot win wars; America's industries are geographically concentrated and easy to destroy; and the material resources of the "peace camp" are almost equal to America's. In other resources the "peace camp" is superior—in manpower, productive capacity, and strategic position, and above all in the morale due to the social system.[25]

If comparisons of this sort were only propagandistic in purpose, they could be and indeed are being counteracted with some promise of success. But the aggressions in Korea and Tibet, the appeals to other Asian peoples to revolt and to rely upon the strength of the "peace camp," the disdain of methods for the peaceful settlement of disputes, and, generally, a haughty attitude in communicating with non-Communist nations seem to indicate that the Communist leaders have talked themselves into believing all these things themselves. Some success with their methods and the backing of the Soviet Union may well induce them to continue their campaign for the "liberation" of Asian peoples. In the past the Chinese have many times shown great boldness in words; they may now want to demonstrate their prowess. That they should have picked the United States as the object of this demonstration is a sad ending to a long, though by no means selfless and high-minded friendship. Of all the important powers with which China has had relations during the last hundred and ten years, this much at any rate can be said, that those with the United States have been the least unpleasant.

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The government of Chiang K'ai-shek on Formosa and the few million inhabitants and refugees on that island remain the only Chinese with whom the United States and the many other nations which still recognize the National Government can maintain peaceful relations. For a few months after the Communists gained power on the mainland even that possibility was doubtful.

Chiang's government had meager resources to guarantee its own survival and keep Formosa out of Communist hands. At the sacrifice of some islands, Hainan most prominent among them, the Nationalists concentrated all their forces and equipment on the island of Formosa.[26] But it is quite probable that at the beginning of 1950, if the Communists had decided upon a determined attempt to capture Formosa, the Nationalists could not have held out for long. Apparently the Communists

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did not make such a decision or did not implement it until early in the summer of 1950. It was only then that rumors of an intended invasion and reports of troop accumulations opposite the island began to spread and increase in intensity.

The United States was the only country from which any help could be expected. The Nationalists looked with anxious eyes to Washington. Their close American friends argued for immediate and full support. They wanted the United States to guarantee the safety of the National Government and of Formosa. But President Truman decided differently. He announced on January 5, 1950, that the United States would not give military aid to the Nationalists, had no predatory designs on Formosa or any other Chinese territory, and had no desire to acquire special rights or privileges or to establish military bases on Formosa.[27] This was bad news to the Nationalists. But the picture was not altogether black. Chiang's fight for continued recognition at the United Nations indicated that the Nationalists had not been forsaken by all the nations of the world, that indeed a sufficient number were on their side to make their struggle successful. American economic aid continued to flow to Formosa, and the Nationalists expressed confidence that if enough of it arrived, they could hold Formosa against Communist attacks. This confidence, however, did not prevent them from periodically asking publicly for a common front to defeat communism or for increased economic aid, or even for military advisers. Furthermore the many visits of American officials to Formosa and the many calls of Chinese officials in the United States on American officials and friends indicated that Chinese diplomatic activity was intense.

For a while it had no visible success. The American debate over policy in regard to Formosa grew increasingly bitter, but the Administration stood fast by its refusal to give military assistance or support to the Nationalists. A statement by Secretary of State Dean Acheson on June 2, 1950, to the effect that the United States must prevent the further spread of communism may have foreshadowed the change in policy which came on June 27 with President Truman's order neutralizing Formosa. The development of American policy toward Formosa from that moment on led eventually to military as well as economic support for the National Government.

The Chinese on Formosa were not altogether happy with the president's order. They welcomed it, in the words of Foreign Minister George

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Yeh, as "a most welcome sign of comradeship in the fight against communism." But they had some fears. The president's statement accompanying his order seemed to leave open the future status of Formosa, and this was as disturbing to the Nationalists as to the Communists. There was mention of the possibility of making Formosa a trust territory under the United Nations, to which the Nationalists strongly objected.* Above all, the neutralization prevented the Nationalists from attacking and eventually invading the mainland, prevented them, in other words, from realizing their most intense desire. The Nationalists made their position clear. Foreign Minister Yeh stated that the president's order did not affect the status of Formosa as determined in the Cairo Declaration nor China's authority over it. The order was an emergency measure, Yeh pointed out, which he hoped would succeed in ending the Korean War, but if it did not, other and stronger measures would have to be taken.[28]

Most of the Chinese fears were allayed after numerous diplomatic contacts and the organization of expanded American support for the National Government on Formosa began. Following a recommendation by General MacArthur, a group of American military officers made a report on the military situation on the island. In accordance with the report, and after the behavior of the Chinese Communists before the United Nations in November 1950 had indicated that the chances of peace in Korea were extremely poor, the United States government resumed shipments of military supplies in December 1950. Even then this action was kept secret for a few months, so that no remotest chance to settle the war might be missed.[29]

The supply of weapons and other military equipment was formalized in an American note to the National Government on January 30, 1951. In it the United States offered military aid to the Chinese on four conditions: (1) the supplies were to be used only for the island's "internal security or its legitimate self-defense"; (2) classified material and information were to be kept secret; (3) American personnel was to be received on the islands to see that the supplies were used properly; and (4) no military materials were to be transferred or sold by the National Government without previous consultation with the United States government. The Chinese accepted this offer on February 9.[30] Together with

* The same idea was mentioned in the halls of the United Nations in April 1953 and was characterized by T. F. Tsiang of Nationalist China as "too ridiculous to consider." — *New York Times*, April 9, 1953.

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the arms and other matériel a military mission (assisting, not advisory, it was remarked officially) of several hundred Americans was sent to Formosa in April 1951. The Chinese received them with good grace, and President Chiang pledged his cooperation, which presumably meant that the usual resentment of the Chinese officers at foreign interference would not be permitted to lead to friction.[31]

The arrival of the military mission lifted the morale of the Nationalists. They took it as definite proof that the "neutralization" of the island would not be permanent. The constant American stress upon the purely defensive purposes for which military aid was given was not taken very seriously. The Chinese felt that the Seventh Fleet was a perfect protection of the island and that no further defense was necessary. They liked to believe that the strengthening of their army was therefore for different purposes: the invasion of the mainland.[32] In spite of increasingly larger American supplies to the island,[33] there was, however, no evidence that American policy would support such a step. When President Eisenhower took office, American policy changed. The "deneutralization" of Formosa early in 1953 freed the Nationalists to raid and, if they could, invade the mainland, though apparently not without prior consultation with American authorities. By their own admission in February 1953, Nationalist armed forces were not yet adequately equipped for a full-scale invasion, but the president's move was a great help to the morale of the Nationalists and taken by them as aligning American opinion with their own conviction that only pressure on the mainland could solve the problem of peace in the Far East.[34]

Parallel with military assistance, economic assistance is now being given in large measure to the Chinese on Formosa. Until the United States took positive action to ensure the island's security, the main purpose of the ECA program was to assist in current economic needs, to put the island's economy back on its feet, and to strengthen the confidence of its inhabitants. Thereafter the program was greatly enlarged and based on long-range planning, with a view to making the island self-sufficient. Since 1950, about $100 million worth of goods and services – half the amount of military aid – has been supplied annually. Assistance has been directed toward four basic needs: (1) immediate requirements, especially in commodities; (2) increased farm productivity and improved rural welfare; (3) reconstruction of war-damaged industries and their further development; and (4) technical advice.

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There is widespread agreement that the program has been very successful.[35]

Compared to American–Nationalist Chinese relations, the relations between Formosa and other nations are insignificant. Toward those nations which have recognized the Communist regime, the Nationalists are naturally very bitter. Madame Chiang K'ai-shek, for instance, in an outburst of great anger, attacked Great Britain as a "moral weakling who has bartered her soul for thirty pieces of silver."[36] With the exception of Japan, relations of the Nationalists with the nations other than the United States with which they continue to have dealings are somewhat devoid of substance and take place mostly in the United Nations.

The major issue that was to be settled between China and Japan was the signing of a peace treaty. This had become a very complicated affair in view of the existence of two Chinese governments, each of which had been recognized by a number of the nations participating in the San Francisco conference dealing with a peace treaty for Japan, and neither of which was invited to participate in the conference. It was left to the Japanese government to determine with which Chinese government it wanted to sign a treaty, and its choice was the National Government on Formosa.

Negotiations began early in 1952. Three points in the proposed treaty emerged immediately as difficult of settlement. The first was the exact title of the treaty. The Chinese insisted adamantly that the title had to make clear that the treaty was a full-fledged peace treaty, while the Japanese hoped to avoid the use of the word peace in the title. The second point was the extent of the territory to which the treaty should apply. The Japanese insisted that the treaty could cover only those territories under the actual control of the National Government at the signing of the treaty or coming under its control thereafter. The Chinese insisted that China was a sovereign entity and the National Government its legal representative, that therefore there should be no provision in the treaty regarding the scope of its territorial applicability. The third point referred to reparations and the date from which Japan's liability was to begin. The Chinese maintained that the state of war began on September 18, 1931, when Mukden was attacked and Manchuria occupied, whereas the Japanese suggested July 7, 1937, when the incident at Lukouchiao renewed the war between the two powers.[37]

After several months of sometimes bitter negotiations, a Treaty of

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Peace was signed in Taipei on April 28, 1952. Peace was thus introduced into the official title of the treaty. On the other hand, there is no specific reference to its territorial scope. In an exchange of notes accompanying the signing of the treaty, however, the two powers agreed that its terms "in respect to the Republic of China, be applicable to all the territories which are now, or which may hereafter be, under the control of its Government."[88] In many respects, the treaty follows the San Francisco Treaty of September 8, 1951. In essence it eliminates the special rights and privileges which Japan had gained during the past fifty years by her ruthless methods. It leaves details of the new Chinese-Japanese relations to subsequent agreements. One of these, regarding trade, was concluded, after some difficult negotiations, on December 13, 1952. It foresees a considerable expansion of trade with Japan, which is already Nationalist China's biggest customer and supplier of commodities.[89]

The relations between Nationalist China and the Western powers and Japan are friendly, as they are bound to be. Formosa would have no chance of survival without foreign, especially American, help. The National Government therefore has no bargaining power at all and is dependent upon the good will of the United States. The development of American policy toward Formosa indicates that American support is not a matter of love but of strategic considerations, as of course the Nationalist Chinese realize. They do not hesitate occasionally to point out some of their grievances. Chiang K'ai-shek, on Christmas Day 1952, gave vent to feelings of bitterness dating from the early postwar years when he recalled – for no apparent reason – that the Western powers "kicked us while we were down, encouraged the enemy to knock us out, and rejoiced at our defeat." The objective of Foreign Minister Yeh's speech on November 1, 1952, at the United Nations was clearer when he warned: "If, in our anxiety to conclude an armistice in Korea,* we

* The final truce terms since agreed upon were approved by Chiang K'ai-shek, but only with the warning that the Communists could not be trusted and that they sought, not peace, but rather a breathing-spell to prepare for attacks elsewhere in Asia. He expressed his conviction that in the end the Communist menace could be eliminated only by a victory, not by a compromise. If United States policy was "really aimed" at the elimination of communism, he felt, such a victory could be achieved. The desiderata would be a security pact in the Pacific, the granting of all his requests for matériel from the United States, full support of Syngman Rhee, and a "strong" policy – short of war – toward the Chinese Communists. – *New York Times*, July 21, 28, 1953.

The signing of the armistice, of course, is making it more difficult for the generalissimo to obtain outside help, without which he cannot hope to invade the mainland.

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should unwittingly provide the aggressors with the opportunity to prepare themselves for further acts of aggression, we would be defeating the very purpose for which we entered into the truce talks."[40] Remarks of this kind are a reflection of the well-justified distrust the Chinese have developed in dealings with the big powers and show their fear of being treated as pawns. That the Chinese Nationalists should in their present condition have this fear and distrust to a heightened degree is easily understandable. That the Communist Chinese should no longer harbor the same feelings toward the Russians is almost impossible to believe.

4:Grajdanzev--42 43 S-4 (no date) 1942 Formosans
116. 651. 177.65 Japan
636.65

"The former Chinese government was exceedingly inefficient and taxes were often paid by the farmers on one ko, where [43] actually there were two. After the Japanese survey this became impossible. The 'striking success' of the Japanese government was largely administrative; for the farmers it meant only the trebling of the land tax. As Takekoshi writes: 'To be more exact, before the survey the total area of the fields and fish nurseries was believed to be 890,000 acres which yielded ¥860,706 tax. The result of the measurement . . . shows that the real area is 1,535,163 acres, and the receipts from the land tax have jumped up to ¥2,989,287.' (1) "

1. Op. cit., p. 130.

4:Grajdanzev--45-46 S-4 (no date) 1942 Formosans
116, 241, 651, 661, 177.24 Japan
636.24

"Beneficial as these irrigation works are, in many cases they curtail the farmer's freedom to select his crops. The government often compels the farmers to raise crops which they do not want to raise (as, for example, sugar cane). Takahashi tries hard to prove that this compulsion, which in Taiwan is [46] called simply exploitation (sakushu), is to their benefit, (1) but his arguments are not convincing.

1. Takahashi, op. cit., p. 280."

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon.

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane Culture in Taiwan

	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4:Grajdanzev--75 S-4 (no date) 1942 Formosans
116, 162, 178, 421, 651

"According to official statistics the number of payers of the agricultural land tax increased from 2,099,000 on January 1, 1938, to 2,112,000 on January 1, 1939—an increase of 13,000. How can this increase be explained when the number of families engaged in agriculture fell by 2,900? We must therefore conclude, either that official statistics are inaccurate, or that a rapid proletarization of the agricultural population is going on. It may be—although this is only a hypothesis—that the official statistics do not include sub-tenants, a very numerous class in Taiwan. But whatever the cause, the statistics give a distorted picture of land relations on the island."

4:Grajdanzev--133-134 S-4 (no date) 1942 Formosans-1-2
116, 651, 177.65 Japan
636.65

"The sources of revenue of the government-general for the last five years are as follows:

Revenue of the Government-General in 1,000 Yen (1)

1. Including net income from monopolies, railways, communications, forests, textbooks, weights and measures, hospitals.

	1935	1936	1937	1938	1939	1940
	settled		accounts	budget	budget estimates	approx. budget estimates
Taxes(a)	53,978	64,173	72,567	81,873	78,170	93,000
Net Revenue from railways, commun.	12,395	12,888	13,296	16,904	15,250	—
Loans (b)	—	—	—	—	6,400	6,000
Others	5,834	7,007	6,564	9,397	8,420	—
Surplus from the preceding year	29,441	32,605	41,833	46,392	18,373	25,934
Total	101,648	116,673	134,260	154,566	126,613	—

a) Including net profits of monopolies and receipts of stamp duty.
b) Loans were often floated by the government-general before 1939, but were not

included in the general budget because they were made for special purposes. This item, however, represents a deficit. The debt of the government-general, at the beginning of 1939, probably stood at about Y 94 million.

Insofar as the 'surplus from the preceding year' cannot be considered as an independent source of revenue, it is clear that the greater part of the revenue of the government comes from taxes (including fees and fines). If we add the taxes to be collected by the provinces and municipalities, the total amount [134] of revenue from taxes was 124.3 million yen for 1938 and 122.5 million yen for 1939--large amounts for an oriental island, agricultural in character, and with a population of only six millions(2). Compared with

2. An official investigation of farmer's budgets made in 1936 revealed that direct taxation of farmers in Taiwan is twice as high as in Japan (Nasu, op. cit.).

1935 the amount of taxes to be collected from the population in 1938 increased by 52%, and this increase was resumed in 1940 and 1941."

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-1-5
116, 434, 565, 651, 177.65 Japan
636.65

"Taxes may be of different types--some falling chiefly on the rich, whose ability to pay is, of course, greater than that of the average farmer. We do not have necessary information for a detailed analysis of how the tax burden is distributed between these two groups, but what is available gives clear indications. We have divided the taxes into two groups: (a) taxes on the recipients of large incomes; (b) taxes on the masses.

Taxation and Net Monopoly Receipts in 1,000 Yen

A. Taxes on the recipients of high incomes:

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Income Tax	3,873	5,285	9,538	13,024	12,395
Tax on capital		5	189	352	855
Mining Tax	200	203	291	353	327
Special profit tax	1,016	1,575	2,761	4,979	2,444
Tax on distribution of dividends		335	425	394	850
Inheritance tax			105	279	305
Total	5,089	7,403	13,309	19,381	17,176

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-2
116, 434, 565, 651, 177.65 Japan
636.65

B. Taxes on the masses of the population:

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Land tax	7,492	7,742	7,938	8,342	8,342
House tax					1,312
Business tax a)			2,931	3,290	2,726
Tax on sugar	3,320	3,461	4,050	6,702	5,215
Tax on alcohol b)	3,698	3,845	2,913	169	100
Taxes on other commodities	2	177	275	393	826
Customs duties and other duties connected with them	2,611	3,326	2,574	1,846	1,817
Stamp duty	5,107	7,271	7,220	7,653	5,926
Monopolies, net receipts	24,555	28,968	29,652	32,845	32,568
Net profits from text-book sales c)	103	29	75	74	24

4:Grajdanzev--134-136 S-4 (no date) 1942 Formosans-3
116, 434, 565, 651, 177.65 Japan
636.65

[135]

	1935	1936	1937	1938	1939
	settled accounts			budget	budget estimates
Profit on weights and measures d)	179	209	206	331	341
Fines and confiscations e)	1,091	529	224	362	224
Tax on railway fares				205	202
Admission ticket tax				116	124
Tax on construction					152
Amusement tax					188
Other taxes	731 f)	1,213 f)	1,200 f)	164	907
Total	48,889	56,770	59,258	62,492	60,994
The same as percentages of total					
Group A.	9.4	11.5	18.3	23.6	22.0
	90.6	88.5	81.7	76.4	78.0

a) We include business taxes in this group because it is legitimate to suppose that they are shifted by the business men to the population.

b) The fall of receipts from the tax on alcohol in the last two years is due to the introduction of a state alcohol monopoly.

c) Formally this is not a tax, but a surplus remaining after deduction of expenditures on printing of textbooks from receipts. However, state profits derived from the sale of textbooks to school pupils hardly can be considered otherwise than a tax.

d) As in the preceding item this represents a surplus from a form of fiscal monopoly.

e) Formally fines and confiscations are not taxes. But their regularity (they are foreseen in the budget) and their amounts show they are not 'casual' receipts. They fall, mainly, on the Chinese population.

f) Chiefly receipts from the taxation of surplus issues of Bank of Taiwan notes.

From this table it may be seen that about 80 to 90 percent of the taxes fall on the masses of the population and only 10 to 20 percent on the wealthier groups. The percentage of taxes contributed by the well-to-do rose from 9.4 in 1935 to 22.0 in 1939, but it would be a mistake to suppose that this implies a change of policy: the exigencies of wartime and the already oppressive burden of taxes on the masses make it more and more difficult to increase that burden. Under these conditions, heavier taxation of the rich is a necessity, but the government prefers to borrow from them, not to tax them: the loans amounted to six million yen in 1939 and are expected to amount to 17 million yen in 1941.

The actual tax-burden on the masses as compared with the wealthy is considerably

greater if we include provincial and [136] local taxes. We have no data on the exact distribution of local taxes, but provincial taxes can be measured. Provincial taxes are surtaxes, calculated as a percentage of the corresponding government-general taxes. Their rates are as follows:

Surtax on income tax	18%	of income tax
Surtax on land tax	90-100%	of land tax
Surtax on business tax	70-80%	of business tax
Surtax on house tax	120-150%	of house tax

These rates show that surtax on income tax (which falls chiefly on the recipients of high incomes) is only 18%, while surtaxes on taxes falling on the masses of population range from 70 to 150%."

4:Grajdanzev--136-137 S-4 (no date) 1942 Formosans-1-2
116, 651, 177.65 Japan
636.65

"The special tax is a combination of property and income tax, but it cannot play an important part in local taxation in Taiwan because as a rule the recipients of large incomes in Taiwan do not live there--their residences being in Japan proper. Consequently this tax falls chiefly on the middle and lower brackets, so that the chief burden of local taxation falls on the masses to an even greater degree than in the case of the taxes of the government-general.

We cannot calculate the general incidence of taxation in Taiwan, but we can get an idea of the burden it represents in the following way: land taxes in the 1939 budget total about 22,350,000 yen (1). In this figure are included taxes on improved land, forest land, fish

1. This figure is arrived at as follows: (a) the land tax of the government-general is 8,342,000 yen; (b) the provincial land tax is 7,805,000 yen; (c) we have no figure for the local land tax, but we assume that the relationship is about the same as in Japan proper, which would give a figure of 6,200,000 yen. Thus the total amount of taxes on land is about 22,350,000 yen.

ponds, and other land to the amount of [137] 3,060,000 yen (2). Thus, 19,280,000 yen are

2. The taxes of the government-general on lands of this kind amount to 1,143,000

yen, but insofar as provincial and local taxes bear a definite relation to the basic tax, the total is estimated to be about 3,060,000 yen.

paid on 856,900 ko of taxable land, i.e. 22.5 yen per ko. Since the agricultural population of the islands represents about 60% of the total population, the average amount of land per person in the agricultural population of Taiwan is about 0.37 ko (about 0.9 acres). A tax of 22.5 yen per ko is equal to one and a half to two months' wages of an agricultural worker (3); and the levy on land is only one among many taxes.

3. Daily wages of an agricultural worker are about 0.80 sen; monthly, 8 yen to 18 yen. Source: Taiwan Jijo.

But as was mentioned above, it is important to know for what purposes the sums collected are applied. The harshness of taxation may be mitigated by beneficial ways of spending the revenue."

15: U.S. Navy--29 [4] (no date) 1944 Formosans
116, 364, 651, 656, 177.65 Japanese
636.65

"The Japanese have enforced rigorously a system of household registration. At the door of each dwelling there is displayed a plaque bearing the name of the head of the house. Near it are pertinent receipts or certifications received from the police which testify to registration at the nearest police station, house-inspection and approval, vaccinations or innoculations required of all members of the household, certain tax receipts, and such other data which the police may require from time to time to be displayed in a public and easily checked place. In the cities small insignia or notices indicate the public utilities available in each house."

15: U.S. Navy--31 [9] (no date) 1944 Formosans
116, 466, 651, 177.65 Japanese
636.65

"The hoko system of mutual responsibility within households and local communities is under closest police supervision and control. Through it the government can demand and receive contributions both of hours of labor and of taxes in kind. Close check can be kept also on all labor unrest and agitation."

15: U.S. Navy--33 [2] (no date) 1944 Formosans
116, ~~651~~, 241, 177.24 Japanese
636.24

"Compulsory service takes an indirect, though no less effective form in the forced contribution of produce. For instance, a village headman notifies the farmers that their district is expected to provide a certain quota of hay for army horses, which must be forthcoming by a certain date. Castor beans are another example. By requiring this crop (which has no value in the economy of the individual farmer) the production has increased from 126,893 pounds in 1936 to 4,148,364 in 1938, which represents an impressive labor contribution. Through this method a goal of 23,000,000 pounds has been set for 1949. Each year more time and more labor and more space must be given to producing castor oil for the air service. Each household tends a few plants from which the children carry the beans to school for collection. In many instances no compensation is given for the produce, and in the instances where compensation is given, it is wholly inadequate to reimburse the costs of production."

40: Kirk--19 [2] S-2 (no date) 1941 Formosans
116, 651, 177.65 Japanese

"Money contributions are made through the chokai (municipal system) and the hoko (the rural system). The government raises considerable sums also by promoting 'one vegetable' meals and soliciting the savings of the frugal peasants. 'One house-one thing' campaigns have brought thousands of yen to the colonial treasury from the sale of goods which patriotic Taiwanese have contributed from their scanty store of personal effects. The overburdened farmers frequently find that the government has made a levy on their crops; and, in addition, they feel obliged to make contributions of animals, fruit, vegetables, and currency to help maintain the Japanese soldiers abroad."

642 The Chinese Constitution provides that the people be given the right to existence, the right to work, and the right to own property.[20] The right of existence implies that the people shall be guaranteed a minimum standard of living. As to the right of work, the state shall provide opportunity of employment to the people who are capable of work, commensurate with their capacity and ability, so that they may render their services to the community and support themselves.[21] The state shall accord special protection to working women and children who work (Article 153) and shall give assistance and relief to the aged, the infirm, the disabled, and the victims of natural calamities. To promote social welfare, the state shall put into operation a Social Insurance System (Article 155).

651 No one shall be arbitrarily deprived of
40 his property. However, privately owned land
642 and other property are liable to taxation. If any land has an increase in value, through neither the exertion of labor nor the employment of capital, the state shall levy thereon an increment tax, the proceeds of which shall be used for public welfare.[22] The government

20. Ibid., Article 15.
21. Ibid., Article 152.
22. Ibid., Article 143.

may regulate the distribution of land in the interests of the tiller-owner and tenant-cultivators and may limit the amount of land ownership.[23]

Under the Chinese Constitution, any citizen has the right to present petitions to file complaints, or to institute legal proceedings. The Law of Petition was promulgated on December 18, 1954. It provides that a person has the right to voice his opinion concerning the policy of the government on matters of public interest to the representative agency or a competent authority, but the petition must be in written form and must not interfere with the exercise of judicial functions.[24] Any citizen may file a complaint against a wrongful decision on the part of a government body. The prescribed procedure is for the injured party to bring his complaint to a higher government body such as the provincial government, if the case is caused by an administrative act on the part of a hsien or a municipal government.

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23. Ibid., These provisions are inserted in accordance with the equalization of land ownership, one of the basic policies of Dr. Sun Yat-sen.

24. Law of Petition, 1954, Articles 2-6.

423 (0.248 acre) of urban land. Any excess portion should be sold in two years, after which period the hsien or municipal government could expropriate it at the assessed value. The area of urban land devoted to industrial use shall be determined according to the requirement in each case.[23]

423 As to taxation, the higher the price of
651 the land, the heavier will be the tax. The minimum is 1.5 per cent and maximu, 6.5 per cent. The land value increment tax is levied at the time of any transfer of ownership or at the completion of a ten-year period. Any increase of value from previous transfer shall be taxed progressively from 30 per cent to 100 per cent.[24]

423 It is estimated that 10,000 hectares (24,700 acres) of urban land throughout the province will be affected by the new regulations.[25] The steady growth of population, better communication facilities, and more prosperous industry and commerce have caused a great
[455] advance in land price. Urban land has become the object of speculation. The need for reform of urban land is as evident as the need for reform

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23. Article XXXIV and XXXV, Regulations Governing the Equalization of Urban Land Ownership.

24. Ibid., Articles XX and XXI.

25. United Nations, Economic Survey of Asia and the Far East, 1954, Bangkok, Feb. 1955, p. 89.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 3c,
Economic Background

TAXATION AND BUDGET

651 The system of taxation in Formosa has undergone considerable reform since the restoration of Chinese rule. The number of categories taxed under the Japanese has been reduced from 30 to 15 and the system of tax collection has been simplified.[1] In June 1951, taxes collected in the province were classified as national, provincial, or local (hsien or municipal). The national, provincial, and local governments have independent budgets.

National taxes include customs duties, taxes on salt and other commodities, taxes on income and inheritance, a stamp tax, and a defense tax.

Customs duties and the salt tax are collected directly by the central government. Customs duties consist principally of import duties and tonnage dues; the former is levied on dutiable imported commodities, the latter on ships which call at Formosan ports. The provincial government also levies a harbor reconstruction tax, a 2 per cent ad valorem

1. Lih-wu Han, Taiwan Today, Taipei, Aug. 1952, p. 67.

651 charge upon all non-exempt import cargo. The proceeds of this tax are forwarded to the provincial treasury. Articles imported for military use, for relief, or for educational or research purposes are exempted from import duty. And customs duties are not levied on the personal effects and supplies imported for use by diplomatic officials and personnel of the administrative agencies of American aid and military missions to Formosa.

The collection of customs duty is the single largest source of income for the central government. In 1954, customs duties amounted to NT $611,022,015[2] There are two customs districts in Formosa - Taipei and Tainan. Sungshan airport is under the administration of the Taipei customs district.

687 Because of the government control on 1139 foreign trade, which forbids the importation of luxury items, smuggling is rampant. In 1954, fines amounting to NT$4,683,485 were collected.

651 The salt tax was once the most important tax on the China Mainland. In Formosa,

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2. The official exchange of Formosa currency in 1954 was NT$18.78 to US$1 and the market rate averaged NT$27.50 to US$1.

65 however, the bulk of salt produced is for export and is exempt from taxation.[3] Annual domestic consumption amounts to only 90,000 metric tons. In July 1953, the tax on table salt was fixed at NT$1,630 per metric ton; the tax on salt used by fisheries was fixed at NT$815 per metric ton. No tax is levied on salt used for agricultural and industrial purposes. In 1954, salt taxes yielded NT$90,517,419 to the central government.[4]

The tax on commodities are taxable on an ad valorem basis, regardless of whether they are domestic or imported goods:[5] cement, 15 per cent, cotton yarn, 5 per cent; woolen thread and yarn, 15 per cent; matches, 10 per cent; non-alcoholic beverages, 30 per cent. Taxes on refined sugar (35 per cent) and brown sugar (28 per cent) are collected in kind.[6]

Commodity tax rates are revised from year to year. The percentages given above

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3. In 1954, 217,438 metric tons (239,183 short tons) were exported to Japan and Korea.

4. Statistical Monthly, published by the Salt Administration, Taiwan Provincial Government.

5. Commodity tax over and above the import duty is levied on imported goods.

6. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China], Taipei, 1954, p. 147.

65 were in force in 1953-54. Commodity tax receipts increased from NT$160,516,397 in 1953 to NT$305,970,787 in 1954.

The income tax, inheritance tax, and the stamp tax are administered by the provincial government and their receipts are shared by all levels of government in the following manner:

	Income Tax	Inheritance Tax	Stamp Tax
Central Government	80%	20%	50%
Provincial Government	10%	30%	20%
Local Government	10%	50%	30%

Income tax is classified as scheduled income tax and as consolidated income tax. Scheduled income tax is divided into five categories, depending upon the source of income. The rates levied are: 5-50 per cent, on a progressive schedule, for income derived from commercial and industrial undertakings; 1-2 per cent on fixed salaries and renumeration for professional services; 3 per cent on income from interest; 6 per cent on income from rental property; and 15 per cent on incidental income, including grants, gifts, and money won by lottery.

•651 The total amount of income tax collected in Formosa in 1954 was NT$306,464,916, comprising 7.6 per cent of all revenues of the island.

The stamp tax is levied on all invoices, bills, vouchers, contracts, and other documents bearing a face value of NT$9 or more. The rate varies, depending upon the nature of the documents.

Inheritance tax is collected on estates valued at NT$50,000 or more. On estates valued at NT$50,000 to NT$70,000, 1 per cent is charged. On estates valued at more than NT$70,000, a 3 per cent tax is collected on that portion between NT$70,000 and NT$100,000; 6 per cent on that portion between NT$100,000 and NT$150,000; 10 per cent on that portion between NT$150,000 and NT$250,000; 16 per cent on that portion between NT$250,000 and NT$400,000; 24 per cent on that portion between NT$400,000 and NT$600,000; 30 per cent on that portion between NT$600,000 and NT$900,000; and 40 per cent on that portion between NT$900,000 and NT$1,200,000. On estates valued at NT$1,200,000 or more, an inheritance tax of 60 per cent is charged on that portion over NT$1,200,000. Sixty per cent is the ceiling rate for inheritance tax.

651 In 1954, revenue from the stamp tax amounted to NT$157,387,218; the revenue from inheritance tax was only NT$1,733,238.

The defense tax is a surtax on other taxes, at varying rates. For example, there is a surcharge of 50 per cent on motor vehicle licenses, and there is a defense surtax of 30 per cent on business taxes. An electric-power tax, which is an item of defense tax, is levied on the consumption of electric energy. For industrial users, the tax represents 10 per cent of the total electric bill; for non-industrial users, the electric-power tax is 30 per cent of the total bill. The total revenue derived from the defense tax amounted to NT$623,141,480 in 1954.

The provincial taxes include land tax, business tax, and household tax. Land tax is collected in kind in the case of grain and in cash in the case of other produce. The grain collected is delivered to the armed forces by the provincial food bureau on behalf of the Ministry of Finance and is also rationed to civil servants. The provincial government keeps a steady supply of food not only for military and civilian consumption, but also to stabilize food prices. The value increment of urban land is taxed on a progressive scale. Land tax in Formosa in 1954 totaled NT$248,622,140

a part of which was allotted to the local governments as subsidy from the provincial government.

Business tax is levied either on the volume of business or the net profit according to the nature of the business. The rates of taxation vary from 1.5 per cent to 6 per cent. Household tax is levied on assets of individuals and corporations valued over NT$3,000. The rate is 0.5 per cent of the total value. The revenue from business tax in 1954 was NT$127,108,309 and from household tax was NT$179,454,138.

The most important items of revenue for the provincial government are the profits from tobacco and wine monopolies. During the Japanese occupation, direct taxation provided less than 20 per cent of governmental income.[7] The major portion was derived from government-owned properties and undertakings. Government monopolies covered salt, camphor, opium, tobacco, matches, and petroleum.

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7. In 1930, a year of normal prewar activity, out of a total revenue of ¥ 105,453,789, only ¥ 18,316,545 was raised by direct taxation.

651 Their profits accounted for fifty per cent of
655 the total revenue. Now under the Chinese only wine and tobacco monopolies remain. Until 1953, all the income from the monopolies went to the provincial government. Since then a part of the profits is forwarded to the central government. Monopoly profits in 1954 amounted to NT$866,571,260.[8]

651 The taxes collected by local government* in 1954 were as follows:

House Tax	NT$ 82,990,410
Slaughter Tax	NT$183,008,444
Vehicle and Vessel License Tax	NT $ 38,064,145
Entertainment and Amusement Tax	NT$ 38,373,143
Title Deeds Tax	NT$ 25,130,005

* Statistical Abstract of the Republic of China 1955.

Government revenues have been steadily increasing since 1950 as evidenced by the

8. Actual monopoly profits received by the provincial government in the fiscal year 1954-55 were NT$820,000,000.

65/following statistics; a great extent of the increase, of course, only reflects the continuous depreciation of the Chinese currency.

45:Stanford U., S-4, 5 1956 ADI Formosa
ADI

• 651

Tax Collection and Monopoly Profit, 1950-54
(in NT$)*

	Tax Collection	Monopoly Profit	Total
1950	709,671,711	174,158,146	883,829,857
1951	1,187,046,304	326,270,067	1,513,316,371
1952	1,988,836,074	547,753,227	2,536,589,301
1953	2,387,977,534	710,917,014	3,098,894,548
1954	3,173,685,192	866,571,014	4,040,256,452

* Statistical Abstratc of the Republic of China 1955.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER II

"Economic Development" in Taiwan

648 RULING TAIWAN was a task that the Japanese approached with high
433 hopes. Because their goals were ambitious, the problems were more formidable than they might have been with a more modest and conventional colonial program. Their officials in Taiwan were the first overseas administrators in the Empire, and felt a responsibility to make the colony appear worth while at home.[1] Whatever their wider aims, their strongest aspirations for the island expressed themselves in energetic economic policies—policies pursued with such determination that they profoundly altered many aspects of Taiwan's economic life. In the course of their administration, Japanese nationals came to look upon enhanced production with a two-fold purpose: to secure profits for certain individuals and groups, and to promote the self-sufficiency and military strength of the Empire.

Here we shall examine the techniques of their economic program, survey its operation, and endeavor to make some appraisal of the accomplishments. A closer view of its significance for the everyday affairs of the population is reserved for the next chapters.

241 The situation that the Japanese first encountered in Taiwan was
433 one of long-established tradition, in which a small amount of innovation could go a long way. Agriculture was the main source of livelihood for practically all Taiwanese. The particular manner in which farming is organized in Taiwan tends, as it does in most of the Far East, to shield it from the intrusions of the modern world. Under the Manchu regime the Chinese inhabitants of Taiwan had developed farming along the familiar lines of their forebears on the China coast. Farms existed on a local village scale and were operated
[65] for local subsistence. Most of any exportable surplus of production was removed from the villages in the form of taxes or rent. What was
[427] left became absorbed in the costs of civil disturbance, misgovernment, and expansion of settlement, rather than going toward broadening commercial or other opportunities of the cultivators themselves.
433 Whatever may bring about such a situation, it is one that tends to

[1] Most of the later Japanese publications about Taiwan's future also stressed the island's potentialities as a base for southward expansion of the Empire. The grandeur of these proposals suggests that some of them may have been invented in search of favor for their authors more than in serious expectancy of being carried out.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

471 was a newly settled land whose surface still showed little strain of intensive clearing and cultivation, and whose manifest possibilities 433 for wider exploitation in agriculture and other lines had scarcely 648 been tapped. Merely imposing public order and effective political administration could hardly have failed to ensure general prosperity, and the Occidental community at the time contemplated the experiment with great interest.

The new authorities did not leave much room for doubt about their intentions for the economy. Even while engaged in some dissension and maneuver for power between their own civil and military officers, they quickly set about constructing railroads as a state enterprise, reinstituting an official monopoly of camphor (amounting to a world monopoly since Taiwan with Japan was the sole important world producer), nurturing one large company for practical research and experiment in sugar production, reviving the former domestic monopoly of salt, and executing a complete and accurate land survey—Taiwan's first—in order to regulate some of the discordant relations of tenancy among farmers and landlords.

Most of the administrative changes were based on a notorious need for reform of pre-existing practices. But all of these reforms were two-edged. Besides regularizing commercial practices and "correcting abuses," the official monopolies and export associations slowly made it impossible for foreign concerns to remain in operation. The revenues from key lines of business soon became centralized in either the Government-General or corporations explicitly controlled by it. Those relations began to appear between state and business that determined the future course of the fields involved. The land survey [L51] furnished a basis for levying a stiff land tax which brought forth a gratifying and dependable flow of revenue into the public treasury and helped to finance later development schemes.

648 If the overall design of economic expansion had been fixed in the minds of influential Japanese even before they took possession of Taiwan, and to some extent this seems likely, its timetable was not. They did not foresee, for example, that almost ten years of costly and arduous military campaign would be needed to subdue the aborigines and thousands of Taiwanese in the lowlands and foothills who had reverted to banditry. And it became apparent only after many Japanese lives had been forfeited to sickness that this "pacification" of the island had to be accompanied by full-fledged warfare against disease and a general sanitation program, in order that enough

of 303,400 metric tons) and that of industrial salt to 67,000 metric tons (as compared to peak production of 465,000 metric tons). The production of chemical fertilizer (33,800 metric tons before the war) had come to a halt. Tea processing plants and pineapple packing plants stood deserted. In short, by V-J Day the ravages of war, materials shortages, and lack of maintenance had almost paralyzed the industry of Taiwan. The railroads had worn out no less than 1400 steel bridges which had to be classified as unsafe to use. C F 433 [387] [251] 499

After V-J Day, rehabilitation work on the railroads was given a high priority. Eroded steel bridge spans were removed, worn-out sleepers and rails were replaced, road beds were reconditioned. Today, passenger traffic exceeds the peak load of the prewar period; freight traffic, after tripling itself in one year, is approaching prewar peak.

Rehabilitation of the power system made great demands on the ingenuity of the available Chinese engineers. Little foreign exchange was available with which to buy needed replacements, so that the repairs had to be accomplished by reworking obsolete and broken equipment scattered about over the island. Through tedious patching and repairing operations, and the acquisition of a few spare parts that could not be improved, they tripled generating capacity in two years. By 1951, capacity had reached an all time high of 217,000 KW. Today coal (1,451,000 metric tons in 1953), cement (369,000 tons in 1951), chemical fertilizers (more than three times prewar production), petroleum, cotton yarn (three times Japanese peak production) and cotton piece goods (four times Japanese peak production) have all surpassed prewar production figures. C F 377 433

The sugar industry, which, as in the past, is Taiwan's most important source of foreign exchange, has done less well by comparison with prewar standards, but not, or at least not primarily, because rehabilitation operations failed to be carried out. In 1945, 27 of 36 plants stood seriously damaged. By 1948, all the factories and plantation railways had been completely rehabilitated, and by 1950 sugar production had climbed back to 620,000 metric tons. The Taiwan Sugar Corporation's capacity is now over one million tons a year. In 1949–50, however, sugar dropped in price on the world market, and farmers turned from sugar to rice. In 1951–53, the world market price began to rise, and sugar production is gradually returning to its previous high levels. C F 257 433

Paper and pulp mills, machinery shops, shipbuilding, and aluminum works have, likewise, been gradually restored. Another worthwhile project has been the development of a fishery industry which has improved the Taiwanese diet (including that of the Nationalist Army) without great expenditures. American economic aid has played an important role in the rehabilitation and development of all these industries. C F 433 [228]

A labor insurance policy was put into effect on 1 March 1950. Its object is described as "safeguarding the livelihood of the workers and promoting harmonious relations between labor and management so as to ensure social security and high production." According to the Labor Insurance Regulations, all workers employed in public and private factories, mines, salt fields, communications, and public utilities in Taiwan shall be insured. It is compulsory labor insurance on a limited scale. The benefits are insurance against injury, death, maternity, disability, and old age. It also has provision for free medical clinics. This new system of social insurance was put into effect with the cooperation of the Chinese Federation of Labor, the Free China Labor League, and the Provincial General Labor Union. Their delegates also sit as members of the legislature of the provincial government. C F 466

The government has also carried out a tax reform and overhauled the tax collection system. The reform program went into effect on 1 January 1951. The number of distinct taxes was reduced from 20 to 11, leaving the income, inheritance, stamp, commodity, land, business, slaughter-house, entertainment and amusement, vehicle license, and household taxes. C F 651

4:Grajdanzev--131 S-4 (no date) 1942 Formosans
116, 439, 652, 177.65 Japan
636.65

"It might seem more appropriate to examine Taiwan's public finances in a later chapter after a survey of the administrative machinery and its functions. However, one important consideration makes it necessary to consider them here. Our investigation of Taiwan's economy cannot be considered complete without an examination of its external trade. which plays a very important part in the life of the islanders. But the exceptionally heavy movement of goods from the island to Japan cannot be understood simply on the basis of trade or the structure of Taiwan's economy. Certain non-economic factors must be examined before a satisfactory explanation of the movement of commodities can be made. By far the most important among these factors is the government budget, which involves tremendous sums--judging by the standards of the islanders."

4:Grajdanzev--131-132 S-4 (no date) 1942 Formosans
116, 652, 177.65 Japan
636.65

"In 1937, ... the gross value of production of the island was officially estimated at 890 million yen, while the gross revenue of the state for the same year was 203 million yen. If one takes into consideration the fact that the prevailing standards of life in Taiwan are oriental and that most of the families have little, if any, surplus, then a system which succeeds in squeezing out a gross revenue of 203 million yen for the state should be recognized as a remarkable achievement which the administrators of other colonial possessions might well envy. The fiscal system in Taiwan is a powerful instrument with which to extract from the population wealth which cannot be got by ordinary economic means. Of course, if the sums received in this way are applied for the benefit of the subjects themselves, a redistribution of income which fol-[132] lows may in certain cases be recognized as beneficial. If, for example, money which would otherwise be spent by the taxpayers on liquor is spent on the education of the taxpayers' children the results will be recognized as beneficial by most people. Thus we should know not only how much money is collected by the colonial administration, but also how it is spent."

4:Grajdanzev--132 S-4 (no date) 1942 Formosans
116, 127, 652, 177.65 Japan
636.65

"Before giving tables of the revenue and expenditures of the government-general, a few explanatory remarks should be made. (1) We give only net revenue (or expenditures) for the fiscal monopolies (1), railway communications, forests, hospitals, etc., because

1. In Taiwan fiscal monopolies include salt, camphor, opium, tobacco, and alcohol.

gross revenue figures give an exaggerated value to these items; (2) on the expenditure side we have changed the classification according to the purpose of the expenditures and all 'extraordinary' revenues and expenditures we combined with ordinary ones in order to give a more complete picture. The official heading, for example, 'grants to the sufferers from natural calamities' is misleading. One might assume that this represents aid rendered by the state to the local population, but on closer inspection one sees that a greater part of this item in the last year was made up of grants to the railways. Under the heading of 'building and repairs' (eizen hi) we find expenditures on airfields (more than one million yen) out of all proportion to the number of passengers carried (about 40 passengers per day), not including subsidies to airlines.

Unfortunately we cannot disentangle many other large items in view of the absence of information, and consequently, the amounts given represent a minimum for certain expenditures (war, police, 'subsidies' to business men, etc.) and if data were available they might be of much larger proportions."

4:Grajdanzev--132-133 S-4 (no date) 1942 Formosans
116, 631, 652, 177.65 Japan
636.65

"First of all let us compare the gross revenue of the government-general, provinces and municipalities, in order to secure a clear idea of their relative importance. [133]

Public Revenues for 1939 (Budget Estimates) (1)

1. Of course, there are probably cases of double counting in this table, e.g. a grant-in-aid from the government-general to provinces may appear in the budget of the government-general and also in the provincial budgets.

	In 1,000 yen	Percent of total
Government-general	208,602	74.4
Provinces	34,610	12.4
Municipalities	36,961	13.2

Thus three-fourths of all revenues pass through the hands of the government-general; compared to it the local administration is of trifling importance, and we may therefore concentrate our attention chiefly on the budget of the government-general."

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-1-5
116, 465, 652, 177.65 Japan
636.65

[illegible] expenditures of the government-general may be classified as follows:

Expenditures of the Government-General (1,000 Yen) (1)

1. Source: Okurasho Nempo.

Purpose [a]	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
Government-general	1,758	1,939	2,289	2,232	2,416
Grants to local governments	14,704	14,985	15,733	16,171	16,648
Pensions	4,915	4,898	5,088	5,190	5,414
Public finance [b]	9,210	8,623	9,412	9,920	14,315
Police, court, prison [c]	4,474	4,547	5,437	5,534	5,342
General hygiene, hospitals [d]	716	572	833	978	1,204
Education	4,720	5,096	5,499	4,119	4,840
University [e]	295	322	349	3,236	3,797
Research and Investigations	2,630	2,570	3,055	3,186	3,929

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-2
116, 465, 652, 177.65 Japan
636.65

	1935	1936 settled accounts	1937	1938 budget	1939 budget estimates
Railroads and roads (new construction)	7,136	8,537	8,475	9,839	9,588
Ports, rivers	9,113	9,625	10,669	9,120	13,327
Communications (new construction)	717	1,623	1,718	1,442	1,798
Help to sufferers in natural calamities	2,894	435	600	1,272	326
Development of State lands	204	193	335	445	497
Rice control	405	1,180	1,218	121	2,217
War	287	2,017	8,727	18,299	21,150
Meteorological stations [138]	73	94	278	507	890
Propaganda	146	155	427	1,228	1,957
of which for 'spiritual mobilization'			37	57	60

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-3
116, 465, 652, 177.65 Japan
636.65

	1935	1936	1937	1938	1939
		settled accounts		budget	budget estimates
'Expenses of establishments (shisetsu) in South China and the South Seas'	583	618	1,080	2,046	4,074
Secret funds	181	176	176	159	190
Encouragement of industry	3,969	5,707	5,873	9,058	11,468
Temples and shrines	709[f]	134	349	377	599
Total	69,839	74,046	87,620	104,479	125,986

a) The classification offered here is in most cases quite different from the official one; see below for explanations.

b) Chiefly debt service and the cost of tax collection.

c) Not including those paid from the budget of local governments.

d) These are net expenditures, receipts from the patients are deducted.

e) As will be shown later, the University serves chiefly the Japanese. It existed before 1938, but the expenditures were not disbursed from the budget of the government-general.

4:Grajdanzev--137-138 S-4 (no date) 1942 Formosans-4
116, 465, 652, 177.65 Japan
636.65

f) Includes expenditures on the memorial exhibition ('Forty years of Japanese rule').

To this it is useful to add the table of expenditures of provincial and local governments:

Expenditures of Provincial and Local Governments (1,000 Yen)

	1938 budget	1939 budget estimates
Cost of government, including police	8,289	7,630
Debt service	4,389	4,413
Education	13,177	14,144
Hospitals and hygiene	5,447	5,193
Encouragement of industry	5,172	6,488
Guards	757	1,110
Public Works	7,156	7,052
Repairs	6,796	4,361
Shrines	146	103
Other expenditures	19,827[a]	21,159[a]
Total	71,156[a]	71,653[a]

a) This includes several millions in cases of double counting

(grants from the provincial governments to local ones), but we have no means of tracing them."

4:Grajdanzev--140 [3] S-4 (no date) 1942 Formosans
116, 652, 657, 177.65 Japan
636.65

"Expenditures on the health and education of the population occupy a rather modest place in the budget of the government-general, and their part in total expenditures is falling, as the following figures show: (percentages of total expenditures)

	1935	1936	1937	1938	1939
Education[a]	6.8	6.9	6.3	4.5	3.8
Health	1.0	0.8	1.0	1.1	1.0

a) Expenditures on the University are not included here as before 1938 they were not included in the general budget, and we have no data on them.

However, it should be pointed out that the bulk of these expenditures passes through local budgets--14,144,000 yen on education and 5,193,000 on health in 1939."

4:Grajdanzev--140-141 S-4 (no date) 1942 Formosans
116, 648, 652, 659, 723, 177.65 Japan
636.65

"The large expenditures on railways and communications, on research, on investments in the South Seas, etc., show what importance the Japanese attach to the part of Taiwan in the schemes for an advance to the South. The money [141] collected in the Taiwan budget--almost 200 million yen--is thus mainly used, on the one hand, for the construction of the all-important base for Japanese penetration in the South Seas, on the other, for the purchase of Taiwanese products to be sent to Japan (1).

1. In the last few years the Japanese government has started the practice of direct contributions by the Taiwan Treasury to the Japan's Treasury. The sum appropriated in Taiwan's budget for 1941, for example, is 24.5 million yen."

4:Grajdanzev--159 S-4 (no date) 1942 Formosans
116. 457, 652, 661, 177.43 Japan
636.43

"For our purposes it is irrelevant whether all or only a few of the Japanese firms on the island make high profits; whether there are bankruptcies among them or not. We are concerned here with Japan's position in Taiwan as a whole. The existence of the Japanese firms on the island which make less than 10 percent on the invested capital, of the Japanese entrepreneurs who fail and the Japanese adventurists who return to Japan disappointed and disillusioned does not refute our thesis. It was shown in some detail above that beside investment profits as such there is derived from Taiwan the income of Japanese officials, and income originating in taxation, monopolies, fines, etc., most of this due in the last analysis to one source—Japan's colonial power. All this brings us to the conclusion that the active balance of Taiwan's trade represents mostly an unusually high degree of exploitation of the Chinese on the island by the Japanese government and industrialists.

To those who ask whether the colonies are profitable or not, it may be said that the ruling group of Japan knows that they are. They are able in Taiwan to support 300,000 Japanese on a much higher level than those Japanese would enjoy in Japan and in addition to extract profits of more than 100 million yen a year."

4:Grajdanzev--188 S-4 (no date) 1942 Formosans
116, 648, 652, 177.72 Japan
636.72

"All this [i.e. Japanese penetration to the South--analyst] required additional grants, and grants were forthcoming. In 1937 the Taiwan Government-General appropriated for the purposes of southern policy Y1,061,000; in 1938 Y1,552,000; in 1939 Y4,073,000; in 1940 Y5,387,000; in 1941 Y8,002,000. These figures may serve as an index of Japan's preparations for war in Southeast Asia. These sums were earmarked for work outside of Taiwan; but at the same time other amounts, enormous by Taiwan standards, were set apart from the Government-General budget for the construction of the base for southern advance in Taiwan. These expenditures from a minimum of 25 million yen in 1937 rose to a minimum of 50 million yen in 1941."

9: Yamasaki--234 [3] N-5 (1896-1897) 1900 Formosans
116, 439, 652

The total national income (Ertrage) of Taiwan is estimated at over 40,000,000 yen per year. Of this, the total value of goods exported in 1896 amounted to 11,791,051 yen.

10: Schumacher--225 [12] T-1 (ca. 1896) 1898 Formosans
116, 175, 652

Ten months after completion of the conquest of Formosa, the Japanese colonial budget showed an income of sixteen million Mark from the island at a time when no capital whatsoever had been invested... There can be no doubt that within the period of ten months mentioned Japan extended its control quite arbitrarily; and the mere sum of 16 million Mark that was added to the Japanese treasury proves the inexhaustible wealth of Formosa.

631 substantiate this contention. For instance,
635 in the realm of finance, all taxes with the exception of customs duties, are collected by the provincial government. The Bank of
[652] Taiwan, a provincial bank, takes over all the functions of the central bank. It issues currency notes, supplies foreign exchange, and acts as the fiscal agent both of the national and provincial governments. With
871 regard to education, only the Taiwan National
631 University is under the supervision of the
635 Ministry of Education of the national government. All other schools in the province, including the College of Engineering and the Normal University are under the direct jurisdiction of the provincial government. Actually the different ministries in the national government have undergone so much consolidation after they had been moved to Formosa, that most of them are now maintaining only a skeleton staff.[4]

631 The relative importance of the Taiwan
635 provincial government does not, however, diminish the highly centralized authority of President Chiang Kai-shek, for the provincial

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4. There are now 12,000 employees in the national government vs. 113,000 in the provincial government. Time, op. cit., p. 34.

less than 40 per cent; and 100 per cent postponement if the crop failure is over 50 per cent.[20]

Land Bonds in rice and sweet potatoes were issued by the Taiwan Provincial Government to pay for 70 per cent of the value of land to be acquired by the government for resale. Rice and sweet potato are the two principal farm products on Formosa, rice being raised in paddy fields and sweet potatoes on dry land. Rice Bonds are used to pay for the paddy fields and Sweet Potato Bonds to pay for dry land. It was estimated that 179,000 chia (429,000 acres) or 70 per cent of the tenanted land should be purchased by the government under the Land-to-the-Tiller Act, and so Land Bonds equivalent to 1,260,000 metric tons of rice and 440,000 metric tons of sweet potatoes was issued. The amortization of principal and the payment of interest are entrusted to the Taiwan Land Bank. The principal and interest of Rice Bonds are paid in rice, while those of Sweet Potato Bonds are paid in cash by conversion at the market price at the time of maturity of the installment.[21] Based on commodities, the value of Land Bonds is not subject to fluctuation

20. Ibid., Article XXVI.
21. Ibid., Article XI.

due to changes in the value of the currency. The other 30 per cent of the purchase price is paid by the transfer of the stocks of government-owned enterprises. The stocks of the Taiwan Cement Company, the Taiwan Paper and Pulp Corporation, the Taiwan Agriculture and Forestry Corporation, and the Taiwan Industrial and Mining Corporation were to be transferred to the landowners as part payment for land purchased.

The Land-to-the-Tiller Program was launched on February 1, 1953. A limit of one year was set for its completion. By the end of 1953, a total of 143,568 chia (344,104 acres) had been purchased by the government from 104,049 landlords and resold to 195,823 tenants and part-tenants. A total of Land Bonds equivalent to 889,123 metric tons of rice and 315,476 metric tons of sweet potatoes were actually issued. The Taiwan Cement Company, the Taiwan Paper and Pulp Corporation, and several plants belonging to the Agricultural and Forestry Corporation and to the Industrial and Mining Corporation have been sold to the landlords. The total value of government industrial stocks paid to landowners as

45:Stanford U. S-4,5 1956 AD1 Formosa
~~AD1~~ AD1

423 662 compensation amounts to NT$659,774,640.[22]

D. Urban Land Reform

423 In addition to the reform program for rural land, the Chinese Nationalist Government on August 26, 1954, issued regulations governing the equalization of urban land ownership. The aim of the new law is to curtail speculation by preventing the concentration of ownership and to tax the unearned profit from the rising price of urban land. The main features of the law are restriction of the acreage of land an individual or a body corporate may possess, and the levy of progressive taxes over the value of the land and its increment.

Under the new law a private landowner may not own more than one-tenth of a hectare

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22. This cash equivalent is obtained by converting the 30 per cent payment in rice and sweet potatoes according to the average market price of these two items in December 1952. To prevent the concentration of the stock of any one enterprise in the hands of large landowners, it is provided in the Rules Governing the Transfer of Public Enterprises to Public Ownership that the 30 per cent compensation to landlords would be paid seventy per cent with the government stocks of the Cement Corporation and the Paper and Pulp Corporation, and thirty per cent with those of two other corporations.

662 Due to inflation government expenditures grew enormously. Despite the increase in tax receipts, budget deficits occurred each year. Until 1953, the Chinese fiscal year corresponded to the calender year. In 1953 a change was made in the budget law to begin the fiscal year on July 1; thus fiscal year 1954 last from July 1, 1954 to June 30, 1955. Because the 1953 budget expired on December 31, 1953, a special budget for the first six months of 1954 was prepared. According to the figures released by the Chinese government, the amount of annual deficit of the central government for the years 1950 and 1954 was as follows. *

	Total Expenditure (NT$ million)	Deficit (NT$ million)	Percentage of Deficit to total expenditure
1950	1,296	410	31.6
1951	1,432	349	24.4
1952	1,918	174	9.1
1953	2,362	29	1.2
1954**	1,603	138	8.6

* Statistical Abstract of the Republic of China 1955. The figures were the actual settlement figures.

** Special budget from January to June 30, 1954. The budget of the central government for the fiscal year 1954 is not yet available.

652. The deficit appears to be smaller than it actually was because the figures listed above only represent the receipts from bond issue and bank credit. A substantial portion of the national deficit has been met by the sale of gold and foreign exchange reserves, by disposal of government-owned property, and by applying funds derived from the sales proceeds of import articles financed by American aid (Counterpart Fund). Since government holdings of gold and foreign exchanges have been almost depleted, "Nationalist China ... [is] faced today with tremendous difficulties in balancing its in-the-red budget since U.S. aid funds no longer can be used for regular government expenditures."[9]

The largest item of government expenditure is the cost of maintaining military establishments. Other expenditures have been reduced to a minimum. At the end of 1954, excluding the military, only 11,585 persons were on the payrolls of the central government, less than 3 per cent of the total number of the civil functionaries[10] on the Mainland in June

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9. Taipei dispatch, United Press, Sept. 23, 1955.

10. The total number of civil service functionaries of the central government on June 1947 was 472,788. Statistical Yearbook of the Republic of China 1948.

65) 1947. Despite efforts of retrenchment, defense expenditures still constitutes 80 per cent of the total.[11] Since a strong military force is indispensable in Formosa today, further reduction of defense outlay might be dangerous. The tax burden of the people is already extremely heavy. The national income in Formosa in 1954 was estimated at NT$23,545 million, and per capita income at NT$2,502.[12] The total amount of government taxes and monopoly profits in 1954 was NT$4,040 million, and the per capita tax burden was NT$429. . . Thus every Formosan is paying 17 per cent of his meager income as taxes to the government. The incidence of taxation is the heavier since all the taxes are nearly indirect taxes on the essential of life.

To raise the revenue of the central government, perhaps greater attention should be devoted to an increase in the surplus of the government enterprises. Production of government enterprises exceeded 75 per cent of the gross production of the island, and 85 per cent of the exports passed through government hands. In addition, the Chinese government

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11. Address by Mr. Hsü Po-yüan, Minister of Finance, Nov. 7, 1955 before the Central Committee of Kuomintang. Pan Asia News Alliance, Taipei dispatch, Nov. 7, 1955.

12. The population in 1954 was estimated by the statistical department of the Taiwan Provincial Government at 9,409,050.

(65) owns 92 per cent of the capital of all banks in Formosa. Under Japanese rule, surplus from public undertakings was the primary source of government income. In 1954, the national government of China derived nothing from the giant state corporations,[13] and the provincial government received only a modest NT$80 million from those under its control. According to observers, "Taiwan's industry is still characterized by a combination of relative youth on the one hand and of the use of antiquated method on the other. There are numerous evidences of a lack of effective planning and over-all integration."[14] "The size of staff and worker personnel in public enterprises is generally reported to be larger than can be profitably used."[15] With proper supervision and greater efficiency in operation, public enterprises can be made to yield a greater revenue to the central government, helping it to reduce its budgetary deficits.

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13. The Taiwan Sugar Corporation alone is worth over US$120,000,000 and its annual production is valued at US$100,000,000.

14. Arthur F. Raper and others, Urban and Industrial Taiwan - Crowded and Resourceful, Taipei, Sept. 1954, p. 10.

15. Ibid., p. 63.

652 The provincial government and the local governments do not face the same serious financial difficulties confronting the central government. The provincial government is able to balance its budget each year. Its principal revenues are the land tax and the profits from monopolies. According to its published statement,[16] the total revenue of the provincial government for the fiscal year ending June 30, 1955 was NT$1,899 million. Rectipts from taxes were NT$691 million and profits from wine and tobacco monopolies were NT$820 million. Revenue from these two items amounted to 80 per cent of the total. The largest items of expenditure were for education and economic reconstruction. Educational and cultural expenditure totaled NT$180 million and expenditure for economic reconstruction amounted to NT$134 million. These two items accounted for 43 per cent of the total expenditure. The population of the province is increasing and new schools are needed; education expenses will occupy a larger proportion of provincial expenditure in future years.

The local governments have their own budgets. The total revenue of hsien and

16. Central Daily News, Taipei, Dec. 16, 1955, p. 6.

652 municipal governments in the fiscal year ending June 30, 1955 amounted to NT$957 million.[17] Sixty-three per cent of the revenue is derived from local taxes and 26 per cent represents subsidies from central and provincial governments. Forty-two per cent of the expenditure is for educational purposes and 15 per cent for the maintenance of the local police force. For the current year there will be a serious drain on the local resources because a large number of recruits have been inducted into the army. The local governments are responsible for the support of the needy family of draftees. It is estimated that a sum of NT$80 million will be needed for this purpose.

On the town and rural district level, the budget for the fiscal year ending June 30, 1955 was NT$355 million. Fifgy-nine per cent of the revenue comes from tax receipts and 23 per cent from subsidies by the provincial government. Forty-one per cent of the expenditure goes to administration expenses, 20 per cent to the improvement of communications, 9 per cent to education, and the remainder to public health.

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17. Report to Mr. Ch'en Han-p'ing, Provincial Commissioner of Finance, to the Provincial Assembly on Dec. 22, 1955 at the 4th meeting of the Second Session.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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•652 Before the enforcement of self-government, local governments shared the same budgets with the provincial government. With independent budgets, the governments on the local levels enjoy a greater freedom in managing their own affairs. The local assemblies are endowed with the power to raise revenue for specific purposes by special assessments. Chinese society has been traditionally patriarchal; government has always been in the hands of the few. Self-government in Formosa is the first democratic experiment in the Chinese nation. The ability to achieve sound financial management is the crucial text of the success of this experiment. A careful survey of the administration of local affairs in the next few years will be well worthwhile.

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Annex "A," Subparagraph 3d,
Economic Background

BANKING AND CURRENCY

652 Modern banking, as it is known in the
436 West, came into being on Formosa during the Japanese occupation. The first bank on Formosa was a branch of a Japanese commercial bank, the Churitsu Bank, which was opened in Keelung during the first year of Japanese rule (1895). The Bank of Taiwan was established in 1899. It had the exclusive right to issue currency and was designated as the fiscal agent of the colonial government. It also did commercial banking, accepting deposits and extending loans, and dealt in foreign exchange. The notes issued between 1899 and 1904 were convertible into silver or were exchangeable at par for Japanese yen. In 1904 notes convertible into gold were issued. On notes which were not secured by gold or silver reserves, the Bank of Taiwan had to pay a tax of 5 per cent per annum. This rate was reduced to 3 per cent per annum in 1935. With
453 agricultural and industrial development of the island, banks prospered. The following banks were operating in Formosa at the end of 1944:

45:Stanford U. S-4, 5 1956 AD1 Formosa
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	Number of Branches (including head office)
453 Bank of Taiwan	14
Taiwan Commercial and Industrial Bank	37
Chang Hua Bank	28
Hua Nan Bank	4
Taiwan Savings Bank	20
Cooperative Bank	45
Sanwa Bank*	3
Hypothec Bank*	5

* Headquarters in Japan.

The Bank of Taiwan had 35 branches outside Formosa, and the Hua Nan Bank had five branches outside Formosa. In addition to the above there were also one trust company, four mutual-credit associations, and approximately 500 branches of co-operative and farmers' associations. During the first six months of 1945, to escape allied aerial bombings, banks were dispersed and the number of branch banks was increased.

652 After the war the Nationalist Government took over all the banking institutions on Formosa. Shares owned by the Japanese government and by Japanese firms and individuals were

652 confiscated. The Bank of Taiwan continued to be the banker for the Provincial Government and for other banks. When the central government of China moved to Formosa, the head offices of the four Chinese national banks also moved to the island. The Central Bank of China (1) delegated its functions -- the issuance of notes, custody of the treasury, role as fiscal agent for the government -- to the Bank of Taiwan. The Bank of China (2) limited its activities to the supervision of its overseas branches.[1] The Bank of Communications (3) and the Farmers Bank of China (4) have suspended operations. Only the Central Trust of China engages in importing and exporting transactions and acts as the purchasing agent for the government.

The Japanese-controlled banks taken over by the Chinese authorities underwent reorganization. The Taiwan Savings Bank and the local branches of the Sanwa Bank were merged into the Bank of Taiwan. The branches of the Hypothec Bank of Japan, which once provided long-term credit for agriculture, were reorganized into the Land Bank. The Land

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1. The Bank of China has branch offices in New York, Saigon, Havana, Bangkok, Phnom Penh, Osaka, Tokyo, and Sydney.

(65) Bank took control of a considerable amount of farm land once owned by the Japanese Taiwan Development Company, which also make a practice of extending long-term loans to farmers. The Co-operative Bank was renamed the Taiwan Provincial Co-operative Treasury. It continues to co-ordinate and provide financial assistance to the co-operatives and the farmers' associations on the island. The Taiwan Provincial Government is also in complete control of the three commercial banks since it now owns the shares which belonged to the Japanese. The Taiwan Commercial and Industrial Bank has been renamed the First Commercial Bank.

Provincial Banks
(June 1955)

	No. of Offices*	Shares Owned (per cent)		
		Taiwan Provincial Gov.	Bank of Taiwan	Private
Bank of Taiwan	39	100	-	-
Land Bank	30	100	-	-
Co-operative Treasury	23	60	-	40#
First Commercial Bank	65	54	13	33

45:Stanford U. S-4, 5 1956 AD1 Formosa
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652 Hua Nan Bank	43	4	49	43
Chang Hua Bank	58	47	-	53

* including head office and branches
\# owned by co-operatives and farmers' associations

After reorganization, new directors and officials were chosen for all the provincial banks. The majority of directors, including the chairman of the board and managing directors, are native Formosans with the exception of those of the Bank of Taiwan. The Bank of Taiwan, nominally a provincial bank in practice, is controlled directly by the Central Government. The chairman of the board of directors is named or appointed with the approval of President Chiang Kai-shek. Its policy is dictated by the Ministry of Finance, but the provincial governor also has the right to supervise the operation of the bank. This dual control is a source of friction between the national and provincial governments. The Land Bank and the Co-operative Treasury are co-ordinated by the provincial government. The Land Bank has been instrumental in the implementation of the land reform program in Formosa.

All commercial banks are required to deposit a reserve fund at the Bank of Taiwan.

662 Effective May 1, 1953, reserve required is 13 per cent of demand deposits and 8 per cent of fixed deposits. The government supervises the credit policy of the commercial bank through the Bank of Taiwan. Except for the general supervision of the Department of Finance of the provincial government, the administration and operation of the commercial banks are left to their respective boards of directors. For the lower income group there are private money lenders and credit unions (hui).[2] They do very little business because the rate of interest charged is exorbitant.

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2. The credit union is a form of mutual-aid organization. For detailed description of its operation, see Arthur F. Raper and others, Urban and Industrial Taiwan - Crowded and Resourceful, Taipei, 1954, pp. 184-85.

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436 652 Formosa came under Chinese control in November 1945. The same monetary unit was continued in circulation but was renamed the Taipi, or Taiwan dollar (T$). At the end of 1945, the total amount of currency in circulation amounted to T$2,311 millions. The dislocation of the credit system, the loss of the Japanese market, the acute shortage of consumer goods, and the urgent need to repair war damages led to the continuous expansion of note issues and bank credit. In three years, currency in circulation increased to T$142,041 million as of December 31, 1948.[4] In 1949, the Chinese National Government was moved to Formosa. The island was faced not only with an influx of refugees requiring consumer goods, but the need to finance a national army and a government administration. Inflation mounted. On June 14, 1949, currency notes reached the astronomical figure of T$527,000 million, and "cash orders," a substitute for currency issued by the Bank of Taiwan amounted to T$1,214,000 million. The total currency and substitute-currency in circulation was T$1,741,000 million. (A U.S. dollar was worth T$235,000.) Prices rocketed. At the last moment a financial crisis was averted by currency reform. On June 15, 1949 new currency was introduced, called Hsin Taipi or the New Taiwan dollar (NT$).

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4. Financial Report of the Bank of Taiwan for 1948.

436 The old currency was converted to New
662 Taiwan dollars at T$40,000 to NT$1. The outstanding currency notes and cash orders were reduced to NT$44 million. A ceiling for the new note issue was set at NT$200 million, equivalent to U.S. $40 million at the official rate of NT$5 to US$1. The new note issue was backed by 100 per cent reserves of gold and foreign exchange.

Because of huge military disbursements and the need for the rehabilitation of government enterprises, the Chinese government was compelled to borrow heavily from the Bank of Taiwan. At the end of 1949, the total note issue reached NT$198 million, approaching the nominal maximum. During the following years the law was altered several times to permit the issue of "extra limit currency." (Extra limit currency may be secured by commercial bills of acceptance, warehouse receipts, and loans against packing or packed commodities.) The note issue steadily expanded; at the end of 1954 the total issue reached NT$1,043 million, five times the maximum limit. Despite the efforts of the government to avoid further inflation, general price levels increased with the increase in the amount of notes in circulation.

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Note Issue*

End of Year	Total Amount of Note Issue (NT$million)#	Indices of Note Issue (June 15, 1949 = 100)	Loans and Advances to Public Treasury[x] (NT$million)	Wholesale Prices Indices in Taipei (June 30, 1949 = 100)
1949	198	452	15	183
1950	248	569	497	345
1951	390	895	684	526
1952	589	1,350	681	544
1953	773	1,773	828	631
1954	1,043	2,390	1,138	616
1955[y]	1,164	2,650	not yet available	

* Statistical Abstract of the Republic of China 1955, pp. 164-67.

\# Amount of subsidiary currency is not included in these figures. At end of 1954 subsidiary notes in circulation amounted to NT$175 million.

x Granted to both the central and provincial governments.

y Chung-yang Jih-pao [Central Daily News], Taipei, Jan. 3, 1956, p. 3.

435 It should be noted that price levels have
459 risen 700 per cent and the amount of notes issued has increased 2,600 per cent. Similarly foreign exchange has not depreciated to the same extent as the increase of money in circulation. The official exchange rate[5] for US dollars has increased from NT$5 to NT$24.78; the market rate[6] for US dollars has increased from NT$7.82 on December 31, 1949 to NT$37.50 on November 6, 1955.

458 The pressure of inflation on the economy
662 of Formosa has been alleviated by a number of factors. The enormous growth in population and industrial expansion tend to absorb a part of the increased money supply. The government controls an abundant reserve of rice, wheat flour, and other essential goods, which may be used to stabilize prices. The depreciation of the external value of the currency has been partially offset by aid from the United States and the personal expenditure of United States advisory personnel in Formosa.

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5. The 1955 figure includes the bank exchange rate of NT$15.65 plus 20 per cent defense tax (NT$3.13) plus the certificate price of NT$6.00.

6. United Press dispatch, Taipei, Nov. 6, 1955.

458 652 However, these favorable factors may be of no help if the trend toward inflation continues unabated. The principal cause of continued inflation is government borrowing. Advances to the public treasury at the end of 1954 amounted to NT$1,138 million; the total note issue was only NT$1,043 million. Unless the Chinese government is able to drastically reduce its huge budgetary deficit by raising more revenue and cutting its expenditures, it will be difficult to control inflation, and unless the dangers of inflation are avoided, it will be impossible to achieve financial stability.

32.Steiner 3-4 (no date)1951
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647 ment employees was reduced to 81,006, while the percentage of indigenous citizens in government service had risen to 65.46. A more significant change, perhaps, is in the increase of indigenous personnel in positions of responsibility. Among the first-class officials, local personnel has increased from 0.92 per cent under the Japanese to 17.45 per cent under the Nationalists. During the similar period, the second-class officials of indigenous origin rose from 1.29 per cent to 25.02 per cent.

563 Of 113,900 aborigines in Taiwan, 91,-
657 070 of them live in the central mountainous region. Since 1946 they have been exempted from tax payments. Redistricted into a number of villages and subvillages, they have been developing local self-government through village assemblies. There are at present 159 free primary schools among them, educating some 20,000 of their children. In addition, 924 graduates have been awarded government scholarships to enter secondary schools. Among them are also 140 public health clinics serviced by 321 medical people.[18]

Finance

652 The people of Taiwan suffered much when their currency was linked with that of mainland China. From one Taiwan dollar for thirty Chinese dollars (*fapi*) in 1946, the rate climbed to T$1,835 for one Chinese "Gold Yuan" in August 1948.[19] By the time the Gold Yuan collapsed several months later, there was little purchasing power left in the Taiwan dollar worth salvaging. A fresh start was made in June 1949 when the

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nel figures on which this analysis is based, see *Taiwan Today*, cited note 11 *supra*, pp. 30–31.

[18] For figures in this paragraph, see *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 20–21.

[19] For a general description of Taiwan provincial finance, see *Taiwan Reconstruction**, pp. 33–77; also cf. *Taiwan Today*, cited note 11 *supra*, pp. 44–76.

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52:Steiner S-4 (no date) 1951
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652 National Taiwan Dollar was introduced,[20] replacing the old currency at a ratio of 1:40,000. Fixed at an official exchange rate of four to one United States dollar, the new issue amounted to NT$200,000,000.[21] Authorized by the Nationalist government and handled by the Taiwan Provincial Bank, its 100 per cent reserve was provided by the former out of its Central Bank reserve fund[22] brought over from the mainland.

Implementing the currency reform were a number of deflationary measures. By selling government-owned commodities, confiscated Japanese properties, and bonds, and conducting lotteries, a total of NT$25,740,000 was siphoned from circulation.[23] Between June 1949 when the reform was instituted and October 1950, the note issue, including subsidiary and fiduciary issues, rose 824.95 per cent, while the wholesale commodity index price of Taipeh rose 330.36 per cent.[24]

Since its transfer to Taiwan, the Nationalist government's expenditures have been reduced considerably. On its administrative staff today are but a few
701 thousands of essential personnel. The maintenance of its armed forces is the largest item.[25]

652 Nationalist financial requirements are
655 met by the sale of government-owned properties, customs receipts, revenues

[20] See Currency Reform Ordinance of the Taiwan Provincial Government*, June 15, 1949.

[21] *Ibid.* The issue was subsequently increased another NT$50,000,000. The present exchange rate fluctuates around eight Taiwan dollars for one United States dollar.

[22] About US$200,000,000 in August 1948. See *China Handbook 1950*, p. 479.

[23] The figure is based on Bank of Taiwan statistics as of June 1950.

[24] *Taiwan Today*, cited note 11 *supra*, p. 71; also cf. *Taiwan Reconstruction**, cited note 12 *supra*, pp. 63–64.

[25] In his Administrative Report of October 3, 1950, Premier Chen Cheng disclosed that some 150,000 men were discharged during the

[P. 217 (A)]

52:Steiner S-4 (no date) 1951
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from salt monopoly, postal service, and profits from such assorted enterprises as telecommunication; air transport; navigation; petroleum; aluminum, gold, coal, and copper mining; and steel works. Where additional funds are needed, the government dips into its estimated US$200,000,000 gold reserve which it brought over from the mainland along with assets of various government corporations.

Presently, the Taiwan Provincial Government operates under the provisions of a "special budgetary system."[26] A considerable part of its expenditures, normally national, are paid from the provincial treasury. The estimated revenue for 1950, for instance, amounted to NT$300,825,888.[27] Of that amount, approximately 31.91 per cent came from government monopolies; 21.54 per cent from sales of government-owned assets consisting mostly of confiscated Japanese properties; 19.51 per cent from such taxes as income, inheritance, excise, and land; and the 27.04 per cent from provincial enterprises. Of the expenditures, 23.71 per cent were for education and culture; 23.4 per cent for subsidies; 21.18 per cent for reconstruction; 7.65 per cent for administering reconstruction; 6.06 per cent for defense and security; 4.11 per cent for financial administration; 3.63 per cent for civil administration; 3.53 per cent for public health; and the rest for social relief and civil service pensions.[28]

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first six months of 1950 "to match the nation's financial resources." Of the remaining units, exact figure not given, the Premier reported that "their pay has been increased and farms have been opened for their own benefits."

[26] *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, p. 33.

[27] *Taiwan Today*, cited note 11 *supra*, p. 60. Actual revenue for 1950 was NT$319,968,297.

[28] For a breakdown of budgetary figures, see *Taiwan Today*, pp. 59–68; also *Taiwan Reconstruction**, pp. 33–36.

[p. 217(B)]

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652 Thus far, the provincial budgets have been balanced in recent years. How long the improved financial outlook will continue depends on a number of factors. Undue strain on provincial resources has been avoided by using assets brought over from the mainland and by selling government properties. Indirect benefits derived from the Economic Co-operation Administration program, which for the fiscal year 1951 amount to approximately US$40,000,000, help to arrest the inflationary trend of commodities.[29]

Living Conditions

511 In the absence of comprehensive statistics establishing the trends of per capita income in Taiwan,[30] the Nationalist policy of improving the people's livelihood may be reflected by the measures which have been taken regarding agriculture, industry, food, and other government-operated productive services.

Agriculture

[162] 427 Farming population in Taiwan is estimated to be around 3,800,000. Of this number, 70 per cent are under contract as tenant farmers. Prior to the enforcement of the rent reduction program in April 1949, which set a maximum rental ceiling of 37.5 per cent, the average rental ranged from 46 to 62.5 per cent of the total yield.

In administering the rent reduction program, the provincial authorities fix a standard yield per *chia* (less than 2.5

[29] "Economic Administration Program in Taiwan," an address by Raymond T. Moyer, chief, ECA, China Mission, before the Chinese Association for the United Nations, March 17, 1951.

[30] Premier Chen Cheng states that per capita income in Taiwan has risen 30 per cent since the termination of Japanese rule (Broadcast of the Voice of Free China, Taipeh, May 12, 1951). Also estimated income in Taiwan for 1950 is NT$1,276,000,000 and for 1951

[P. 218 (A)]

52:Steiner S-4 (no date)1951
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625 wine, tobacco, and salt in violation of government monopoly, and violations of the 37.5 rent reduction program.

Conclusions

643 In describing the Nationalist government policies, 1949–51, the writer has sought to ascertain their nature and contents by recounting a chain of events which set the political pattern in contemporary Taiwan and by a survey of what has taken place since. From them may be drawn the following tentative conclusions:

1. Generalissimo Chiang Kai-shek and his supporters have been exercising a dominant role in National Government policies, 1949–51.

665 2. While there are three known political parties active in national politics in Taiwan, the Kuomintang, as presently constituted, is the ruling party.

631 3. The political framework in Taiwan may be described as one of over-all political control by the Nationalist government, centralized management by the provincial government, and local self-government, still in its preliminary stage, at the municipal and county levels.

652 4. The National Taiwan currency has exhibited a degree of stability which compares favorably with that in most postwar countries having suffered from war devastation.

5. Nationalist government assets and reserve, sale of government properties, and ECA assistance are contributing factors in balancing the provincial budgets in recent years.

427 6. The 37.5 rent reduction program has contributed towards rural well-being, along with the projects sponsored by the Joint Committee on Rural Rehabilitation.

433 7. There has been an upward trend in agricultural and industrial produc-

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tenants there has been a rent reform program, which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

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By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

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Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

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Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

311 total arable land has remained more or less constant, in spite of the fact that some land along the eastern coast of the island as well as some 300,000 hectares of grass land in the mountains might be developed either for crops or as grazing land if the expense of such projects did not seem to indicate that the cost would be prohibitive.[4] When the [55] Shihmen dam and reservoir project is completed, waste land on the banks of Tanshui River can be converted into paddy fields. It is believed that the completion of the dam will make possible the reclamation of at least 54,000 hectares.[5]

241 Paddy fields constitute about 60 per cent of the total cultivated land in Formosa. They are classified in two categories -- double-cropping fields and single-cropping fields. The former yields two crops of rice each year. Between rice crops, one crop of vegetables is planted and harvested. In single-cropping fields, besides one crop of

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4. Table 196, "Summary of Statistics of Taiwan for the Past Fifty-one Years," Taiwan Agricultural Yearbook, 1954, p. 20.

5. Chung-yang Jih-pao [The Central Daily News], Taipei, July 1, 1955.

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the Japanese undertook primarily in anticipation of long-term benefit, without being able to justify its initial cost for many years. In terms of kilometer-tons of freight carried, the railroad made only partial use of its physical facilities until late in the colony's existence.[33] This sort of schedule was also followed in establishing a system of improved roads and trails over the island. In both cases, Japanese had to bear the burden of ambitious engineering projects when they could least afford it, for basic transportation networks are more valuable as networks than they are piecemeal.

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Public irrigation was a project closely tied to agriculture, and followed a different timetable (see Fig. 7). After 1895 there was no large

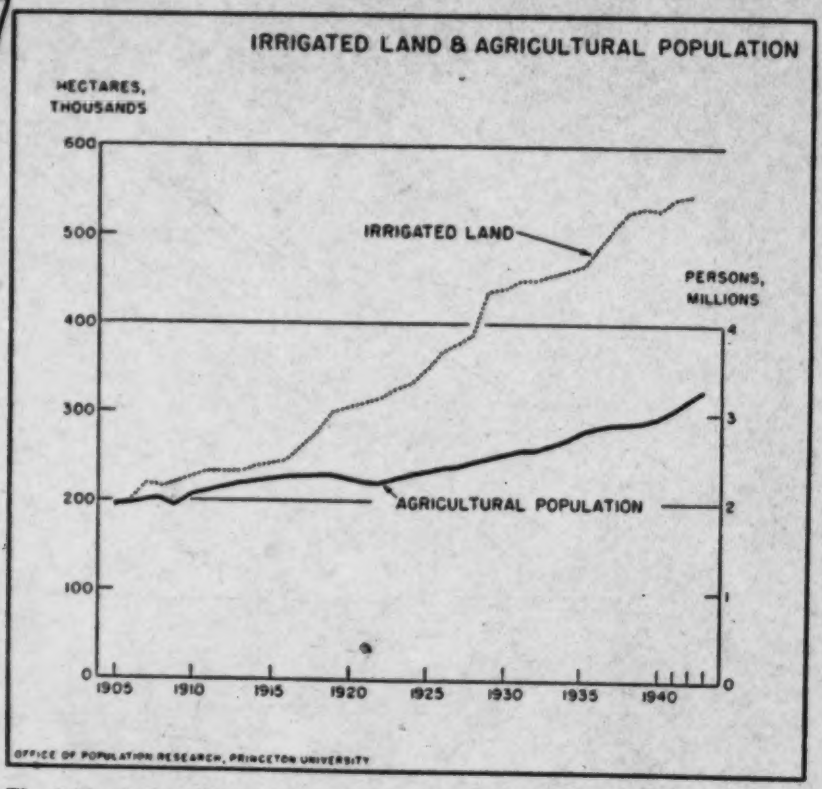

Fig. 7. Expansion of Irrigation and Agricultural Population in Taiwan, 1905-1943.

[33] Then it suddenly became overtaxed with cargo connected with the war, stemming from industrial growth and from Taiwan's role as a military base. See OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement* (1944), p. 60.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

supply of unoccupied land in Taiwan that could be drawn into cultivation, and so the needs of an expanding farming population and growing export demand had to be met by other means. The Japanese turned again to large investment to improve the effectiveness of the land that there was. The manner of constructing and upkeep of irrigation canals in Taiwan depended on mass labor. They were turned into an investment of labor, employed so as to produce an important form of capital equipment. The extent of irrigation more than kept pace with rural population growth while the Japanese were in control. Water for this purpose became indispensable in maintaining the output of farms. It was a hidden element in the improvement of rice and sugar yields, for the new varieties of seed that were developed were types that needed to be carefully irrigated.

Finally, the development of electric power was so closely related to the growth of Taiwan's newer industries that it should not be passed over without mention. Generation of electricity was one of the specialized heavy investments that formed the nucleus of the "industrial" progress after 1930. This is evident in a circumstantial way from the trends of capacity in generating power and the spread of factory employment (see Fig. 8). Factories in Taiwan came to depend on the cheap electricity that was developed at state instigation from water power. Judged from the size of their employment, the most important of the mechanized factories in the island were "food" (i.e., sugar) and metallurgical plants, which were the heaviest users of electricity.

As the next chapter will indicate, the Japanese broadened their objectives in Taiwan too late to put its human resources to best use in the new effort. Drawing the developed wealth of the island together into centralized control had turned out to be singularly advantageous. It had erected an entire structure of corporate organization from specialized financial services down to the coordinating of actual physical production of commodities. The Government-General had retained a close supervision over this structure, by licensing, regulation, and participation as a shareholder. As a program it quickly marshalled the production of Taiwan's farms into a profitable colonial enterprise.

When it came to pressing this development further, however, the Japanese made no real progress, for they had frustrated these aims in advance. Under agrarian conditions, industrial skills and experience in management are slower and more difficult to accumulate

52 Steiner S-4 (no date) 1951
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427 acres) as a measuring stick for rental calculation. It varies with the fertility of land in different sections of Taiwan. To prepare the farmers for the acceptance of the program, 9,937 persons were sent to the rural areas in 1949 to acquaint them with the operational details. They were followed by 1,257 trained persons who helped farmers to readjust their rental contracts. By November 1949, 306,473 families were given "37.5-contracts" in conformity with the program. Finally, 26 provincial inspectors toured the island to check the results. 484 The income of the tenant farmers was estimated to have registered an average gain of 30 per cent, ranging from 0.9 per cent to as high as 70 per cent in comparison with the pre-reform period.[21]

653 Pertinent to rural rehabilitation are the public works being done in dike repair and construction, irrigation, and land reclamation. Briefly, from 1947 to 1950, some 10,983 meters of new dikes were built, in addition to 65,288 meters repaired. Since 1946 a yearly average of 9,972 hectares of land has been brought under irrigation, in comparison to an average of 9,428 hectares under the Japanese.[22]

433 A review of statistics also shows varying degrees of gains in agricultural production.[23] For instance, for 1950 the

NT$1,432,000,000 (*Taiwan Today*, cited note 11 *supra*, pp. 59–61).

[21] For statistical data on the rent reduction program, see Land Bureau, Taiwan Provincial Government, *37.5 Rent Reduction Program** (Taipeh, 1949), pp. 1, 19, 34; *Taiwan Today*, cited note 11 *supra*, p. 90; *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 2, p. 383; Vol. 1, p. 25.

[22] *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 227–28, also for comprehensive data, pp. 227–43. For a general descriptive and statistical presentation of the subject, see Taiwan Provincial Government, *Water Conservancy and Irrigation**, Taipeh, 1949; also *Reclamation of Waste-land**, Taipeh, 1949.

[23] For detailed statistical data on agricultural production, see Taiwan Provincial Gov-

[P. 218 (8)]

1:Gallin E-4,5 (1957-1958) 1966
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some insights into what is now taking place on the Chinese mainland. For many of the changes now taking place both in Taiwan and on the mainland are primarily due to the same cause—the encroachment of urbanization on a traditionally agrarian culture, whether enforced by the Japanese, the Nationalist Chinese, or the Chinese Communists.

FIELD METHODS AND PROBLEMS

T 121

In the selection of a research site, I looked for a Taiwanese village with several attributes. These were that the inhabitants be of mainland origin, preferably descendants of early emigrants from the province of Fukien; that the village have agriculture as its primary means of livelihood; that it have a moderate-sized population, preferably between five hundred and one thousand inhabitants, to facilitate the achievement of familiarity with most of the people and with all aspects of village cultural life; that it be fairly traditional both culturally and socially and as typical as possible of the general villages in that area; and that housing be available inside the village for me, my wife, and our interpreter. It was also important that the village not be too near a major city, and yet not be geographically or culturally isolated from the main flow of Taiwanese life; it had to be identifiable as a definite community.

And, of course, it was important that the villagers be receptive to having a foreign observer move into the village.

It is no easy task to search for a village in which to carry on research in an unfamiliar country. The island of Taiwan, which on the map appears to be minute, is actually 250 miles long from north to south and 90 miles wide; it has an area of 13.8 thousand square miles.

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At the start of my search, I talked with the staff of the Joint Commission on Rural Reconstruction (JCRR), a Chinese and American agency which plays an important role in rural development in Taiwan. They briefed me on the cultural and geographic areas of rural Taiwan, and we decided that the *hsien* (counties) of Chang-hua, Taichung, and Yun Lin (all on the west-central coastal plain of Taiwan) offered the best possibilities for a suitable village. The next step was to travel by jeep within this area with JCRR field agents to visit many different kinds of villages and make a final choice. The interpreter, whom I hired at that time to live and work with my wife and me in the village, was a companion on these excursions. (For a discussion of translation methods and the use of the interpreter in the field see Appendix 1.)

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During the time we were investigating the many villages, we also visited local Farmers' Associations and *hsiang* (district) public offices. We held many long discussions with local officials to get additional

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"At the time of annexation the Japanese [58] government was anxious to improve their 'unfavorable' balance of trade with foreign countries, and the cultivation of sugar cane in Taiwan appeared to be an excellent means of doing this. Japan's imports of sugar at that time were in excess of twenty million yen—about ten per cent of her total imports, and at times equal to the 'unfavorable' balance of trade. Sugar cane is grown in Japan, but climatic conditions and limited area make it impossible to increase the total production significantly. At the most it can supply only a small percentage of the domestic demand for sugar. But Taiwan with its tropical climate could be successfully used for this purpose.

As early as 1896 seeds of improved types of sugar cane were imported from the Hawaiian Islands. In 1898, Kodama, the Governor-General of Taiwan, and his energetic Governor Goto began conferences with Japanese financiers on the question of investment in the sugar industry of Taiwan. A special investigation of the outlook for sugar cane culture in Taiwan was entrusted to Dr. Inazo Nitobe, who presented his report in 1901. In this report Dr. Nitobe recommended that the irrigated area and the area under cultivation be increased through various measures of encouragement, assistance, and direct government action, the establishment of sugar research stations, and the introduction of improved varieties of sugar cane, while other recommendations were made concerning sugar manufacture. The government followed these recommendations, established experimental

stations, imported new varieties of sugar cane from Hawaii and Java, and paid special subsidies and grants to the manufacturers and farmers to induce them to follow its policy. Up to March 31, 1932, it had paid about thirteen million yen in subsidies. Moreover, in 1903 a relatively moderate protective tariff on sugar imported into the Japanese Empire was introduced, the rate being 0.8 sen per kin (0.6 kg.) on No. 20 standard and higher. This rate was increased to 4.65 sen per kin in 1911 on No. 21 standard and higher, to 5.3 sen in 1927 on No. 22 standard and higher, and to 7.15 sen in 1932. As a result—this is the official version—wealth came to the sugar [59] industry and to the island 'and this has resulted in the present industrial prosperity'."

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-1-2
116, 249, 433, 458, 654, 177.24 Japan
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"There can be no doubt as to the importance of sugar cane cultivation and of the sugar industry in Taiwan and the degree of success achieved by the Japanese government and Chinese cultivators.

However, a close examination of the table [See page 59, category 116--analyst] reveals some interesting features. It was pointed out how much effort was expended by the officials on the improvement of sugar cane culture. But in spite of all the efforts of the government and of the experimental stations the yield per ko did not show any signs of improvement during the first fifteen years. If the development was as steady as is officially described, why then was the increase of production up to 1921 taking place exclusively as a result of the increase in the planted area?

Further, the increase in sugar production may also come through the increase of sugar content in the juice of the sugar cane. It is interesting to note that in this respect too, little, if any, improvement is noticed up to 1922, but that after that year the sugar content rose from 9.5 per cent in 1922 to 13.2 per cent in 1935 and in this year was considerably higher than in Java or Cuba (12.3 and 11.6 per cent respectively). Finally, the table shows that after the peak of production (and area) was reached in 1917-18, production fell, then rose slowly up to 1928-29, fell sharply by almost thirty per cent and then began to rise again.

4:Grajdanzev--60-61 S-4 (no date) 1942 Formosans-2
116, 249, 433, 458, 654, 177.24 Japan
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The explanation of these fluctuations is that the Taiwan sugar industry (and, as a consequence, also the cultivation of sugar cane) passed through several crises of the most severe character. 'Overproduction' is a word familiar to this industry, and to the planters also. Of course, it must be emphasized that this 'overproduction' is of a special character, because the consumption of sugar in Japan is relatively low and, though physically the demand of the population for sugar [61] is not satisfied, there is insufficient purchasing power available to buy it.

All this is very important for the problem in hand. The government's efforts were probably as great from 1900 to 1922 as afterward, subsidies were given more lavishly than later on, but the results in the first twenty years were rather meagre. In other words, the development was due not so much to the government's and the manufacturers' efforts as to some other factors inherent in the development of the economy of Taiwan and Japan."

4:Grajdanzev--140 [4] S-4 (no date) 1942 Formosans
116, 654, 177.81 Japan
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"Attention should also be paid to the considerable amounts spent by the government on research and investigation. A special institute has been established, which centralizes the research on the island and considerable sums are spent on research into new uses for natural gas, on sugar and sugar cane research, and on war industries."

9: Yamasaki--229 [3] N-5 (1896-1897) 1900 Formosans
116, 132, 654

Like the scientific investigation of Taiwan in general, the systematic examination of the climate also does not begin until the establishment of Japanese rule. In 1897 five meteorological stations were set up, in Taihoku, Taichū, Tainan, Kōshun and Hōko-tō. The organization of simultaneous and corresponding observations in these and other Japanese stations, as also in China and Korea, undoubtedly effected a new advance in East Asiatic climatology. Very carefully observed is the cyclone, which frequently every summer or fall begins in the neighborhood of Taiwan and gradually proceeds north to Japan, and in the regions it touches, precautionary measures are adopted, depending on the weather prospects.

25: Plaut--28-29 U-4 (no date) 1903 Formosans-1-2
116, 114, 654, 177.65 Japan
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Anyone who knew the conditions [EJ: previous to Japanese occupation] realized that if the new order were to be a permanent one, it would have to be based on the existing circumstances; these circumstances were the culture, customs, laws and habits of the [29] most important and largest element of the population, or the Chinese, and so the first thing to do was to make a thorough study of the old system. A number of capable men were set to this task, and they collected a great deal of material. An imperial decree established a Commission to inquire into the old customs on Formosa, and it was under the direction of Okamatsu Santaro, Professor of Law at Kyoto University. This group was charged to examine the available information and to get some more. That was on the 25th of October 1901. That same year Professor Okamatsu published his first report by order of the Governor General, and in 1902 it appeared in English under the title of: "Provisional Report on Investigations of Laws and Customs in the Island of Formosa compiled by order of the Governor-General of Formosa by Santaro Okamatsu."

The report begins with a brief survey of the history, administration and judicial procedures of the island, then there is a detailed description of the legal status of the lands, their division according to the nature and utilization of the soil, the land tax, inheritance and loss, purchase, sale and lease, as well as of the legal forms relating to these contracts, and there is also a discussion of irrigation and the rights and taxes which it entails. In conclusion he has a brief discussion of the family rights of the Chinese

25: Plaut--28-29 U-4 (no date) 1903 Formosans-2
116, 114, 654, 177.65 Japan
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inhabitant. In an appendix he has added a glossary of the Chinese terms which were used in the work, and then there are 89 "References", or examples of documents in Chinese, as they are used in various legal affairs.

All in all, the report is a valuable contribution not only to our knowledge of Formosa, but to the study of comparative jurisprudence as well.

25: Plaut--32 U-4 (no date) 1903 Formosans
116, 206, 496, 654, 177.65 China
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Liu-Ming-Chuan [EJ: the Chinese Viceroy appointed in 1884] was eager to make Formosa more progressive. So he built a railroad from Kelung to the capital T'ai-pei-fu, and from there on to Hsin-chu; he connected the capital T'ai-pei to T'ai-nan and the Pescadores with a telegraph line, and then he made Formosa a part of the world telegraph system by constructing a cable to Futchou. He also established a well-regulated postal system. Industry, including sugar, also received his support. Although Liu-Ming-Chuang's administration was very beneficial for Formosa, he aroused much dissatisfaction by raising the taxes and levying an inland duty, for the previous revenues were not sufficient to defray the costs of his innovations.

36: Rowe S-4 (no date) 1955 AF1 China AF1
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tenants there has been a rent reform program, which went into effect in 1949 and set a maximum rental ceiling of 37.5 percent of the total yield (average rental had theretofore ranged from 46 to 62.5 percent of the total yield). The income of tenant farmers has, in consequence of the program, risen by an average of 30 percent. The reform legislation provides that where the main crop yields are less than 20 percent of normal the tenant shall not be required to pay any rent at all. It also gives the farmer security of tenure (landlords may no longer refuse to renew contracts in order to re-rent on more favorable terms), and it restricts landlords' right to dispossess tenants. By 1951, 97.54 percent of the tenant farmers had completed new contracts under the new law, and the landlord problem had been brought, for the most part, under control. The price of land has steadily declined, which, of course, enables more and more tenant farmers to buy land to own. The rent reduction program has been carried out in cooperation with a Chinese-American organization, the Joint Commission on Rural Reconstruction, which is responsible for a program of general agricultural improvement: the construction of irrigation dams and canals, reclamation projects, the making available of better seeds and fertilizers, animal disease control, the organization of farmer associations and rural cooperatives, and rural health measures.

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By the end of the period 1950–1951, the use of US-financed fertilizer had brought rice production to the highest peak in the history of Taiwan. In exchange for much-needed foreign currency, twenty-two thousand, five hundred eighty-seven metric tons of Taiwan's surplus were exported to Japan and South Korea. Other foods basic to local consumption were also above peak prewar production levels. Sweet potatoes were up 20 percent, wheat 165 percent, and peanuts 89 percent. Considering the handicaps under which the government started, the economy of Taiwan is now surprisingly stable, largely because of the increased agricultural productivity reflected in the foregoing statistics.

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Economic Reform

In 1949, to meet the economic crisis precipitated by the soaring inflation of the Chinese National currency, to which the Taiwan dollar was then linked, a fresh start was made by introducing a new currency, linked to the US dollar and backed by gold bullion brought over from the mainland. At the same time, a series of deflationary measures were enlisted. The government's expenditures, for example, were curtailed by reducing its personnel and cutting back certain of its activities; at the same time, its resources were increased by means of a new luxury tax (based upon ownership of property, including cars and refrigerators), a defense tax, the floating of bonds, and the sale of government assets. The program, as a whole, had the effect of encouraging private enterprise, so that the usual sources of revenue (customs receipts, returns from the salt monopoly, the postal services, and assorted government enterprises in fields like telecommunication, air transport, navigation, petroleum, aluminum, gold, coal, copper, and steel) became more productive.

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Industrial Recovery

In industry, Taiwan's return to prosperity has been extremely rapid. At the time of Japan's surrender, the annual coal production had dropped to 776,000 metric tons (as compared to peak production of 1,182,635 in 1941); electric power had fallen off to 52,646 KW (as compared to the peak load of 152,355 KW in 1943); the production of sugar (the chief product for export) had declined to 86,073 metric tons (as compared to 1,418,000 metric tons before WW II), that of cement to 78,000 metric tons (as compared to peak production

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

648 achieved through the efforts of private individuals in a free investment market. The Government-General of Taiwan was given a free
471 hand by Tokyo in most internal affairs, and displayed great interest and vigor in regulating all areas of business activity that it could effectively control. A large part in the formation of capital in Taiwan can be attributed to official steps deliberately adopted with this end in view.

471 On the one hand, these measures consisted of widespread rationalizations in agriculture and large investments providing technical
654 economies to individual farmers; on the other, there were various devices to centralize the heavy investments in large blocs and thereby keep control over the entire venture. The former consisted mainly of improvements that could be initiated and carried out by Japanese without full participation by Taiwanese, and the latter of ways to guide the process and garner the returns. The one served to raise the average productivity of working Taiwanese without depending on them for inception; the other to avoid dissipating the earnings of the colonial enterprise as higher incomes among the Taiwanese, by confining them in the charge of a few Japanese.[5]

Although the Japanese treated their domestic agriculture in much the same way, they made use of their own farmers' earnings in furthering the growth of industry. The fiscal role of rural Taiwan corresponded to that of rural Japan, but in Japan the several lines developed together and were complementary. Fewer opportunities of this nature were exploited in Taiwan, for the complementarities were all external. This is shown in the other side of the picture of trade with Japan—that of imports and their composition. More than half of the value of imports from Japan during later years represented items that were clearly for current consumption.[6] There was surely nothing like the emphasis on heavy capital goods among the remainder that is found in the imports of Japan itself.[7]

Problems of Pacification

471 This study is concerned as much with broader aspects of organiza-
433 tion in economic life as with the economic activities themselves. Thus

[5] One of the organizational devices for diverting this income away from consumption was, as in Japan, to make it flow into corporate rather than individual hands, where its disposition was more easily regulated.

[6] I.e., articles such as food, clothing, paper, beverages, textiles, manufactured consumer commodities, and the like. One suspects that a large part of these went to maintain the comforts of the Japanese living in Taiwan.

[7] For example, see Reubens, Edwin P. (1950), pp. 109-112.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

Japanese government officers could be stationed over the island to establish political order firmly. 648

This delay in extending their mastery over the whole of Taiwan was a disappointment to the Japanese. It spurred them to concentrate their efforts at organization on measures other than force to bring the inhabitants under control. Once set in motion after some three years' experiment and delay, their methods brought swift results. They encircled and isolated the aboriginal tribes in the hills, and introduced a refinement of old Chinese forms of keeping local order—the so-called *pao-chia* system.[10] 648 631

Private Corporations and Japanese Investment

Other measures followed to make the Japanese rule more effective. As the exercise of authority became more a matter of routine, the policy turned more and more to exploring improvements and enlargements of production. This progress in government can be traced in the annals of specific achievements, like the drive to raise rice yields[11] and the public health program. By 1905 the Government-General felt itself well enough established to take a detailed census of the population; the descriptive report of its procedures is the best evidence of a firm degree of control and competence in performing complicated administrative tasks in Taiwan. 648 659

For the next 25 years or more, until they began to shift their energies to preparation for World War II, the Japanese proceeded to work out their policies for Taiwan (outside of the Aborigine Territory) with scarcely a serious check.[12] This long interlude between two periods of tight regulation is sometimes known as one of official "liberalism" or laissez-faire toward business affairs. It can be so designated, however, only in contrast to the strictness that preceded and followed. In steady succession the government completed several major projects. It finished the land survey of the entire island, essential to all their later engineering works as well as to the desired 654

[10] The *pao-chia* system was a scheme for assigning joint responsibility to village and familial groups for the conduct of their members. Its operation and the reasons for its effectiveness are taken up in the following chapter.

[11] Mendiola, N. B. (1949), p. 76 ff.

[12] The Taiwanese efforts at insurrection, as for example recounted in OPNAV, Civil Affairs Handbook (1944), pp. 173-177, tended to be exaggerated by their instigators. Due to their own clumsiness, these were quickly put down by the Japanese, though not without some local disruption. Inside the Aborigine Territory, on the other hand, the Japanese devoted many years of hard fighting and frustration to "pacification," and did not hold the entire island securely until the mid-1920's, nor peacefully until almost 1940.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

654 supervision of agriculture. Through its own revenues the government became independent of the annual subsidy from Tokyo with which it had been launched.

By direct action and through state-owned companies, it enlarged communications facilities into a thorough public network of roads, bridges, railway lines, telegraph and telephone installations, tunnels and mountain trails; constructed harbor equipment to accommodate an ever-growing volume of shipping: expended a tremendous effort (if not large sums) on sanitation and disease control; relieved much of the uncertainty of weather for crops by an irrigation system which also reduced the destruction of floods. Finally, and in some respects the central note of the entire program, the authorities gave continual attention to ways of rationalizing agricultural production.

It must be admitted that most of their techniques of agrarian improvement were relatively well known even at the beginning. These were already part of the world accumulation of knowledge by the time the program was well under way. The Japanese did not discover new principles of agronomy in Taiwan, but drew upon this fund of information with alert but minor adaptations to fit the case at hand. The rice yields from the land, for example, were increased spectacularly through the spread of a new strain of seed, introduced in 1922 and cultivated thereafter under supervision by Japanese.[23]

Practices like breeding suitable varieties of seed, using fertilizer systematically to replace elements removed from the soil, rotating crops, and matching irrigation schedules to the growth cycles of plants have for many years been commonplace in the world. But they do not by magical properties overcome the handicaps of unenlightened farming practices. Japanese characteristically did not pin all their faith on the ability of these methods to work out improvement in yields unaided. They painstakingly supervised the application of techniques, and coordinated the use of new procedures with judicious—never extravagant—mixtures of capital.

The most crucial capital input of the Japanese in agriculture was the administrative framework through which these technical changes were introduced. It was a channel of influence that they turned to good account with a cheap outlay of resources. Japanese themselves were not cultivators. They operated experimental farms at many places to study means of improving agriculture, always from the standpoint of what was practical in a land of peasant farmers. They

[23] Mendiola (1949), p. 76 ff.

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also maintained a zealous staff of workers to put new findings into effect. Taiwanese villagers were mobilized into compulsory associations to utilize the information, and the program was carried on with close cooperation by local authorities.

In addition to these measures, certain of the large Japanese expenditures on outright heavy investment helped to modify agricultural productivity of Taiwanese. The building of railroads, large-scale facilities for irrigation and flood control, and in later years factories for processing agricultural produce all worked some radical changes in the relations between the farms and the markets abroad. But these reached down only occasionally to disturb the operation of individual peasant farming. What one Japanese writer has called the process of "capitalist development in Taiwanese agriculture" was not so much a matter of developing investment in agriculture itself as of surrounding agriculture with capital improvements.[14]

Many improvements were introduced directly by the Government-General. Usually a charge was levied on their use or the expense was defrayed by heavy taxation. The government matched each of these steps of its own by prompting the large private firms to carry on parallel works inside their corporate domains. This sort of extra-curricular investment was widely undertaken by Japanese companies, and led to the growth of giant integrated concerns, some larger than their counterparts in Japan.[15]

A remarkable set of inducements existed for engaging in this sort of corporate expansion. Taiwan in the first place had the reputation of being the most profitable locale for investment in the Empire.[16] In addition to this, the Government-General frequently offered subsidies, partial subscription of funds by itself, special legal privileges, a trifling burden of taxation, and in general more cordial relations with the state than were available elsewhere. The response to these terms was apparently more enthusiastic than had been anticipated. It rose at times to feverish speculation, followed by short depressions among Japanese financial circles,[17] and led the Government-General to impose restrictive schemes for fixing prices and output.

[14] Yanaihara, Tadao (1929), p. 140 ff. He points out that most Japanese held land as landlords, like the Taiwanese, not as capitalists. The exception to this rule—and it is a large exception—was the management of sugar-growing plantations by a few of the large sugar-processing companies.

[15] Grajdanzev, A. J. (1942), p. 96.

[16] Yanaihara (1929), p. 146.

[17] Price movements of rice and sugar in Japan intensified some of these effects, especially in the late 1920's and for several years after 1930. See Grajdanzev (1942), pp. 99-101.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

more than following advantages which had been obscured by the official emphasis on foodstuffs.[19] 656

A general survey of Taiwan's part in the Japanese war program is impossible to undertake here. It is nonetheless pertinent to indicate what were some of the implications of this shift for the internal administration and economic affairs of the island. The turning point cannot be dated exactly, for the decisions behind it were probably not made at any one point of time. They rather reflected a gradual reorientation of official opinion regarding the course of development that was desirable. 654

From the early years of its existence, the Government-General of Taiwan had sponsored many special corporations to finance and help to organize a limited modification of agriculture. It made more intensive use of them during the 1930's to enlarge new industries that it wanted to foster. Bank credit was made available for new investments at low fixed interest rates. Subsidies were granted widely to induce old firms to enter new fields. Corporations were spared the burden of taxes, government revenue being made up through an ingenious set of other devices.[20] Under exclusive privileges, Japanese companies were attracted to exploit rapidly many of the virgin mineral and forest resources of the island owned by the government. Business activity was hedged about with countless regulations intended to invite mergers and reduce rivalries between firms.[21]

The sugar industry was the outstanding example of government indulgence toward private corporations and its effects. A few Japanese sugar companies had made an early start, before World War I. These were favored with direct subsidies, marketing advantages in Japan and imported equipment far superior to that traditionally used by Taiwanese.[22] By keeping and improving this initial advantage, Japanese producers [illegible] but drove Taiwanese competitors out of the field. Some of them grew so quickly that they were under some compulsion to branch out into providing transportation and related

[19] Special advances were made in starting hydro-electric power output and aluminum and chemical production, however, which would probably not have progressed in any such manner except by dictation from high places.

[20] For sources of government revenue, see Grajdanzev (1942), pp. 133-137, and *Statistical Summary*, Tables 335-345.

[21] Stock dividends of corporations, for example, were limited by law. Since profits were high, large sums were forced into business expansion.

[22] An even greater prop to the industry as a whole was tariff protection in the Japanese market, whereby Japanese consumers supplied the greatest subsidy of all. Here also Japanese companies were enabled to reap the major share of the benefit, for reasons given above.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

654 services for themselves, in order to keep output in pace with their own milling capacities.[23] The industry had expanded, in fact, too
435 rapidly for its own good. It had suffered several crises, brought on by fluctuations in the demand for sugar in Japan, where its tariff preference led it to sell.[24] To "stabilize production," the important producers organized a cartel (under the Japan Sugar Association) with government permission and guidance.

Buying of cane from farmers had from the start been controlled by agreements among processing firms; the cartel opened a concerted effort to prevent cane prices from rising. The need for this step arose from the fact that sugar cane and rice both were grown in the same soils and more or less during the same seasons. In effect, the two crops competed for land. Japanese had always complained that the Taiwanese had a perverse tendency to cultivate rice when it was more profitable. Under the cartel agreements, sugar firms avoided competitive buying by strict agreements to allocate areas of cane purchase. Owing to their size and diversity, they were able to persuade many farmers to grow sugar instead of rice by withholding irrigation water from rice fields, and by making conditional cash advances to individual families.

By such means the sugar cartel accomplished what the government could never have done unaided: it ensured a steady output of sugar at fixed prices for which it would have been irrational for individual
654 farmers to produce cane.[25] Sugar acquired a place of high wartime priority as a source for industrial alcohol, and beginning in 1939 the Government-General assisted sugar concerns to construct distilleries and make alcohol on the island. Under these circumstances it is not surprising that the sugar processing industry tended to pass into fewer and fewer hands. After a merger in 1940 more than 95 per cent of the sugar in Taiwan was milled by five giant companies. Though more extreme, the history of the sugar industry was essentially that of all large-scale Japanese enterprise in Taiwan.

655 The Government-General itself began to promote industrial ex-
471 pansion during the 1930's by further participation in economic life.

[23] Privately owned and operated railroads attained a length of over half as great as the entire state system. Not all were built by sugar concerns; the largest belonged to lumber companies. Most were of narrower gauge than the main rail lines. See *Statistical Summary*, Tables 430-432.

[24] Costs were higher than in Java throughout the period, putting Taiwanese sugar at a serious handicap in markets outside Japan.

[25] The Government-General did its part to encourage sugar cultivation by putting rice paddies in a higher tax category than comparable sugar fields. And in 1939 it simply took over the entire cartel by issuing a set of detailed regulations to dictate its affairs.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

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First, it controlled certain key sources of income and authority, as before, through the legal monopolies. Net receipts from these enterprises (including salt, alcohol, camphor, tobacco and opium) made up one of the largest classes of revenue. Public railroads, irrigation and generation of electricity were also government monopolies—unofficial but nonetheless actual—which were operated more for the sake of the power that could be wielded through their services than for profit. They were developed so as to assert what amounted to administrative control over the private sphere of production.

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[28] These services stretched from research grants to larger funds allocated directly for new subsidies of business. *Ibid.*, p. 59.

4:Grajdanzev--45 S-4 (no date) 1942 Formosans
116, 312, 471, 655, 177.31 Japan
636.31

"In any case the success in irrigation should be recognized as conspicuous, and it is not less striking that it was achieved with the relatively modest investment of about fifty million yen by the state since 1908. But the state has gradually withdrawn from the field, leaving irrigation works to private enterprise and to special irrigation associations. In 1937 the irrigated area was divided among three groups as follows: 140,500 ko were irrigated from the public canals, 132,000 ko from canals belonging to private persons, 259,000 ko from those of irrigation associations. The last are under the influence of landowners and of the owners of enterprises processing agricultural products."

4:Grajdanzev--54-55 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 655, 177.24 Japan
636.24

"Space does not permit us to analyse the rice situation in detail. The table below shows the rapid process of displacement of other kinds of rice in Taiwan by horai.

Crop Area Under Various Kinds of Rice in Taiwan
(In thousand ko)

	1905	1915	1920	1925	1930	1935
Common Taiwan rice	393	423	417	370	370	263
Clutinous, round	24	39	53	81	68	73
Glutinous, long	...	...	...	...	19	18
Horai	0	0	0	72	135	305
Total	417	462	472	523	592	659

Yields of Various Sorts of Rice in Taiwan were as Follows
(1930-35 average)

	(koku per ko)
Common Taiwanese	12.1
Round glutinous	10.2
Long glutinous	11.7
Horai	14.6

varieties.

But on the other side, the production costs of one ko of common rice in 1925 were ¥223.8, while for horai the amount was ¥342.0, and—what is also very important—whereas thirty-four per cent of the production costs of common rice consisted of the farmer's own labor, home-prepared fertilizers (which the farmer does not buy) etc., these costs in the production of horai amounted to only twenty-two per cent. In other words a much greater part of the expenses on horai consisted of sums paid for commercial fertilizers, etc., and as a result, the farmer does not receive so much profit from horai, but is compelled to plant it because he cannot sell his own [55] kind of rice in the Japanese market. The expansion of area under horai is therefore not so much a sign of prosperity, as it would at first sight appear, as a sign of the growing need of the farmer for money to pay taxes, to pay for irrigation, and to pay for the tobacco which he formerly produced himself (and is now a state monopoly)."

4:Grajdanzev--56-57 S-4 (no date) 1942 Formosans
116, 241, 439, 441, 655, 177.43 Japan
636.43

"The price ruling on the Tokyo market is, however, not the price which the farmer in Taiwan receives. Between him and the Tokyo or Osaka market are landlords, usurers, a chain of local dealers in rice, big Japanese importers and exporters, and Japanese shipping companies. Each one of them makes profits, [57] and good profits, so that little remains for the farmer, and especially the tenant-farmer.

However, the advice of Takahashi and others fell on fertile ground and, beginning with November 1, 1939, the export of rice from Taiwan to Japan became a government monopoly. The government-general decides how much rice should be produced, works out a plan of exports for each month, buys rice from the special local organizations, and sells it to a Japanese company, Nippon Beikoku Kabushiki Kaisha (Japan Rice Corporation). The other suggestion of the Japanese economists concerning the lowering of the price of rice in Taiwan may also be attempted, though it will be difficult to realize in a time of war inflation and rice shortage in Japan."

4:Grajdanzev--61-62 S-4 (no date) 1942 Formosans-1-2
116, 241, 435, 452, 477, 655, 177.47 Japan
636.47

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--110-111 S-4 (no date) 1942 Formosans-1-3
116, 463, 471, 563, 655, 177.47 Japan
636.47

"Our analysis of industry and mining must not be limited to a survey of present conditions and the plans of the government, etc. Properly speaking it should only begin here. The population of Taiwan is about five per cent Japanese and about ninety-five per cent Chinese and aborigines. In order to evaluate the place of these two groups in industry and mining we should know wage levels and working conditions as well as the all-important question of who are the entrepreneurs and who the wage earners. Unfortunately, some of these questions cannot be answered because of the absence of information.

The latest available report concerning the nationality of capital in Taiwan's companies refers to the years 1929.

Distribution of Corporate Capital in Taiwan by Nationality in 1929
(1,000 yen)

	Japanese	Chinese	Other*	Total
Agriculture	4,434	4,962	4	9,399
Industry	180,497	16,786	1,658	198,941
Commerce	23,128	28,082	2,033	53,242
Communications	3,186	2,571	25	5,781
Fisheries	2,258	1,190	20	3,467

Distribution of Corporate Capital in Taiwan by Nationality in 1929 [Cont.]
(1,000 yen)

	Japanese	Chinese	Other*	Total
Mining	12,243	3,441	1,422	17,107
Total	225,745	57,033	5,161	287,939

* Chiefly Chinese from the mainland, citizens of the Chinese Republic.

The share of the Japanese was therefore 90.7 per cent in industry and 71.6 per cent in mining, while the corresponding shares for the Chinese were 8.5 per cent and 20.1 per cent. It is true that these figures do not include individual enterprises, which are chiefly Chinese, but it is quite evident that their inclusion would not greatly change the picture because the average capital of such enterprises is very small. On the other [111] hand this table does not include government enterprises which should be considered for all practical purposes as Japanese enterprises (the managerial staff is Japanese and the profits may be transferred to Japan at any time), and the capital of these government enterprises is huge. As is seen from the table, the capital of all corporations was about ¥288 million in 1929, yet in the same year the capital of the state railways alone was ¥122 million. Beside railways the government has many enterprises of all kinds. Since 1929 the situation has further changed to the disadvantage of the Chinese group for in the

last few years, as was shown above, huge new companies have been established and the capital of old ones increased. The new companies are Japanese. In 1929, for example, the capital of the Japanese companies occupied in the fisheries was ¥2,258,000; in 1939 two Japanese companies with headquarters in Japan proper, whose capital is ¥65,500,000 were operating in Taiwan. Of course, only a part of this capital is sunk in their Taiwan enterprises, but it is clear that the situation in 1939, in this as well as in many other respects, is less favorable to the Chinese than it was ten years before.

The same thing has occurred in mining, where the total capital is now ¥46.6 million, instead of ¥17.1 million as in 1929. The increase is due to the activities of the Japanese Koyo Kogyo, Taiwan Kogyo, and Keelung Tanko corporations."

4:Grajdanzev--112 S-4 (no date) 1942 Formosans -1-2
116, 171, 471, 563, 477, 655, 177.47 Japan
636.47

"It may be of some interest to compare the share of native corporations in the total corporate capital of Taiwan with their share in Korea, for which the most recent data is available:

Percentage Share of the Native Corporations in the Total Capital of Corporations

	Taiwan, 1929 Per cent	Korea 1938 Per cent
Agriculture	52.8	20.7
Industry	8.5	6.6
Commerce	52.7	19.1
Communications	44.5	7.5
Fisheries	34.3	6.3
Mining	20.1	6.8
Total	19.8	11.3

Source for Korea: Kokusei gurafu, April 1940.

It is evident from this table that in Korea the occupation of commanding positions by Japanese capital had proceeded much further by 1938 than it had in Taiwan by 1929. Native capital was strongest in Taiwan in 1929 in agriculture, commerce, communications and fisheries and it is interesting to note that Korean capital was most strongly placed

just in these branches in 1920. This is not a coincidence. The squeezing out of the native capital usually begins in industry and mining (2) and reaches commerce and agriculture

2. Actually it began with communications. The railroads in both colonies are in Japanese hands, but since they belong chiefly to the government they are not included in the above figures.

only at a later stage. In Korea native capital is now only eleven per cent of total corporate capital, and there is no reason to expect that the proportion is higher in Taiwan.

The answer to the first question as to the nationality of capital in industry and mining in Taiwan is thus quite clear—from ninety to ninety-five per cent of this capital belongs to the Japanese."

4:Granjdanzev--118-119 S-4 (no date) 1942 Formosans
116, 454, 496, 655, 177.49 Japan
636.49

"In 1926 there were 950 km.(1) of government railroads in Taiwan; in 1938 there were

1. Taiwan. Its System of Communication and Transportation, 1929.

1,040 km. The lengths of private railways at the same dates were 525 km. and 521 km. respec-[119]tively—a slight decrease. In other words, in the last decade the construction of new railroads in Taiwan has almost stopped. At the end of 1938 the capital invested in the government railroads including expenditures on repairs and restorations was ¥172,499,691."

4:Grajdanzev--149 S-4 (no date) 1942 Formosans
116, 314, 439, 655, 177.31 Japan
636.31

"The government, desiring to utilize the unique position occupied by Taiwan in the supply of camphor, made it a government monopoly. However, in the last few years synthethic camphor production has made striking progress and the monopoly is now definitely broken. This does not mean that natural camphor will lose its market for the expanding celluloid industry can successfully absorb the surplus, but the former advantageous position of the Japanese government is lost."

9: Yamasaki--233 [2] N-5 (1896-1897) 1900 Formosans
116, 314, 655

The Japanese Government on the island has now made the camphor trade into a monopoly, like the obtaining of sea salt on the west coast.

31: Hofmann--608-609 N-3 (1909) 1912 Formosans
116, 245, 655

The newly conquered land [EJ: i. e., the Atayal] is now being cultivated with great industry and energy. We saw a settlement of the Mitsui Company where the forested areas had been cleared and were made ready for cultivation. Camphor trees are being planted along the steep inclines and the old camphor trees are felled and prepared for export. Since 1889 camphor has been a government monopoly and constitutes one of the most important sources of revenue on Formosa. "The problem of the aborigines is actually the problem of [609] camphor," according to Davidson, (1) and the truth of this

1. Davidson, J. W. The island of Formosa, Past and Present.

statement cannot be questioned.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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NUMBER OF EMPLOYEES (BY INDUSTRY AND SEX) IN GOVERNMENT ENTERPRISES*

Industry	(March 1, 1952) Total	Male	Female	(December 31, 1951) Total	Male	Female
Textile	7,816	2,399	5,417	28,873	8,409	20,464
Metal	3,259	3,050	209	3,626	3,257	351
Machine & Tools	7,440	7,095	345	7,121	6,753	368
Kiln	4,843	3,930	913	10,390	7,482	2,908
Chemical	17,881	14,465	3,416	9,440	6,558	2,882
Wooden#	6,596	6,158	438	4,377	3,934	443
Printing	2,014	1,472	542	1,889	1,625	264
Food Processing	29,519	25,741	3,838	20,067	15,493	4,574
Gas & Electricity	5,019	4,810	209	-	-	-
Others	252	157	95	3,393	1,484	1,909
Total	84,699	69,277	15,422	89,176	55,013	34,158

45:Stanford U. S-4, 5 1956 AD1 Formosa
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* Taiwan Provincial Government, Department of Reconstruction as quoted by L. R. Smith and W. R. Etter, Labor in Taiwan, Taipei, MSA/MC, 1953.

This term is used in the original source and presumably includes logging and lumber workers.

630 election of hsien and city assemblies was
631 completed before April 7 and the provincial assembly (called the Provincial Political Council) was formally inaugurated on May 1. Although the functions of the local assemblies were principally consultative, they represented a great improvement over the Japanese system in two ways: first, the base for suffrage had been extended to include a greater number of voters, and, secondly, all the members of the assembly were elected. The election of district heads, magistrates, and mayors was deferred, because the authorities asserted the people at that time lacked administrative experience to undertake the work.[12]

635 After the local insurrection of February
636 27, 1947, the provincial administration was brought into conformity with that of other provinces of China. The post of administrator-general was abolished. A provincial council of fourteen members or commissioners, with the governor as chairman, was established. Half of the provincial commissioners were chosen from local residents, the Formosan Chinese. The monopoly bureau, whose restrictive activities were immediately responsible for the outbreak of riots, was

12. Ibid., p. 103.

45tStanford U. S-4, 5 1956 AD1 Formosa
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abolished. A new tobacco and wine bureau was created and placed under the finance department. A camphor company was formed under the department of reconstruction (industry and commerce), and a bureau of supply replaced the trading bureau. In 1950 the number of provincial commissioners was further increased to 23, of whom seventeen were Formosan Chinese. Local elections were held in 1950 and 1953-54. Members of assemblies of rural districts, towns, cities, and hsien and heads of villages, rural districts, and towns, such as mayors and magistrates, were all elected by direct vote. Members of the Provisional Provincial Assembly[13] were elected indirectly by the various hsien and municipal assemblies in 1950. In the second election of 1953-54, they were directly elected by the people. (Details of the organizations of the provincial and local government as well as the popular elections, will be considered in another chapter.)

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13. "Local self-government in Taiwan is, for the time being, confined to the hsien and municipal level. Since the provincial government is still under the direct control of the Central Government, the principal council is known as the Provisional Provincial Assembly; China Handbook, 1954-55, Taipei, China Publishing Co., 1954, p. 469.

65/a part of which was allotted to the local governments as subsidy from the provincial government.

Business tax is levied either on the volume of business or the net profit according to the nature of the business. The rates of taxation vary from 1.5 per cent to 6 per cent. Household tax is levied on assets of individuals and corporations valued over NT$3,000. The rate is 0.5 per cent of the total value. The revenue from business tax in 1954 was NT$127,108,309 and from household tax was NT$179,454,138.

65/ 65b The most important items of revenue for the provincial government are the profits from tobacco and wine monopolies. During the Japanese occupation, direct taxation provided less than 20 per cent of governmental income.[7] The major portion was derived from government-owned properties and undertakings. Government monopolies covered salt, camphor, opium, tobacco, matches, and petroleum.

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7. In 1930, a year of normal prewar activity, out of a total revenue of ¥ 105,453,789, only ¥ 18,316,545 was raised by direct taxation.

651 Their profits accounted for fifty per cent of
655 the total revenue. Now under the Chinese only wine and tobacco monopolies remain. Until 1953, all the income from the monopolies went to the provincial government. Since then a part of the profits is forwarded to the central government. Monopoly profits in 1954 amounted to NT$866,571,260.[8]

651 The taxes collected by local government* in 1954 were as follows:

House Tax	NT$ 82,990,410
Slaughter Tax	NT$183,008,444
Vehicle and Vessel License Tax	NT $ 38,064,145
Entertainment and Amusement Tax	NT$ 38,373,143
Title Deeds Tax	NT$ 25,130,005

* Statistical Abstract of the Republic of China 1955.

Government revenues have been steadily increasing since 1950 as evidenced by the

8. Actual monopoly profits received by the provincial government in the fiscal year 1954-55 were NT$820,000,000.

339 656 435 Cement: Cement was originally distributed under the supervision of the Cement Distribution Secreening Committee of the Provincial Department of Reconstruction. To effect tighter control over the sale and use of all building materials, cement was placed under the supervision of the Provincial Supply Bureau in September 1953. The bureau determines allotments to building material traders' associations and cement traders' associations throughout the island; they in turn allocate cement to their members, and the members to consumers. The wholesale price is fixed, currently at NT $30 per bag (about 50 kgs.); however, the retail price is allowed to fluctuate according to supply and demand -- about NT $50 per bag in early 1955, and about NT $40 in late 1955.[4]

655 Tobacco and Alcoholic Beverages: Production and distribution of these goods are completely under government monopoly. The Taiwan Tobacco and Wine Monopoly Bureau has eleven branches and two business offices, which handle distribution of these commodities to three types of wholesale establishments -- the city, county, and town co-operatives; the

4. Kung-shang Yüeh-k'an [Industry-Commerce Monthly], Vol. 3, No. 10, p. 94; The Central Daily News, Dec. 4, Dec. 15, 1955.

655 tobacco and beverage wholesale houses; and the bureau's own wholesale offices. The tobacco and beverage wholesale houses sell directly to general retailers; all the other types of wholesalers of these commodities sell to their own retailers. All the wholesalers and retailers must be approved by the bureau, which fixes prices at both levels.

B. Small Business

443 Retail sales in large cities are handled by modern department stores, speciality stores and shops, general stores, roadside stands, and peddlers. In general the organized [435] department stores and other shops sell goods at a fixed price whereas the roadside stands and peddlers have no fixed prices. The large stores and shops generally operate at a higher cost and margin of profit than do the peddlers and proprietors of roadside stands, who are satisfied with a small profit, need only minimum capital, and pay no interest, rent, or taxes. Small business has increased in Formosa due to lack of other opportunities for employment. Enterprising people create marginal self-employment by establishing roadside stands for the sale of food and other everyday necessities., The buying public seems to favor this type of "little" business where various items can be bought more inexpensively than in

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

654 services for themselves, in order to keep output in pace with their own milling capacities.[23] The industry had expanded, in fact, too 435 rapidly for its own good. It had suffered several crises, brought on by fluctuations in the demand for sugar in Japan, where its tariff preference led it to sell.[24] To "stabilize production," the important producers organized a cartel (under the Japan Sugar Association) with government permission and guidance.

Buying of cane from farmers had from the start been controlled by agreements among processing firms; the cartel opened a concerted effort to prevent cane prices from rising. The need for this step arose from the fact that sugar cane and rice both were grown in the same soils and more or less during the same seasons. In effect, the two crops competed for land. Japanese had always complained that the Taiwanese had a perverse tendency to cultivate rice when it was more profitable. Under the cartel agreements, sugar firms avoided competitive buying by strict agreements to allocate areas of cane purchase. Owing to their size and diversity, they were able to persuade many farmers to grow sugar instead of rice by withholding irrigation water from rice fields, and by making conditional cash advances to individual families.

By such means the sugar cartel accomplished what the government could never have done unaided: it ensured a steady output of sugar at fixed prices for which it would have been irrational for individual 654 farmers to produce cane.[25] Sugar acquired a place of high wartime priority as a source for industrial alcohol, and beginning in 1939 the Government-General assisted sugar concerns to construct distilleries and make alcohol on the island. Under these circumstances it is not surprising that the sugar processing industry tended to pass into fewer and fewer hands. After a merger in 1940 more than 95 per cent of the sugar in Taiwan was milled by five giant companies. Though more extreme, the history of the sugar industry was essentially that of all large-scale Japanese enterprise in Taiwan.

655 471 The Government-General itself began to promote industrial expansion during the 1930's by further participation in economic life.

[23] Privately owned and operated railroads attained a length of over half as great as the entire state system. Not all were built by sugar concerns; the largest belonged to lumber companies. Most were of narrower gauge than the main rail lines. See *Statistical Summary*, Tables 440-442.

[24] Costs were higher than in Java throughout the period, putting Taiwanese sugar at a serious handicap in markets outside Japan.

[25] The Government-General did its part to encourage sugar cultivation by putting rice paddies in a higher tax category than comparable sugar fields. And in 1939 it simply took over the entire cartel by issuing a set of detailed regulations to dictate its affairs.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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First, it controlled certain key sources of income and authority, as before, through the legal monopolies. Net receipts from these enterprises (including salt, alcohol, camphor, tobacco and opium) made up one of the largest classes of revenue. Public railroads, irrigation and generation of electricity were also government monopolies—unofficial but nonetheless actual—which were operated more for the sake of the power that could be wielded through their services than for profit. They were developed so as to assert what amounted to administrative control over the private sphere of production.

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52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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cially in chemical and metal manufacturing; their expansion did not have an appreciable effect in the production of all the island.

In other words, in spite of its expansion, industrial production had only begun to make headway in relation to agricultural output. Before 1940, manufactured commodities were still subordinate to Taiwan's farm products (and did not amount to much beyond processed sugar). Afterwards the Japanese did not have enough time to marshal the island's resources effectively in industry. We know this was not because they failed to make an effort—it was because they started too late.

Certain types of heavy investment had received their close attention ever since earlier years. Railway construction, for example, was pushed forward with enthusiasm from the very first. The time schedule of progress in expanding the public railroads was far ahead of their actual utilization (see Fig. 6). This was an investment which

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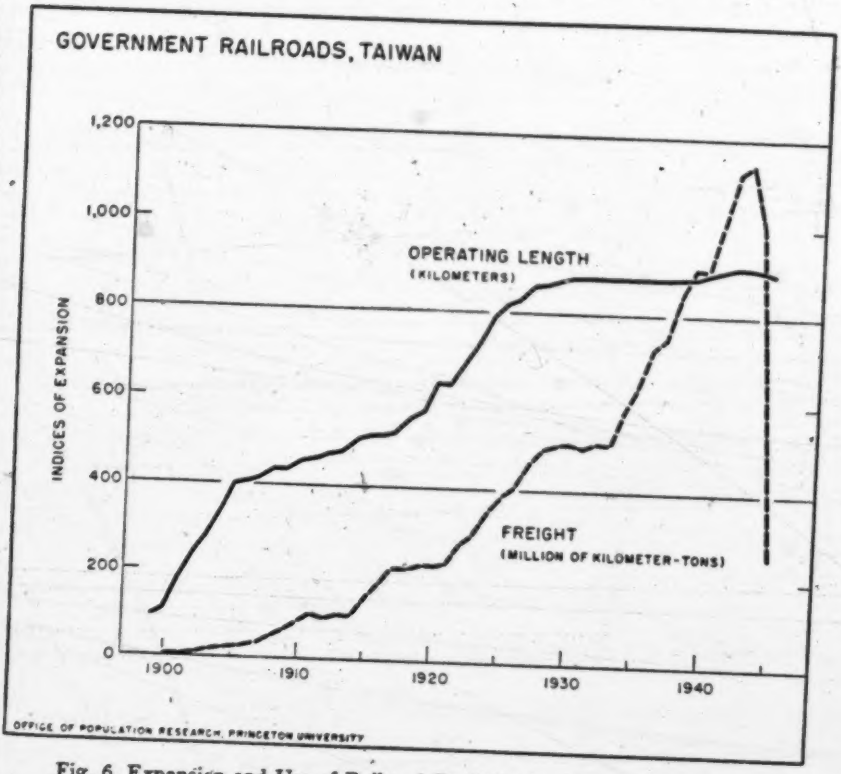

Fig. 6. Expansion and Use of Railroad Facilities in Taiwan, 1900-1945.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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the Japanese undertook primarily in anticipation of long-term benefit, without being able to justify its initial cost for many years. In terms of kilometer-tons of freight carried, the railroad made only partial use of its physical facilities until late in the colony's existence.[33] This sort of schedule was also followed in establishing a system of improved roads and trails over the island. In both cases, Japanese had to bear the burden of ambitious engineering projects when they could least afford it, for basic transportation networks are more valuable as networks than they are piecemeal.

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Public irrigation was a project closely tied to agriculture, and followed a different timetable (see Fig. 7). After 1895 there was no large

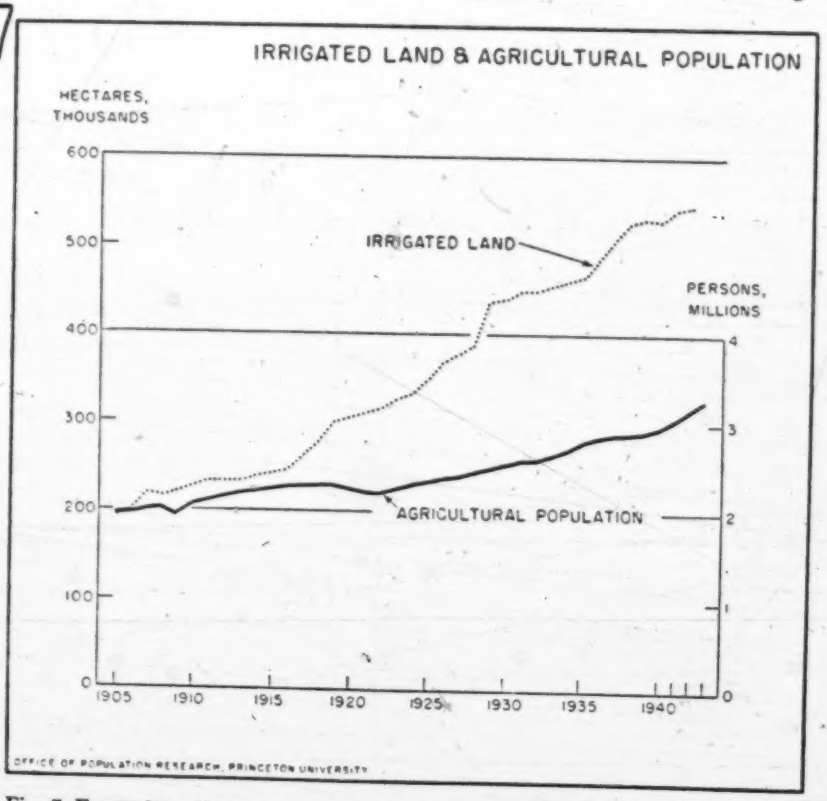

Fig. 7. Expansion of Irrigation and Agricultural Population in Taiwan, 1905-1943.

[33] Then it suddenly became overtaxed with cargo connected with the war, stemming from industrial growth and from Taiwan's role as a military base. See OPNAV, Civil Affairs Handbook, *Taiwan—Economic Supplement* (1944), p. 60.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

tation were confined to some of the major cities, the influence of these broader health measures gradually spread evenly over most of the island. In this way Japanese gained results that were very substantial through the use of none but crude techniques.

The Japanese policy toward opium addiction was less consistent, for here they found welfare goals to be in conflict with profit motives. They made the manufacture of opium a government monopoly, and closely regulated its sale. The announced purpose for this control was to eradicate the use of the drug, but the Taiwanese occasionally complained that officials secretly abetted its consumption. The truth of the matter is not clear, but their success in other tasks suggests that opium addiction could have been stamped out far more quickly if they had made a determined effort to do so. Some of their own records show that new users of opium were being granted licenses as late as the 1920's. It is likely that the Japanese appreciated the effectiveness of addiction in enervating the resistance to their rule among wealthy families, and they made no secret of the steady public revenues that they derived from opium sales.[12]

The Evidence for Measurement of Mortality

There is not much point in describing the purposes and methods of public health work without having some independent appraisal of results. Such efforts have often been sponsored elsewhere with much fanfare and little accomplishment. The only trustworthy way to view the results of economic and sanitation policies in prolonging life is through some form of measurement; this is likewise the only precise way of comparing the risks of death in Taiwan and in other areas.

Fortunately the data that exist to gauge mortality in Taiwan are excellent. The occurrence of many kinds of illness involving danger of contagion was required by law to be reported to the authorities. Partly as a means of avoiding contamination of the living by the dead, and partly just as a means of tightening official control over the reporting of disease, the Japanese also strictly regulated burials and cremations.[13] The rigors of enforcing these rules led to concealment of some illness and evasions by mis-stating exact causes of

[12] A careful study of opium addiction in Taiwan and its relation to mortality is contained in Tu Tsung-ming (1935 and 1938).

[13] See Hsü Tze-wei (1946), p. 449.

652 National Taiwan Dollar was introduced,[20] replacing the old currency at a ratio of 1:40,000. Fixed at an official exchange rate of four to one United States dollar, the new issue amounted to NT$200,000,000.[21] Authorized by the Nationalist government and handled by the Taiwan Provincial Bank, its 100 per cent reserve was provided by the former out of its Central Bank reserve fund[22] brought over from the mainland.

Implementing the currency reform were a number of deflationary measures. By selling government-owned commodities, confiscated Japanese properties, and bonds, and conducting lotteries, a total of NT$25,740,000 was siphoned from circulation.[23] Between June 1949 when the reform was instituted and October 1950, the note issue, including subsidiary and fiduciary issues, rose 824.95 per cent, while the wholesale commodity index price of Taipeh rose 330.36 per cent.[24]

Since its transfer to Taiwan, the Nationalist government's expenditures have been reduced considerably. On its administrative staff today are but a few 701 thousands of essential personnel. The maintenance of its armed forces is the largest item.[25]

652 655 Nationalist financial requirements are met by the sale of government-owned properties, customs receipts, revenues

[20] See Currency Reform Ordinance of the Taiwan Provincial Government*, June 15, 1949.

[21] *Ibid.* The issue was subsequently increased another NT$50,000,000. The present exchange rate fluctuates around eight Taiwan dollars for one United States dollar.

[22] About US$200,000,000 in August 1948. See *China Handbook 1950*, p. 479.

[23] The figure is based on Bank of Taiwan statistics as of June 1950.

[24] *Taiwan Today*, cited note 11 *supra*, p. 71; also cf. *Taiwan Reconstruction**, cited note 12 *supra*, pp. 63–64.

[25] In his Administrative Report of October 3, 1950, Premier Chen Cheng disclosed that some 150,000 men were discharged during the

[P. 217 (A)]

AF1 China
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from salt monopoly, postal service, and profits from such assorted enterprises as telecommunication; air transport; navigation; petroleum; aluminum, gold, coal, and copper mining; and steel works. Where additional funds are needed, the government dips into its estimated US$200,000,000 gold reserve which it brought over from the mainland along with assets of various government corporations.

Presently, the Taiwan Provincial Government operates under the provisions of a "special budgetary system."[26] A considerable part of its expenditures, normally national, are paid from the provincial treasury. The estimated revenue for 1950, for instance, amounted to NT$300,825,888.[27] Of that amount, approximately 31.91 per cent came from government monopolies; 21.54 per cent from sales of government-owned assets consisting mostly of confiscated Japanese properties; 19.51 per cent from such taxes as income, inheritance, excise, and land; and the 27.04 per cent from provincial enterprises. Of the expenditures, 23.71 per cent were for education and culture; 23.4 per cent for subsidies; 21.18 per cent for reconstruction; 7.65 per cent for administering reconstruction; 6.06 per cent for defense and security; 4.11 per cent for financial administration; 3.63 per cent for civil administration; 3.53 per cent for public health; and the rest for social relief and civil service pensions.[28]

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first six months of 1950 "to match the nation's financial resources." Of the remaining units, exact figure not given, the Premier reported that "their pay has been increased and farms have been opened for their own benefits."

[26] *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, p. 33.

[27] *Taiwan Today*, cited note 11 *supra*, p. 60. Actual revenue for 1950 was NT$319,968,297.

[28] For a breakdown of budgetary figures, see *Taiwan Today*, pp. 59–68; also *Taiwan Reconstruction**, pp. 33–36.

[p. 217(B)]

52:Steiner S-4 (no date) 1951
AF1 China
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Since March 1948, a refining process has been instituted in the government-managed camphor industry.[37] In areas where Taiwan and Japanese economy complement each other, a trade agreement was signed with Japan on September 6, 1949 under which Taiwan sugar, salt, camphor, cement, and pears are to be exchanged for Japanese consumer and capital goods at an estimated annual volume of US$100,000,000.[38]

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Government-owned and -operated enterprises dominate Taiwan's industrial field. As of 1950, there were 79,058 publicly operated units employing 63,065 workers. Available statistics place privately owned industrial units at approximately 67,660 employing 53,310 workers. Production figure for public industries in 1949 is about NT$718,000,000 as against NT$600,000,000 for private enterprises.[39]

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This situation may be accounted for by the predominant position of Japanese-owned industries in Taiwan which were acquired by the Chinese Nationalist government following the Japanese surrender in September 1945. Since then, petroleum, aluminum, gold and copper mining, salt, coal mining, and steel works have been taken over by the National Government. Power, sugar, fertilizer, cement, alkali, pulp and paper, shipbuilding, and machine tools have been jointly operated by the national and provincial authorities on a capital division of 6 to 4. Some smaller mining units, camphor, tobacco and wine monopoly, and agricultural and forestry enterprises have been managed by the provincial government. The rest, being of smaller scale, have either been taken over by county or municipal govern-

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*Reconstruction**, Vol. 2, pp. 473–74, where the total 1948 demand was estimated to be 141,727 tons.

[37] For a general description, see *Taiwan Reconstruction**, Vol. 2, pp. 436–46.

[38] For detailed listings, see *Taiwan Reconstruction**, Vol. 2, pp. 357–61.

[39] *Taiwan Today*, pp. 121–22.

[p. 219(B)]

52:Steiner S-4 (no date) 1951
AF1 China
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655 471 ments or sold to private industrialists by means of competitive bidding.[40]

Taiwan's industrial growth in recent years reflects mostly the development of government enterprises. Such state industries as gasoline, kerosene, and Diesel oil have registered considerable increase over the peak year production figures under the Japanese.[41] Other government-operated industries such as electric power, sugar, alcohol, cement, and camphor, though lower in production volume than in the prewar peak year, have made extensive recoveries in contrast to their chaotic conditions at the conclusion of World War II.[42] Augmented by ECA assistance, the over-all industrial picture may be described as one of steady growth.

Educational Policies

871 177 [212] The Nationalist government inherited from Japan an educational legacy which comprises a mixture of salutary and disadvantageous factors. Of the former is a more than 70 per cent literacy among the people.[43] A framework of primary and secondary schools scatters over the island. A fair foundation of vocational education has been laid. There are also several higher institutions of learning. A tradition of discipline, hard work, and thriftiness prevails among the students.

871 177 197 On the disadvantageous side is the predominant position of the Japanese language, both spoken and written, as a medium of learning. Many island inhabitants can hardly read Chinese or speak their native Fukien tongue flu-

[40] *Taiwan Reconstruction**, Vol. 2, pp. 408–547.

[41] *Ibid.*

[42] *Ibid.*; also *Taiwan Today*, pp. 99–122.

[43] *Taiwan Reconstruction**, Vol. 1, p. 89; also for a general treatment of the subject, see Taiwan Provincial Government, *The Administration of Planned Education**, Taipeh, 1948.

[p. 220 (A)]

4:Grajdanzev--24-25 S-4 (no date) 1942 Formosans-1-3
116, 162, 168, 656, 177.16 Japan
636.16

"Racial Composition of the Population

Since Taiwan is a colonial territory, it is of more than ordinary interest to study the evolution of the racial composition of its population.

After more than forty years of Japanese domination the island thus remains Chinese in character. In 1938 Chinese made up 94 per cent of the population, while the Japanese, who constituted about 2 per cent of the total in 1905, now made up 5.3 per cent. Presumably this figure does not include Japanese soldiers stationed in Taiwan. At the time of the occupation [25] of the island the Japanese entertained high hopes for Japanese immigration

Racial Composition of The Population of Taiwan (1905-1938)

	Oct. 1, 1905 Census		Oct. 1, 1935 Census		Dec. 31, 1937		Dec. 31, 1938	
	Thousands	%	Thousands	%	Thousands	%	Thousands	%
Chinese	2,979.0	97.8	4,990.1	93.86	5,261.5	93.85	5,392.8	93.88
Japanese	59.6	1.93	271.4	5.12	229.3	5.33	308.8	5.37
Foreigners*	8.2	.27	54.1	1.02	46.2	.82	43.4	.75
Total	3,046.9	100.0	5,315.6	100.0	5,609.0	100.0	5,747.0	100.0

* Almost entirely Chinese who are citizens of the Republic of China.

Note:—For 1935, 1937 and 1938 'Chinese' includes also aborigines, numbering about 140,000.

into Taiwan. Climatic conditions are suitable, the density of the population at that time was relatively low and there was no doubt that the island could support much larger numbers than were there. Subsidies were granted to settlers in general and to fishermen in particular and it was thought that in this way the island would be speedily 'japanized.' The results of the first seven years had already brought disappointment:

	Total Japanese arrivals	Total Japanese departures	Remainder
1898	13,214	3,078	10,136
1899	20,743	7,903	12,840
1900	20,995	11,291	9,704
1901	17,841	14,054	3,787
1902	13,821	11,478	2,343
1903	15,892	13,149	2,743
1904	11,564	12,155	591

After the rush of the first three years, when the Japanese administration of the island was organized and many persons were needed for the governmental apparatus, the number of immigrants fell sharply. As was shown above, the growth of the Japanese population

on the island was not due to immigration alone, but also to natural increase. After subtracting this natural increase, the average annual number of immigrants is only 4,000 to 5,000."

4:Grajdanzev--25-26 S-4 (no date) 1942 Formosans
116, 168, 464, 656, 609, 177.16 Japan
636.16

"Since the occupation of the island, the Japanese authorities have forbidden the free immigration of Chinese. Coolies were [26] admitted in limited numbers each year for seasonal work but they were compelled to return to the mainland after the expiration of their contract. Besides the coolie class some Chinese could enter Taiwan for business purposes with the permission of Japanese consular authorities, but they remained Chinese citizens and were treated as foreigners. These two groups of Chinese make up most of the 'foreigners'. The fall in their numbers in 1937 and 1938 is connected with the Sino-Japanese war, for many then preferred to return to China and the total number of 'foreigners' is now comparatively small. Thus the purpose of the Japanese authorities —to exclude the Chinese from the island—has been accomplished, but this has been more than offset by the natural increase of the Chinese population."

4:Grajdanzev--48 [2] S-4 (no date) 1942 Formosans
116, 241, 439, 656, 177.45 Japan
636.45

"Rice, as we shall see, is a cash crop; probably not less than two-thirds of the crop finds its way to the market. Sugar cane which constitutes from 12.2 to 19.3 per cent of the total, has special importance because the whole crop is marketed. Sweet potatoes and vegetables are chiefly for home consumption. Next in importance, in the order named, are tea, bananas, groundnuts, pineapples, tobacco, jute, and cassava. This almost complete dependence on rice and sugar cane is the result of government policy, as before 1905 the distribution of cultures was not so specialised. But now Taiwan has become a part of the economy of Japan and its function is to serve that country's needs."

4:Grajdanzev--52-53 S-4 (no date) 1942 Formosans
116, 243, 311, 656, 177.24 Japan
636.24

"Thus from 1905 to 1920 the area under rice expanded slowly and the yield per ko showed no increase, while from 1920 to 1935 the area under rice increased by thirty-seven per cent and the yield per ko of paddy increased also by thirty-seven per cent. The explanation of this difference does not lie in Taiwan, but in Japan proper. After 1920 the leaders of the Japanese government became worried over the rice supply of the Empire. The rapid growth of population and the insufficiency of domestic production brought a sharp increase of rice imports from abroad. From the annual average of ¥16.6 million in 1913-17 Japan's imports of rice rose to an annual average of ¥72.0 million in the period 1918-22.

Besides the difficulty of balancing payments abroad, the government did not like this dependence on foreign supplies in time of war. A program for the increase of rice production in Japan proper, Korea and Taiwan was worked out and the necessary measures applied, such as the construction of dams and canals for irrigation purposes, the enlargement of the net-[53] work of agricultural experimental stations, the distribution of small subsidies to new producers of rice as well as to those who would produce new varieties of rice selected by the stations. The fact that these measures were quite effective shows not only the efficiency of the administration but also the ability of the Chinese farmers to act in response to economic factors."

4:Grajdanzev--67-68 S-4 (no date) 1942 Formosans
116, 248, 433, 656, 177.24 Japan
636.24

"As will be seen, cotton does not occupy an important place in Taiwan's economy. But it does play an important part in Japanese imperial policy. As was mentioned, the Japanese authorities did not spare efforts to encourage the production of sugar cane and rice in Taiwan, not because it was in the interests of the island, but because it benefited Japan proper. Since 1927 the sugar industry has suffered from overproduction and in 1935-36 another spectre appeared on the Japanese horizon--the overproduction of rice. A discussion began as to how the production of rice in Taiwan might be limited. A rice monopoly was suggested and was later applied, but for a somewhat different purpose. Instead of rice, the authorities proposed to encourage the production of textile fibers and oilseeds in Taiwan and, partly owing to the shortage of foreign exchange in time of war, more attention was given to cotton than to anything else. A plan was worked out for the production of 100 million kin of cotton at the end of the ten-year period beginning with 1937, on an area of 100,000 ko, i.e. more than ten per cent of the cultivated area of the island. The first year's crop (according to the Japan Year Book, 1939-40 [68] is estimated at about 6 million kin, or, already six per cent of the goal. We do not know on what the data of the Japan Year Book are based, but in Taiwan Jijo, published in December 1939, the plan provided for an area of only 50,000 ko in 1946 and the production of only 35 million kin. According to the same source, there were 4,800 ko under cotton in 1938 and the crop was 1,816,983 kin--as one may see, very far from 6 million kin. The average yield was 2.26 quintals per hectare--a low figure for a region of intensive agriculture."

4: Grajdanzev--68 [2] S-4 (no date) 1942 Formosans
116, 241, 471, 656, 177.65 Japan
636.65

"These examples--the cotton plan and horse-breeding plan--are extremely significant. The government officials work out plans which can hardly be called realistic and yet the successes of agriculture in Taiwan are very frequently ascribed to the government's efforts and plans."

4:Grajdanzev--126-128 S-4 (no date) 1942 Formosans
Japan

116, 426, 453, 656, 177.42
636.42

"Another bank whose loans are far above deposits is Nippon Kangyo Bank, or the Japanese Bank for the Encouragement of Business. Actually this bank is a mortgage institution and [128] is in the forefront of the organizations which extend Japanese control over real property in Taiwan."

4:Grajdanzev--140 S-4 (no date) 1942 Formosans
116, 563, 656, 177.47 Japan
636.47

" 'Encouragement of industry', on which the government planned in 1939 to spend 11.5 million yen from the general budget and 6.5 million from local budgets, consists of subsidies to Japanese industrialists and entrepreneurs in general. The budget for 1939, for example, provided for the following grants to Japanese companies: 1,743,000 yen to oil companies, 1,447,000 to shipping lines, 1,640,000 to airlines, 72,000 to private railways, 629,000 to gold producers. It is clear that these expenditures enriching the Japanese entrepreneurs give at best, as was shown above, low-paid work for the Chinese."

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-1-3
116, 439, 656, 722, 177.43 Japan
636.43

"These tables [pages 143-144 in category 116--analyst] are of some value beyond the topic of immediate interest. Elaborate theories of international trade have been constructed, the purpose of which is to explain the movement of international trade as distinct from internal trade, but these theories pay little or no attention to factors of political control which are so often of paramount importance in this sphere. Before the occupation of Taiwan, Japan occupied a very modest [145] place in the trade of the island and even after the conquest, her share was at first small; in the period 1896-1900 imports from Japan made up on the average only 27 percent of the total and exports to Japan, only 19.6 percent. It is true that these figures are rather too low because of the absence of data on Japan's trade in 1896, but if these data were available, they would probably increase Japan's share by only 4 or 5 percent. The fact is that even after the occupation of the island, and in spite of the presence of large detachments of troops and swarms of Japanese officials and adventurers, trade continued for some time to flow chiefly in the old channels. However, this situation was soon changed. In 1926-1930 exports to Japan amounted to 85.5 percent of total exports and in 1937 reached a maximum of 93.2 percent, a figure probably unsurpassed in the history of other colonial countries. The same development was achieved in imports. In 1926-30 Japan's share was 68.3 percent, in 1931-35 it was 83.4, and in 1938 it reached a maximum of 89.4. The slight fall

in Japan's share in 1938 and 1939 is apparent rather than real, for in these years Kwantung, Manchoukuo, and maritime China became to all intents and purposes Japanese colonies and for the Japanese in Taiwan it makes no difference from the point of view of profits and foreign exchange whether they trade with Japan or with these regions. In 1939 the share of this 'yen bloc area' of Taiwan's trade was 97.8 percent of her exports and 96.5 percent of her imports. For comparison let us look at the share of China. In 1896-1900 her share in Taiwan exports averaged 63.1 percent, in 1926-30, only 7.0, in 1936, 2.0, and in 1937, 1.3. The same picture appears in the case of imports, for which the corresponding percentages are 37.4, 13.8, 2.9, and 1.9. China is near, --just across the Taiwan Strait, her population is vast her cities are growing, her products are held in high esteem by the Chinese population of the island, she is in great need of Taiwan's products, and yet the trade between these two regions continued to fall catastrophically, But in 1937-1938 the most important points on the Chinese coast were occupied by the Japanese. By 1939 the area under the latter's domination has increased further, and a surprising change is occuring [sic]--the trade of Taiwan with China now shows a remarkable increase. [146]In 1937 exports from Taiwan to China were valued at 5,575,000 yen, but by 1939 they had risen to 33,840,000. Imports from China in 1938 were valued at 1,954,000 yen, in 1939, at 4,253,000. Although China experienced war in the last three years, though many of her cities were ruined, and the purchasing power of the population has fallen, the trade is better than at the start of the conflict. The reason for this reversal

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-3
116, 439, 656, 722, 177.43 Japan
636.43

lies not in the economic situation; it is rooted in the change in the political conditions for now maritime China is virtually a Japanese colony.

This will help us to understand why the foreigners--British, Americans, and others--were gradually ousted from Taiwan. Before 1895 British and American trade with the island was larger than that of Japan, the most important branches of trade, as well as shipping, were in British hands. The British owned Douglas Co. monopolized shipping, the Hongkong and Shanghai Banking Corporation dominated the financial sphere, Jardine Matheson, Dent, and Samuel Samuel traded in camphor, sugar, tea, and other products, while the trade in rice was chiefly in the hands of Chinese. Mitsui Bussan--the pioneer Japanese firm--did not appear on the island till 1898. The share of Great Britain in Taiwan's imports fell from 7.3 percent in 1896-1900 to 0.1 in 1936 and to almost zero in 1939, while in the same period that of the United States fell in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. from 5.3 to 1 and to 0.4. [sic] In 1896-1900 Taiwan's average annual imports from Great Britain were valued at 1,326,000 yen, in 1926-30 (in depreciated yen) at 3,083,000 yen and in 1936, at 392,000. The imports from the U.S.A. amounted to 957,000 yen in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. (The purchasing power of the yen of 1939 is probably not more than one-fourth of what it was in 1896-1900.)"

4:Grajdanzev--146-147 S-4 (no date) 1942 Formosans -1-2
116, 439, 477, 563, 656, 177.47 Japan
636.47

"Independent trade and foreign business are at an end (1) and the handful of foreigners

1. Identical amounts of foreign trade may mean different things for a nation; thus if an American firm buys tea in Taiwan, transports it to the United States in an American ship and sells it to retailers, the net result for the United States is very different from the case where a Japanese firm buys tea in Taiwan, brings it to the United States in Japanese bottoms, and sells it to American retailers.

in Taiwan are in a precarious position. In his [147] book 'Taiwan under Imperialism' Tadao Yanaihara explains this in the following way (2): in their competition with foreign

2. Yanaihara, op. cit., pages 48-49.

and Chinese merchants the Japanese traders had great capital; they also entered the sphere of production; they had the advantage of the cooperation of the Taiwan Bank; they were helped by state monopolies; they enjoyed subsidies from the state; they were protected by the tariff wall. But nowhere in his book does Professor Yanaihara give proof that the Japanese merchants had greater amounts of capital when their enterprises were organized. The huge capital funds were not brought from Japan; they were created in Taiwan itself. Neither can any reason be found for combination of trade and production

as a cause of their success. According to his own statement (op. cit., page 48), the foreign traders and shipping were almost completely driven out (hotondo kuchiku serarete) by 1907. But at that time no Japanese took any part in the production of rice, whereas in tea production Mitsui Bussan Co. and Nozawa have participated only since 1907. As late as 1905 about 90% of the sugar was produced in primitive mills and only 4,535 tons in the mills of the newly-established Japanese enterprises, while the total exports of sugar for 1905 were but 42,600 tons. Pineapples and bananas were unimportant as articles of export in these early years: bananas appeared in the custom reports in 1907 (valued at only 44,129 yen), pineapples to the value of only 18,639 yen were exported in the same year. Since camphor became a monopoly, there is no question of competition with respect to it; while alcohol was practically not exported."

4:Grajdanzev--147 S-4 (no date) 1942 Formosans
116, 171, 477, 656, 177.47 Japan
636.47

"The establishment of a Japanese bank does not of itself mean that Japanese merchants would enjoy privileges in it in comparison with other clients. There remain then monopolies, subsidies, tariff walls and--we add--taxation policy, administrative pressure and other similar measures as causes of the Japanese commercial success. The same measures were applied in Korea, later on in Manchuria and are now being used in China."

4:Grajdanzev--170 [2] S-4 (no date) 1942
116, 204, 563, 656, 177.20
636.20

Formosans-1-2
Japan

"Now let us turn to another important sphere of cultural activities—newspapers. In Taiwan no newspaper can be published without the permission of the government-general, and the government-general has established a 'custom' of permitting only one newspaper to a city, so that up to 1932 there were only four newspapers in Taiwan, all in the Japanese language, though they sometimes carried a column in Chinese (1). Five

1. In 1937 a fifth one was permitted for Takao.

million Chinese in Taiwan had no newspaper of their own. In 1932 permission was granted to a Chinese weekly to appear as a daily, so that for the first time since the Japanese conquest the Chinese could read their own newspaper—Taiwan Shin-minpao. However, this experiment was short-lived. In 1937 it was decided that the people now know the Japanese language so well that no obstacles should exist to the japanization of the islanders. On March 1, 1937, all Japanese newspapers and the Chinese one carried a notice to the effect that after April 1 (for the Chinese newspaper, after June 1,) they were to cease publication of columns in Chinese (2).

2. Information on the newspapers is taken from Nippon shimbun nenkan, 1939, pp. 143-145. It is confirmed also by Sekai nenkan, 1929.

4:Grajdanzev--170 [21 S-4 (no date) 1942 Formosans-2
116. 204. 563, 656, 177.20 Japan
636.20

Thus after 1937 five and one half million Chinese could not read a newspaper in their own language, though most of them do not know Japanese."

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -1-2
116, 467, 656, 668, 177.66 Japan
636.66

"In October, 1921, Lin Hsien-t'ang, Ts'ai Pei-ho (who was arrested in 1923), Chiang Wei-sui and others organized the Taiwan Bunkakyokai (Taiwan Cultural Society), which very soon became the centre of the national movement among the moderate elements. But in 1926 the Marxist groups made their appearance on the island for the first time when twenty Chinese formed the Taiwan Proletarian Youth League (Taiwan Musan Seinenkai). Since that time the political movement has separated into two branches—the Moderates centered around the Bunka Kyokai and were strongly represented in the Taiwan Agricultural Cooperatives, and the revolutionary Marxist organizations closely connected with the workers union (Taiwan Koyuso remmei), which in 1928 was reported to have had as many as 6,367 members and to have organized several successful strikes. However, after 1928 there began a new era of suppressions and arrests and one after another the Chinese organizations fell victims to it. The Marxist groups were the first to go. In 1931 the Taiwan Koyuso remmei was suppressed and finally in August 1937 even the most moderate movement of the right wing organizations, the purpose of which was the reform of local government, was dissolved on the claim that the government had already realized this reform.

This, of course, does not mean that all these movements were eradicated; they went underground, and continued their struggle, but the government suppression made even moderate groups more radical than they were before. In 1931 Taiwanese in Shanghai reorganized their Taiwan Youth Party into the Anti-imperialist League. It had close

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -2
116, 467, 656, 668, 177.66 Japan
636.66

connections with Taiwan, where its members from time to time were rounded [179] up by the police."

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress. The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

15: U.S. Navy--26 [12] (no date) 1944 Formosans
116, 511, 656, 177.65 Japanese
636.65

"The Japanese have immeasurably improved living conditions in Taiwan by systematically developing communications, public health measures, commodity distribution, agricultural planning and the like. Their efforts have been directed toward the improvement and control of the livelihood of the Formosan in order that he may better contribute to the total economic and strategic value of the island. Brigandage has been eliminated and the roads made safe. The whole organization of Formosan life has gone through much the same development and standardization that Japan has experienced since 1868, save that in Taiwan change has been an official policy executed methodically under police supervision with no regard to local opinion or tradition."

15: U.S. Navy--29 [4] (no date) 1944 Formosans
116, 364, 651, 656, 177.65 Japanese
636.65

"The Japanese have enforced rigorously a system of household registration. At the door of each dwelling there is displayed a plaque bearing the name of the head of the house. Near it are pertinent receipts or certifications received from the police which testify to registration at the nearest police station, house-inspection and approval, vaccinations or innoculations required of all members of the household, certain tax receipts, and such other data which the police may require from time to time to be displayed in a public and easily checked place. In the cities small insignia or notices indicate the public utilities available in each house."

15: U.S. Navy--31 [5]
116, 466, 656, 177.46
636.46

(no date) 1944

Formosans
Japanese

"Through direct employment and through indirect control of the large agricultural and industrial companies, the Japanese government is the largest single employer of Formosan labor. Control and supervision has been strict since the Japanese occupation of the island, but the progressive invocation of the National Mobilization laws after the outbreak of the China 'Incident' has made government control of labor complete. Although there is evidence of chronic discontent among laborers on Taiwan since the 'liberal' days of the 1920's, government policy has been careful to prevent the development of any leadership. The usefulness of Taiwan as a base for military operations and as a link in the new imperial system depends upon the smooth functioning of transportation and communication and (to a growing degree) of industrial activity. All this in turn depends upon the strict control and obedient service of Formosan-Chinese labor, both skilled and unskilled. The Japanese fear any labor agitation, and realize that they are extremely vulnerable to slow-down tactics, if these should be initiated."

15: U.S. Navy--32 [3] (no date) 1944 Formosans
116, 466, 467, 656, 177.46 Japanese
636.46

"In 1931 the upsurge of reactionary power at Tokyo made possible the outbreak of the Manchurian Incident and the stage was set for the war program. Labor leadership, labor organizations and union programs came to an end much more quickly in Taiwan than in Japan Proper. By the end of 1931 everything which smacked of opposition had been suppressed. The employers in the strategic industries, transportation and communications are official or semi-official bodies. Hence there can be no dispute over labor questions."

40: Kirk --19 S-2 (no date) 1941 Formosans
116, 185, 208, 461, 656, 177.20 Japanese

"The common people today are called upon to make so many sacrifices that the government is appealing to their sense of loyalty to the Empire and to their intense national patriotism to keep the masses united and in a mood to endure further privations. The present campaign for 'Spiritual Mobilization' includes (1) encouragement of savings, spending nothing for luxuries and very little for necessities ; (2) mobilization of gold; (3) free gifts of labor, money, and materials to help carry on the war; (4) improvement of health and training to increase the stature. Very few persons are exempt from labor services. Road and bridge building, flood prevention, cleaning and caring for shrines and shrine grounds, clearing and cleaning airports, and tree planting are types of labor which any able-bodied person may be called upon to do. When a worker receives notice to report on a certain day and at a certain time and place, he usually thinks twice before he dares to ignore the summons."

40: Kirk--21-22 S-2 (no date) 1941 Formosans-1-2
116, 185, 656, 177.18 Japanese

"Chinese culture. The government officials of Taiwan are trying to abolish the Chinese culture patterns of the Formosan people. The 'Spiritual Mobilization' program formulated as a result of the 'China Incident' involves radical changes in social customs and religion as well as the substitution of Japanese for the Formosan language. A number of social customs are particularly objectionable to the Taiwan government. (1) Foot-binding is still practiced among the Taiwanese women, especially among those whose forefathers came originally from Fukien, China, although the custom is now prohibited by law. In 1905, according to official statistics, 59.6 per cent of the entire female population had deformed feet, in 1915 the percentage had dropped to 17.4 per cent, and in 1920 only 11.8 per cent of the women were victims of foot-binding. Today the young women are practically free from this affliction, but many of the older women are cruelly misshapen and walk with extreme difficulty. (2) The Japanese are trying to change the burial customs of the Formosans by urging cremation to promote sanitation and to conserve the land. The Chinese are reluctant to give up [22] the time-honored practice of depositing their dead in concrete mounds and vaults, and resent any interference on the part of the government. (3) Firecrackers, so dear to young and old, are no longer permitted. The Chinese find that the noise quickly brings the military police to the scene; so they comply with this law. (4) Another law which the subject people frequently disobey, however, is the prohibition of gold and silver religious papers, which the

Chinese persist in burning at their temple ceremonies. (5) Traditional Chinese costumes no longer meet with the approval of the ruling class. The Taiwanese who discard their native dress are more apt to receive favors from the military police. Guardians of the law have been known to cut cloth buttons from the garments of Formosan Chinese in public. (6) The traditional Chinese theater is no longer free to give performances of classical plays in the old style. Actors must appear in modern or Japanese clothes, and preferably in plays which dwell upon Japanese themes of loyalty and Bushido. The Taiwan puppet plays are illegal except by police permission. (7) 'Due to the present situation,' storytellers are no longer allowed free speech. (8) The Japanese are opposed to betel-nut chewing and are anxious to put a stop to the habit, but they have not yet taken positive action. The natives buy and use betel nuts without police interference. (9) As opium is a government monopoly, the Japanese are in a position to exercise strict control. Opium smoking, it is claimed, is declining rapidly. (10) The Taiwan officials do not approve of native dances and festivals, but permit a few savage tribes to stage their traditional dances under close supervision."

575 number began to decline. Some associations disappeared, some remained in name only. Some associations with properties were troubled by disputes among their members.

B. Under the Japanese Rule

656 575 Strength arises from unification. The new rulers of Formosa in general looked with disfavor on associations of the Formosan people, with the exception of those which facilitated their administration.

From the political point of view there were two categories of associations: those promoted or approved by the Japanese government, and those voluntarily organized by the Formosans and not welcomed by the government. Among the former were: (1) industrial and occupational associations; (2) associations for educational and social development; and (3) social clubs, philanthropic and religious associations.

Many associations were sponsored and controlled by the government, often with government officials as their directors, and had their offices in government buildings. In fact there were auxiliary agencies for administration, and were not voluntary associations of the people. Most associations for the promotion of production belonged to this type. For example, associations of farmers

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were called "Agricultural Associations". It was not an association of farmers for co-operation and improvement of agriculture. Participation was compulsory, membership fees were collected along with taxes, and farmers received only instruction and supervision. Associations for animal husbandry, for fishing, for forestry and irrigation were similar in nature. Co-operatives for fruit growers (banana, citrus fruits, etc.), associations of various trades, chambers of commerce were more autonomous, but government control and supervision were always in evidence. There were various kinds of occupational and professional associations for physicians, lawyers, teachers, etc., and though the Formosan people were allowed to join them as members, they were all controlled by the Japanese.

Associations for educational and social development were also numerous. There were parent-teacher associations called "father and elder brothers" association to help school education. There were householders' associations and housewives' associations to promote adult education. In addition there were youth associations, girls' associations and boy scouts for young people. Community Development Association, Landlord-Tenants Associations, Sanitary Associations, Athletic Associations, the Red Cross, Patriotic Women's Associations, Association for the Improvement of Living, Associations for the

656 575 Reformation of Bad Habits and Customs (such as prostitutes and drinking), etc. are further examples of this type. Many of these associations were organized under government encouragement in response to the new situation after the 1920's in order to distract the awakening Formosans who were grumbling against colonialism.

Social clubs for hobbies, recreational, literary artistic and cultural activities were organized freely by the Japanese. A selected number of Formosans were permitted to join these clubs. Philanthropic agencies had existed since the Manchu era. Some of them were reorganized and new agencies were added during the Japanese era. Religious groups with the exception of Christian minors, were less active.

Voluntary Associations of the Formosans

668 As folk associations waned with the change of social life after World War I, the Formosan people began to form their own voluntary associations of a modern type.

1. Political Associations

After World War I the spirit of democracy permeated the whole world. In Japan serious problems appeared and democratic and socialistic movements became widespread.

471 the transfer transactions are completed, the government will still control 60 per cent of the total value of industrial output.

656 Another adverse factor affecting the development of private enterprise is the multiplicity of government controls. The prices of coal, cement, fertilizer, and many other goods are regulated by the government. "The government also operates a supply bureau, through which small private manufacturers secure much of their imported raw materials. Banks, foreign exchange, and import and export licenses are controlled by the government; the sale of exports is permitted by the government only at prices above fixed floor prices."[15] In the field of taxation, inequities are widely reported. The discrimination in favor of public enterprises and the vexatious government controls seriously hamper the
178 growth of private industry. Formosa is
4 emerging from a colonial economy into a self-sufficient economic unit. The need for the production of goods and services is tremendous. The creation of new employment opportunities is also imperative on account of the enormous increase in population in recent years. In future industrial expansion, private enterprise

15. Raper, op. cit., p. 10.

438 belief has been, particularly in the postwar
434 years, that in Formosa more opportunities for money-making exist in trade and enterprise than in other fields.

A. Channels of Trade

438 The marketing system of Formosa is in
• 656 part free and in part controlled. Certain commodities are strictly in the hands of the government as far as production and distribution are concerned. Prices of some commodities
[435] are regulated and the movement of other commodities is controlled by the government. Some commodities are controlled in their production phase and some in their distribution phase. Since it is difficult to describe the marketing system in general terms, the process as it applies to a few typical commodities will be discussed.

Rice: To effect control on movements of rice, the Provincial Food Bureau has established seven food districts on the island • Taipei, Hsinchu, Taichung, Tainan, Kaohsiung, East Taiwan, and Penghu - designating each as either "surplus," "self-sufficient," or "deficient." Only the Taipei and Penghu districts are considered deficient areas. Taichung, Hsinchu, Kaohsiung, and Tianan are surplus districts. The regional movement of rice is determined at the discretion of the Provincial

438 Food Bureau. Shipment of rice from one dis-
656 trict to another is prohibited unless prior permission has been granted by the local district office or a branch office of the Provincial Food Bureau. For example, a Taipei merchant cannot purchase and move rice from the Tainan district without permission from the district office of the Provincial Food Bureau in Tainan.

442 Within this framework of control, rice merchants engage in one or more marketing activities -- transporting, milling, wholesaling, or retailing. They may be roughly classified into eight groups:

1. Local wholesalers and retailers -- receive unhulled rice from farmers for milling and sell to local retailers or to wholesalers at transit market.

2. Wholesalers at transit market -- buy rice, mostly brown, from the local wholesaling mills and sell to wholesalers at consumption markets, say in Taipei. These merchants are usually located in Taichung and Hsinchu, and at times they utilize the service of brokers to effect sales.

3. Wholesalers and retailers at transit market -- their function is the same as the wholesaler at transit market, although

442 function independently to provide sales
443 facilities for some large mills which engage only in processing.

In addition to the independent activities described above, some rural co-operatives also store, mill, and wholesale rice.

As of early 1953, there were 8,115 rice merchants of one kind or another on the island: 2,813 wholesalers, 2,305 retailers, 2,936 mill operators, 49 brokers, and 12 warehousemen.[3]

•656 The Provincial Food Bureau, as well
435 as maintaining control over the movement and distribution of rice, also acquires a considerable amount of the rice produced yearly (some 30 per cent in 1951), since the government may barter fertilizer (which it controls) in exchange for rice and also receives some rice in payment of taxes. The bureau rations its rice to civil employees and sets aside a certain amount

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3. Hsieh Shen-chung, "T'ai-wan Ti Nung-ch'an Yün-hsiao Chih-tu," ["The Marketing System of Agricultural Produce in Taiwan"], T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 10, No. 4, Taipei, April 1954, pp. 29-34. The classification used here appears rather arbitrary. It may be that those registered as wholesalers are also engaged in retailing.

656 each year to meet emergencies and maintain a stable market price.

Vegetables: Taipei, with a population of nearly 700,000 as of late 1955 consumes more vegetables (as well as other commodities) than other cities on the island. Vegetables for the city are produced in its suburban areas and in the regions of Taichung and Changhua during spring and winter. Yilan also supplies a sizable quantity of vegetables to Taipei (about 3,000 metric tons a year). Producers in the vicinity of Taipei sell vegetables directly to consumers or to local vegetable traders who sell to city dealers. In areas at a greater distance from the consumer, local vegetable traders sell to sales-agents, who sell to retailers at 6 per cent commission. The retailers clean and grade the vegetables before offering them to the public.

656 Salt: The Taiwan Salt Works, the sole producer of salt in Formosa, supplies salt directly to industrial consumers. The supply to general consumers is controlled by the Provincial Food Bureau, which has offices near railroad stations in the vicinity of the salt fields. The allotment of salt to licensed wholesalers is governed by directives from the Provincial Food Bureau.

339 656 435 Cement: Cement was originally distributed under the supervision of the Cement Distribution Secreening Committee of the Provincial Department of Reconstruction. To effect tighter control over the sale and use of all building materials, cement was placed under the supervision of the Provincial Supply Bureau in September 1953. The bureau determines allotments to building material traders' associations and cement traders' associations throughout the island; they in turn allocate cement to their members, and the members to consumers. The wholesale price is fixed, currently at NT $30 per bag (about 50 kgs.); however, the retail price is allowed to fluctuate according to supply and demand -- about NT $50 per bag in early 1955, and about NT $40 in late 1955.[4]

655 Tobacco and Alcoholic Beverages: Production and distribution of these goods are completely under government monopoly. The Taiwan Tobacco and Wine Monopoly Bureau has eleven branches and two business offices, which handle distribution of these commodities to three types of wholesale establishments -- the city, county, and town co-operatives; the

4. Kung-shang Yüeh-k'an [Industry-Commerce Monthly], Vol. 3, No. 10, p. 94; The Central Daily News, Dec. 4, Dec. 15, 1955.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

471 454 438 There was still another category, a somewhat subtler one, by which Japanese investment was injected into Taiwan's economy. This consists of what might be called organizational changes, like banking facilities and the formation of stable domestic markets for disposing of produce. Many such features had been notably absent before 1895, when most commodity markets were no more than local in scope, prices fluctuated widely, interest rates were usurious, and speculation was the principal business activity. This channel of influence was often not actually separate from others; some efficiencies of this sort appeared even as by-products of other more deliberate innovations. These advantages tended to flow from relations among the modern types of business organization. Hence such benefits went to Japanese businessmen, though they often opened up subsidiary avenues to wealth for a number of Taiwanese in commerce and in service enterprises.[18]

With no significant exceptions, the growth and spread of Japanese business activity in Taiwan served primarily to introduce capital into agriculture without greatly changing the operation of individual farms. It furnished a pattern of services between the fields and the markets in Japan through which to reap the economies of modern organization, and yet ensured that most of the proceeds were reinvested on the island in a pattern determined by official decision.

The Preparations for War

656 During the early or middle 1930's the Japanese Empire began to turn toward preparations for war. The colonies were called upon to increase the measure of their contribution in other lines of production besides Empire self-sufficiency in food. Taiwan was not abundantly endowed with the heavy stuff with which the war was to be made—metallic ores were lacking, and coal deposits were not plentiful—and so it was permitted to assume some of the burden of processing materials formerly supplied to Japan as agricultural and other primary produce. This decision did not issue entirely from military or strategic considerations, since in many cases it amounted to no

[18] Chartered banks were an exception. They harnessed funds for industrial investment, and were all owned and operated by Japanese. ". . . modern banks in Taiwan help to collect money from the population and loan it at a relatively low rate of interest to the big Japanese firms, while the Chinese [Taiwanese] have to apply for loans to other sources where they pay two to five times as high a rate of interest as that which the Japanese firms pay." Grajdanzev (1942), p. 126.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

more than following advantages which had been obscured by the official emphasis on foodstuffs.[19]

A general survey of Taiwan's part in the Japanese war program is impossible to undertake here. It is nonetheless pertinent to indicate what were some of the implications of this shift for the internal administration and economic affairs of the island. The turning point cannot be dated exactly, for the decisions behind it were probably not made at any one point of time. They rather reflected a gradual reorientation of official opinion regarding the course of development that was desirable.

From the early years of its existence, the Government-General of Taiwan had sponsored many special corporations to finance and help to organize a limited modification of agriculture. It made more intensive use of them during the 1930's to enlarge new industries that it wanted to foster. Bank credit was made available for new investments at low fixed interest rates. Subsidies were granted widely to induce old firms to enter new fields. Corporations were spared the burden of taxes, government revenue being made up through an ingenious set of other devices.[20] Under exclusive privileges, Japanese companies were attracted to exploit rapidly many of the virgin mineral and forest resources of the island owned by the government. Business activity was hedged about with countless regulations intended to invite mergers and reduce rivalries between firms.[21]

The sugar industry was the outstanding example of government indulgence toward private corporations and its effects. A few Japanese sugar companies had made an early start, before World War I. These were favored with direct subsidies, marketing advantages in Japan and imported equipment far superior to that traditionally used by Taiwanese.[22] By keeping and improving this initial advantage, Japanese producers all but drove Taiwanese competitors out of the field. Some of them grew so quickly that they were under some compulsion to branch out into providing transportation and related

[19] Special advances were made in starting hydro-electric power output and aluminum and chemical production, however, which would probably not have progressed in any such manner except by dictation from high places.

[20] For sources of government revenue, see Grajdanzev (1942), pp. 135-137, and *Statistical Summary*, Tables 335-345.

[21] Stock dividends of corporations, for example, were limited by law. Since profits were high, large sums were forced into business expansion.

[22] An even greater prop to the industry as a whole was tariff protection in the Japanese market, whereby Japanese consumers supplied the greatest subsidy of all. Here also Japanese companies were enabled to reap the major share of the benefit, for reasons given above.

563 Japanese lost their lives in the attempt to subdue a revolt staged by the aborigines. After 1936 the Japanese colonial government tried to assimilate the aborigines: (a) by removing them from their remote mountain homes to small plots of land on the plains where they could be more easily watched and where they might settle down as farmers; (b) by establishing schools within the aborigines' territory. A four-year primary school and some vocational courses were set up for them by the Japanese. This accounts for the fact that a small percentage[23] of the aborigines can speak the Japanese language.

563 657 After the restoration of the island to China, the aborigines are no longer called "savages." They are referred to as "mountain tribesmen" and addressed as "mountain brethren." The administration of the mountain areas has been transferred from the Police Department to the Civil Affairs Department of the Provincial Government. The areas are divided into 30 hsiang (groups of villages) and 192 ts'un (villages).[24] The chiefs

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23. About 30 per cent. "In the east coast town like Hualien, the bus conductresses make their announcements in Japanese, so that even the aborigines will know where to get down." Manchester Guardian, op. cit., p. 12.

24. T'ai-wan Ti Shan-ti Hsing-cheng [Administration of Mountain Areas], published by the Information Department of Taiwan Provincial Government, Taipei, 1952, p. 15.

4:Grajdanzev--140 [31 S-4 (no date) 1942 Formosans
116, 652, 657, 177.65 Japan
636.65

"Expenditures on the health and education of the population occupy a rather modest place in the budget of the government-general, and their part in total expenditures is falling, as the following figures show: (percentages of total expenditures)

	1935	1936	1937	1938	1939
Education[a]	6.8	6.9	6.3	4.5	3.8
Health	1.0	0.8	1.0	1.1	1.0

a) Expenditures on the University are not included here as before 1938 they were not included in the general budget, and we have no data on them.

However, it should be pointed out that the bulk of these expenditures passes through local budgets--14,144,000 yen on education and 5,193,000 on health in 1939."

31: Hofmann--603 N-3 (1909) 1912 Formosans
116, 366, 543, 657, 177.65 Japanese
636.65

During my stay of one week in the capital and the neighboring regions, I was greatly impressed by the energy with which the Japanese had stimulated the culture of Taihoku. There were extensive government buildings, broad streets, water pipes, schools, barracks, hospitals, reformatories, railroads, telegraph and telephone connections; everything, in short, that is considered representative of western culture. Everywhere there are signs of Japanese patience, energy, and initiative which form a striking contrast to the confusion and negligence of the Chinese regime. There is a museum in Taihoku which is well worth seeing, with an extensive collection of the abundant fauna and flora of this island; it is because of the copious vegetation that Formosa for so many centuries has been the cynosure of all those nations who sought to expand their boundaries. There is also a botanical garden where a large number of useful and interesting plants has been systematically arranged and it is calculated to impress any visitor to the tropics. There is one hotel in Taihoku which, judged even by European standards, is excellent; it offers all the comforts of a tropical hotel.

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of the rural districts are all elected by the aborigines themselves. They are represented in the Provincial Assembly by three members, two elected by the tribesmen living in mountain areas and one by those living on the plains. One tribesman, Hua Ch'ing-chi, serves as a Commissioner in the Provincial Council. In the 144 elementary schools provided for the aborigines, 17,734 children and 6,032 adults were enrolled in the second semester of 1951.[25] It is said that 71.56 per cent of school age children are receiving education.[26] With the assistance of the Sino-American Joint Commission on Rural Reconstruction, the Nationalist Government is also improving the livelihood and economy of the tribesmen. The number of health stations has been increased. A total of 30 health stations and 120 substations have been set up since November 1949. Efforts have been made to improve the quality of the cattle and to increase the number of hogs in the aboriginal areas. A selected number of aboriginal girls are to be trained in sewing and sericulture.[27] The guarding of the mountain areas has been relaxed. In fact,

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25. Ibid., p. 22.

26. Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China], 1954, p.818.

27. General Report of J.C.R.R., Vol. IV, 1954, p. 186.

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many tribesmen are found patrolling the streets in Taipei as members of the local police force. No noticeable friction has ever been reported between the aborigines and other groups. For this the Nationalist government should be given credit. The aborigines are at long last recognized as a part of the community, and some headway has been made to bring about their economic betterment. It is quite natural that they are satisfied with Nationalist rule.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER VI

Public Health and the Risks of Death

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In the preceding pages, we have given attention to various features of intercourse between Taiwanese and Japanese in Taiwan. Most of the evidence has been in agreement on one point—the policies of Japanese as rulers of the island failed to make any substantial difference in the social structure of its people. The more it seemed to change in some particular, the more it turned out to be essentially the same thing. As a matter of official design many innovations were concentrated in the hands of a favored few. Even when it came to implementing their aims, Japanese found ways to meet the population on its own terms. Much of their success in colonial administration was due to the ability to make the social system serve their purposes without changing its form.

The most significant exception was their effort on behalf of the health of the inhabitants. Japanese have never received full credit for their achievement in this realm, either on the part of the Taiwanese (who resented the intrusions that it involved in their lives) or from Western students of population and public health (who mostly ignored or belittled it). The "benefits" of rationalizing Taiwanese agriculture may be a matter of dispute, for it enormously enriched a few Japanese at the same time that it broadened standards of consumption in the population. The motives of Japanese in introducing to Taiwan some of the advantages of scientific discovery from the outside world may likewise be suspect, for they managed to keep control over most of the fruits of improvement. But there is no doubt that in the field of public health Japanese rule added many years to the expected lifetime of Taiwanese. This, in an environment of opinion that looks with approval upon any postponement of death, deserves to be given adequate attention.

Early Health Conditions in Taiwan

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Prior to 1895, Taiwan was renowned as an unhealthful place to live. It presented special hazards to survival in addition to those which its people had learned to accept in South China. Unusual efforts had been called forth in expanding settlement into the relatively empty area, and these entailed unusual risks of death. Early Chinese migrants to Taiwan had to attend to clearing new lands,

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

PUBLIC HEALTH AND THE RISKS OF DEATH

The Japanese and Public Health

165 The Japanese military forces that first set out to subdue Taiwan met no firmly organized resistance among the people, but were nearly overcome by sickness in their own ranks before taking possession of the island. Out of an undisclosed total number of troops taking part in the campaign, the Japanese acknowledged only 154 combat fatalities, but over 4,000 died of disease within the first several months, and 27,000 had to be hospitalized (most of them in Japan).[5] Epidemic illness did not, like poverty, stay confined to the Taiwanese population and leave the new rulers unmolested. Mosquitoes that carried malaria, for example, did not observe this distinction. The Japanese liking for raw fish was said to make them even more vulnerable than Taiwanese to the parasites that infested the food. Among the garrison alone, annual deaths of more than 40 per thousand were reported during the first decade of occupation, probably a higher figure than in the adult population of Taiwanese. In order to make this region of the world safe for imperialism, the Japanese found that they had to take drastic measures to curb the spread of disease.

•657 744 They started almost at once to devise ways of counteracting the most serious sources. The steps that they adopted are instructive, for the result was a marked success with only a modest outlay. The campaign against sickness was launched when scientific knowledge as to the nature of these diseases was by present standards still rudimentary. Its weapons were crude and sometimes misguided. Moreover, there were many other goals of administration that competed with public health for attention. The authorities were never in a position to divert large blocs of funds to make their program elaborate or munificent. It lacked the grandeur of projects sometimes contemplated by those who draw up plans for "backward" areas today. The whole approach of the Japanese to the problem of disease in Taiwan was an austere one. They avoided every possible expense in equipment and physical facilities, and depended on intensive use of all the administrative resources at their command.

744 In slightly over a decade the authorities almost eradicated plague as a major disease, through strict vigilance for suspected cases of infection, rigorous quarantine regulations, and careful inspection of incoming ocean cargoes for infected rats.[6] Cholera was similarly pre-

[5] Davidson, James W. (1903), p. 354.
[6] Naito, Hideo (1937), p. 84 ff.

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD 1

647 ment employees was reduced to 81,006, while the percentage of indigenous citizens in government service had risen to 65.46. A more significant change, perhaps, is in the increase of indigenous personnel in positions of responsibility. Among the first-class officials, local personnel has increased from 0.92 per cent under the Japanese to 17.45 per cent under the Nationalists. During the similar period, the second-class officials of indigenous origin rose from 1.29 per cent to 25.02 per cent.

563 Of 113,900 aborigines in Taiwan, 91,-
070 of them live in the central moun-
657 tainous region. Since 1946 they have been exempted from tax payments. Redistricted into a number of villages and subvillages, they have been developing local self-government through village assemblies. There are at present 159 free primary schools among them, educating some 20,000 of their children. In addition, 924 graduates have been awarded government scholarships to enter secondary schools. Among them are also 140 public health clinics serviced by 321 medical people.[18]

FINANCE

652 The people of Taiwan suffered much when their currency was linked with that of mainland China. From one Taiwan dollar for thirty Chinese dollars (*fapi*) in 1946, the rate climbed to T$1,835 for one Chinese "Gold Yuan" in August 1948.[19] By the time the Gold Yuan collapsed several months later, there was little purchasing power left in the Taiwan dollar worth salvaging. A fresh start was made in June 1949 when the

nel figures on which this analysis is based, see *Taiwan Today*, cited note 11 *supra*, pp. 30–31.

[18] For figures in this paragraph, see *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 20–21.

[19] For a general description of Taiwan provincial finance, see *Taiwan Reconstruction**, pp. 33–77; also cf. *Taiwan Today*, cited note 11 *supra*, pp. 44–76.

[p. 216 (B)]

4:Grajdanzev--139 S-4 (no date) 1942 Formosans
116, 171, 208, 658, 177.20 Japan
636.20

"Analogous to the war expenditures are the related expenditures on propaganda. In this group we included expenditures on broadcasting, including construction of new stations, on 'social education,' and on the 'spiritual mobilization of the population'. There may be some who wonder whether the expenditures on radio-broadcasting stations may be properly considered as expenditures on propaganda. But while in Japan the users of radio receivers must pay a certain annual fee, in Taiwan broadcasting is free because the government considers it a powerful instrument for 'spiritual mobilization' and for the Japanization of the population."

4:Grajdanzev--165 S-4 (no date)1942 Formosans
116, 208, 563, 658, 871, 177.87 Japan
636.87

"In the sphere of education the island has passed through two periods, one before 1919 and another since that year. Before 1919 the policy of the government with respect to the Chinese of the island was vacillating. It was ready to recognize the existence of the Chinese in the Japanese Empire as a separate entity, and was ready even to help them preserve their Chinese character. A special society was created to investigate Chinese customs and habits and these were to be taken into consideration in court practice. Later, the failure of this policy was recognized and the avowed end became the japanization of the inhabitants of the islands in order to make them loyal subjects of the Empire. The elementary school was to become the chief instrument in this japanization. While before that period the education of the Chinese was completely neglected, since then school expenditures have grown and the number of pupils has increased from year to year. But this does not mean that there is any equality between the Japanese and Chinese as regards education. A literate population is necessary for the japanization of the islanders. Knowledge of the Japanese language is indispensable for workers, policemen, for the paocheng, for clerks, for all who work for their Japanese rulers. It does not mean, that there is any intention of raising the Chinese to an equal position with the Japanese."

4:Grajdanzev--168 [2] S-4 (no date) 1942 Formosans
116, 563, 658, 873

"In discussing the public finances of Taiwan, it was noted that the expenditures on the only university in Taiwan. which is in Taihoku, cannot be considered as expenditures purely for the education of the Chinese population. In 1939 there were 192 Japanese and 90 Chinese students in this university."

40: Kirk--20 S-2 (no date) 1941 Formosans
116, 191, 658, 871, 177.87

"Koshusho, or national language training schools, which have sprung up to facilitate the teaching of Japanese to adults, numbered 7,306 in 1939. The classes meet in schoolrooms, public halls, or private homes under the leadership usually of Japanese-speaking Formosans who contribute their services free. From the year 1934 Formosan children will attend primary school for at least six years under a cumpulsory education law similar to the law in Japan proper."

40: Kirk--25-26 S-2 (no date) 1941 Formosans-1-2
116, 561, 575, 658, 883, 177.88 Japanese

"Youth movements. The Japanese are laying great stress upon the various youth movements which are actively sponsored in Taiwan by the Government General and the local provincial governments. There are young men's associations, young women's associations, and Boy Scouts. These organizations aim to

> train and drill youth spiritually and physically to inculcate loyalty, to improve character as loyal subjects, to instill a spirit of public service, to encourage self-help, self-control and initiative, to increase knowledge and skill necessary for practical life, to encourage diligence and thrift, and to improve general health conditions of the nation.

The specific purpose of the young women's association (Joshi Seinen Dan), especially among Formosan Chinese, is 'to encourage and propagate the use of the national language, to inculcate female virtue, to educate women in housekeeping, to improve home-life, to cultivate sentiments through recreation, to improve health conditions, and thus to train women in sound womanhood.' The young woman's movements, however, are far less active than the men's associations. The local territory covered by each association corresponds to a public school district. Young people under 20 years of age

who are graduates of [26] public schools may join the youth movement. The young Formosan Chinese members are particularly interested in spreading the use of the Japanese language and in raising the Formosan standards of living. The young men are called upon to assist the police in traffic control during celebrations, to serve on watch duty or to run errands, and even to do hard manual labor, on occasion, when additional workers are needed.

The geographical position of Formosa and the ethnic factors in the overwhelming non-Japanese population are largely responsible for the determined drive of the Imperial government to assimilate the Formosans as speedily as possible."

217 libraries have a total of 46,187 books in European languages, 241, 574 in Chinese, and 240,603 in Japanese.

874 The provincial Department of Education also maintains two trade schools for the deaf, dumb, and blind at Taipei and Tainan. These schools provide free education in trades such as woodworking, barbering, shoemaking, massaging, etc., and can accommodate 436 students, principally children.

.658 Special attention has been given to fine arts education in order to encourage the aesthetic aspirations of the people. The Ministry of Education recently established for this task the Committee for Fine Arts Education and the Committee for Research and Improvement of Chinese Opera. New plays are being written and concerts, art exhibitions, and other cultural events are provided under the committees' promotion.

III. ROLE OF THE GOVERNMENT

A. Content and Character of the Role

87

In Formosa, the government has general control over the supervision, educational policies, and organization of schools at all levels.

The Executive Yuan, in its proposal of an administrative program to the Legislative Yuan in March 1952, set its educational objectives as follows: "that in order to meet the needs of time...

4:Grajdanzev--87-88 S-4 (no date) 1942 Formosans
116, 167, 313, 423, 659, 177.31 Japan
636.31

"When the Japanese occupied the island, the new administration immediately became interested in its forest resources. One part of forests was in the possession of the Chinese farmers, but the other, more important one was the area of the aborigines. The Chinese were required to register the documents of ownership of forest lands, and since in most cases they had no such documents—their possession and use of forests being based on [88] custom—this device enlarged the government forest reserves (1). It has

1. This is described in Section 3, Ch. 11, p. 1 of T. Yanaihara, Teikoku Shugishita no Taiwan, pp. 23-26.

already been mentioned that in order to use the forests, formerly occupied by the aborigines, the government began to settle the latter by force in the plains. It is said that the settlement of one family of aborigines on the plains cost only ¥70, and this may be compared with the ¥1,000 or more which are spent on the settlement of a Japanese family. Many hundred thousands of ko of forest were acquired in this way."

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-1-2
116, 563, 659, 723, 177.65 Japan
636.65

"The expenditures on the government apparatus, including police, courts, prisons, and pensions are chiefly, in some cases [139] exclusively, expenditures on the Japanese staff and for the benefit of the Japanese. All important government positions are occupied by Japanese and their salaries are much higher than those of the Chinese. Expenditures on roads, railroads, and communications, of course, benefit the local population as well as the Japanese, but as was shown in preceding chapters, these improvements are used chiefly by the Japanese or for commerce with Japan which brings little net gain to the islanders. Expenditures on ports are out of all proportion to the needs of the island. Their function is, as the Japanese openly announce, to serve as a base for the advance to the South, and such expenditures have little to do with the welfare of the islanders. Expenditures on rice control are again expenditures in the interest of Japan proper for this system has in view simply the interest of Japanese. In the war expenditures we have included expenditures on airfields, on Red Cross activities, on air defense and contributions to the war chest of Japan. These expenditures grew from the modest figure of 287,000 yen in 1935 to 21,150,000 yen in 1939; thus Taiwan contributes to the conquest of China by the Japanese. In the war expenditures should be included expenditures on meteorological stations. Their remarkable growth from 73,000 yen in 1935 to 900,000 yen in 1939 is explained not by any interest in meteorological phenomena, but by the

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-2
116, 563, 659, 723, 177.65 Japan
636.65

needs of the Japanese military aviation. Taiwan lies in the path of typhoons and information on weather conditions there is of extreme value to the Japanese forces in China."

4:Grajdanzev--139-140 S-4 (no date) 1942 Formosans
116, 648, 659, 177.72 Japan
636.72

"Expenditures for the penetration of Southern countries and [140] 'secret funds' are scarcely likely to benefit the Chinese population of Taiwan."

4:Grajdanzev--140 [2] S-4 (no date) 1942 Formosans
116, 346, 563, 659, 177.65 Japan
636.65

"The shrines and temples mentioned above are not Chinese temples, but Japanese shrines, including a shrine to the spirits of the war-dead on which 100,000 yen was expended in 1939. It may be interesting to note that construction of Japanese shrine in Taito (1937-1939) was to cost 1,078,000 yen, while the appropriations for the Chinese temple of Confucius in Taihoku (1935-1936) amounted to only 20,000 yen."

4:Grajdanzev--140-141 S-4 (no date) 1942 Formosans
116, 648, 652, 659, 723, 177.65 Japan
636.65

"The large expenditures on railways and communications, on research, on investments in the South Seas, etc., show what importance the Japanese attach to the part of Taiwan in the schemes for an advance to the South. The money [141] collected in the Taiwan budget--almost 200 million yen--is thus mainly used, on the one hand, for the construction of the all-important base for Japanese penetration in the South Seas, on the other, for the purchase of Taiwanese products to be sent to Japan (1).

1. In the last few years the Japanese government has started the practice of direct contributions by the Taiwan Treasury to the Japan's Treasury. The sum appropriated in Taiwan's budget for 1941, for example, is 24.5 million yen."

4:Grajdanzev--163 [2] S-4 (no date) 1942 Formosans
116, 171, 625, 659, 871.177.62 Japan
636.62

"Many times on the preceding pages it has been shown that Taiwan is more poorly supplied with this or that commodity than is Japan proper. But in one respect Taiwan is better supplied ——with policemen. According to Dainippon teikoku nenkan (Statistical Year Book of the Japanese Empire) for 1937, there was one policeman for every 1,052 persons in Japan proper in 1937, while in Taiwan there was one for every 580 persons. According to the same source there were more policemen than teachers in Taiwan—— 9,972 policemen in 1937 as compared with 9,651 teachers of all kinds in 1936——while in Japan proper the number of teachers was almost six times as large as the number of policemen. The number of policemen in Taiwan is almost three times the number of physicians."

15: U.S. Navy --24 [5] (no date) 1944 Formosans
116, 166, 486, 659, 177.48 Japanese
636.48

"The movement of Formosan-Chinese or Japanese into the aborigine territory is supposed to be strictly regulated. Permits must be had for any forest operations which take laborers into the area for logging or for camphor extraction. Likewise, the movements of aborigines who wish to leave the territory for business or sightseeing (educational) visits to towns and villages is carefully checked by the Japanese police. The police stations are small centers for trade and local administration through which most such traffic must pass. Roads, paths and the pushcar lines converge on these centers.

Movement from the western and northern settled regions to the isolated East Coast is susceptible of complete control. The town of Suo is the last important settlement at the northeast. Koshun is the last important settlement at the extreme south. Through these two towns pass all round-the-island motor traffic. (A road crossing the southern peninsula from Shajo eastward may now cross above Koshun.) All persons entering the territory through these points are expected to be registered for police purposes.

Some foot traffic (confined largely to bearers of supplies and messengers for the interior police stations) passes across the island from the Taichu-Hori district over the Noko mountain ridge to Karenko. It is improbable that Formosan-Chinese, singly or in small groups, should attempt to cross the mountains on foot unless armed or escorted by armed police."

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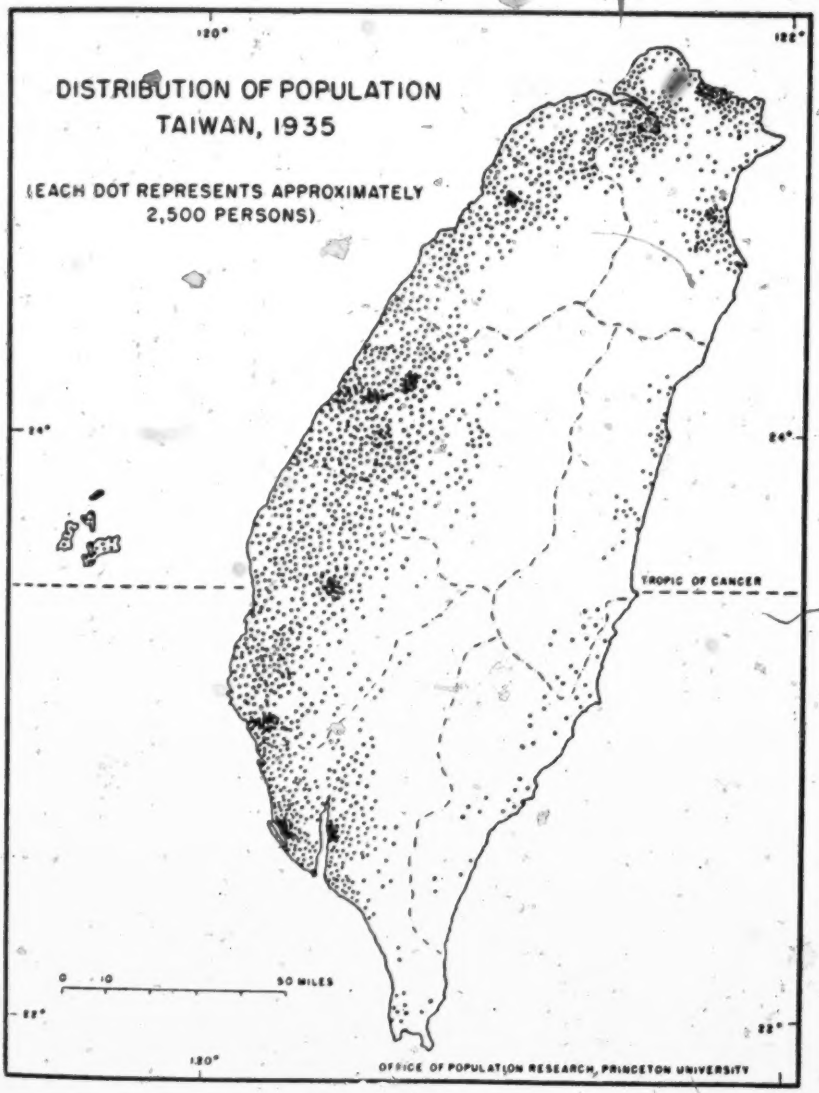

Fig. 2. Distribution of Population in Taiwan, 1935. All nationality groups

The Japanese and Statistics of the Population

The only trustworthy information that we have about the numbers and kinds of people in Taiwan at any time is the evidence of the censuses taken by the Japanese. They conceived and established

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659 a system of collecting population data, as an integral part of their wider goals in the island. Factual materials of this order have not existed either before or since their occupation.

The complete monument to their enumerative capacities in Taiwan is a series of seven censuses, the first one in 1905, the next in 1915, and one every five years thereafter stopping with 1940. Some were more detailed and are therefore more useful than others. All maintained uniformly high standards in the completeness of reporting, in the consistency of defining ethnic classes, and in the accuracy of information such as age reporting. In these respects they often ranked in quality well above the more advanced censuses of the Western world. The first two censuses, in 1905 and 1915, were carried out before a genuine enumerative census was ever conducted in Japan Proper[5] and probably served as testing-grounds for the initial Japanese census of 1920.

One of the first official acts of the Japanese was to make a register of the population under their control. This was undertaken for purposes of regulation, and not to satisfy disinterested curiosity about the inhabitants. To judge by its published results, the early registry was incomplete, especially in its vital statistics. But the rules regarding nationality were important for later demographic data, because they provided the first basis for distinguishing ethnic groups in the population.

659 641 The authorities began by requiring all persons who acknowledged the legal status of Taiwanese "nationals" to be so documented with the police. The remaining people of Chinese origin were thenceforth classed as aliens, and were given stricter treatment before the law than the rest. This legal concept of "nationality" (*Minseki*) was unchanging for each individual over time.[6] Reflecting as it did an official system of ethnic discrimination, this scheme was maintained with some rigor by the police. The classification was extended into census practice, and the system of control later became the basis for collecting census and vital statistics data. It kept distinct four principal groups of people—"Taiwanese" (or "Islanders," as they were called until 1939 in the statistics), Japanese, Koreans, and Mainland Chinese.

[5] The Russo-Japanese War intervened in 1905, the World War in 1915. See Taeuber, Irene B., and Beal, Edwin G., Jr. (October, 1946), p. 9.

[6] The privilege of adopting Japanese nationality was extended to natives of Taiwan only in later years, and was not widely used.

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By these actions the Japanese set apart from all others those who were descended from the original residents of Taiwan. This segregation in the statistics extended from the most obvious differentiation—that of Japanese nationals—down to fine distinctions within the Taiwanese population itself.[7] It was consistent in both the population censuses and vital statistics, making it possible to amalgamate the two systems of record-keeping continuously as long as they were maintained.

TABLE 1

TAIWANESE BORN OUTSIDE OF TAIWAN, 1920 AND 1930

Proportion of All Persons Who Have Been Born "Abroad," by Age and Sex

	Census of 1920		*Census of 1930*	
	Male	*Female*	*Male*	*Female*
All ages	0.2	0.1	0.1	0.0
0-9	0.0	0.0	0.0	0.0
10-19	0.0	0.0	0.0	0.0
20-29	0.1	0.0	0.0	0.0
30-39	0.1	0.0	0.0	0.0
40-49	0.5	0.1	0.1	0.1
50-59	1.3	0.2	0.3	0.1
60-69	1.9	0.3	0.8	0.1
70 and above	2.6	0.7	1.0	0.3

Sources: *Census of 1920, Descriptive Report with Appendix*, Table 79.
Census of 1930, Statistical Tables, Table 55.

Regulating the conduct of "alien" Chinese nationals in Taiwan was not the sole purpose in establishing the legal status of residents. The authorities also set out to halt the further migration of people from the mainland. In this they were apparently successful. Taiwanese were required to verify their nationality by certain proofs, chief of which was evidence of having been born in Taiwan. Taking this as a criterion, there seems to have been little admixture from the mainland to the category of "Taiwanese." For example, tables showing Taiwanese who were born "abroad" were published with the censuses of 1920 and 1930. If the information was accurate, practically the entire population of Taiwanese born after 1895 was ac-

[7] This fine detail was confined to a slightly different classification, based on "race." It provided categories within the group with Taiwanese nationality—aborigines, Taiwanese of Fukien origin, and Taiwanese of Kwangtung origin. The two classifications were not precisely the same, the one based on "nationality" being the more consistent at different times.

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659 tually born in Taiwan (see Table 1). Almost none under 25 years
167 of age in 1920, or under 35 in 1930, were recorded as having been
born outside. Some who were older at these two dates had been
162 born in China, but they were very few and were probably living in Taiwan at the time of annexation. These figures imply that migration after 1895 was probably confined to people who were appropriately registered by nationality, and counted as *aliens* in census enumerations.[8]

Hence the census category of "Taiwanese" was defined so as to exclude migrants to and from the island. This is significant to know, for it means that Taiwanese counted in any census after 1905 were exactly the survivors of those who had been counted before (plus those who had been born in the meantime). It also means that the population of Taiwanese was for statistical purposes a "closed" population—one which neither gained nor lost people by migration. All change in the size of the Taiwanese population was therefore due to "natural increase," or the balance between births and deaths. One can thus speak precisely of population "growth" in Taiwan, without reference to migration as a complicating factor.

Half a Century of Rapid Growth

161 The total population, and the sub-total of Taiwanese, are shown in Table 2 as counted on October 1 of each census year, along with the annual geometric rates of growth that are implied at each intercensal stage. Every year showed an increase. The only setbacks were between 1915 and 1920, when the island suffered three near-epidemic attacks of disease. Even over this relatively poor span the average yearly rate of increase was close to one per cent. The original population of 1895 was more than doubled by 1945; when the vital statistics were discontinued in 1943, there were nearly six million Taiwanese.

[8] By evasion of the law some Chinese might conceivably have slipped into Taiwan and passed themselves off as Taiwanese. A further acquaintance with the regulatory system in later chapters, however, will make this appear most unlikely.

There is evidence of another sort that the Taiwanese were not diminished by removals to the mainland. Briefly, detailed testing of the validity of birth and death statistics has shown that practically all persons born in Taiwan were later accounted for in a census enumeration, or as registered deaths if they failed to survive. Practically all who were enumerated in one census were similarly accounted for at later dates. During the 1930's, Japanese permitted small numbers of Taiwanese to leave the island for special purposes. The effect of these departures was very small, and raises no difficulty in dealing with the data of earlier years. Thus, if there was emigration, it too was clandestine and very small.

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Japanese government officers could be stationed over the island to establish political order firmly. 648

This delay in extending their mastery over the whole of Taiwan was a disappointment to the Japanese. It spurred them to concentrate their efforts at organization on measures other than force to bring the inhabitants under control. Once set in motion after some three years' experiment and delay, their methods brought swift results. They encircled and isolated the aboriginal tribes in the hills, and introduced a refinement of old Chinese forms of keeping local order—the so-called *pao-chia* system.[10] 648 631

Private Corporations and Japanese Investment

Other measures followed to make the Japanese rule more effective. As the exercise of authority became more a matter of routine, the policy turned more and more to exploring improvements and enlargements of production. This progress in government can be traced in the annals of specific achievements, like the drive to raise rice yields[11] and the public health program. By 1905 the Government-General felt itself well enough established to take a detailed census of the population; the descriptive report of its procedures is the best evidence of a firm degree of control and competence in performing complicated administrative tasks in Taiwan. 648 659

For the next 25 years or more, until they began to shift their energies to preparation for World War II, the Japanese proceeded to work out their policies for Taiwan (outside of the Aborigine Territory) with scarcely a serious check.[12] This long interlude between two periods of tight regulation is sometimes known as one of official "liberalism" or laissez-faire toward business affairs. It can be so designated, however, only in contrast to the strictness that preceded and followed. In steady succession the government completed several major projects. It finished the land survey of the entire island, essential to all their later engineering works as well as to the desired 654

[10] The *pao-chia* system was a scheme for assigning joint responsibility to village and familial groups for the conduct of their members. Its operation and the reasons for its effectiveness are taken up in the following chapter.

[11] Mendiola, N. B. (1949), p. 76 ff.

[12] The Taiwanese efforts at insurrection, as for example recounted in OPNAV, Civil Affairs Handbook (1944), pp. 173-177, tended to be exaggerated by their instigators. Due to their own clumsiness, these were quickly put down by the Japanese, though not without some local disruption. Inside the Aborigine Territory, on the other hand, the Japanese devoted many years of hard fighting and frustration to "pacification," and did not hold the entire island securely until the mid-1920's, nor peacefully until almost 1940.

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"ECONOMIC DEVELOPMENT" IN TAIWAN

Industrial Growth during the War

722 After setting the stage for limited industrialization by their treatment of large business in Taiwan, Japanese leaders after 1940 began actively to move the players. The centralized corporate structure had been expected to be adequate preparation for most of the demands of war. The Government-General made frantic last-minute attempts to expand specific fields in which Japan itself was short, particularly aluminum and coal. But before long the subordination of Taiwan's economy to heavy industry in Japan, which had seemed so satisfactory, turned out to be a source of weakness. Naval losses started to interfere with shipping between Japan and Taiwan. Many of the small but essential items supplied from the home islands (special equipment, replacement parts, fuels, and skills) became unobtainable. Certain large imports such as fertilizer were cut off.

None of these shortages was fundamentally important for the island itself, since food was sufficient for its population and little else had previously been imported. Lack of articles of the first sort did play havoc with some of the new industrial output, and caused much of the equipment to deteriorate. Exports of aluminum and coal slowed down to a trickle by 1944, and practically all shipping to Japan—even rice and sugar—was discontinued early in 1945.[29] By the time of Japan's surrender much of the highly organized economic life had come to a stop, but Taiwan suffered no devastating damage as a result of the war. Agriculture was still conducted as usual, except that without fertilizer and other accustomed capital the yields had fallen off substantially.

Accomplishments of Japanese Colonial Policies

648 659 Having described the workings of colonial administration in Taiwan, one should have some idea of its accomplishments before going on to discuss in later chapters its consequences in the lives of the Taiwanese. For this purpose, the abundance of records kept by the Japanese is often a hindrance rather than a help. In general the economic statistics are not up to the standards of the population data. Numerical tables are plentiful, but explanations of what the numbers mean are not. They disagree from source to source, seldom with any reason given for the discrepancies. One must therefore look for summarizing measures, and not for fine detail.

[29] See Cohen, J. (1949), pp. 154-156.

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fluctuations in employment. If employment is to be regarded in this way, it needs a set of criteria that are more complex, more sensitive to particular circumstances, and better oriented to the activities of people at a given moment. 121

Census Procedures in Taiwan for Determining the Working Population

Even if the conceptual questions can be settled, there remains a group of procedural ones. Since information which might be used to measure the size of the labor force must cover the entire population, it is ordinarily secured as part of a general census enumeration. Consequently most of the issues in collecting such materials are encountered in connection with census administration, and they have usually been dealt with by official organs charged with managing a census. Until very recently, it has been in this procedural realm that most attention has been given to labor force measurement—how to establish definitions, etc.

In actual experience, some of these criteria of working status have always been incorporated into census data that are already collected and published. They are beyond the control of the persons who make use of the materials, who are as a rule not the same ones who gathered and compiled them. Most of them must be accepted as they are, save for slight alterations (like shifting or combining certain categories) which may or may not aid in comparing data from different sources. Often the best that can be done is to scrutinize carefully the standards that were used in any given instance, and to make whatever allowance is possible for peculiarities that may exist from case to case.

In Taiwan, where census practices in Japan were followed,[2] the first of the two concepts of employment was used with little variation from census to census. Some specific entry as to "principal occupation" or customary activity was required of each individual. This left it up to each person or household head to decide whether he held an occupation; if so, he was supposed to specify the usual activities that he actually performed, as distinct from the part of the economy in which the work was carried on.[3] The information was compiled 659

[2] The enumerations of 1905 and 1915 in Taiwan had been planned likewise to synchronize with Japan in every major respect, but were carried out actually without the intended counterparts in Japan Proper.

[3] That is, in the current census usage of the terms, the enumerations were "occupational" rather than "industrial." The compilation of occupational titles before 1930,

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659 in detail, and transmitted to the central office, where it was reduced to groups of occupations by clerks. Here strict instructions were issued to ensure that the procedure of classification was uniform and consistent.[4]

The authorities were anxious to impress the outside world and their own superiors in Tokyo with their efficiency as a colonial government, and spared little trouble to prepare census reports that were documents of their competence. Thanks to elaborate and often exaggerated care in these matters, there is some possibility of checking on the modes of allocating people among groups of occupations. Every occupational census was published with at least one detailed tabulation showing the separate occupations of which the broader categories were composed. In 1905, for example, the census recognized 178 specific occupations. The number rose in the revised lists that appeared in later censuses, until some 376 were taken into account by 1930.[5] In fact, the zeal to gain stature for their work alongside the most modern Western enumerations carried Japanese census authorities still further. They prepared comprehensive glossaries of occupational titles to standardize the content of all categories that were tabulated. These translations contained up to several thousand names of occupations current in different dialects, and reconciled local usages with each other and with their conventional equivalents in Japanese.

It is not so clear how persons who had occupations were distin-

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while designed to classify occupational roles as such, tended to group together many persons with different functions who worked in certain lines. For example, workers in retail stores selling a particular article, regardless of whether they were owners, hired sales persons, peddlers, or simply helpers, were often placed in a single group. The census of 1930 included a stricter classification of occupations, and introduced for the first time in Taiwan a separate "industrial" tabulation of occupied persons. With one or two exceptions explicitly noted, the former of these will be used throughout this study. It is the most nearly comparable from one time to another, and provides a more useful type of information for our purposes.

[4] For a short account of the administration of these measures in Japan in 1920 and 1930, see Taeuber, Irene B., and Beal, Edwin G., Jr. (1946), pp. 9-15. The execution of the census of 1905 is described in more detail in a descriptive report translated into English as *The Special Population Census of Formosa, 1905* ([Taiwan], Government of Formosa, Tokyo, 1909).

[5] The number of occupations included in any of these lists is in itself an important detail. Very likely the systems of classification were developed beyond the degree of specialization in the economy itself. This is especially true in the later years, for the occupational scheme was devised for use in Japan and transported bodily to Taiwan as part of the policy of coordinating their census practices. While useful in locating certain specific types of activities, these minutiae are relevant chiefly as evidence of the meticulous attention to detail in the compilation of the materials.

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guished from those who did not. There were few rules covering this point. Once a person reported some employment on his census schedule, he could be assigned to an occupational class very simply by the central coding staff. But it was not easy, in terms of a "customary occupation," to control the basis on which a person might decide whether he was employed at all. The criteria for making this distinction ultimately rested on prevailing social standards of what constituted employment.

No society is lacking in definition of its own of what is useful and what is not, though the particular objects of such evaluations may vary widely from place to place. But as surely as standards of usefulness are universal among different peoples, census agencies likewise will inevitably tamper with them in the course of their duties. There is some practical necessity for this. These cultural definitions are not often explicitly formulated, nor are they consistent for all individuals in a society. Both clarity and uniformity need to be stressed in an occupational census, and so certain conventional rules are always established. The virtue of a notion such as "customary" occupation in use—and its greatest weakness—is that it serves well with little overt supervision. Hence, while an occupational inventory along these lines can be a simple matter, some of its basic categories are necessarily indistinct.

This type of inexactitude creates "fringes" of employment, especially among groups of people who are just entering or retiring from the labor force. Here are found the individuals whose exact occupational status would have to be decided on more explicit standards if all entries were to be made consistent. Customary occupations are generally suspected of being *inflated*, of retaining people who are temporarily out of work or who have retired from active work.[6]

The only procedure that census officials in Taiwan adopted to control this tendency was to specify carefully the circumstances for reporting *no occupation*, in order to settle the doubtful cases from this side. The "no-occupation" category thus had the most positive definition of all. All persons not reporting a regular occupation were required to state in detail their means of support.[7]

[6] Against this can possibly be set an honorific value, unusually strong in a Chinese society, that accrues to *leisure* activities, which may tend in the opposite direction.

[7] If living on income, the type of income was to be stated; if a family worker, the type and family status was to be included; for "dependents"—those for whom no separate source of income could be found—it was to be noted whether students, family

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659 In publication, except for some special tables on households, this information was usually lumped into one single class ("no-occupation"). The census of 1930 was the one exception, when the census authorities tried to be more precise about all occupations than before. In that year the following separate types of status were tabulated as sub-classes of the major group "without occupation": those living on securities, living on tenant fees, living on house and land rents; students, "dependents," inmates of special institutions, persons on relief, prisoners, others and those whose occupations were not reported, and domestic servants.[8]

This policy towards the listing of all non-employed statuses should be kept in mind when interpreting occupational figures for Taiwan. It furnishes the only definite clue that we have of the boundary that was drawn to set off the labor force as a whole. The precautions taken to prevent the "no-occupation" category from being a repository for borderline cases may even have helped in exaggerating the amount of actual employment. Hence, while census data may give good evidence on the kinds and patterns of employment in Taiwan, they are not free from bias in indicating the total amount.[9]

Variation by Age and Sex

There is no way to clarify the meaning of data on occupations without investigating the purposes and problems of census-taking. But there are limitations. The outcome of these compilations depends also on how well the planning and execution of the censuses were adapted to the circumstances they were supposed to describe.

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members, or other relationship to the household, and the occupation of the head of the supporting household.

[8] It has been necessary to reassign domestic servants arbitrarily to the "no-occupation" class. So few were enumerated that the category is meaningless, especially with reference to males.

[9] On conceptual grounds, there is not much reason to endow the "amount" of employment with much importance, for in demographic data one has to deal with units of persons and not of work. It is well known that a certain amount of temporary or partial unemployment is chronic in agrarian societies; it is taken for granted, expected, and institutionalized in some "hidden" form. Properly speaking, this is not unemployment at all: the persons involved would not necessarily work if work were available. In these circumstances the indistinct line separating these cases from the working force is not primarily a defect of the concept of "customary occupation," but reflects the facts of the real situation.

Other uses of such data are not necessarily impaired by this circumstance. The bias toward over-stating the number of working persons did not vary greatly in Taiwan over time, and therefore will not affect comparisons of the same population at different dates, such as those used in this chapter and in Chapter III.

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THE DISPOSITION OF MANPOWER

In general, activities having to do primarily with livelihood are so important in human societies that they are always subjected to some special forms of coordination. Never are they treated casually in a society, as minor points of etiquette or personal friendship may be. Much of their importance arises from the fact that the same persons who engage in them also occupy other positions of social significance. This coordination, therefore, cannot be primarily a matter of regulation within the realm of economic behavior,[10] but consists of keeping such behavior consistent with the social order. Demographically, the problem is found wherever occupational functions overlap with other roles in the same individuals. 659

Two of the commonest regions of overlap in a population are with sex and age. Most of Asia, for example, is beset by such hazards to human existence that its peoples have maintained their numbers only by bringing forth abundant offspring. High fertility, which until recent centuries had been the universal offset to high mortality, has always necessitated a distinct kind of social position for women. Being the only ones capable of parturition, females in these societies come under the influence of family institutions that attach high priority and emphasis to the bearing and rearing of progeny.[11] 659 462

This circumstance has profoundly affected the part of women in economic activity. Most of the ways thought proper for an adult woman to have contact with the people beyond her family circle are in a married status. Few women escape marriage. Indeed, it is so normal an event that to pass the age of 25 unwed is considered a serious misfortune. To covet matrimony in vain does not carry with it any of the other possibilities (such as occupational careers) that exist in Western societies, and becomes a matter of anxiety if not humiliation for an entire family.

All this does not mean that women under these conditions do not work. The lot of a "home-maker" is a more laborious one in agrarian than in industrial countries, and may encompass more different sorts of particular activities from case to case. A wide range of tasks, including production of many physical commodities, is conducted as

[10] If it were, it would cease to present any problem, for it could be reduced simply to bureaucratic patterns of large-scale organizations.

[11] This does not mean that the particular family institutions are everywhere the same: such societies have long been renowned for the variety in such matters as marriage ceremonies, types of education of children, adolescent behavior and the division of labor in specific household tasks. We are not here concerned with superficial variation, but with the general features which are shared.

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659 462 a matter of course within the households that finally make use of them—items which in industrial societies are ordinarily purchased in the market. In these activities women are occupied often from childhood to old age, and sometimes more vigorously than men. It is this economy of the household, and not real inactivity, that utilizes the efforts of females in useful pursuits but provides against their holding extra-familial occupations.

We can be certain that a goodly portion of the work done in Taiwan was concealed in the activities of women. When such is the case, estimates of manpower based on occupational data are necessarily distorted, especially when these data have been compiled without overt care to this problem. Here the only feasible procedure in measuring manpower is to exclude altogether this important segment—womanpower—and to concentrate only on the "male labor force" as representing the dominant working patterns of the population.

659 Even within the male population, however, not all of its members are eligible or able for permanent employment. Close to half of all males in Taiwan—practically all those without occupations—were consistently of ages in which employment was not customary. Age always has a great deal to do with whether a person follows an occupation or not, and often with the sort of work he may perform. Tasks that are looked upon as useful are commonly ones that infants and the aged, for example, lack the capacity for doing. In between these extremes, some males of certain ages are excluded from the labor force when sufficient value is attached to other activities such as school attendance, acquisition of special skills, patriarchy, or infirmity—either due to priority of the competing activities themselves (regardless of who performs them) or due to the kinds of persons involved.

These various factors determining employment are so closely associated with age that at any one time almost all of the men of young and middle adulthood in a population have some occupation. The exclusions are concentrated in the years of childhood and old age. For this reason it is meaningful to speak of the "population of working ages," and often more information is available about them as a whole than about the labor force itself.

The Labor Force in Taiwan

162 464 Let us continue this line of inquiry by inspecting the portions of the population that are employed in relation to sex and age. With

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CHAPTER V

Migration and the Growth of Cities

177 DEPENDING on the way one looks at it, the history of colonial rule in Taiwan can give the appearance either of having brought great transformations to the island or of having left the indigenous social structure virtually intact. This apparent contrast comes from shifting attention between the two principal groups of people that were involved—from the Japanese, who had little to do with the archaic customs and usages of the population, to the Taiwanese, who had only small acquaintance with the modern changes that were being introduced. Here we shall be concerned with those of the latter who came into contact with the new elements.

Though the full force of these developments passed them by as a group, the Taiwanese were not all uninfluenced. The organization of farming, to be sure, continued as before with little modification. The activities most affected were those outside of agriculture. Hence the people must have moved to the new conditions, since the innovations did not move to them.

The Territorial Frame of Migration

659 Taiwan is a small island, and recording the migration of its people should not be a task of great magnitude or difficulty. Japanese regarded such a record as essential in keeping a close watch over the population. It was so important that they inaugurated continuous population registers for every village, every group of households. These reports were compiled in fine detail by the authorities and published in a single volume each year.[1] A certain amount of adaptation is needed to make these registers answer questions that are germane to our interests.

167 Japanese conquest began to provide not only the first reliable data for assessing movement in the population, but also a new type of control over it. It put an end to the historic influx of people from China that had been responsible for populating most of the island.

[1] The data proved to be more efficient for their purpose than for ours. The system faithfully counted the arrival of new persons in a community (the most important information from the standpoint of regulation) but did not expunge the records of all persons who left. The result was a more or less consistent bias toward *over*-estimating the number of people living in a given locality, and of course a somewhat distorted view of total migration.

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On a much smaller scale, Japanese replaced Chinese as immigrants. Chinese arriving from the mainland were given a distinct legal status as aliens. Their activities were restricted, and they were no longer allowed to merge with permanent Taiwanese residents. Practically all movement by Taiwanese thenceforth consisted of internal migration, redistributing the population that was already there.

Only a part of the island is level enough to have encouraged heavy agricultural settlement; almost half of the total area is more than 500 meters above sea level. For administration, and therefore for the census, Taiwan was separated from 1920 on into seven main divisions. Two of them, plus an eighth for P'enghu (the Pescadores Islands) off the West coast, were technically under a different sort of political organization; but for convenience we shall refer to all eight as *Prefectures*.[2] Most types of census and registration statistics were tabulated for each of these political units as well as for the total island.

Beneath the level of Prefectures, local administration was organized around a set of Districts and a smaller number of Municipalities. In the population statistics, these formed two parallel units: no District contained a Municipality, and both were subordinate to Prefectures.[3] There were seven Municipalities at the census date in 1930, raised to nine before 1935, and 53 Districts in both years; in comparisons of different years, all will be standardized to the arrangement in 1935. Inside each District were towns and villages. Few materials are available for these individually; for most purposes the smallest divisions that can be studied are the Districts.[4]

Finally, the mountainous interior region—the Aborigine Terri-

[2] If not literally accurate, the term is appropriate in that authority below the Government-General was highly centralized in the subordinate governors of these divisions. How they are designated here is a matter of no consequence, as it made little difference in the actual administration. P'enghu, scarcely known to Westerners except as the Pescadores Islands, was in 1926 made a separate division under the Government-General. Prior to this it had shifted between separate status and a subdivision of Kaohsiung Prefecture. Hence there is no unbroken series of data for it.

[3] Again, the details of political organization were not uniform, but that need not concern us here. Both terms are arbitrary: "District" for the term *chün* (in its Chinese reading), and "Municipality" for *shih*. It was the practice to form new municipalities by removing some important town of sufficient size as a unit from its surrounding District, sometimes adding some former villages, also intact. This practice gives a basis for identifying the population of cities for comparison over a period when such administrative changes were taking place.

[4] The area of towns and villages exhausted the entire area of Districts, leaving no space between their boundaries. Therefore they do not always refer to meaningful units of settlement, and the terms are not consistent.

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tory—was put under special control (though it nominally fell inside some part of each prefecture). This area must be considered as a separate division of the island. Its actual conditions and the quality of its population data are distinct from the remainder. Japanese were secretive about their treatment of the Aborigine Territory, and we have little information about it that is dependable.

These civil divisions were the outcome of some experimentation in government administration. The scheme just described was put into essentially its final form in 1920. Accordingly, most comparisons involving internal boundaries cannot be carried back beyond that year.

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The Distribution of Total Population and of Migrants

In 1930, the population of Taiwanese was divided among the Prefectures as indicated in Table 19. Data in this form do not readily

TABLE 19

TOTAL POPULATION OF TAIWAN, 1930

By Prefecture, Inside and Outside the Aborigine Territory

(All Ethnic Groups)

	Area of Regular Administration			*Aborigine Territory*		
Prefecture	*Population*	*Density: Persons Per Sq. Km.*	*Density As % of Average For Total Island*	*Population*	*Density: Persons Per Sq. Km.*	*Per Cent*
Taipei	896,380	328.0	141	17,151	9.4	4
Hsinchu	641,479	243.9	105	23,232	11.8	5
Taichung	990,571	279.3	120	24,975	6.5	3
Tainan	1,155,287	233.9	100	4,359	9.0	4
Kaohsiung	601,547	210.5	90	31,772	11.1	5
Taitung	46,182	46.2	20	12,619	5.0	2
Hualien	72,555	53.7	23	14,304	4.4	2
P'enghu	60,124	473.9	204	—	—	-
Total Island	4,464,125	232.7	100	128,412	7.6	3

Source: *Census of 1930, Statistical Tables*, Table 11.

reveal relative concentration and dispersion of people. The real centers of population, if we disregard for a moment the dense settlement in the largest cities, were in portions of Taichung and Tainan

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tation were confined to some of the major cities, the influence of these broader health measures gradually spread evenly over most of the island. In this way Japanese gained results that were very substantial through the use of none but crude techniques.

The Japanese policy toward opium addiction was less consistent, for here they found welfare goals to be in conflict with profit motives. They made the manufacture of opium a government monopoly, and closely regulated its sale. The announced purpose for this control was to eradicate the use of the drug, but the Taiwanese occasionally complained that officials secretly abetted its consumption. The truth of the matter is not clear, but their success in other tasks suggests that opium addiction could have been stamped out far more quickly if they had made a determined effort to do so. Some of their own records show that new users of opium were being granted licenses as late as the 1920's. It is likely that the Japanese appreciated the effectiveness of addiction in enervating the resistance to their rule among wealthy families, and they made no secret of the steady public revenues that they derived from opium sales.[12]

The Evidence for Measurement of Mortality

There is not much point in describing the purposes and methods of public health work without having some independent appraisal of results. Such efforts have often been sponsored elsewhere with much fanfare and little accomplishment. The only trustworthy way to view the results of economic and sanitation policies in prolonging life is through some form of measurement; this is likewise the only precise way of comparing the risks of death in Taiwan and in other areas.

Fortunately the data that exist to gauge mortality in Taiwan are excellent. The occurrence of many kinds of illness involving danger of contagion was required by law to be reported to the authorities. Partly as a means of avoiding contamination of the living by the dead, and partly just as a means of tightening official control over the reporting of disease, the Japanese also strictly regulated burials and cremations.[13] The rigors of enforcing these rules led to concealment of some illness and evasions by mis-stating exact causes of

[12] A careful study of opium addiction in Taiwan and its relation to mortality is contained in Tu Tsung-ming (1935 and 1938).

[13] See Hsü Tze-wei (1946), p. 449.

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death;[24] but at the same time they led to registration of deaths that was virtually complete.

A person while living had a legitimate civil status only by being entered in an appropriate police register. Deceased, his absence could be legitimized only by removal from these rolls, and his burial could be permitted only by following this prescribed procedure. All of these records were kept by the police or by affiliated agencies. The police were alert and well-deployed to prevent evasions. Since such records were useful to them in surveillance of the population, they employed the *pao-chia* system to make the registration effective. The people in each locality were thus compelled to accept conformity with these requirements as a matter of their own collective interest. Consequently a person's identity in these records from birth till death was almost never subject to confusion or concealment.

This consistency of information in all the population registers has a special significance for demographic research. It means, for example, that each person's death record was matched to the record of his birth, so that the exact number of years elapsed between the two events can be calculated. The same legal identity of a person formed the basis for his entry in every census enumeration. "Age," as a census category, was not set down according to an individual's recollection of the number of birthdays experienced. Instead, the pertinent fact that was entered was his date of birth, and age was ascribed to him in the process of tabulation at the central census office.

Age in Taiwanese population statistics was therefore explicitly defined: it was a classification of equal intervals, in which each person ideally had one and only one "true" position at a time. It was possible for age to correspond perfectly in the recording of all three kinds of events of interest here—birth, enumeration at census date, and death. An unambiguous scheme of this sort for reckoning age is especially important in a population of Chinese, because most Chinese compute their ages in a manner that cannot be reconciled to Western usage. Starting with age one at the date of birth, it is customary for them to add a year of age with the passage of every (lunar)

[24] Once cases of smallpox, scarlet fever, typhoid fever and certain other diseases were discovered, the people were forced to undergo disinfection of lodgings and personal effects that was often destructive. Hence, it has been alleged that diagnoses were deliberately falsified to avoid these consequences (see OPNAV, Civil Affairs Handbook, 1944, *Shinchiku Province*, p. 54; U.S. War Department, TB Med 30, p. 6). A more important source of inaccuracy was probably (in the case of deaths) ignorance as to the nature of a decedent's illness. Tuberculosis was said to be very prevalent, and yet few deaths were ever diagnosed as due to this cause.

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New Year thereafter. The Japanese system of ascribing age completely avoided bias from this source.

Moreover, in this system the year of age that a person occupied at any date did not depend on his personal conception of it at the time. Such subjective conceptions of age often do not change through an individual lifetime exactly as "true" age does. Misstatement of age is always a source of error in census procedures that rely on people to report their own ages directly. The recorded ages of people in Taiwan at census dates and at death were determined at the date of birth. If the birth had been registered on the proper date, it was next to impossible for the reporting of age in a census enumeration to be incorrect. Even when the date of birth was reported wrongly, there was strong pressure to be consistent later when reporting it in the census and at death. For purposes of constructing life tables, the system thus made an automatic adjustment for these errors by shifting the age at death by exactly the same amount.[15] Decedents at a given year of age were registered according to the particular calendar year in which they were born; persons enumerated in a census of the same year at the same age were the survivors of births in that prior calendar year, from January to December. It follows that both registered deaths and census of population belonged to the same group of people. With these two figures, it is a simple problem in arithmetic to compute the number of persons who entered that year of age, the number who died before reaching the next higher age, and the proportion who died out of the first group.[16] This proportion is the most important element in the construction of life tables, and it places Taiwan's mortality data in this respect among the most remarkable that exist. The applications of this special feature are discussed in the next section.[17]

[15] The census of 1905 enumerated Taiwanese with birth dates as far back as the year of Meiji Restoration and earlier. Though evidence like family records and land titles were often called upon by the authorities in order to substantiate this information, some inaccuracies must have been present. They could not have been numerous, for they do not appear as "heaping" in census age distributions of people.

[16] Of course, the census population must be brought up to December 31 if the census was taken earlier (which has always been the case in Taiwan). Also, the figure for deaths must be re-constituted from the vital statistics reports of two years, since many of the decedents died later than December 31 of the census year. These two details do not alter the principle explained above.

[17] In the earlier census enumerations, before 1930, age was ascribed by calendar year of birth. Persons born after January 1 in the census year were placed into the first year of age, those born in the calendar year preceding the census into the second, and so on. To this peculiarity of the system we owe the possibility of making accurate early life

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PUBLIC HEALTH AND THE RISKS OF DEATH

659 165 A welcome feature of Taiwan's mortality and census data is that they lend themselves to a detailed test for accuracy. First, they can be checked against the number of people counted in one census who died before the next one. For any given cohort of births, if the data are all correct, this should be equal to the number of survivors counted in the earlier minus the number counted in the later census. The censuses of 1905 and 1920 are compared in these terms in Table 34, for males only; the result is almost identical for females. The column of ratios indicates the degree to which registered deaths account for the difference in the numbers of survivors counted at successive census dates.

If all records were complete and accurate, the ratios would be unity at every age. If the differences in census survivors are assumed to be correct, then apparently a few deaths went unregistered in certain years. It is obvious that the records were not perfect. As it is, they were so nearly complete that there is little if anything to be gained from trying to make corrections for the discrepancies. Since this is simultaneously a test of census enumeration and vital registration (and an extremely sensitive test of age reporting), it is not possible to decide whether the discrepancies arose from deaths that were omitted or people overlooked from the earlier census.[18]

Since mortality in the first year of life is usually measured on the basis of the number of live-born babies, it is necessary also to know how adequate the birth statistics were in relation to death and census records. A test for births, similar to that above, is shown in Table 35; the results give an excellent account of the birth registration. The registration of birth entered a child permanently in the police lists, and was an almost inescapable bond during his later life. By this criterion, the chances of evading su[illegible]ent controls allied to

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tables for Taiwanese, for the yearly intervals had the same upper and lower limits as those of the vital statistics.

Japanese were apologetic about the deviation of this system from the Western mode of age reporting, and beginning with 1930 "modernized" the system so that its special virtue was eliminated. Starting with the census of that year, census-year rather than calendar-year intervals were used, making the system identical with the Western conventions in design. For dates after 1930 it is no longer possible to relate deaths precisely to enumerated census population.

[18] There is reason for not putting all the blame on registered deaths, for the area of effective administration was expanded slightly after 1905, and by 1915 and 1920 had brought more people into the registration and census system than the survivors of those enumerated in 1905. This being the case, it is possible that both measuring instruments were nearly perfect, and that the discrepancies arose entirely from the expansion of administration.

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TABLE 34

TEST FOR ADEQUACY OF DEATH REGISTRATION OF TAIWANESE 159 165

Males by Year of Birth, Surviving at Census Dates in 1905 and 1920, and Intervening Deaths as Registered

Year of Birth	*Survivors 1905*	*Survivors 1920*	*Difference*	*Registered Deaths 1905-1920*	*"Completeness" of Death Registration**
1904	48,859	38,257	10,602	11,602	1.094
1903	43,432	35,769	7,663	7,768	1.014
1902	43,340	36,392	6,948	6,718	.967
1901	41,658	35,523	6,135	6,087	.992
1900	41,910	36,224	5,686	5,564	.979
1899	38,149	32,899	5,250	5,099	.971
1898	40,913	35,409	5,504	5,257	.955
1897	34,183	29,707	4,476	4,801	1.073
1896	33,855	29,149	4,706	4,872	1.035
1895	35,579	30,148	5,431	5,177	.053
1894	32,338	27,187	5,151	5,052	.981
1893	32,581	27,062	5,519	5,444	.986
1892	34,122	27,945	6,177	6,224	1.008
1891	32,421	25,963	6,458	6,263	.970
1890	31,626	24,672	6,954	6,540	.940
1889	32,164	25,479	6,685	7,273	1.088
1888	34,355	25,907	8,448	8,040	.952
1887	35,471	27,101	8,370	8,584	1.026
1886	33,697	25,254	8,443	8,587	1.017
1885	33,445	24,708	8,737	9,016	1.032
1884	36,969	27,156	9,813	10,023	1.021
1883	34,750	25,257	9,493	9,911	1.044
1882	32,431	23,034	9,397	9,922	1.056
1881	35,951	25,034	10,917	11,100	1.017
1880	31,335	21,484	9,851	10,242	1.040
1879	31,345	21,230	10,115	10,287	1.017
1878	29,016	19,036	9,980	9,961	.998
1877	27,669	18,379	9,290	9,988	1.075
1876	31,238	20,263	10,975	11,239	1.024
1875	27,991	17,880	10,111	10,741	1.062

* Ratio: Deaths/Difference.

Sources: *Census of 1920, Descriptive Report*, Appendix, Table 15.
Vital Statistics, yearly volumes, 1906-1920.
Statistical Summary, Table 58, for population by age in 1905.

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TABLE 35

TEST FOR ADEQUACY OF BIRTH REGISTRATION OF TAIWANESE Births from 1906 to 1920, as Registered and as Estimated from Survivors Enumerated in Census of 1920 and Intervening Deaths

Year of Birth	Survivors 1920	Registered Deaths Since Birth	Estimated Births (1) + (2)	Registered Births*	"Completeness" of Registered Births†
			Males		
1920	46,832	7,725	54,557	54,064	.9910
1919	55,006	12,993	67,999	70,349	1.0346
1918	52,260	18,219	70,479	71,764	1.0182
1917	52,245	19,854	72,099	73,430	1.0185
1916	46,234	19,805	66,039	65,837	.9969
1915	48,109	22,322	70,431	70,855	1.0060
1914	49,637	23,109	72,746	72,755	1.0001
1913	48,427	21,550	69,977	70,170	1.0028
1912	48,810	20,961	69,771	69,990	1.0031
1911	48,388	21,159	69,547	69,558	1.0002
1910	46,609	20,806	67,415	68,042	1.0093
1909	44,540	20,780	65,320	65,666	1.0053
1908	41,626	20,353	61,979	61,993	1.0002
1907	43,003	20,074	63,077	63,290	1.0034
1906	41,598	20,008	61,606	62,120	1.0083
			Females		
1920	46,017	5,815	51,832	51,410	.9919
1919	53,950	10,346	64,296	66,358	1.0321
1918	50,328	16,028	66,356	67,701	1.0203
1917	49,315	18,099	67,414	68,984	1.0233
1916	44,230	18,658	62,888	62,768	.9981
1915	45,348	21,372	66,720	66,814	1.0014
1914	46,245	22,279	68,524	68,695	1.0025
1913	45,434	21,281	66,715	66,797	1.0012
1912	45,403	21,090	66,493	66,632	1.0021
1911	45,373	20,805	66,178	66,100	.9988
1910	43,251	20,262	63,513	64,099	1.0092
1909	41,268	20,187	61,455	61,620	1.0027
1908	38,292	19,737	58,029	57,807	.9962
1907	38,594	19,981	58,575	58,466	.9981
1906	37,323	19,824	57,147	56,987	.9972

* In 1920, deaths and births have been taken only from January 1 to October 1.
† Ratio: Registered Births/Estimated Births.
Sources: *Census of 1920, Descriptive Report*, Appendix, Table 15.
Vital Statistics, yearly volumes, 1906-1920.

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the registration system were very slight. The same result is found for births of more recent years.

With very few exceptions, these events—births, deaths, and presence at each census date—were nearly all recorded and were recorded accurately. The pattern of omissions is itself significant: whatever their source, they contained practically no age or sex bias. Therefore (with one reservation)[19] we shall accept all published deaths and all population figures as complete and correct for the measurement of mortality. The differences would be trivial if they were distributed as adjustments over all the years of deaths; and the tests give no clue as to how such adjustment should be distributed.

The Decline of Mortality

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The simplest question that arises about the trend of Taiwanese mortality is also the easiest to answer: what happened to the prevalence of deaths in the population during colonial rule? Unfortunately for judging this trend, no one can say what was the level of mortality in Taiwan when the Japanese first arrived. The Manchu government did not even know the number of its subjects, far less their behavior with respect to births and deaths. The colonial regime founded by the Japanese started a thorough system of vital statistics only after a decade of control. Consequently the very earliest usable record began at a time when life had already been made more secure.

The trend of annual death rates after 1905 appears clearly in Table 36. It was not only downward, but was rapid in its fall. Over the same period there were scarcely any recorded instances to equal the speed of this decline. Supposing that there were over 40 deaths per thousand persons in 1895 and before, the yearly incidence must have dropped by more than one-half in the next fifty years.

Thanks to improved drugs and newer approaches to the problems of health, such a feat has since this time become fairly easy in countries of high mortality. Crude death rates of 20 are no longer considered low. But subsequent advances in medicine should not be allowed to detract from this performance. With the resources and

[19] The only reservation is in the case of infants. This requires special attention, and is discussed in the section on infant mortality.

In reality, the ambiguity is a more fundamental one than any amount of "correction" can remedy. It arises from an inherent difficulty in making a precise definition for a "live" birth in a society where infants are delivered without skilled medical care and where the chances of surviving the first day of life are very poor. Where families regard mere discussion of deceased offspring as inauspicious, the prospects for developing precise measuring standards for infant mortality are poor.

4:Grajdanzev--45-46 S-4 (no date) 1942 Formosans
116, 241, 651, 661, 177.24 Japan
636.24

"Beneficial as these irrigation works are, in many cases they curtail the farmer's freedom to select his crops. The government often compels the farmers to raise crops which they do not want to raise (as, for example, sugar cane). Takahashi tries hard to prove that this compulsion, which in Taiwan is [46] called simply exploitation (sakushu), is to their benefit, (1) but his arguments are not convincing.

1. Takahashi, op. cit., p. 280."

4:Grajdanzev--154 S-4 (no date) 1942 Formosans
116, 127, 471, 661

"We have now come to a point where some estimate may be made of what the Japanese are getting from Taiwan (1). It is important to emphasize that all that follows is based,

1. Such questions as how many among the Japanese receive benefits from Taiwan and whether these benefits are distributed equally among recipients, do not concern us here.

with few exceptions, not on more or less exact official figures, but only on estimates. All those who have worked on colonial problems know how difficult it is to get certain data. This does not mean, however, that we should give up the idea of forming an opinion concerning, for example, colonial profits, for many facts are available which help us to make estimates. These are not therefore based on intuitive guesses, but are all founded on certain facts supplied by official and unofficial Japanese statistics."

4:Grajdanzev--158 S-4 (no date) 1942 Formosans
116, 457, 563, 661, 177.43 Japan
636.43

"Of course, some part of the [trade--analyst] balance is made up by the remittances of the Japanese on the island to Japan-proper, remittances which may be presented as 'earned income' and not an income from investment. However, the thousands of Chinese citizens who reside on the island remit home to China only paltry sums. They are unable to earn as much as the Japanese, mainly because the privileged position of the Japanese is the result of the colonial status of the island. The services performed now by the Japanese in most cases could be as well performed by the islanders, but their part is to be servants of the ruling nation. It should be clear than that this 'earned income' can be considered as a special form of the general income from the colonial exploitation of the island."

4:Grajdanzev--158-159 S-4 (no date) 1942 Formosans
116, 171, 457, 477, 661, 177.43 Japan
636.43

"The usual explanation of Japan's ability to obtain year after year tens of millions of yen worth of goods over and above what is sent from Japan to Taiwan is that this balance represents the interest on Japanese capital invested in Taiwan and the profits of the Japanese businessmen there. But a closer analysis of the figures given above reveals that this explanation is not satisfactory. It is important to understand that we are concerned here with investments and the returns on them, not from the point of view of an individual, but from the point of view of two regions——Taiwan and Japan. From 1896 to 1908, [159] inclusive, Japan sent goods to the value of 31,655,000 yen over and above her imports from the island and this represents her real outlay in the colony. She now receives from Taiwan sums which in every year since 1914 have been greater than this original 31,655,000 yen; which in every year since 1924 have been more than twice as great; and which in every year since 1934 three times as great, and in 1939 were six times as great as the original sum. Is this the legitimate interest on capital and profits of the entrepreneurs which are due to their energy, foresight and managerial ability?

Of course, we know that high profits are made not only in Taiwan, but, say, in the United States as well. Does this fact refute our thesis of exploitation? In no way. The existence of monopolies in the United States is a fact known to all. However, these monopolies are not permanent. Some of them appear, some disappear, every year."

4:Grajdanzev--159 S-4 (no date) 1942 Formosans
116, 457, 652, 661, 177.43 Japan
636.43

"For our purposes it is irrelevant whether all or only a few of the Japanese firms on the island make high profits; whether there are bankruptcies among them or not. We are concerned here with Japan's position in Taiwan as a whole. The existence of the Japanese firms on the island which make less than 10 percent on the invested capital, of the Japanese entrepreneurs who fail and the Japanese adventurists who return to Japan disappointed and disillusioned does not refute our thesis. It was shown in some detail above that beside investment profits as such there is derived from Taiwan the income of Japanese officials, and income originating in taxation, monopolies, fines, etc., most of this due in the last analysis to one source—Japan's colonial power. All this brings us to the conclusion that the active balance of Taiwan's trade represents mostly an unusually high degree of exploitation of the Chinese on the island by the Japanese government and industrialists.

To those who ask whether the colonies are profitable or not, it may be said that the ruling group of Japan knows that they are. They are able in Taiwan to support 300,000 Japanese on a much higher level than those Japanese would enjoy in Japan and in addition to extract profits of more than 100 million yen a year."

4:Grajdanzev--171-172 S-4 (no date) 1942 Formosans-1-2
116. 452, 476, 563, 661, 177. 47 Japan
636. 47

"The growth of Taiwan's cooperative societies of all kinds is good testimony to the ability of the Chinese population to organize and to manage quite successful enterprises. The growth of the cooperative movement in Taiwan may be seen from the following table:

The Cooperative Movement in Taiwan

	1913	1918	1930	1935
Number of societies of all types	18	171	407	462
Number of members	2,760	70,428	265,248	342,122
Paid-up capital 1,000 yen	484	4,455	13,949	15,250

[172]

In 1936 the urban credit cooperatives had deposits of 20.7 million yen, while the rural cooperatives had 64.3 million yen. In May, 1940 the corresponding sums were 36.4 million yen and 122.7 million yen. All this is the more remarkable because the cooperatives were developed by the Chinese with little help from the Japanese or from the cooperative associations of Japan (1), and because the government put so many obstacles

1. This does not mean, of course, that the Japanese cooperative associations were unfriendly to the Taiwan cooperative movement. Quite the contrary. Throughout the history of the Taiwan cooperative movement the Chinese received every encouragement from the Japanese societies and from the certain Japanese individuals; but this help could not be great because of the conditions existing on the island. It is

important to emphasize that many individual Japanese physicians struggling with epidemics, teachers bringing education to far-away villages, political organizers helping the Chinese to organize their fight for freedom, and many others whose services to the Chinese were great and whose relation to the conquered people was that of sympathy and often of self-sacrifice, deserve the highest praise. However, it is not the individuals who count most, but the system, and however good the intentions of particular individuals might be, they could not and cannot change the governmental system existing on the island.

in the way of the development. The managerial and controlling staffs of the cooperatives in Taiwan must be approved by the government-general, so that 'undesirable' elements can be eliminated from the movement. The active members of the societies were often arrested and imprisoned and obstacles were put in the way of the creation of a powerful central body for the cooperative movement. But in spite of all obstacles the population of the island succeeded in building up a strong and useful organization."

36: Rowe S-4 (no date) 1955 AF1 China AF1
Formosa AD1

was that the Taiwanese were accustomed to the peace and order of a country under a foreign tyranny, and could not, at first, understand the "lack of uniformity" and "the complexities" of democratic rule (thanks to the Japanese, on the other hand, they had no illusions about or yearnings after Communism). Finally, the men who governed Taiwan immediately after the retrocession gave every evidence of being more interested in increasing their power and lining their pockets than in providing good management. When, therefore, the Nationalist government moved to Taiwan in 1949, it found that it had taken on numerous grave local problems in addition to those it had brought with it from the mainland.

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Political Reform

The Kuomintang, the leading political party, prepared itself to deal with these problems by putting itself through a reorganization. Its younger, more liberal leaders were, to this end, appointed to a Central Reform Committee, the main task of which was to strengthen and tighten party organization and eliminate corrupt elements, opportunists, and bureaucratic politicians. On 1 September 1950, the Nationalist government was ready to announce a new political program. Its objectives were to

CF [665]

> encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; to establish a democratic industrial system in which the workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprise; to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; to carry out local self-government and to protect civil rights.

Local self-government and land reform were the fields in which the government brought about the most spectacular changes. It first removed all the social barriers and segregation measures that had been created and maintained by the Japanese. The native Taiwanese were no longer barred from institutions of higher learning or from the worthwhile positions in commerce and politics. They were encouraged to participate in local self-government, and to think for themselves. By 6 May 1951, 21 mayors and magistrates in 16 counties and 5 municipalities had been elected to their respective offices by popular vote. There are now 6304 village and *li* (comparable to urban wards) assemblies, in which the Taiwanese are learning the art of self-government. Representing them in town and district assemblies are 8024 village and *li* delegates. On the county and municipal levels, there are about 541 popularly elected councilmen. Of an estimated 2,650,000 qualified men and women voters, some 2,416,072 are registered. In keeping with the government's policy of economy, the total number of government employees was reduced in June, 1950 to 81,000. The percentage of indigenous citizens in the government service rose to 65.46 percent.

CF 666 185

There has also been a marked change in the importance and responsibility of the posts held by Taiwanese. In the category of first class officials, indigenous personnel have increased from 0.92 percent under Japanese rule to 17.45 percent in the present government. In the category of second class officials, indigenous personnel rose from 1.29 percent to 25 percent.

Land Reform

CF 423 421

The other outstanding reform accomplished by the government has been the carrying out of a new land reform program, which has greatly benefited the lot of the farmers, who are no less than 60 percent of the population. For the 70 percent of the farmers who are

15: U.S. Navy —25 [3] (no date) 1944 Formosans
116, 191, 554, 662, 177.19 Japanese
636.19

"No information is available as to the standard used in determining knowledge of Japanese. Consequently the official figure of 45.6 percent may be an exaggeration. It is nevertheless true that the campaign to promote the use of Japanese has greatly intensified since the beginning of the China 'Incident' in 1937.

Various methods are used. Town and village police stations record the names of inhabitants considered conversant with Japanese. Periodical inspection of homes and oral questioning determines eligibility for the book. Whenever a Formosan needs recourse to the local authorities for licenses, business purposes, appeals, or other matters, reference is invariably made to the 'blue book'. If the applicant's name appears in the book, he is usually granted his request; if not, he is refused. Obviously there is room for graft and the shutting of official eyes in judging eligibility for the book. A foreigner with a wide acquaintance among Formosan-Chinese states that he knows of a number of instances where a man of some financial influence in the community is listed in the 'blue book' although his knowledge of Japanese is decidedly open to question. Nevertheless, it is understood that the system, only recently inaugurated, is producing results. Formosans have come to realize that without a listing in the book privileges and opportunities are denied."

643 constitute the source of his strength. No matter what position Chiang Kai-shek may be holding in the government, his leadership is never disputed. Even during his retirement in his native village in 1949, he was able to conduct military operations against the Communists and direct the evacuation of government and military personnel to Formosa.

645 Another source of President Chiang's political power is his position as Director General[7] of the Kuomintang. The Kuomintang or the Nationalist Party was founded by Dr. Sun Yat-sen. Its predecessors, the Hsing Chung Hui (Revive China Society), the Hui (Common Alliance Society), and the Chung-kuo Ko-ming Tang (China Revolutionary Party), also organized by Dr. Sun, all contributed to the overthrow of the Manchu monarchy. The First National Congress of the Kuomintang was held in Canton in 1924. It adopted Dr. Sun's San-min Chu-i [Three People's Principles] as the creed of the Party. The three principles

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6. (continued) fortunes at the expense of the nation. They are the persons who have identified the nationalist government as a corrupt regime. Chiang Kai-shek himself has always led a life of simplicity, according to those close to him.

7. Tsung-ts'ai in Chinese.

665 are nationalism, people's rights, and people's livelihood. Nationalism implies the abolition of unequal treaties and restoration to China her full sovereignty.[8] The rights of people include those of initiative, election, recall and referendum. To improve the livelihood of the people, Dr. Sun advocated the equitable distribution of wealth by the following means: assistance to the tiller to enable him to own his land; the suppression of private speculation on urban land; the regulation of private capital by means of progressive taxation, and the development of state capital.

In another work, entitled Fundamentals of National Reconstruction, Dr. Sun Yat-sen outlined the three stages for constitutional government. The first stage was that of the unification of the country by military force. Then it was to be followed by the second stage, that of political tutelage under the Kuomintang. The final stage would begin with

8. The limitations on China's sovereignty -- foreign concessions in treaty ports, extra-territoriality, restrictions on tarriff, foreign post offices and wireless stations -- were gradually removed between 1929 and 1943.

665 the adoption of a permanent constitution. Dr. Sun further advocated a "five-power constitution," under which the power of impeachment is taken out of the legislative and the power of selecting civil employees by means of competitive examination is made independent of the executive department. Instead of the customary three branches of governmental powers found in the Western democracies, the Chinese Nationalist Government would have five independent branches,[9] the executive, legislative, judicial, control, and examination.

Thus the Kuomintang had an excellent political program to begin with. Unfortunately, Dr. Sun Yat-sen died in 1925. In the following year, Chiang Kai-shek as Commander in Chief of the Revolution Army undertook to unify the country. His northern expedition was highly successful. In two years Chiang Kai-shek not only brought the whole country south of the great wall more or less under his control, but after a bitter struggle with the radical wing and Communist elements of the Kuomintang also firmly established himself as leader of the party, thus ridding the Kuomintang of Communists and Russian advisers whom Dr. Sun Yat-sen had tolerated. Even since, Chiang has become the archenemy of the Communists.

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9. In Chinese, Yüan.

•665 With the establishment of the Nationalist Government in Nanking in October 1928, the second stage of Dr. Sun's program of political reconstruction -- the political tutelage period -- commenced. In this period, political power was to be assumed by the Kuomintang. The Communist Party was outlawed, and no other political party was recognized. Facing no competition, the members of the Kuomintang gradually were divided into rival cliques. People often criticized Chiang Kai-shek for not taking measures to remedy the situation. They have even blamed him for relying on the cliques to maintain his own supremacy. Instead of training the people to exercise their suffrage, recall, initiative and referendum and to pave the way for constitutional government as Dr. Sun expected, the Kuomintang began to drift away from the people. The deteriorating situation was described by a leading Chinese authority[10] as follows: "The leader of Kuomintang is not only the head of its organization, but actually holds it together. Or to state it in another way, the leader has allowed the party to be segmented so that he alone supplies the link between its several segments. It is in this all-important feature,

10. Ch'ien Tuan-sheng: The Government and Politics of China, Cambridge, Harvard University Press, 1950, p. 132.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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665 rather than in its doctrine, or in its organization, or even in the social basis of its membership, that one can discover a key to the understanding of the Kuomintang."

665 227 At the outbreak of war with Japan, the Kuomintang and the Communist Party composed their differences, resulting in a truce. A People's Political Council was established. Leaders of the Communist Party as well as several smaller parties which had pledged their support to the national war effort were chosen to direct a united front against Japanese aggression. However, the political honeymoon did not last very long. As soon as the United States entered the war and ultimate defeat of Japan was assured, hostilities again broke out between the Kuomintang and Communist forces. Minority parties then clamored for the relinquishment of the one-party rule by the Kuomintang. Mediation by the United States, the convocation of the National Assembly, and the adoption of a new Constitution which placed all political parties on a footing of equality, failed to prevent the outbreak of civil war. In the subsequent political and military clashes, the weakness of the Kuomintang became more and more obvious. The party was almost on the verge of total collapse. President Chiang, in introducing a reform program for the Kuomintang in 1950, admitted[11] that the disastrous military

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11. Addressing the Central Executive Committee of the Kuomintang in July 1950. China Handbook 1952-53, Taipei, China Publish-

(continued next page)

665 reverses on the Mainland was not due to the
727 overwhelming strength of the Communists, which would be not strong enough to defeat the Nationalist forces, but due to the Nationalist Party's organizational weaknesses, loose discipline, and low morale.

665 In his capacity as Director General of the Kuomintang, Chiang proposed to reform thoroughly the Party by "getting rid of all factional and personal differences." A Central Reform Committee of 16 members was appointed in August 1950 to overhaul the party machinery on Formosa and the party branches in various overseas Chinese communities. At the same time the Kuomintang announced that it would respect the position of and co-operate with all democratic political parties that were anti-Communist in nature in order to struggle together for the salvation of the country and the defense of democracy. The reorganizational work of the Reform Committee was concluded in October 1952. A National Congress[12] of the Kuomintang was held on October 10, 1952. It adopted a political platform for the guidance of the government and formed a Central Advisory Committee with 48 members, and a Central

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11. (continued) -ing Co., 1954, p. 341.
12. The Seventh National Congress.

605 Committee with 32 members and 16 alternates to direct the affairs of the Party.

Although the Kuomintang has always been the dominating party since the inception of the Nationalist Government in 1928, party membership is not the requisite to appointment to high posts in the government. For instance the present incumbent of the Defense Ministry, Mr. Yü Ta-wei is an independent. Members of two minor parties -- the Young China Party and the Democratic Socialist Party -- have been co-operating closely with the Kuomintang since the end of World War II and participating in the government.

The present membership of the Kuomintang has never been officially disclosed. Even the number of representatives who attended the Seventh National Congress of 1952 was not revealed. In a party report,[13] it was said that "during the past two years [1952-54], more and more young men and young women have joined the Party. More than 40 per cent of the new members are farmers and workers. The members are

13. Cited in China Handbook 1954-55, p. 433.

665 divided into about 15,000 small groups to hold bi-weekly meetings to discuss Party work." A private source estimates that, excluding the military personnel, the total membership of the Kuomintang in Formosa is around 80,000. The other two political parties[14] have always kept their membership a secret. But it cannot be too far from the truth to say that membership of each of these parties does not exceed a few thousand. The Young China Party is strongly nationalistic and anti-Communist, while the Democratic Socialist Party advocates democracy and socialism as their political goals.

In the election in 1947 of the delegates to the National Assembly and members of the Legislative Yuan and Control Yuan, special arrangement was made to insure the election of the members of the two minority parties. Tacit understanding was given by the Kuomintang not to compete in certain districts where the smaller parties had announced their own candidates. In Formosa, however, the quota system was not enforced. Hence in the two local elections of 1950 and 1953, the members of the two smaller parties relied on their own merit to compete with the candidates of the Kuomintang and the

14. A third small party -- the Democratic League -- has joined the Communists.

65 independents. As a result, only a handful members of the smaller parties were elected. The following table shows the relative strength of the three political parties in various representative organizations in Formosa.

	National Assembly	Legislative Yuan	Control Yuan	Provincial Assembly	Local Assemblies
Kuomintang	1,200	483	70	50	657
Democratic Socialists	61	14	2	2	none
Young China	85	13	8	2	3
Independents	232	73	13	3	268
Total	1,578	583	93	57	928

665 The above figures seem to bear out the statement that the Nationalist Government is a one-party government and President Chiang Kai-shek as Director General of the Party runs it.[15] The recent reorganization of the Kuomintang by eliminating its undesirable elements has only strengthened President Chiang's control.

The personalities most outstanding in present day Formosa aside from President Chiang are: his son Chiang Ching-kuo who directs the political officers in the army, the Youth corps and the security forces; General Chang Ch'ün, secretary-general to the President and a former Premier, who is the President's closest political advisor; and Vice-President Chen Ch'eng who has been for many years Chiang's chief military lieutenant. All three are capable, hard-working and devoted to President Chiang and his cause. Chiang is 69 and his second term as President of the Constitutional Government

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15. The Director General [Tsung-s'ai] is virtually invested with broad power over the party. According to Articles 27-30 of the General Regulations of the Kuomintang, he directs the activities of all members, he may veto the resolutions of the National Party Congress and makes the final decision on any resolution proposed by the Central Committee.

of China will expire on May 10, 1960. It remains to be seen whether any of the three possesses the same stature as that of President Chiang Kai-shek and is able to pursue further Chiang's achievement in building Formosa into a strong bulwark against Communist aggression. In a country dominated by a strong leadership, there is always the inherent difficulty of finding an equally eminent successor.

36: Rowe S-4 (no date) 1955 AF1 China AF1
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CF 177 CF [661] CF 642

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Land Reform

CF 423 421

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52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA A21

Nationalist Government Policies, 1949–1951

By GUNG-HSING WANG

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THE political pattern of Nationalist China in contemporary Taiwan (Formosa) is set by a series of events which took place between January 21, 1949 and March 1, 1950. The first was the date on which President Chiang Kai-shek "stepped down" from office to clear the way for a negotiated peace with the Communists. Advocated by the peace party and the moderates within the Kuomintang (KMT) and backed by popular support, the attempt failed in the face of mounting Communist military successes. During the interval, Acting President Li Tsung-jen steered the ship of state against overwhelming odds of financial, military, and political difficulties. His administration was inconclusive when in November 1949 he left for the United States for reasons of health.

Succumbing to the circumstances, a dual process, characterized by the transfer of top-ranking Nationalist personnel, armed forces, and financial assets to Taiwan and a partial disintegration of the KMT, dominated the Nationalist political sky. Of the former, the transfer began with the appointment of General Chen Cheng as Governor of Taiwan on January 5, 1949. It reached a climax on December 7, 1949, when the seat of the National Government was established in Taiwan. The process was completed on March 1, 1950 when President Chiang Kai-shek announced his resumption of office.[1] With reference to the disinte-

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NOTE: Citations and references marked with an asterisk (*) refer to Chinese-language sources.

[1] For constitutional provisions regarding presidential term of office, see The Constitution of The Republic of China, 1947, Arts. 47,

[P.213 (4)]

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA (rD)

gration of the KMT, a part of its members who remained on the mainland went over to the Communists. Another part, for the time being at least, faded away for various reasons. The KMT as presently established in Taiwan may be described as composed of those who follow President Chiang's leadership and are personally loyal to him.

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In principle, any political party subscribing to the provisions of the Constitution [2] may legally contest for political power. Located in Taiwan today are the national headquarters of the Kuomintang, the Young China Party, and the Democratic Socialist Party.[3] Of these, the KMT assumes an over-all political leadership. An analysis of the National Government policies may well begin with the recent changes in the KMT.

Kuomintang "Reformation"

Normally, the highest organ of the Kuomintang is the National Congress, comprised of delegates elected by party members in their respective districts. This Congress, meeting once every two years, elects the Central Executive Committee (CEC) and the Central Supervisory Committee (CSC) which manage the party affairs.[4] In a move to reform the party, the functions of CEC and CSC were terminated following a resolution introduced by Chiang Kai-shek

[2] For the text of the Constitution, see *China Handbook 1950* (New York, 1950), pp. 144–55.

[3] Brief accounts of these parties can be found in *China Handbook 1950*, pp. 236–51, 255–57, and 257–58 respectively.

[4] See General Regulations of the Kuomintang as amended, May 1945*. Also *China Handbook 1950*, pp. 240–43.

[p. 213 (A)]

52:Steiner S-4 (no date) 1951
AF1 China
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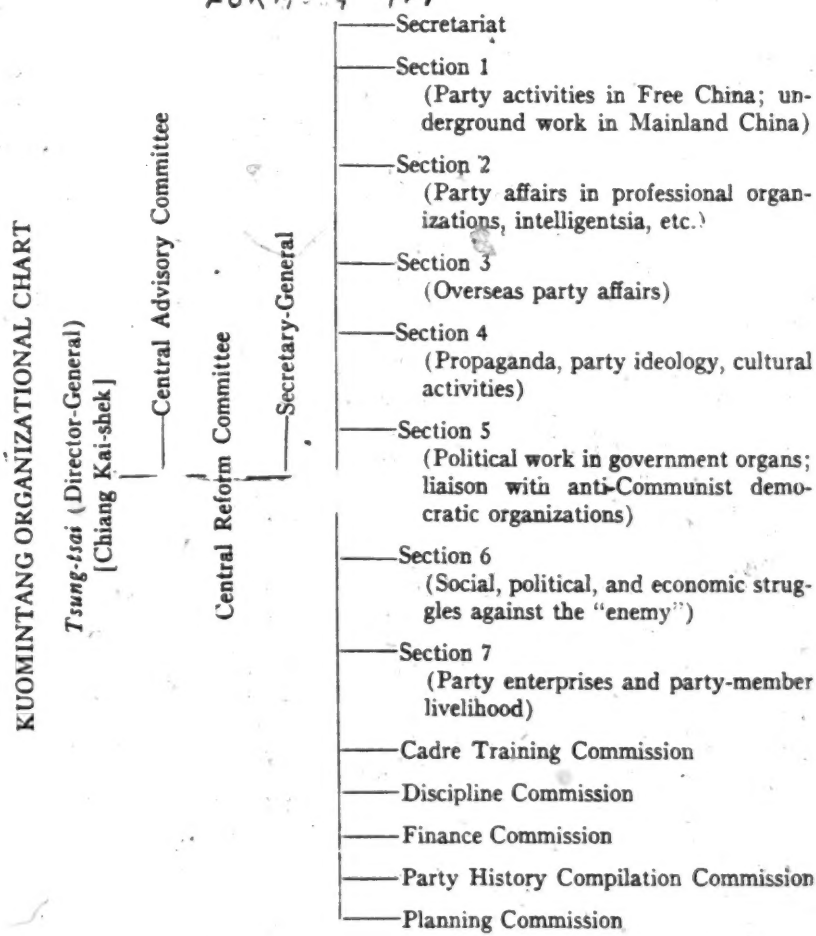

and adopted by the Standing Committee of the CEC on July 22, 1950.[5] Subsequently, a Central Reform Committee of sixteen members and an Advisory Committee of twenty-five members were appointed. Having held government or party offices for varying lengths of time, these committee members are well known in Kuomintang circles. A difference in the age composition of the committee members is evident. The Reform Committee, comprising the "younger"

[5] As distributed by The Government Spokesman's Office, Taipeh.

[p. 214 (A)]

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD 1

1d5 men—whose average age (1951) is 48—administers the Reform Plan,[6] while the Advisory Committee, composed of the elder "party-statesmen"—whose average age is 66—supervises the administration.

The Reform Plan seeks to tighten the party organization by eliminating corrupt elements, opportunists, and bureaucratic politicians. It proposes to strengthen the party cadre by recruiting patriotic elements from among the

[6] See resolutions cited note 5 *supra*; also *Reform* (Taipeh), Vol. I, No. 1 (Sept. 1950), pp. 5–17.

[p. 214 (B)]

52:Steiner S-4 (no date) 1951
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665 youth, intellectuals, and agricultural and industrial workers. It commands the party members to go to the masses and work for their well-being.[7]

A new political program was announced on September 1, 1950.[8] Its general objectives are to restore national sovereignty and to put democracy into practice. Specifically, it proposes: (1) to encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; (2) to establish a democratic industrial system in which workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprises; (3) to welcome foreign investment and technical co-operation; (4) to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; (5) to carry out local self-government and to protect civil rights; and (6) following restoration of mainland China, to punish Communist leaders, to extend amnesty to those who follow them under duress, and to allow farmers to continue tilling the land they have been tilling.

Relations Between National and Provincial Government

642 The practical effects of the program may be reflected in varying degrees by what has been taking place in Taiwan.[9] Organically speaking, the National Goverment looks after foreign affairs, national defense, the administration and adjudication of national laws, national revenues, and foreign trade policies. The powers of the provincial government consist of those which are inherent

[7] *Ibid.*

[8] *The Present Political Platform of the Kuomintang*, Taipeh: Government Spokesman's Office, Sept. 1950.

[9] Taiwan: population, 7,026,883 (1949); area, 35,961 sq. km. For other essential facts, see *China Handbook 1950*, pp. 33–39.

[p. 215 (A)]

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD1

625 wine, tobacco, and salt in violation of government monopoly, and violations of the 37.5 rent reduction program.

Conclusions

643 In describing the Nationalist government policies, 1949–51, the writer has sought to ascertain their nature and contents by recounting a chain of events which set the political pattern in contemporary Taiwan and by a survey of what has taken place since. From them may be drawn the following tentative conclusions:

1. Generalissimo Chiang Kai-shek and his supporters have been exercising a dominant role in National Government policies, 1949–51.

665 2. While there are three known political parties active in national politics in Taiwan, the Kuomintang, as presently constituted, is the ruling party.

631 3. The political framework in Taiwan may be described as one of over-all political control by the Nationalist government, centralized management by the provincial government, and local self-government, still in its preliminary stage, at the municipal and county levels.

652 4. The National Taiwan currency has exhibited a degree of stability which compares favorably with that in most postwar countries having suffered from war devastation.

5. Nationalist government assets and reserve, sale of government properties, and ECA assistance are contributing factors in balancing the provincial budgets in recent years.

427 6. The 37.5 rent reduction program has contributed towards rural well-being, along with the projects sponsored by the Joint Committee on Rural Rehabilitation.

433 7. There has been an upward trend in agricultural and industrial produc-

[p. 222 (B)]

214 seas subscriptions to local newspapers, which were an important supplement to and check on the central organs.

665 214 Publications of the Chinese Communist Party are as abundant as those of the government. The millions of party members have to be kept informed, as do the cadres or political shock troops. Apparently the party chiefs consider that normal commercial channels constitute an efficient means of distributing many instructions and reports on party affairs. As a result, a large body of generally available material deals in detail with the problems of party organisation, indoctrination, discipline, and program. Obviously the published record is incomplete, but it is extensive and credible as far as it goes. This material is intended as the basis for action, and therefore it can be presumed to be reasonably accurate within the Communist framework.

214 Doctrinal questions are especially well covered in the available documentation, and it would be impossible to overstate the importance of understanding the theory of Chinese society and of the Chinese revolution as it is now developing in Communist China. In retrospect, it is plain that this theory has been gradually modified by and adapted to the Chinese scene. Its development therefore sheds light on actual conditions in China. It is also now evident that theory of social development may have greater significance for world affairs than apparently more dramatic and portentous economic or military policies. Some twenty million people are avidly studying these vast theoretical questions, and samples of the views of various groups are available. On another level, leading theoreticians are contributing to the new history, the new economics, the new sociology, and the new philosophy. The majority of these works are of importance mainly as examples of doctrinal development.

[P. 225 (A)]

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Following the revolt of February 28, 1947, the new Chinese provincial administration accepted seven Formosan Chinese as commissioners in a total of fifteen. When K. C. Wu became governor, another effort was made to broaden the participation of local Chinese in government. The provincial commission was enlarged to include seventeen Formosans in a total of twenty-three. Greater number of local people were employed in the civil service. By June 1950, of the total of 81,006 persons employed by the provincial government, Formosans accounted for 53,024.[52] On August 16, 1950 the administrative areas were revised from eight hsien and nine municipalities directly under the province to sixteen hsien and five municipalities. Steps were immediately taken to promote self government in the province. The popular election of the magistrates of the sixteen hsien, the mayors of the five municipalities, the members of the hsien and municipal councils, and the members of the Provincial council was held for the first time in July 1950 and completed in March 1951. A new election took place in 1953-54. Since that time the election law has been modified so that future elections will take place on the same day in all sections of Formosa.

52. Fred W. Riggs, Formosa under Chinese Nationalist Rule, New York, The Macmillan Company, 1952, p. 49.

632 answer to questions submitted to them by
633 the local government authorities." The heads of towns and villages had no obligation to seek or to follow the advice of local assemblies. The governor-general could dissolve the assemblies at any level at will.

631 The exceedingly limited extent of "self-
•666 government,"[1] which the Japanese had much
641 publicized, was further minimized by the franchise. Suffrage was granted to all self-supporting male Japanese subjects 25 years of age or older, resident in the relevant districts for more than six months, who have been paying for six months or longer a minimum local tax of ¥ 5.00 a year.[6] Formosan Chinese were counted as Japanese subjects, but because the majority of them paid a city, town, or village tax under ¥ 5.00 a year,[7] the number

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6. Naito, op. cit., p. 73.

7. "The small landowners in Taiwan possess chiefly dry land and the majority of them own less than one ko (chio = 2.39 acres). But the village land tax from one ko of dry land is less than five yen and consequently the majority of owners, as well as all tenants and workers, have no right to vote." Grajdanzev, op. cit., p. 163.

1 [During Japanese occupation from 1895 to 1945 -- Analyst]

631 of eligible voters among the Formosan Chinese
666 was extremely small. In 1935, the year in
641 which the so-called local self-government was introduced, there were 40,297 qualified voters among 270,674 Japanese residents, but only 187,155 qualified voters among 4,674,300 Formosan Chinese. The total membership, including government appointees of provincial, district and city assemblies as instituted in 1935, was 252 Japanese and 169 Formosan Chinese. Thus, not only were all administrative offices almost exclusively staffed by Japanese, but even in provincial and municipal representative bodies the Japanese members also far outnumbered the Formosan members.

625 For administrative control of the populace, the Japanese relied upon an elaborate police system. This system[8] comprised a civilian police force, numbering over 12,000 in 1940, supplemented by a special police force of over 5,000, functioning in the areas occupied by the aborigines and by a military police force numbering some 6,000. To facilitate the task of the police force, the old Chinese pao-chia system of collective responsibility was revived and strengthened. Approximately ten households formed a chia and ten chia a pao.

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8. Ballantine, op. cit., p. 28.

63/ jurisdiction of the hsien government in which they were located. The hsien were subdivided into chen [town] and hsiang [rural districts]. Towns and rural districts were further subdivided into ts'un [villages]. The cities were divided into ch'ü [districts, or sections] and ch'ü into li [wards]. A ts'un is composed of one hundred to two hundred households, and a li from one hundred fifty to three hundred households. Under the ts'un and the li is the smallest community organization, the lin [neighborhoods], consisting of six to fifteen households. Ts'un and li correspond to the former pao, and lin to the former chia, the designations having been altered to obliterate the unhappy associations the former names held for the people who were forced to live under the old system of pao-chia with its unrestrained police powers.

66 Elections of local representative bodies
63/ took place in 1946. Franchise was extended to all citizens of both sexes over twenty years of age. Approximately 91.80 per cent of the eligible voters registered for voting.[11] The

11. Total number of registered voters was 2,409,560, First Collective Report on the Civil Affairs of Taiwan, p. 139.

666 election of hsien and city assemblies was
631 completed before April 7 and the provincial assembly (called the Provincial Political Council) was formally inaugurated on May 1. Although the functions of the local assemblies were principally consultative, they represented a great improvement over the Japanese system in two ways: first, the base for suffrage had been extended to include a greater number of voters, and, secondly, all the members of the assembly were elected. The election of district heads, magistrates, and mayors was deferred, because the authorities asserted the people at that time lacked administrative experience to undertake the work.[12]

635 After the local insurrection of February
633 7, 1947, the provincial administration was brought into conformity with that of other provinces of China. The post of administrator-general was abolished. A provincial council of fourteen members or commissioners, with the governor as chairman, was established. Half of the provincial commissioners were chosen from local residents, the Formosan Chinese. The monopoly bureau, whose restrictive activities were immediately responsible for the outbreak of riots, was

12. Ibid., p. 103.

abolished. A new tobacco and wine bureau was created and placed under the finance department. A camphor company was formed under the department of reconstruction (industry and commerce), and a bureau of supply replaced the trading bureau. In 1950 the number of provincial commissioners was further increased to 23, of whom seventeen were Formosan Chinese. Local elections were held in 1950 and 1953-54. Members of assemblies of rural districts, towns, cities, and hsien and heads of villages, rural districts, and towns, such as mayors and magistrates, were all elected by direct vote. Members of the Provisional Provincial Assembly[13] were elected indirectly by the various hsien and municipal assemblies in 1950. In the second election of 1953-54, they were directly elected by the people. (Details of the organizations of the provincial and local government as well as the popular elections, will be considered in another chapter.)

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13. "Local self-government in Taiwan is, for the time being, confined to the hsien and municipal level. Since the provincial government is still under the direct control of the Central Government, the principal council is known as the Provisional Provincial Assembly; China Handbook, 1954-55, Taipei, China Publishing Co., 1954, p. 469.

642 According to Article 23 of the Constitution, all the rights and freedoms enumerated above may not be restricted by law, except in order to prevent infringements upon the freedom of other persons, to avert an imminent crisis, to maintain social order, or to improve general welfare. One condition under which civil liberties may be restricted is during the time of declaration of martial law by the president; another is the exercise of the emergency power granted the president in the temporary provisions adopted by the first session of the National Assembly.

SUFFRAGE AND THE RIGHT TO HOLD OFFICE

666 642 Any citizen of the Republic of China over twenty-years of age has the right to vote. All elections stipulated in the Constitution, except as otherwise provided, shall be universal and by secret ballot.[28]

Any citizen over the age of twenty-three years has the right to be elected to office, except as otherwise provided by law. All candidates in the election prescribed by the Constitution shall openly campaign for election. Intimidation and material inducement

28. Ibid., Article 129.

are strictly forbidden, and disputes concerning elections shall be settled by the courts (Articles 130-33). The delegates to the National Assembly and members of the Legislative Yuan are elected directly by the people; but the president and vice-president are elected by the National Assembly, and the members of the Control Yuan are elected by the provincial and municipal assemlies. In local elections of 1950 and 1953-54 on Formosa, the magistrates, mayors, and members of the provincial hsien and municipal assemblies were directly elected by the people in secret ballot. The Constitution also provides that a person after being elected may be recalled by the constituency (Article 133). Beside the rights of suffrage and recall, the people also possess the rights of initiative and referendum. However, although the Constitution states that the exercise of the rights of initiative and referendum shall be prescribed by law (Article 136), no law in this regard has been promulgated.

In the selection of public functionaries, the Constitution specifies that a system of competitive examinations shall be enforced, quotas of candidates shall be prescribed severally according to provinces and areas, and examinations shall be held by regions. No person may be appointed to a public office unless he has been qualified through

634 of 1950, a candidate for magistrate or mayor had to be at least thirty years of age. In an election held in 1954, other qualifications were added: to be a candidate for the office of magistrate or mayor, a person must either be a college graduate or have passed a senior civil service examination or have met the requirements set by the Examination Yuan. Secret ballots were cast in all elections. The order of the candidates on public notices and on the ballots were determined by lot. For the benefit of those voters who could not read, pictures of the candidates were printed next to their names; thus the voters would have no difficulty in voting correctly for the candidate of their choice.[12]

635 President Chiang Kai-shek proclaimed three principles on which the government was to formulate the regulations governing elections: a law-abiding spirit, an avoidance of waste, and the election of the good and the capable.[13] Accordingly, candidates were not permitted to spend more than a certain amount of money in campaigning and were forbidden to bribe their constituents or make a campaign issue of the private lives of their opponents. Supervisory offices were established by the Taiwan Provincial Government, which declared that stern measures would be taken against those who "use force, threat or other illegal means

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12. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 473.
13. Ibid., p. 470.

666 635 to interfere with the election campaign of the candidates, obstruct the casting and counting of votes, and hamper the performance of duties by those in charge of the election affairs."[14] Generally speaking, the elections were conducted in an orderly manner. No report of election "irregularities" has appeared in newspapers. Mr. Hsü Fu-lin, acting chairman of the Democratic Socialist Party, in answer to the query of an American newspaper correspondent, said that there had been no discrimination against the candidates of his party during the election campaign. A British newspaperman observed that "if Formosan elections cannot be regarded as free by the standards of the West, they have nevertheless been considerably more democratic in character than anything yet known in the Far East outside Hong Kong. The secret ballot prevails, but no candidate fundamentally opposed to the regime would have the temerity to stand for election."[15]

[161] The Civil Affairs Department of Taiwan Provincial Government reported the population of Taiwan Province to be 8,438,016 at the end of 1953. This number included 741,016 foreign-born (Mainlanders) but excluded military

14. A General Report Made by Governor O.K. Yui before the Fifth Session of the Provisional Provincial Assembly of Taiwan on Dec. 14, 1953, Taipei, Dept. of Information, Taiwan Provincial Government, 1954, p. 31.

15. H. Maclear Bate, Report from Formosa, London, Eyre & Spottiswoode, 1953, p. 23.

666 personnel. According to the regulation govern-
635 ing the election and recall of assembly members Mainlanders who have resided in Formosa for six months or more have the right to vote and stand for election. Members of the police and military forces and students may vote but are not eligible candidates for office.[16] The number of qualified voters at the end of 1953 was 3,715,552, approximately 45 per cent of the total civilian population.[17] The ratio of actual voters to qualified voters at the time of the two popular elections held in Formosa was as follows:[18]

Election	Year	Percentage of Participation
Provisional Provincial Assembly	1954	74.41
Hsien and Municipal Assemblies	1950	80.73
Hsien and Municipal Assemblies	1953	79.72
Magistrates and Mayors	1950	80.87
Magistrates and Mayors	1954	75.33

The first Provisional Provincial Assembly was elected by the hsien and municipal assemblies After the first election, the percent of partici-

16. Tai-wan Sheng Cheng-fu Kung-pao [Official Gazette of Taiwan Provincial Government], Taipei, Secretariat of Taiwan Provincial Government, Autumn issue, No. 48, August 25, 1953, p. 611. [17,18 - next page]

666 pating voters decreased slightly, but the actual
635 number of people who cast their votes in subsequent elections increased. For instance, in the election of hsien and municipal assemblies the total number of votes cast in 1950 was 2,769,696; the number of votes cast in 1953 totalled 2,961,941. Of a total of 1,846 candidates, 860 members of the hsien and municipal assemblie were elected in 1953. Seventy-four members were women.

631 The educational background of local
635 legislators is much lower than that of the members of the Legislative Yuan. Over ninety per cent of the members of the current Legislative Yuan are college graduates; of the 860 members of the hsien and municipal assemblies, only 202 are graduates of universities or technical colleges, 342 are graduates of high schools, and the remainder attended primary schools or were privately tutored.

The occupations of the members of local legislatures have been reported as follows:[19]

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17. Number of civilian population on Formosa in February 1955 was 8,695,843; number of qualified voters: 3,997,226, according to report of Civil Affairs Dept. of Taiwan Provincial Government.

18. The China Handbook 1954-55, pp. 474-76.

19. Reports of the election offices, Dept. of Civil Affairs, Taiwan Provincial Government.

631 urban centers as administrative units. The island is presently divided into sixteen counties and five province-controlled municipalities. Under them are various districts, townships, and villages.[12]

632 634 666 Within this framework of centralized control is carried out the program of encouraging local self-government. As of May 6, 1951, all the twenty-one mayors and county magistrates had been successively elected to their respective offices by popular vote.[13] Besides, there are 6,304 village and *li* (urban units akin to wards) assemblies learning self-government by doing. Representing them in township and district assemblies are some 8,024 village and *li* delegates.[14] On county and municipal levels are some 541 popularly elected councilmen.[15] Of an estimated 2,650,000 men and women of twenty years of age and over who are qualified to vote, some 2,416,072 had registered.[16]

647 Along with the development in local self-government has been an increase in the participation of local inhabitants in the management of their provincial affairs. It may be recalled that under the Japanese, of 84,559 government personnel in 1945, 55.53 per cent were Taiwanese, and the rest Japanese.[17] In June 1950 the total number of govern-

[12] See Provincial Government of Taiwan, *Report on Administrative Reorganization**, Taipeh, 1949; also Democratic Publications Association, *Taiwan Reconstruction** (Taipeh, 1950), Vol. 1, pp. 1–12.

[13] The Broadcast of Voice of Free China, Taipeh, April 28, 1951 reported the conclusion of nineteen local elections with the remaining two to be completed by May 6, 1951.

[14] April 1948 figures. Also see *Taiwan Reconstruction**, cited note 12 *supra*, pp. 7–12. The terms of office of the delegates have since been extended by the National Government to such time as "formal assemblies shall be constituted."

[15] *Ibid.*

[16] 1947 figure. See *Taiwan Reconstruction**, cited note 12 *supra*, p. 7.

[17] For a breakdown of government person-

[P. 216 (A)]

36: Rowe S-4 (no date) 1955 AF1 China AF1
Form. Osa. AD1

was that the Taiwanese were accustomed to the peace and order of a country under a foreign tyranny, and could not, at first, understand the "lack of uniformity" and "the complexities" of democratic rule (thanks to the Japanese, on the other hand, they had no illusions about or yearnings after Communism). Finally, the men who governed Taiwan immediately after the retrocession gave every evidence of being more interested in increasing their power and lining their pockets than in providing good management. When, therefore, the Nationalist government moved to Taiwan in 1949, it found that it had taken on numerous grave local problems in addition to those it had brought with it from the mainland.

CF 177 CF [661] CF 642

Political Reform

The Kuomintang, the leading political party, prepared itself to deal with these problems by putting itself through a reorganization. Its younger, more liberal leaders were, to this end, appointed to a Central Reform Committee, the main task of which was to strengthen and tighten party organization and eliminate corrupt elements, opportunists, and bureaucratic politicians. On 1 September 1950, the Nationalist government was ready to announce a new political program. Its objectives were to

CF [665]

> encourage private enterprise to the extent of avoiding monopolistic combinations and to transfer government-operated light industries to private ownership; to establish a democratic industrial system in which the workers' welfare is safeguarded by allowing them a share and a voice in the ownership and management of private enterprise; to promote the interests of tenant farmers and farmers through land reform, water conservancy, and land reclamation; to carry out local self-government and to protect civil rights.

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Local self-government and land reform were the fields in which the government brought about the most spectacular changes. It first removed all the social barriers and segregation measures that had been created and maintained by the Japanese. The native Taiwanese were no longer barred from institutions of higher learning, or from the worthwhile positions in commerce and politics. They were encouraged to participate in local self-government, and to think for themselves. By 6 May 1951, 21 mayors and magistrates in 16 counties and 5 municipalities had been elected to their respective offices by popular vote. There are now 6304 village and *li* (comparable to urban wards) assemblies, in which the Taiwanese are learning the art of self-government. Representing them in town and district assemblies are 8024 village and *li* delegates. On the county and municipal levels, there are about 541 popularly elected councilmen. Of an estimated 2,650,000 qualified men and women voters, some 2,416,072 are registered. In keeping with the government's policy of economy, the total number of government employees was reduced in June, 1950 to 81,000. The percentage of indigenous citizens in the government service rose to 65.46 percent.

CF 666 185

There has also been a marked change in the importance and responsibility of the posts held by Taiwanese. In the category of first class officials, indigenous personnel have increased from 0.92 percent under Japanese rule to 17.45 percent in the present government. In the category of second class officials, indigenous personnel rose from 1.29 percent to 25 percent.

Land Reform

CF 423 421

The other outstanding reform accomplished by the government has been the carrying out of a new land reform program, which has greatly benefited the lot of the farmers, who are no less than 60 percent of the population. For the 70 percent of the farmers who are

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

The men learned it either in the Japanese schools or in the Japanese army labor gangs. The caliber of Japanese spoken by this group depends usually on the amount of schooling they had or the amount of their contact with the Japanese. A few men in this age group speak some Mandarin, learned from contact with mainlanders or while working in Taipei or local government offices. They do not speak it fluently in most cases, since they only learned it recently. Very few women in this age group speak Mandarin at all. The age group also contains a small number of Mandarin-speaking mainland Chinese who work in the area in some official capacity.

Few villagers above the age of forty-five speak Japanese or Mandarin unless they learned either language through a government job or contact with the Japanese or mainland Chinese group. Villagers over forty-five usually speak only Min-nan.

ADMINISTRATIVE SETTING

The village is the smallest political unit in Taiwan. Several villages make up a *hsiang*, and several *hsiang*—plus several *chen* (township)—comprise a *hsien*. Sixteen *hsien*, including the Pescadores, now make up the province of Taiwan. Hsin Hsing village is one of twenty-two villages in Pu Yen Hsiang in Chang-hua Hsien.

The *hsien* is the highest level of government in which the residents of Hsin Hsing and other Taiwanese villages participate, which they do through the elections of *hsien* assemblymen. On the lower level, the villagers vote for their own village officials—*lin* (neighborhood) leaders, mayor, and village representative to the *hsiang* council. The latter council elects the *hsiang* mayor. The present election system, except for the village mayorality "elections" established during Japanese times, was instituted in the postwar period after the arrival of the Chinese Nationalists.

Under the Japanese colonial regime the population had no way to express itself politically on the district, county, or national level. Today, under the Chinese Nationalist government, although the rural population does have a voice in local and district political affairs, the people have little direct influence at the provincial level and no opportunity—either directly or indirectly—to participate in national governmental affairs. Even their influence on *hsien* politics (although assemblymen are elected directly by the people) is very slight.

The Kuomintang, the National People's Party, is considered and referred to as the "Ruling Party" in Taiwan. The party participates in elections for *hsien* assemblymen and for *hsien chang* (magistrate of the county) by running its own candidates who are usually heavy contributors to the party. In Chang-hua Hsien, these candidates are most

4:Grajdanzev--18-20 S-4 (no date) 1942 Formosans-1-4
116, 175, 668

"In 1894 the war between Japan and China began. China suffered defeat, and by the Treaty of Shimonoseki of April 18, 1895, Liaotung peninsula and Taiwan were ceded to Japan. Though the Pescadores Islands had been occupied by Japanese [19] marines, there were no Japanese troops on the island of Taiwan at the time the treaty was signed, and when the news reached Taiwan, the administration and the population decided not to submit to the cession. It is quite possible that Peking encouraged local authorities to do this and there were rumors that in order to avoid the transfer of the island to the Japanese, the government was ready to give it to the British or to the French. In fact, the British are said to have declined the offer, (1) and under the circumstances, the French too

1. In view of the interest which the British had in the island (as was shown above) the natural question arises as to why they declined this offer. The answer is given in the work of Mr. W.A. Pickering, an important official in British service, of whom none other than Sir Robert Hart said in 1878 that 'no single European had ever possessed such opportunities of learning the Chinese character in all its phases,' and who from 1877 to 1888 'was virtually the ruler of some hundreds of thousands of Chinese in the Straits Settlements and in native States' (See his Pioneering in Formosa, London, 1898, p. 257). Mr. Pickering writes: 'Well, Japan is an Asiatic nation in spite of her modern civilization and her Western

ideas. Against any European power Japan can do absolutely nothing, in fact there is no European nation that has any reason to fear anything from any Asiatic race, however civilized. Japan, however, would be splendid as an ally; and, per contra, she would be just as dangerous in alliance with any other European power. That she would be a splendid ally to us I have not the least doubt.' And further (p. 258, op. cit.): 'And Formosa? Well we have had lots of chances to take Formosa. Certainly, we can't allow Russia or France to take it, and it could not be in better hands than those of Japan or in worse than those of China.' The gift of Taiwan to Japan was to pave the ground for a coming alliance. The British were sure of Japan's inability to rule there without British assistance and capital. The Pickerings who thought they knew the Chinese character so well badly misjudged the Japanese.

showed no special inclination to take it. Nevertheless the Chinese of Taiwan decided to act on their own. On May 23, 1895, the Taiwan republic (for which China's treaty was not binding) came into existence with the governor of the province Tang Ching-sung as its president.

But the republic of Taiwan lasted in the north less than three weeks. The president of the republic fled after the first defeat of his troops, and the army was left disorganized and leaderless. It is true that General Liu Yung-fu proclaimed himself president in the south, but at the approach of the Japanese he fled in the same manner as Tang Ching-sung.

As subsequent events clearly showed, it was not the absence of enthusiasm on the part of soldiers and of the people to fight for Taiwan that caused the collapse of the Republic. Describ-[20]ing the guerilla war which took place after the flight of the president, Yosaburo Takekoshi says: 'Whenever our troops were defeated, the inhabitants of the surrounding villages instantly became our enemies, every one, even the young women, arming themselves and joining the ranks with shouts of defiance. Our opponents were very stubborn and not at all afraid of death.' (2)Chinese mandarins showed their inability

2. Japanese Rule in Formosa, p. 88.

to rule the country in time of peace; they proved also their complete inability to organize its defenses in time of war. (3)In better hands Taiwan could have shown incomparably

3. The following rewards promised by the governor of Taiwan may serve as an illustration of his military knowledge:for the capture of a big man-of-war, 70,000 taels; for the capture of a small cruiser, 4,600 taels.

better resistance. The president fled on June 11, but Taiwan (in the south) was not taken until November 18, 1895, and four to six more years were necessary in order to subdue the guerilla warriors whom the Japanese contemptuously called 'brigands'. Japanese

losses in the pacification were not small. Takekoshi gives the following figures: died of disease in Taiwan, 4,642; sent to Japan for treatment, 21,748; remaining in hospitals in Taiwan, 5,246; killed in battle, 164; wounded, 515. This does not include losses suffered after November 1895 (4).

> 4. Engagements of the period of 1895-1901 were often on a quite large scale. In December 1895 General Yamaguchi, suppressing the 'insurrection of Hakkas armed only with long poles...shot five or six hundred of them and forced the rest to submit.' (Takekoshi, op. cit., p. 92.)

The strikingly small number of killed and wounded, as compared with those who died of disease or were treated for illness is possibly the result of the habit of the Japanese command in understating losses in war. Chinese losses up to December 1895 were estimated by Japanese at six to seven thousand killed in action."

4:Grajdanzev--176-177 S-4 (no date) 1942 Formosans -1-2
116, 175, 208, 563, 668, 177.65 Japan
636.65

"Political Movements (1)

1. The information concerning these movements is taken chiefly from Yanaihara, op. cit., and from Sekai nenkan, 1939.

As was shown in the historical section of this book, the island was not actually acquired by the treaty of Shimonoseki, but was conquered by the Japanese. This conquest took seven years and the Japanese recognize that the island was pacified only about 1902. However, in 1907 the Peipu rebellion broke out, the immediate cause being an attempt on the part of the officials to use the paochia in the subjugation of the savages. In 1912 the Linchi rebellion broke out in connection with the felling of the bamboo forest by Mitsui interests, and in 1915 [177] there was a new rebellion at Hsilaian. All these rebellions were suppressed by the government. These and other spontaneous movements, the information concerning which was withheld by the government, are classified by the Japanese as rebellions of the old type, to distinguish them from newer movements guided by persons with modern education and ideas. The first of these movements was led by a Japanese, Taisuke Itagaki, who came to Taiwan in November 1914 and organized Dokakai, the Assimilation Society. The purpose of Itagaki was not a revolutionary one; he wanted to see the Chinese of the island assimilated by the Japanese. He realized however, that this assimilation could not take place unless the Chinese of the island

were given equal treatment and equal opportunities in education. But such ideas appeared too dangerous to the government-general and the movement was suppressed in February 1915. Another stimulus to the awakening of political consciousness in the Chinese was given by Lin Hsien-t'ang, a wealthy Chinese who petitioned the government to permit him to open a private middle school in Taichu for the Chinese. The idea was evidently so strange and radical to the Japanese that they consider this application an important stage in the political development of the island. In 1918 the Chinese from Taiwan who studied in Tokyo organized the Domeikai, an organization the primary purpose of which was to effect the abolition of some especially harsh laws in Taiwan. In 1919 this organization started a monthly publication Taiwan Youth, which a few years later was changed into a weekly. At that time the attempt to transfer its publication to Taiwan failed, but the organ became the spearhead of the educational movement and in the 'liberal' years of 1927-30 this publication succeeded in moving to Taiwan and turned into a daily newspaper, the fate of which has already been described."

4:Grajdanzev--177-178 S-4 (no date) 1942 Formosans
116, 668, 177.66 Japan
636.66

"The World War brought in its wake unrest and political agitation. Lin Hsien-t'ang, together with many other Chinese, petitioned the Imperial Diet in February 1921 for the establishment of a parliament in Taiwan and for some kind of home [178] rule. The diet paid no attention either to this or to the following petitions, but the government-general arrested hundreds of persons in 1923 in order to stop the movement (1).

1. This is the Japanese version. Professor R. Goldschmidt, who visited the island in 1926 and who is in general an admirer of Japanese colonial methods, writes as follows: 'There are rumors that the movement was suppressed with 3,000 death sentences. But the notorious Japanese system of secrecy makes this difficult to verify.' (Translated from the German, Neu Japan, Berlin, 1927. pp. 109-110.)"

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -1-2
116, 467, 656, 668, 177.66 Japan
636.66

"In October, 1921, Lin Hsien-t'ang, Ts'ai Pei-ho (who was arrested in 1923), Chiang Wei-sui and others organized the Taiwan Bunkakyokai (Taiwan Cultural Society), which very soon became the centre of the national movement among the moderate elements. But in 1926 the Marxist groups made their appearance on the island for the first time when twenty Chinese formed the Taiwan Proletarian Youth League (Taiwan Musan Seinenkai). Since that time the political movement has separated into two branches—the Moderates centered around the Bunka Kyokai and were strongly represented in the Taiwan Agricultural Cooperatives, and the revolutionary Marxist organizations closely connected with the workers union (Taiwan Koyuso remmei), which in 1928 was reported to have had as many as 6,367 members and to have organized several successful strikes. However, after 1928 there began a new era of suppressions and arrests and one after another the Chinese organizations fell victims to it. The Marxist groups were the first to go. In 1931 the Taiwan Koyuso remmei was suppressed and finally in August 1937 even the most moderate movement of the right wing organizations, the purpose of which was the reform of local government, was dissolved on the claim that the government had already realized this reform.

This, of course, does not mean that all these movements were eradicated; they went underground, and continued their struggle, but the government suppression made even moderate groups more radical than they were before. In 1931 Taiwanese in Shanghai reorganized their Taiwan Youth Party into the Anti-imperialist League. It had close

4:Grajdanzev--178-179 S-4 (no date) 1942 Formosans -2
116, 467, 656, 668, 177.66 Japan
636.66

connections with Taiwan, where its members from time to time were rounded [179] up by the police."

"That the struggle in Taiwan continues one may see from a dispatch from Chungking which reads in part: 'Great significance is attached here to the formation of a united front among the various Formosan revolutionary parties with the inauguration of the Federation of Formosan Revolutionists. The unification of the revolutionary parties is announced in the first issue of the Taiwan Hsienfeng, official organ of the newly-formed organization.

The Federation is composed of the Formosan Independence Revolutionary Party, The Formosan Revolutionary League and many other smaller groups of Formosan revolutionists, active throughout Formosa, in China and foreign countries. 'Since the outbreak of the Sino-Japanese hostilities Formosan revolutionists have started many uprisings in Formosa. Japanese-owned mines were bomed, oil wells set on fire, and railways wrecked.' (China To-day, September 1940, p. 19.)

Of course it is useless to try to find confirmation of this information in the official sources, which even before the war were so secretive about the nationalist movement in Taiwan. But those who are well acquainted with the position of the Chinese in Taiwan will not be astonished by this kind of information.

The immediate aims of the party in Taiwan are formulated as follows: (1) To disorganize Taiwan's production and communications. (2) To strengthen Alashan anti-Japanese guerilla forces in Taiwan. (3) To organize groups of volunteers for war with Japan in China. (4) To organize strikes of workers, municipal personnel, pupils.

4:Grajdanzev--179 S-4 (no date) 1942 Formosans-2
116, 668

(5) To spread anti-war and anti-fascist propaganda. (6) To unite all Taiwan revolutionary organisations. (Taiwan Hsienfeng, April 15, 1940, p. 31.)"

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress. The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

15: U.S. Navy --22 [2] (no date) 1944 Formosans
116, 181, 668, 177.66 Japanese
636.66

"Formosans who have received the advantages of a Japanese education naturally expect opportunities in return. If such cannot be found in Taiwan, nor in China or Japan, discontent may increase. The Formosan temperament is not aggressive, but 'Old Formosa Hands' remark that this temperament often finds devious ways of achieving desired ends in spite of official control.

The Formosans lack leadership, for the Japanese have destroyed out-spoken opposition or have driven it underground and abroad. Only through pressure of Japanese occupation did there begin to develop a sense of the interests of the Formosan people as a whole, and the formulation of a political program embracing the welfare of the island vis-a-vis Japanese policy."

15: U.S. Navy--22 [9] (no date) 1944 Formosans
116, 186, 668, 563, 177.66 Japanese
636.66

"It is evident from an analysis of election returns that the greatest interest in politics and representative government is shown in the districts where the Hakka people are predominant, notably in Shinchiku Province. It is also notable that many of the leaders of fierce resistance to the initial Japanese invasion of the island were Hakka people or people from areas in which the Hakka predominate. Not only is government -processed opium said to be more easily accessible in Shinchiku Province, but it is in this district that the Japanese have taken greatest pains to destroy local religious cults, and to press the Japanization program."

15: U.S. Navy--32 [5] (no date) 1944 Formosans
116, 467, 668, 871, 177.87 Japanese
636.87

"Formosan peasant and trade unions were not organized along class lines, owing perhaps to the essential democracy of the Chinese guild system. Members of the middle and well-to-do classes actively supported the peasants and workers in their agitation for better working conditions and attempted to work for legislation to that end. The biggest handicap to any such movement has been the lack of education for peasants and workers, especially of education which could be gained outside of the Japanese 'National Schools.'"

656 575 Reformation of Bad Habits and Customs (such as prostitutes and drinking), etc. are further examples of this type. Many of these associations were organized under government encouragement in response to the new situation after the 1920's in order to distract the awakening Formosans who were grumbling against colonialism.

Social clubs for hobbies, recreational, literary artistic and cultural activities were organized freely by the Japanese. A selected number of Formosans were permitted to join these clubs. Philanthropic agencies had existed since the Manchu era. Some of them were reorganized and new agencies were added during the Japanese era. Religious groups with the exception of Christian minors, were less active.

Voluntary Associations of the Formosans

•668 As folk associations waned with the change of social life after World War I, the Formosan people began to form their own voluntary associations of a modern type.

1. Political Associations

After World War I the spirit of democracy permeated the whole world. In Japan serious problems appeared and democratic and socialistic movements became widespread.

668 In China, social movements of the modern type among students and young people gained momentum at about the same time. Under the influences of both China and Japan, Formosa was involved in this modern current. In 1919 an association was organized by Formosan students in Tokyo, and started the work of enlightenment and criticism of colonialism in Formosa. Two years later, in 1921, the Taiwan Cultural Association was organized in Taipei by young people and students both in Japan and Formosa. In the name of cultural enlightenment, they organized public speaking teams, gave lectures, and held meetings in various places in the island. Their new knowledge and criticism of colonialism stirred up the racial consciousness of the Formosan people, and everywhere they were met with overwhelming enthusiasm. Their activity reached a peak in 1925-26, and between 1923 and 1926 many similar associations in other parts of the island. The social consciousness kindled by this movement proved very important for the subsequent social development on Formosa.

When the movement reached its peak, the association split up, as the ideological incompatability of liberalism, socialism, and communism became clear. The right wing dropped out of the association, and organized the Taiwan People's Party in 1927. In 1929

668 the remaining left wing of the association split again into the communistic and the social-democratic groups, and the latter was expelled from the association. The moderate Taiwan People's Party again split into the conservative rich landlord group and the more radical middle class group. The former group organized the Taiwan League for Local Self-Government in 1929, and in the meeting of the party in 1930, was expelled by the more radical group. But at the same time, the party was disbanded by the colonial government. Thus, by 1930, among the Formosans, there were (1) a communistic group, (2) a social-democratic group, (3) a more radical middle-class group, and (4) a conservative landlord group.

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II. ATTITUDES OF THE FORMOSAN CHINESE

A. Toward the Communists:

.668 A small number of Formosans had attended the Communist training school (the Institute of the Toilers of the Far East) at Moscow. In 1928 they held a conference with Chinese and Japanese Communists in Shanghai. Shortly thereafter they formed the Taiwan branch of the Japanese Communist Party. Their mission was to "lead" the Farmers" Association, the Workers' Union, the Cultural League, the Anti-Imperialist League, and the Friends of the Masses Society on the island and to incite strikes and riots.[1] One Communist leader, Yang Chun-sung, was assigned to work among Formosan residents in Japan.[2] In 1931 the Japanese administration suppressed the movement in Formosa, disbanding all organizations connected with it. The leaders were either imprisoned or put to death. One of the leaders, Hsieh Hsueh-hung, was sentenced to thirteen years of imprisonment.[3] Following the restoration of Formosa to China, the Communists were active again. They organized the People's League, revived the Farmers' Assodation, and published a newspaper called Jen-min Kung-pao [People's Bulletin]. Ts'ai Ch'ien, a Formosan Chinese[4] and veteran Communist who had accompanied Mao Tse-tung on his Long March to Yenan, was designated chairman of Taiwan's Communist organization.

[Footnotes 1 - 4 on following page.]

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Gradually a growing number of Formosans were won over by Communist Party tactics. The Communists played an important role in the incident of February 28, 1947 and lost many members during the subsequent massacre by governor Ch'en I (Chen Yi). The small group led by Hsieh Hsüeh-hung escaped to Hong Kong and organized the Democratic Self-government League. Hsieh is now a member of the East China Administrative Committee and a member of the People's Political Consultative Council in Peking. The other Communist leader, Ts'ai-Ch'ien, was arrested by the Chinese Nationalist Government in Formosa in 1951 and his present fate is unknown.[5]

The Communist Party in Formosa was outlawed in 1947 and the island's security control was further tightened when Formosa became the seat of the central government of the Republic of China in 1949. Communism is no longer a serious problem on Formosa. There were only two cases of

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1. Wang Chu-lou, "Tai-wan Jen-min Ko-ming Nien-pao" ["A chronicle of People's Revolution in Formosa], Kuang-ming Jih-pao [Enlightenment Daily], Peiping, February 28, 1952, p. 3.

2. F. W. Riggs, Formosa under Chinese Nationalist Rule, New York: Macmillan & Co., 1952 p. 54.

3. She was released in 1940 on account of ill health. Kuang-ming Jih-pao, p. 3.

4. He joined the Communist Party in 1925 while studying in a college in Shanghai.

5. Gendai Chugoku Chosen Jinmeikan [Who's Who in Present Day China and Korea] compiled by [cont'd]

668 Communist espionage throughout 1955.[6] Educational institutions which have usually been hotbeds of Communist agitation are found to be relatively free of Communist influences. According to President Ch'ien Ssu-liang of Taiwan National University, there is no known Communist among either the professors or students, and that all suspected Communists have been either persuaded to change their convictions or eliminated. The presidents of two teachers' colleges know of no Communist activities in their schools.[7] The fact that Communist infiltration into Formosa has been held in check should not be construed as solely the result of the stern preventive measures taken by the government.[8] After all, Communism has never

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Japan's Gaimo-sho Asia-Kyoku (Asia Bureau of the Japanese Ministry of Foreign Affairs), Tokyo, 1953, pp. 77-83.

6. Even in those cases, according to Nationalist reports, most Communist agents on the island are mainlanders rather than the Formosans, and they concentrate their efforts on propaganda work among fellow exiles rather than among the local population. F. W. Roggs, op. cit., p. 55.

7. Walter Crosby Eels, Communist in Education in Asia, Africa, and the Far Pacific, Washington, D.C., American Council on Education, 1954, p. 45.

8. Communist is a capital crime in Korea.

668 been really strong on the island. It has never been given a chance to take root among Formosans. Communism was repeatedly persecuted by Japan with vigor when the island was under Japanese rule. After the restoration, a great many Communists perished in the February-March 1947 incident. Another important reason why the Formosans have never cherished any hope of being "liberated" by the Communists is that the islanders are convinced that they are faring better than the Chinese on the Mainland. Refugees fled from the Mainland have many stories to tell of the terror and sufferings they have experienced, and such accounts simply render Communist propaganda ineffective. The fact that 14,209 Chinese prisoners of war in Korea refused repatriation after hostilities ceased and that the inhabitants of Yikiangshan (I-chiang-shan) and nearby islands chose to evacuate to Formosa provide additional evidence of the ineffectualness of Communist propaganda. It is quite certain that the people in Formosa are firmly opposed to Communist and that they will wholeheartedly defend the island against Communist aggression.

B. Toward Independence:

186 668 Some Formosans favor complete independence for the island from Nationalist rule. They advocate the setting up of a United Nations trusteeship as a means of enabling the island to attain autonomy. It is said that the Japanese are secretly encouraging the movement in the hope that an independent Formosa might provide a better chance for Japan's imperialist expansion in the future. The separation

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movement attracted some following soon after the return of the island to Chinese rule, when the Formosans found themselves worse off than they were under the Japanese. They were denied at that time the opportunity of participating in the management of Japanese enterprises taken over by the Chinese Government. Although the new Chinese Constitution was in force on the Mainland in 1947, local self-government for Formosa was not carried out until 1949. Even then all positions of authority, in both government and business, were occupied by Mainland Chinese. As to the local people, if they had any standing during the Japanese regime, all were treated as Japanese collaborationists. Formosan Chinese who were enthusiastic about the restoration of the island to Chinese rule, expected equality from the Nationalist administration. When they were treated as second class citizens, they were naturally disappointed. Their resentment led to the growth of the independence or separation movement.

The leaders of the independence movement are the two Liao brothers, Joshua and Thomas. Their father was a tax collector at Lotung. Both brothers were educated at Columbia University, and taught in high schools after their return to Formosa. They formed a Freedom Party in 1945 and associated with the Communists in the uprising occurring February 28, 1947. Following this incident, they fled to Hong Kong, organized the Formosan League for Reemancipation, and issued a manifesto, "Formosa Speaks," demanding independence and a plebescite.

186 The manifesto was circulated among the representatives to the United Nations. In May 1950 a Formosan Democratic Independence Party was organized in Tokyo; its leaders included Wilfred Wong, James H. Chen, Gordon Tan, Y. T. Tsong and Frank Lim.[9] Joshua Liao was elected Chairman of the new party. It was reported by a Hong Kong newspaper[10] that in view of their past association with the Communists, the Liao brothers were confined in Sugamo prison, Tokyo, for seven to eight months after their arrival in Japan, and were bailed out by an American by the name of John Kellen. In the latter part of 1955, apparently in connivance with Japanese authorities, they were active again. In September they organized an association of Taiwan residents in Japan and a "Taiwan Provisional Congress."[11] On November 21, 1955, it was announced that Joshua Liao assumed the post of the "President of the Taiwan Provisional Government" and the chairman of the Provisional Congress, while Wu Chen-nan was named "Vice-President."[12] According to Japan's Immigration Bureau, there were in 1955 about 25,000 Formosans living in Japan. How many of the Formosan residents supported Liao was not disclosed.

186 178 In Formosa the independence movement is regarded just as traitorous as Communism. Since

9. F. W. Riggs, op. cit., p. 56.

10. Weekly Supplement of Hsing-tao Jih-pao (Hsing-tao Daily), No. 201, Sept. 15, 1955, p. 12.

11. United Press, Tokyo dispatch, Sept. 28, 1955.

12. Pan-Asia News Alliance, dispatch of November 21, 1955.

625 874 The exact number of personnel belonging to the police force on Formosa is not available. According to the China Handbook[11] for 1954-55, the total police force numbered a little more than 20,000 in 1953. There are two schools devoted to the training of police personnel: the Central Police Academy trains officers, the Taiwan Police Academy trains enlisted men. In 1953, ten officers were selected for advanced training in the United States and Japan.

III. MEASURES AGAINST COMMUNIST ACTIVITIES

668 648 The Communists in Peking see Formosa as a potential threat to their regime in contradistinction to the Chinese people on the Mainland, who look to Formosa in the hope of ultimate emancipation. As long as Formosa remains free, it is a thorn in their flesh. The Nationalist Government may use the island as a staging area in preparation for an attack on the China Mainland, much as the Allies made use of Britain prior to the invasion of Nazi-dominated Europe. In consequence, Communists never relent in their effort to infiltrate into the island.

648 625 The Nationalist Government, alert to the presence of saboteurs and spies, has organized a security network under the direction of Lt. General Chiang Ching-kuo, son of Chiang Kai-shek. The security network is controlled by the

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11. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 184.

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charge of training the new army, and the managing director of the Taiwan Sugar Corporation, was exposed by the Peace Preservation Corps. According to the China Handbook 1954-55, approximately one-hundred espionage cases, involving some 4,500 people, have been uncovered in the past four years.[12] The Pan-Asia Alliance News Agency reported on January 3, 1956 that, according to an official release, Communist agents were most active in Formosa just before the conflict in Korea began, but since the launching of the Counterespionage Campaign in 1950, a number of Communist cells have been discovered. In 1955, two conspiracies were suppressed, although the government report does not give further details. One of these cases may have involved the attempt of Major Kuo T'ing-liang to assassinate President Chiang in May 1955. The case was widely publicized because it resulted in the resignation of General Sun Li-jen, former commander-in-chief of the Nationalist land forces, who had been Kuo's superior for many years.

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In 1951, the Nationalist Government called upon Communists to renounce their affiliation with the Party; in return, they would receive assurance from the government that their life and property would be protected.[13] Several hundred

12. China Handbook, 1954-55, p. 184.

13. Procedures for Communists and Fellow-travelers to Surrender, promulgated on Sept. 16, 1951.

648 Communists have since surrendered to the
668 government.[14]

625 The tightness of security control and
648 the severity of punishment have gained for Formosa the unpleasant appellation of a "Police State." It might be true that in proportion to the size of the territory and the population the number of secret service men is unduly large. This will be no surprise if we take into consideration the fact that the security agents of the Nationalist Government formerly patrolled all of China, a territory 160 times larger than the island of Formosa, and that when the continent was overrun by the Communists, the great majority of those security men had to withdraw to Formosa, for they, more than other groups, were most hated by the Communists. Nevertheless, the swarming of secret service men in Formosa has created the impression that everyone on the island is being haunted by the shadow of a Police State.[15] It is also possible that some searches and arrests have been unwarranted. But overcaution is inevitable as Nationalist China is at war with a ruthless and unscrupulous enemy. After all, under martial law, persons endangering the safety of a nation may be sentenced to death

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14. China Yearbook, 1953, p.825:203 Communists surrendered between May 1952 and April 1953. China Handbook 1954-55, p.184: "More than 100 Communists gave themselves up in 1953."

15. [see following page]

31: Hofmann--603-604 N-3 (1909) 1912 Formosans
116, 634, 669, 697, 177.63 Japanese
636.63

In the house of the governor, Count Sakuma... I had the opportunity to meet the chief magistrates of the various provinces. Among these there was not one who did not speak either English or German. All of them had been sent to Europe by the government of Formosa to complete their studies there. In every respect, the achievements of the Japanese colonial administration are most impressive, and they become even more so if one takes into consideration the conditions under which the Japanese first took over the administration of the island. In 1895 there was complete anarchy among the Chinese elements of the population. There were organized bands of guerilla soldiers in all the regions that were accessible to foreigners, so that before the administration could proceed to the task of suppressing the Malayans in the mountain regions, [604] it was necessary to break the resistance of the Chinese. I saw some of the leaders of these guerilla bands, who had not been condemmed to capital punishment, in the large reformatory in the capital. There the prisoners were engaged in occupations such as cabinet making, in which they showed a great deal of skill and understanding.

621 for tax collection, conscription and cases of capital crime which were handled directly by the prefectural government. In this respect the situation in Formosa under the Manchu regime was the same as that on the Mainland. Within the village, the elder was elected, and approved by the local government. He had some assistants under him. Public affairs and minor crimes were decided and disposed of by the village elders. At times the new settlers drew up rules for the administration of local affairs, and affairs for common interest were discussed and decided upon by the council of householders.

648 Manchu control of Formosa was always
631 tenuous. Uprisings were frequent, and after the first quarter of the 18th century internecine wars
669 occurred incessantly. As the government was not strong enough to keep peace and order, self-defense was left to kinship groups or groups of the people of the same native town. In this situation the influential kinship group was very significant. If it was strong, not only could it defend its kinsmen better, but it could even suppress other groups and enjoy various privileges. A strong clan insured survival and prosperity, and this was the reason why an abundance of male descendants became the ideal of life among the Formosan Chinese. This
[161] may account for the enormous rate of natural growth of Formosa's population which is still going on unabated. On the other hand, for defense against raids of aborigines and pirates, even the influential clan had to get the co-operation of other people. This led to territorial consolidation within the village.

631 As uprisings and clan wars became more
669 frequent and widespread, often nearby villages united to make a league of defense. When one village was raided, a drum or gong would be beaten and the allied neighboring villagers would come to the rescue. To affirm their consolidation, common temples were constructed and common patron gods were worshipped. In rotation each allied village celebrated the yearly festival in honor of the patron god. In each case the allied villagers participated in the festival and feast. The blood tie was represented by the village ancestral temple, the territorial tie was represented by the local patronal god. Usually the worship of local patron gods was more frequent and enthusiastic. Sociologically speaking, it is safe to say that, in spite of the often emphasized Chinese ancestral worship and family spirit, the principle of locality took precedence over the principle of blood relationship during the Manchu period. As far as the mass of Formosan Chinese is concerned, this is true. However, in the case of a smaller number of the upper ruling class, the blood tie was still the dominant principle.

7. Breakdown of Folk Society.

612 Consciousness of the blood tie and locality
178 bond was very strong among the Formosans in former times. When two persons found they had
631 the same surname, they would consider each other as brothers or cousins. When a person introduced himself, he usually added his native

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertilizer and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertilizer increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyze the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1943, p. 201.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

[121] people were forced to sell their land cheaply to sugar corporations. The influence of the revolution lead by Dr. Sun Yat-sen on the mainland was also felt. After 1916, the ●669 uprisings were suppressed by a forceful police system. Since 1921 the revolts of the aborigines have been largely mitigated.[6] After the 1920's peace was generally preserved in Taiwan, and the resistance of the people changed gradually from revolt by force to organized political and social movements.

000 Peoples' attitudes are much influenced by peace and war. Disturbances do not give the people the needed security of life and property. They must keep a cautious and watchful attitude at all times. It is impossible to invest the surplus of their production for the extension of their business. They have to exchange the surplus of production for gold and silver, and bury it under the ground for safety. Direct and immediate self-sustainance was their main daily concern, and the idea of future development was unfamiliar to them. This society is approximataly the same as the "militaristic type of society" defined by Herbert Spencer, and no development can be expected from it. In peace time people need not spend their time and energy defending themselves against thieves and bandits. They can concentrate their strength on their work. They can extend their business and gradually plan for the future. Again, we may use Spencer's definition and classify this state as an "industrial type of society". Once 178 established, its development will be accelerated. In Taiwan, after peace and order 648 were established by the colonial government police system, production was extended, and the population gradually increased.

The various kinds of social change in Taiwan were basically influenced by the colonial policy of Japan. Before World War I the policy was typically colonial. After the war, the spirit of democracy permeated the whole world. In Japan, serious social problems broke out. Democratic and Socialistic movements likewise became widespread. Social movement of the modern type among students and young people broke out in China at about the same time. Under the influence of both China and Japan, political, social, and cultural movements started in Taiwan for the first time around 1920. At first the colonial government tried to suppress them by force, but the current was too strong and the government had to change its policy somewhat. From around 1920, the policy of assimilation was adopted, and there were some improvements in administration. Though the improvement was limited in character, it had a fairly significant effect on Taiwan, and its results were reflected in population data. From [161] 1926 on the system of modern Taiwan was generally molded, and after that date population growth was speeded up.

Japan started her invasion of Manchuria in 1931, intruded in northern China in 1937, and then struck Pearl Harbor in 1941. As the war for expansion was extended, Taiwan was considered a strategic base, and the colonial policy had to change again.

Note 6: Yanaihara, T.: Taiwan under Imperialism. 1929, Tokio, pp. 241-242. Shiomi, T.: "Police System and Economy of Taiwan under Japanese Rule". Quarterly of the Bank of Taiwan. Vol. 5, No. 4, 1953, Taipei, pp. 259-261.

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Annex "A," Subparagraph 2d,
Political Background

LAW AND ORDER

I. CRIMINAL CODES AND PROCEDURES

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671 The Criminal Code of the Republic of China was first enacted on March 10, 1928 and revised on January 1, 1935. The revised text came into force on July 1, 1935. The main provisions of the Chinese Criminal Code may be stated as follows:

A. Individual Responsbility. No person shall be held guilty of an offense not expressly covered in the Criminal Code. Chinese jurisprudence does not tolerate the principle of collective responsibility prevailing during the Japanese occupation, under which the family or the village could be held to share in the guilt of any of its members, fathers were punished with their sons for crimes committed by their sons, or the village leader was punished for an offense of a villager.

B. Criminal Liability. An unpremeditated or negligent act shall not be punishable except when specifically made punishable by law. As to the capacity to commit a premeditated crime, insofar as age is concerned, it is provided in the Criminal Code than an act committed by someone under fourteen years of age is not subject to punishment. Where

681 671 the offender is over fourteen and under eighteen years of age, the sentence may be reduced. Likewise, a person judged to be insane is not held accountable for his acts. When a criminal act is committed by a person who is feeble-minded, the sentence may be reduced.[1] The Chinese Criminal Code has adopted the principle that the prevention of crime is more important than its punishment. Preventative laws require that juvenile delinquents be detained in reformatories for rehabilitation, insane persons be kept in some appropriate institution for their own protection, opium addicts and habitual drunkards be sent to hospitals for cure, and vagrants be compelled to work.[2] The government is now drafting a set of laws concerning juvenile delinquency, but has not yet presented the statutory bill to the Legislative Yuan for discussion and approval.

C. Suspension of Sentence. The Criminal Code also permits suspension of punishment and conditional release. Whoever during the execution of a sentence of imprisonment shows evidence of repentance may, after having served ten years of his sentences in cases of imprisonment for life or after having served

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1. Articles 18 and 19, Criminal Code, 1935.

2. Wen-yu Tsao, "The Development of Chinese Law," Free China Review, Vol. 3, No. 10, Oct. 1953, pp. 29-31.

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3. Articles 230, 239, 240, Criminal Code, 1935.

695 A party not satisfied with the judgment of the lower court may appeal to a higher court. The procurator, advocate, statutory agent, or spouse of the accused may also appeal on behalf of the accused. And a party not satisfied with the verdict rendered by a high court sitting as court of first or second trial may direct his appeal to the supreme court. But no appeal may be taken from the court of second trial to the supreme court for a third trial in cases involving the trivial offenses specified in Article 61 of the Criminal Code.

E. Retrial and Extraordinary Appeals. When the period for filing an appeal has elapsed, or the judgment has been rendered by the supreme court or high court at the final trial, the judgment is final. There is no other remedy for the person convicted except application for retrial or an extraordinary appeal filed in the supreme court by the procurator general, in accordance with the provisions of the Code of Criminal Procedure.

After a judgment is final, an application for a retrial may be made in the interest of the person sentenced only if the original judgment was based on evidence which can be proved to have been forced or altered or where incontrovertible evidence is discovered to prove that the sentenced person is innocent.

671 695 Article 434 of the Code of Criminal Procedure provides that if it is discovered after the judgment becomes final that the con-

671 duct of the trial was contrary to law, the
695 procurator of the supreme court may file an extraordinary appeal in the supreme court.

674 It should be noted that the number of criminal cases is on the increase. The number reported in 1952-53 far exceeded the number reported under Japanese rule. One writer attributed the increase in the number of criminal cases on Formosa to the mitigation of punishments under the Chinese law and the relaxation of police control.[7] Of course the enormous growth of population is an important contributory cause of the increase in the number of violations. It is generally conceded that the Chinese Criminal Code is impartially administered and leniently interpreted.

697 There are eleven penitentiaries and twelve detention houses in Formosa. Juveniles are confined in the penitentiary at Hsinchu. There have been attempts to improve the facilities and the administration of the prisons in recent years. Wardens appointed to the prison must have had a high school education. The inmates are required to attend citizenship classes for two hours a day. In the workshops they are taught a variety of trades which will fit them for work outside the prison. Twenty-five per cent of the proceeds derived from their work is paid to the prisoners in exchange for their labor. The prisoners have opportunity for daily exercise and undergo physical examinations at regular intervals. Each prison has

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7. Lih-wu Han, Taiwan Today, Taipei, 1952, p. 47.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table faces p. 408.)

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Violations of Police Regulations in Taiwan Province */
(1952 - 1953)

	1952				1953			
	Number of Cases	Male	Female	Total	Number of Cases	Male	Female	Total
Disorderly Conduct	27,556	30,678	6,541	37,12[illegible]	28,854	27,990	6,884	29,874
Traffic Violations	14,223	16,222	1,738	17,960	16,350	17,127	2,168	19,295
Moral Turpitude	21,323	38,068	9,431	47,499	28,095	45,283	12,589	57,872
Offenses Against the Exercise of Public Functions	1,204	1,228	129	1,357	[illegible]	1,386	154	1,460
Violation of Health Regulations	6,330	7,011	1,069	8,080	8,[illegible]	8,271	1,396	9,667
Destruction of Evidence, False Evidence and Malicious Accusation	287	267	52	319	189	200	31	231
Offenses Against Personal Liberty and Property	7,785	8,294	1,990	10,284	10,510	10,809	2,444	13,253
Total	78,698	103,774	20,860	122,63[illegible]	94,639	110,986	25,666	136,652

*/ Yearbook of the Republic of China, 1953, 1954.

(facing p. 408)

45: Stanford U. S-4, 5 1956 AD1 Formosa AD

(Table faces p. 405.)

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Criminal Cases in Taiwan Province */
(1952 - 1953)

Classification of Cases	1952 Number of Cases	1952 Cases Settled	1952 Percentage Settled	1953 Number of Cases	1953 Cases Settled	1953 Percentage Settled
Purse-snatching, pick-pocketing, etc.	101	71	70%	108	98	87%
Murder and Homicide	187	148	92%	174	171	98%
Theft	7,066	4,695	67%	11,414	8,784	77%
Counterfeiting Currency	21	21	100%	8	8	100%
Assault and Battery	391	384	98%	857	806	94%
Fraud, Breaches of Promise and Usury	648	644	99%	1,233	1,178	95%
Misappropriation	174	174	100%	394	383	97%
Offenses Against the Institutions of Marriage and the Family	34	33	97%	133	127	95%
Offenses Against Morals	81	81	100%	174	169	97%
Gambling	12	12	100%	8	8	100%
Sale, Transport, Use of Opium	84	84	100%	238	238	100%
Intimidation and Kidnapping	32	32	100%	54	52	96%
Receiving Stolen Property	132	132	100%	188	188	100%
Bribery, Malfeasance in Office	71	71	100%	182	180	99%
Offenses Against the Exercise of Public Functions	12	12	100%	38	37	97%
Counterfeiting of Valuable Securities	5	5	100%	9	8	90%
Forgery	95	95	100%	135	135	100%
Malicious Accusation	13	12	92%	33	32	97%
Offenses Against Public Safety	117	59	50%	219	137	64%
Mischief	23	23	100%	50	49	98%
Suicide Attempts				870	870	100%
Car Accidents				1,270	1,240	97%
Miscellaneous	958	912	98%	1,339	1,005	75%
Total	10,340	7,838	76%	18,228	15,009	78.4%

*/ Chung-hua Min-kuo Nien-chien [Yearbook of the Republic of China], 1952, p. 695; 1955, p. 750.

[facing p. 405]

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a/ Yearbook of the Republic of China, 1953, 1954.

(facing p. 408)

4:Grajdanzev--80-82 S-4 (no date) 1942 Formosans-1- 3
116, 427, 466, 675, 177.42 Japan
636.42

"The tenancy contract in Taiwan, as it was a few years ago, had the following features: (1) (1) It was a short-term contract—for the most part for one year only and cases were

1. For a more detailed description see K. Takahashi Gendai Taiwan Keizairon, pp. 293-303.

frequent where the landlords broke the contract before its expiry. It is possible for them to do this because the tenants are more numerous, there is stiff competition among them, and they cling to the plots which they are able to secure. There have [81] been cases when the term was six years and even ten years (opening of new land or reclaimed land), but these were exceptional. (2) It was almost exclusively an oral contract and in case of conflict the landlords were more successful than the tenants in securing their own interpretation of it. (3) The landlord usually received security from the tenant in money or in kind, amounting to from forty to sixty per cent of the rent, deposited with the owner at the time the contract is made. No interest is paid on this amount. This deposit represents a heavy additional burden on the tenants, who, as a rule, have no cash and are compelled to borrow the money at high interest rates while they themselves do not receive any interest on it. In many cases this results in sub-tenancy—a rich farmer renting land and sub-letting it to poor tenants.

Through the efforts of the government these general features were somewhat changed. The government policy was as follows: (I) the term of tenancy should be five to six years or more; (2) if, after the expiry of the contract, the contracting parties do not denounce the contract within six months, it must be regarded as automatically renewed; (3) in time of crop failure the rent is to be reduced by mutual agreement; (4) in case of arrears (without a justifiable reason) or misuse of soil, the contract may be voided by the landowner; (5) no transfer of land by the tenant can be made without agreement and approval by the landowner; (6) changes in the form of the plot and other changes influencing the productive capacity of the land must be approved by the landowner; (7) if improvements are approved by the landowner, he must bear the expenses of the improvements fully or in part; (8) no contract may be declared void before expiry without sufficient reasons; otherwise compensation must be paid; (9) disputes are to be settled by special arbitration committees.

It is unwise to attach too much importance to these government efforts, however good their purpose may be. True, in 1935 sixty-eight per cent of all area leased was leased under written contracts, while in 1938-39 the percentage had risen to 76.6 per cent. Arbitration committees are established, as well [82] as societies of landowners and tenants, the purpose of which is to bring social peace to the relations between the landowners and tenants as well as to effect a change in the ideology of the farmers. Money

grants from the government-general are made to aid these societies and officials appointed to direct them. But all this does not touch the core of the problem. The problem of tenancy is not to secure the tenant in his lease for one year, or how to distribute the costs of improvements, as this touches chiefly the misuse of power by the landlord. With a secure contract for three or five years, the tenant must still pay the rent, and he has no assurance that the lease will be extended after expiry of the contract. The policy states that in case of crop failure the rent should be reduced by mutual agreement, but in Taiwan it used to be customary for the farmer to pay the rent whether the crop failed or not, and there is no guarantee that this custom will not form the basis of the 'mutual agreement'. In this agreement there is no equality between the opposing parties. The same should be said about the arbitration committees--everything depends upon the degree of influence of the landowners in these committees."

Annex "A," Subparagraph 2d,
Political Background

LAW AND ORDER

I. CRIMINAL CODES AND PROCEDURES

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651 charge upon all non-exempt import cargo. The proceeds of this tax are forwarded to the provincial treasury. Articles imported for military use, for relief, or for educational or research purposes are exempted from import duty. And customs duties are not levied on the personal effects and supplies imported for use by diplomatic officials and personnel of the administrative agencies of American aid and military missions to Formosa.

The collection of customs duty is the single largest source of income for the central government. In 1954, customs duties amounted to NT $611,022,015[2] There are two customs districts in Formosa - Taipei and Tainan. Sungshan airport is under the administration of the Taipei customs district.

687 Because of the government control on 1139 foreign trade, which forbids the importation of luxury items, smuggling is rampant. In 1954, fines amounting to NT$4,683,485 were collected.

651 The salt tax was once the most important tax on the China Mainland. In Formosa,

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2. The official exchange of Formosa currency in 1954 was NT$18.78 to US$1 and the market rate averaged NT$27.50 to US$1.

C. The Judicial Yuan

692 642 The functions of the Judicial Yuan according to the Constitution[18] are: (a) the interpretation of the Constitution and other laws and decrees; (b) the adjudication of administrative suits and disciplinary punishment of public functionaries. In other countries the last-named functions -- jurisdiction over administrative cases and disciplinary actions against government employees -- normally fall within the authority of the administration.

The President and Vice-President of the Judicial Yuan are nominated and appointed by the President of the Republic with the consent of the Control Yuan. They with a number of Grand Justices form the Council of Grand Justices.[19] The Council of Grand Justices is charged with the power and responsibility of interpreting the Constitution. It is also concerned with the interpretation of laws and ordinances with a view to adjusting

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18. Constitution 1947, Articles 77 and 78.

19. According to Article 3 of the Organic Law of the Judicial Yuan, the Council of Grand Justice is to be composed of seventeen judges of high standing. Twelve of them were appointed in 1948 but only two accompanied the National Government to Formosa. Seven new justices were appointed in 1952.

692 differences and bringing about their uniform
642 application. The tenure of office of a Grand Justice is nine years.

692 Under the Judicial Yuan there are the Supreme Court, the Administrative Court, and the Committee on the Discipline of Public Functionaries. The judicial system in China is based upon the principle of three trials in three grades of courts -- the District Court, the High Court, and the Supreme Court. The Supreme Court is the highest tribunal of the land. It consists of a number of civil and criminal divisions,[20] each of which is formed by a presiding judge and four associate judges. The judges are appointed for life, and they are above party affiliations.[21]

The Administrative Court is concerned with legal procedings against government agencies. Any individual who is convined that his proper rights or interests have been injured by an unlawful decision or act of a government agency, and who has failed to receive satisfactory redress from the superior

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20. Before the removal to Formosa it had thirteen civil divisions and fourteen criminal divisions. At present it maintains three civil divisions and two criminal divisions.

21. Constitution, 1947, Articles 80 and 81.

692 authorities on first and second complaints, may bring the matter to the Administrative Court. The Court, like the Supreme Court, is headed by a President, and consists of several divisions.[22] Each division has a presiding judge and four associate judges. In 1954 there were ninety-six administrative suits, out of which seventy-eight cases were settled. Many of the suits brought before the Administrative Court in that year arose from the implementation of Land Reform initiated in 1953. Others were related to wine and tobacco monopolies, requisition of dwellings for public use, and the consfication of smuggled goods by the Customs. In all cases the decision was against the government.

The Committee on the Discipline of Public Functionaries is composed of a chairman and nine to fifteen members, whose duty is to mete out proper punishment to government officials who have been either impeached by the Control Yuan or referred to the Committee by the competent superior authority. The disciplinary punishment may be suspension or dismissal from office, demotion, reduction of salary, or a warning. Where a criminal law is involved, the case is turned over to a criminal

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22. Two to three divisions, Organic Law of Administrative Court 1948, Article 3.

692 court. In 1954 there were fifty-one cases involving seventy-two officials of different ranks brought before the committee.

The District Court and the High Court are under the direct supervision of the Ministry of Justice of the Executive Yuan. The judges and procurators are appointed by the Minister of Justice. In principle, each hsien should have a District Court and each province a High Court. In practice, several hsien may share a District Court if their area is small. In provinces, where the area is extensive and the population large, there may be one or more branches of the High Court. Both the District Court and the High Court are under the direction of a President, and the judges are divided into civil and criminal divisions. The district court handles all civil and criminal cases of the first instances; the High Court, both hears appeals against decisions of the District Courts and takes under advisement cases of the first instance of insurrection, treason, conspiracy with a foreign power against the Government, and actions detrimental to the foreign relations of the country.[23] The Supreme Court, which is a part of the Judicial Yuan, is the court of last resort.

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23. Organic Law Governing the Law Courts, 1932, Article 17.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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•692 On Formosa a High Court sits in Taipei, a branch High Court in Tainan, and twelve District Courts in the cities of Taipei, Taichung, Tainan, Hsinchu, Chiayi, Kaohsiung, Pingtung, Taitung, Penghu, Yilan, Hualien, and Keelung. There is a Juvenile Court in Hsinchu.

45:Stanford U. S-4, 5 1956 ADI Formosa
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COURT CASES IN 1954*

	Pending and New Cases	Settled in 1954	Pending at End of Year	Pendency#
District Courts				
Civil	81,578	77,111	4,476	50 1/2 days
Criminal	48,555	46,947	1,578	29 1/2 days
High Courts				
Civil	7,649	6,341	1,308	67 1/2 days
Criminal	11,089	9,674	1,415	52 days

* Source: Report of the Ministry of Justice to the Editors' Committee of China Handbook 1955-56, which is going to press.

Average number of days required for settlement.

693 is not less than one year of imprisonment or
695 in cases where a higher court takes jurisdiction as a court of first trial. The public defender system had been in use for some years on the Mainland; and was introduced in Formosa on June 1, 1950.

695 D. Trial and Appeal. Most criminal cases may
692 go through as many as three courts -- the district court, the high court, and the supreme court. The district court handles the first trial of all criminal cases except those for which special provisions have been made by law. The organic law governing courts provides that the high court be given jurisdiction over the first trial for offenses against the internal and external security of the state and offenses against the property or persons of a friendly foreign state.[5]

695 In cases involving the trivial offenses enumerated in Article 61 of the Criminal Code, the court of first trial may, upon application by the procurator, order the sentencing of the offender without observing the usual trial procedure, if the accused has confessed during the preliminary investigation or other evidence sufficient for conviction has been offered the court. Such a sentence is limited to a fine, detention, or not more than six months' imprisonment.[6]

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5. Article 10, Organic Laws Governing Court, 1932, and Article 4, Code of Criminal Procedure, 1935.

6. Article 442, Code of Criminal Procedure, 1935.

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671 for a lesser period, be granted conditional release upon application of the prison authorities to the highest judicial administration. The sphere of conditional release has been enlarged by a series of measures controlling convicts, which took effect on August 23, 1954.

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693 694 B. Private Prosecution. A private person may introduce criminal prosecution. The responsibility for the instigation of prosecution rests upon the aggrieved individual; he is granted the opportunity to avail himself of possible redress in cases where the procurator has not brought charges. Private prosecution may not begin if the procurator has already completed a preliminary investigation in the same case. However, if the procurator knows, prior to the completion of his preliminary investigation, that private prosecution has been instituted, he shall immediately cease investigations and send the case to the court, since two complaints cannot be filed in a single case.

693 695 The court shall, upon receipt of a private petition for prosecution, immediately send a copy of the complaint to the accused and notify the procurator of the date set for hearing of the private prosecution; whereupon the procurator may appear in court and express his opinion. The judge will then conduct the trial in accordance with the provisions of the Procedural Code.[4]

C. Advocate and Public Defender. Upon the institution of charges against an individual, the accused may employ one to three advocates. If no counsel has been employed, the presiding judge shall assign a public defender for the accused in cases where the minimum punishment

4. Articles 320, 340, Code of Criminal Procedure, 1935.

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625 blown up and water works wrecked if the Com-
648 munists had had their way. The lives of responsible personages would have been in constant danger, too. Then, the risk of internal trouble during a possible invasion from outside would have been very grave."[17] It appears that, in order to save Formosa from Communist domination, rigid government control may not be entirely indefensible.

722 During the past few years, as conditions
698 on the island grew more stable, the Nationalist
693 Government has been taking measures to guard against unwarranted arrest and imprisonment. In a decree issued on January 29, 1951, the Executive Yuan prescribed that public defenders should be provided in the military court to defend persons accused of violating martial law in cases where the minimum punishment would be not less than five years' imprisonment. A spouse, lineal blood relative, collateral blood relative within third degree, or a statutory agent may be present at the trial and testify on behalf of the accused.

722 Since 1949 Formosa has been subject to
698 martial law. Article 8 provides that the following offenses committed in strategic zones may be tried by the military court: (a) offenses against the internal security of the state, (b) against the external security of the state, (c) against public order, (d) against public safety, (e) forgery, counterfeiting of currency, valuable securities, documents, (f) murder or homicide, (g) restraining personal liberty, (h) snatching, robbery, and piracy, (i) intimidation and kidnapping, and (j) malicious mischief. If provisions

17. Lih-wu Han, op. cit., p. 49.

642 may regulate the distribution of land in the
651 interests of the tiller-owner and tenant-
423 cultivators and may limit the amount of land ownership.[23]

642 Under the Chinese Constitution, any
694 citizen has the right to present petitions to file complaints, or to institute legal proceedings. The Law of Petition was promulgated on December 18, 1954. It provides that a person has the right to voice his opinion concerning the policy of the government on matters of public interest to the representative agency or a competent authority, but the petition must be in written form and must not interfere with the exercise of judicial functions.[24] Any citizen may file a complaint against a wrongful decision on the part of a government body. The prescribed procedure is for the injured party to bring his complaint to a higher government body such as the provincial government, if the case is caused by an administrative act on the part of a hsien or a municipal government.

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23. Ibid., These provisions are inserted in accordance with the equalization of land ownership, one of the basic policies of Dr. Sun Yat-sen.

24. Law of Petition, 1954, Articles 2-6.

642 694 If he is not satisfied with the decision of the provincial government, he may file a further complaint with the proper department of the Central Government. If the charge is against a wrongful decision, the decision on the second complaint by a superior government body will be final. But if the complaint is against an unlawful decision or an illegal execution, the dispute may be referred to the administrative court for final judgment.[25]

642 871 The Chinese Constitution provides that the people shall have the right to receive as well as the obligation to accept public education.[26] The state has the responsibility of providing the necessary educational institutions so that all the people may have a chance to receive elementary education; and the state may compel children of school age to attend school. Articles 159 and 160 of the Constitution specify that all citizens shall have an equal opportunity to receive education and that primary education shall be free of charge. Children from poor families shall be supplied with textbooks at the expense of the government.[27]

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25. Law of Administrative Procedure, 1942, Article 1.

26. Constitution, Article 21.

27. Constitution, Article 160.

693 B. Private Prosecution. A private person
694 may introduce criminal prosecution. The responsibility for the instigation of prosecution rests upon the aggrieved individual; he is granted the opportunity to avail himself of possible redress in cases where the procurator has not brought charges. Private prosecution may not begin if the procurator has already completed a preliminary investigation in the same case. However, if the procurator knows, prior to the completion of his preliminary investigation, that private prosecution has been instituted, he shall immediately cease investigations and send the case to the court, since two complaints cannot be filed in a single case.

693 The court shall, upon receipt of a private
695 petition for prosecution, immediately send a copy of the complaint to the accused and notify the procurator of the date set for hearing of the private prosecution; whereupon the procurator may appear in court and express his opinion. The judge will then conduct the trial in accordance with the provisions of the Procedural Code.[4]

C. Advocate and Public Defender. Upon the institution of charges against an individual, the accused may employ one to three advocates. If no counsel has been employed, the presiding judge shall assign a public defender for the accused in cases where the minimum punishment

4. Articles 320, 340, Code of Criminal Procedure, 1935.

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693 is not less than one year of imprisonment or
695 in cases where a higher court takes jurisdiction as a court of first trial. The public defender system had been in use for some years on the Mainland; and was introduced in Formosa on June 1, 1950.

695 D. Trial and Appeal. Most criminal cases may
692 go through as many as three courts -- the district court, the high court, and the supreme court. The district court handles the first trial of all criminal cases except those for which special provisions have been made by law. The organic law governing courts provides that the high court be given jurisdiction over the first trial for offenses against the internal and external security of the state and offenses against the property or persons of a friendly foreign state.[5]

695 In cases involving the trivial offenses enumerated in Article 61 of the Criminal Code, the court of first trial may, upon application by the procurator, order the sentencing of the offender without observing the usual trial procedure, if the accused has confessed during the preliminary investigation or other evidence sufficient for conviction has been offered the court. Such a sentence is limited to a fine, detention, or not more than six months' imprisonment.[6]

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5. Article 10, Organic Laws Governing Court, 1932, and Article 4, Code of Criminal Procedure, 1935.

6. Article 442, Code of Criminal Procedure, 1935.

695 A party not satisfied with the judgment of the lower court may appeal to a higher court. The procurator, advocate, statutory agent, or spouse of the accused may also appeal on behalf of the accused. And a party not satisfied with the verdict rendered by a high court sitting as court of first or second trial may direct his appeal to the supreme court. But no appeal may be taken from the court of second trial to the supreme court for a third trial in cases involving the trivial offenses specified in Article 61 of the Criminal Code.

E. Retrial and Extraordinary Appeals. When the period for filing an appeal has elapsed, or the judgment has been rendered by the supreme court or high court at the final trial, the judgment is final. There is no other remedy for the person convicted except application for retrial or an extraordinary appeal filed in the supreme court by the procurator general, in accordance with the provisions of the Code of Criminal Procedure.

After a judgment is final, an application for a retrial may be made in the interest of the person sentenced only if the original judgment was based on evidence which can be proved to have been forced or altered or where incontrovertible evidence is discovered to prove that the sentenced person is innocent.

671 695 Article 434 of the Code of Criminal Procedure provides that if it is discovered after the judgment becomes final that the con-

671 duct of the trial was contrary to law, the
695 procurator of the supreme court may file an extraordinary appeal in the supreme court.

674 It should be noted that the number of criminal cases is on the increase. The number reported in 1952-53 far exceeded the number reported under Japanese rule. One writer attributed the increase in the number of criminal cases on Formosa to the mitigation of punishments under the Chinese law and the relaxation of police control.[7] Of course the enormous growth of population is an important contributory cause of the increase in the number of violations. It is generally conceded that the Chinese Criminal Code is impartially administered and leniently interpreted.

697 There are eleven penitentiaries and twelve detention houses in Formosa. Juveniles are confined in the penitentiary at Hsinchu. There have been attempts to improve the facilities and the administration of the prisons in recent years. Wardens appointed to the prison must have had a high school education. The inmates are required to attend citizenship classes for two hours a day. In the workshops they are taught a variety of trades which will fit them for work outside the prison. Twenty-five per cent of the proceeds derived from their work is paid to the prisoners in exchange for their labor. The prisoners have opportunity for daily exercise and undergo physical examinations at regular intervals. Each prison has

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7. Lih-wu Han, Taiwan Today, Taipei, 1952, p. 47.

31: Hofmann--603-604 N-3 (1909) 1912 Formosans
116, 634, 669, 697, 177.63 Japanese
636.63

In the house of the governor, Count Sakuma... I had the opportunity to meet the chief magistrates of the various provinces. Among these there was not one who did not speak either English or German. All of them had been sent to Europe by the government of Formosa to complete their studies there. In every respect, the achievements of the Japanese colonial administration are most impressive, and they become even more so if one takes into consideration the conditions under which the Japanese first took over the administration of the island. In 1895 there was complete anarchy among the Chinese elements of the population. There were organized bands of guerilla soldiers in all the regions that were accessible to foreigners, so that before the administration could proceed to the task of suppressing the Malayans in the mountain regions, [604] it was necessary to break the resistance of the Chinese. I saw some of the leaders of these guerilla bands, who had not been condemmed to capital punishment, in the large reformatory in the capital. There the prisoners were engaged in occupations such as cabinet making, in which they showed a great deal of skill and understanding.

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7. Lih-wu Han, Taiwan Today, Taipei, 1952, p. 47.

617 an infirmary. Efforts have been successful in preventing epidemics and infectious diseases among the prisoners.

697 165 The number of deaths[8] in prisons and detention houses has been progressively reduced during the past five years although the number of inmates has remained more or less constant. The following table attests to the improved conditions in Formosan prisons.

DEATH RATE IN FORMOSAN PRISONS */

At End of Year	Number of Inmates In Prisons	Number of Inmates In Detention Homes	Total No. of Deaths During the Year
1949	2,909	1,691	70
1950	2,619	1,209	23
1951	3,667	2,043	19
1952	2,906	1,954	13
1953	3,021	2,346	8
1954	—	—	—

*/ Yearbook of the Republic of China, 1953, 1954.

II. THE POLICE SYSTEM

625 635 The Ministry of Interior of the Executive Yuan exercises general supervision over the

8. In 1946 there were 863 deaths caused by epidemics in Formosan prisons. The number of deaths in prison in 1947 was 222 and in 1948, 156.

625 blown up and water works wrecked if the Com-
648 munists had had their way. The lives of responsible personages would have been in constant danger, too. Then, the risk of internal trouble during a possible invasion from outside would have been very grave."[17] It appears that, in order to save Formosa from Communist domination, rigid government control may not be entirely indefensible.

722 During the past few years, as conditions
698 on the island grew more stable, the Nationalist
693 Government has been taking measures to guard against unwarranted arrest and imprisonment. In a decree issued on January 29, 1951, the Executive Yuan prescribed that public defenders should be provided in the military court to defend persons accused of violating martial law in cases where the minimum punishment would be not less than five years' imprisonment. A spouse, lineal blood relative, collateral blood relative within third degree, or a statutory agent may be present at the trial and testify on behalf of the accused.

722 Since 1949 Formosa has been subject to
698 martial law. Article 8 provides that the following offenses committed in strategic zones may be tried by the military court: (a) offenses against the internal security of the state, (b) against the external security of the state, (c) against public order, (d) against public safety, (e) forgery, counterfeiting of currency, valuable securities, documents, (f) murder or homicide, (g) restraining personal liberty, (h) snatching, robbery, and piracy, (i) intimidation and kidnapping, and (j) malicious mischief. If provisions

17. Lih-wu Han, op. cit., p. 49.

722 of martial law should be strictly applied, the
698 military court would replace the civil courts of law in Formosa. However, orders issued by the Executive Yuan on June 1, 1952 and reissued on October 14, 1954, restrict the jurisdiction of the military court. The order of October 14, 1954, specifies that military courts have jurisdiction only in those cases involving espionage and insurrection; all other offenses are to be tried in civil court. This order seeks to protect the rights and freedoms of the people of Formosa against infringement by over-zealous, defense-minded militarists."

4:Grajdanzev--28-29 S-4 (no date) 1942 Formosans
116, 168, 609, 701, 177.17 Japan
636.17

"Greater numbers of Japanese in Taiwan are necessary both for military reasons and for the speedy 'japanization' of the islanders. The military considerations advanced by Takahashi [29] are very interesting for they show that, in spite of forty-five years of Japanese domination, there is still a certain anxiety concerning the loyalty among the Japanese rulers of the Chinese. The island is highly militarized and accustomed to martial discipline and yet the Japanese still consider it necessary to strengthen it militarily. But even Takahashi puts greater stress on the 'japanization' of the natives than on the Japanese immigration. After forty-five years of Japanese domination, after their continuous efforts to increase the number of Japanese there and to 'japanize' the natives, the island remains predominantly Chinese in character, the Japanese forming only about five per cent of the total population, and this state of affairs is bound to continue as long as the natural increase of the Chinese remains at its present high level."

31: Hofmann--627 [2] N-3 (1909) 1912 Formosans
116, 701

When we had returned to the valley... we watched a parade of the guards. These men are stationed along the boundary; they are Chinese who have been drilled by Japanese officers and evidently have had an excellent training.

87 is subject to the permission of the educational authorities of the government.

New requirements in the courses offered in all levels of schools -- non-academic labor and military training -- are recent implementations of the educational program. All primary and secondary schools are required to provide vegetable gardens, workshops, implements, tools, machines, etc., in order that students may learn the habit of manual work and productive efforts. Efforts are being made to achieve closer coordination between the school and the community and between vocational schools and factories or farms.

87 Needs of the time, especially in Formosa, clearly indicate the necessity for military pre-
• 701 paredness. The Ministry of Education is of the opinion that educated people should be prepared to serve on the home front if they are not to serve in the front line. Students of all schools above junior middle-school level are required to take military training at school and upon graduation Girls are required to take nursing instead of
87 military training. As of 1954, more than 90 per cent of the schools at junior middle-school level were giving scout training, and there were approximately 8,876 Boy Scouts and 3,084 Girl Scouts[14] in Formosa.

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14. Chung-hsin Ch'en "T'ai-wan-sheng T'ung-tzu-chun Chiao-yu Kai-k'uang," ["Boy Scout Education in Taiwan"] Chiao-yü Yü Wen-hua [Education and Culture Weekly], Vol.6, No.10, pp.9-11.

642
433 For the main cause of inflation is the huge deficit in the national budget, which is strainted by nearly one million men in the armed forces.

701 The upkeep of such a huge military force accounts for the most crucial question raised by political observers: are the Formosan people willingly supporting the military program of the government? Contrary to speculation, the answer is affirmative. Foreign visitors are practically unanimous in stating the lack of interest among the Formosans in the liberation of the Mainland. This is true although such sentiment has not been openly expressed as the result of the rigid government control of all media of public expression. Nevertheless, another facet of the question, the need of a strong military force to defend the island, has never been debated. The farmer in Formosa now owns the land he cultivates, however small the acreage, and enjoys the fruits of his own labor. He certainly does not cherish the propsect of being chained to a collective farm, and laboring under the whip of political cadres. The industrial developments of recent years have provided opportunities for an increasing number of people and given rise to a new business and industrial class. The Formosans are both resourceful and industrious. They will be loath to see their prosperous land overrun by Communism, suffer deprivations similar to those found on the Mainland. It is quite certain that Formosans will resist Communist aggression, and that they will defend the offshore islands too. The best evidence of the unequivocal support of the Formosans to the government is the response of young Formosans

701 to military call. Up to now, 90,000 Formosans have been drafted into the army to replace aging Nationalist veterans.[16]

648 642 It seems clear that the Formosans do not have much sympathy for the Communists, although they realize that there is little prospect of their island becoming really independent. They also realize that, as more and more of them are being absorbed into the government and as the Mainlanders are aging, it is only a matter of time before they will win full control of the island.[17] They may differ with the Government in regard to its policy of liberating the Mainland, but they take comfort in President Chiang's assurance that it would not take place yet for some years. As more and more Formosans are inducted into the armed forces, more changes will take place in the Nationalist overall policy for the island. The principal aspirations of the Formosans at this moment are: more self-government, greater freedom of expression, and greater economic security. Their immediate apprehension is a runaway inflation. They are fearful that the Nationalist Government might plunge the island into bankruptcy, as it did on the Mainland in the years following the war, paving the way for Communist conquest.

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16. Time, op. cit., p. 34. 72,000 young Formosans were drafted from February to July 1955.

17. Manchester Guardian, Vol. 78, No. 13, Sept. 29, 1955, p. 14.

652 National Taiwan Dollar was introduced,[20] replacing the old currency at a ratio of 1:40,000. Fixed at an official exchange rate of four to one United States dollar, the new issue amounted to NT$200,000,000.[21] Authorized by the Nationalist government and handled by the Taiwan Provincial Bank, its 100 per cent reserve was provided by the former out of its Central Bank reserve fund[22] brought over from the mainland.

Implementing the currency reform were a number of deflationary measures. By selling government-owned commodities, confiscated Japanese properties, and bonds, and conducting lotteries, a total of NT$25,740,000 was siphoned from circulation.[23] Between June 1949 when the reform was instituted and October 1950, the note issue, including subsidiary and fiduciary issues, rose 824.95 per cent, while the wholesale commodity index price of Taipeh rose 330.36 per cent.[24]

Since its transfer to Taiwan, the Nationalist government's expenditures have been reduced considerably. On its administrative staff today are but a few 701 thousands of essential personnel. The maintenance of its armed forces is the largest item.[25]

652 655 Nationalist financial requirements are met by the sale of government-owned properties, customs receipts, revenues

[20] See Currency Reform Ordinance of the Taiwan Provincial Government*, June 15, 1949.

[21] *Ibid.* The issue was subsequently increased another NT$50,000,000. The present exchange rate fluctuates around eight Taiwan dollars for one United States dollar.

[22] About US$200,000,000 in August 1948. See *China Handbook 1950*, p. 479.

[23] The figure is based on Bank of Taiwan statistics as of June 1950.

[24] *Taiwan Today*, cited note 11 *supra*, p. 71; also cf. *Taiwan Reconstruction**, cited note 12 *supra*, pp. 63–64.

[25] In his Administrative Report of October 3, 1950, Premier Chen Cheng disclosed that some 150,000 men were discharged during the

[p. 217 (A)]

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD 1

871 *chu-i.*[46] "Nationalist concepts" are to be strengthened by means of the National Language or "Speak Mandarin" movement,[47] by enhancement of civic, history, and geography lessons with "glorious historical events," and by supplementary teaching material relating to Russian aggression committed on China. The program of reconstruction calls for specified training to meet the needs of local self-government, economic development, and military requirements. The "defeat Communism" projects include anti-infiltration organizations, anti-Communist propaganada, and youth service groups. The extension program deals with the mobile library, audio-visual demonstration, and other measures of adult education. Just how far these programs have been carried out and how the students react to them cannot be ascertained at this moment, for lack of sufficient data.

Defense Policies

701 The security forces of Taiwan are largely composed of army, navy, and air units transferred from mainland
702 China. They are augmented by Taiwan youths inducted through a system of selective service and the provincial police. For lack of conclusive data, the discussion will be confined to local conscription and police administration.

Selective service in Taiwan is administered in accordance with a number of national laws[48] and provincial regula-

[46] For a brief summary of *San-min chu-i*, see *China Handbook 1950*, pp. 238–39; Paul E. Eckel, *The Far East Since 1500* (New York, 1950), pp. 477–80; Paul H. Clyde, *The Far East* (New York, 1948), pp. 512–17. For complete text, see F. W. Price, *San-Min-Chi-I*, Shanghai, 1927.

[47] *Taiwan Reconstruction**, Vol. 1, pp. 143–46.

[48] National laws include: (1) Universal Military Service Ordinance of the Republic of China*, Oct. 10, 1946; see *National Govern-*

[P.221(A)]

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD1
702

tions.[49] In drafting the local youths, certain indigenous wishes have been taken into account. Among them are: (1) Selectees shall be used to establish new army units. Unless absolutely necessary, they shall not be employed to fill the deficient ranks in the National armed forces. (2) The initial number to be called shall not exceed 35,000 for the year 1950 and shall be confined to seventeen- and eighteen-year-olds. (3) Inductees shall be released from service in accordance with the National Universal Military Service Ordinance.[50] (4) Noncommissioned officers and officers of field grades shall be selected from among natives of Taiwan to the fullest extent possible. (5) Effective preferential treatment of inductees' families shall be enforced.[51]

701

A review of military service administration indicates a conformity to these conditions, particularly with reference to inductees' families. They are given a monthly allowance equivalent to 35 per cent of an inductee's pay; six piculs of rice per annum; free education in

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ment Gazette, No. 2624; (2) Regulations of Preferential Treatment of Servicemen's Families*, Sept. 15, 1941; subsequently augmented by a series of detailed regulations governing family allowances, grain allowances, and so forth.

[49] Provincial regulations, promulgated in 1949 and since, govern registration, physical examination, preferential treatment of the serviceman's family in allowances, grain allocations, and priority in leasing public lands for cultivation, duration and rotation of service, procedure of induction through lot-drawing, selectees' reception centers, and so forth.

[50] The Ordinance* provides service periods ranging from eighteen months to three years varying with different branches of the armed forces.

[51] For a general description of military conscription, see *Taiwan Reconstruction*, cited note 12 *supra*, Vol. 1, pp. 12–18. For an official account of military conscription, see Taiwan Provincial Government, *A General Description of Military Conscription*, Taipeh, 1949.

p. 221 (B)

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD1

701 government schools; free medical clinic service with 50 per cent discount on surgery; retention of vacated jobs; priority in leasing public lands for cultivation; and priority in loans for co-operative enterprises. A major part of expenditures for this program is borne by provincial, municipal, and county government.[52]

Police System

625 The police administration of Taiwan follows a centralized system. The province is divided into a number of police districts and patrolled by a police force commanded by the Department of Police of the Provincial Government. Its jurisdiction also extends to harbor and railroad patrol. The exact size of the police force is not known.[53]

Nationalist policies have been directed mainly toward the improvement of the service. The over-all emphasis on security, centrally administered, has not been changed. Briefly, the average educational qualifications of the officers of the police have been raised. Of 3,109 officers, 72 per cent are graduates of colleges or technical or military schools of college standing. Native Taiwanese in the service are being promoted. Salaries and in-service training are being stepped up. A police school, managed by the national authorities and financed by the provincial government, has been in operation since 1948.[54] In addition, since 1947 an "economic police" has been engaged in detection of currency forgeries, underground financial operations and black-marketing, bootlegging of liquor,

[52] *Taiwan Reconstruction*, Vol. 1, p. 15.

[53] Department of Police. *Police and Public Safety*. Taipeh. 1949. The Department of Police estimated a police force of 13,000 under the Japanese, but did not disclose the Nationalist figure.

[54] For data in this paragraph, see *Taiwan Reconstruction*, Vol. 2, pp. 331–44.

[P. 222 (A)]

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD 1

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p.221 (B)

4:Grajdanzev--120-121 S-4 (no date) 1942 Formosans-1-3
116, 439, 505, 705

"The products of Taiwan can be brought to Japan only by sea: it was pointed out above that air freight-transport is insignificant because it is too expensive. As will be shown in the next chapter, the external trade of Taiwan is chiefly with Japan. The following table gives information on the shipping line connecting Taiwan with Japan and the continent.

This table shows that coastal shipping in Taiwan is not developed. The only line of importance is Keelung--Karenko, which is a necessity because the eastern railroad is not connected with the railroad network of the island, freight being transported exclusively by ships. Information concerning the lines connecting Taiwan with Japan shows how close are the commercial relations between the two countries,.... Lines connecting Taiwan with Manchuria direct and via Korea (Takao--Seishin) are of recent origin, while it will be observed that there are many more lines connecting Taiwan with China and with Southeastern Asia than is commensurate with the trade of Taiwan with these regions. The lines connecting the island with China probably serve the army and organizations connected with it, for Taiwan is the supply base for the armies now operating in South China.

4:Grajdanzev--120-121 S-4 (no date) 1942 Formosans-2
116, 439, 505, 705

Taiwan's Shipping Lines in 1939

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Keelung--Kobe	6	84	8,000 tons or more
Takao--Tokyo	6	90	4,000 "
Takao--Tokyo*	2	24	2,500 "
Takao--Seishin (Korea)	2	12	2,000 "
Takao--Jinsen (Chemulpo) Korea	2	24	2,000 "
Takao--Dairen (Kwantung, Manch..)	2	46	4,000 "
Takao--Tientsin	2	24	2,000 "
Takao--Shanghai	2	36	2,000 "
Keelung--Amoy	1	36	1,500 "
Keelung--Hongkong	2	48	1,500 "
Takao--Canton	1	24	1,500 "
Keelung--Java	2	12	3,000 "
Keelung--Philippines	3	24	3,000 "

4:Grajdanzev--120-121 S-4 (no date) 1942 Formosans-3
116, 439, 505, 705

Taiwan's Shipping Lines in 1939 [Cont.]

Line	Number of vessels plying	Number of voyages (minimum per year)	Tonnage of vessels used (minimum)
Takao--Aparri (Philippines) since 1938	1	30	3,000 tons or more
Calls of Southern lines	2	24	5,000 "
Keelung--Karenko (Taiwan)	2	300	2,500 "
Coastal line, East of Taiwan *	2	70	700 "
Takao--the Pescadores	1	156	700 "
Shinko--Koto†	1	60	50 "
Calls of European lines (Tokyo--London)	8	24	8,000 "

* Used for 'special purposes of the Army'

† Islands to the southeast of Taiwan, a part of the government-general. [Botel Tobago--analyst]"

4:Grajdanzev--122 S-4 (no date) 1942 Formosans
116, 504, 712

"Anpin, the port of Tainan, and the canal connecting it with Tainan were to be finished in March 1940 at a cost of ¥778,000. All this does not include the considerable expenditures on naval construction in Taiwan. There are three large fortified zones on Taiwan and the Pescadores, and entrance to these is prohibited."

Kaohsiung

504 712 [439] Kaohsiung is the second largest city and is known for its harbor and large-scale industries. It has a population of 300,000. Because of its warm and rather dry climate, this port handles a major portion of the island's sugar, salt, and cement exports. The naval base of Tsoying is located in the city and the military fort, Fengshan, another important military base, is about six miles north of the city limits.

Makung

712 633 Makung, located in the west of the main island of the Pescadores, is an important naval base and the seat of the Penghu hsien government. The fact that this port lies in the Formosa Strait and between the China Mainland and Taiwan gives it strategic importance.

15: U.S. Navy--27 [12] (no date) 1944 Formosans
116, 177, 714

"Young men and boys who have been in Japanese schools wear the uniform which is required of all students and officials, and which gives them a military air. The hair is cropped close in military fashion."

7: Joest--61 [7] E-5 (no date) 1882 Formosans
116, 175, 721

Often several tribes form an alliance against a common enemy, especially against the Chinese.

These feuds often result in bloody battles. In 1874-75 the Chinese sent an expedition of 9,000 men of which 2,000 were killed; many of the victims, however, died from the effects of the climate.

48: Chen E-4 (no date) 1955 ADI Formosa ADI

corrected, the standardized death rate of the Japanese in Taiwan was 13.34 per 1,000, still far lower than the rate of 20.27 per 1,000 for their brothers in Japan proper[5]. The rate of infant mortality of the Japanese in Taiwan was also comparable to that of most advanced western countries. From this we can see that Japanese in Taiwan were under tremendously favorable circumstances. Their excessive benefits were enjoyed only at the expense of the land in which they lived.

Social change in Taiwan after the restoration in 1945 will help us to understand the character of colonial type of change. Under Japanese rule, manufacturing industry had attained a fair development, but it produced mostly processed agricultural goods or semi-manufactured goods, and finished consumer's goods were mostly imported from Japan. Fertilizer and textiles were two main import items. If the production of 1941 is taken as base, after the restoration, the production of textiles increased ten times and fertilizer increased five times by 1953 (7: p. 26). This is a sign that the economy of Taiwan has outstripped its colonial and dependent character and has become an autonomous system. In respect to education, the enrollment of Taiwanese school age children in primary school had attained 80% by the later years of Japanese occupation, but the secondary and higher education were very poor. After the restoration, if we take the figure of 1937 as a base and compare it with 1953, the growth of the number of students was as follows. Primary school: more than doubled; vocational and normal school: more than three times; middle school: six and an half times; college and junior college: more than eight times; university: more then twenty one times (7: p. 302). In order to rectify the defects of the colonial era, higher education was especially promoted.

The Japanese are no exception to the rule that each nation struggles for its own benefit. Now that the colonial era is at an end, it is our task to analyze the elements of social change in that era. Some useful references for planning of further social development may be drawn from our analysis.

III. SOCIAL CHANGE IN TAIWAN

Some aspects of social change which relate directly to population change, will be discussed in the following section.

7. *Political Background*

It is self-evident that population growth is deeply influenced by peace and war. The Japanese occupation of Taiwan in 1895 was met with a series of severe revolts. Between 1895 and 1901, the city of Taipei, the capital, was raided twice, the city of Taichung was also raided twice. Other military posts, local governmental offices and posts of military police were raided more than fifty times. A bigger uprising was suppressed in 1902, and after that several years passed in comparative tranquility. An insurrection broke out in 1907, and there were seven revolts between 1907 and 1915. During this period there were frequent uprisings against economic exploitation, as when

Note 5: Tachi, M.: Lecture on Population Problems, Tokio, 1943. p. 201.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

[121] 669 people were forced to sell their land cheaply to sugar corporations. The influence of the revolution lead by Dr. Sun Yat-sen on the mainland was also felt. After 1916, the uprisings were suppressed by a forceful police system. Since 1921 the revolts of the aborigines have been largely mitigated.[5] After the 1920's peace was generally preserved in Taiwan, and the resistance of the people changed gradually from revolt by force to organized political and social movements.

000 Peoples' attitudes are much influenced by peace and war. Disturbances do not give the people the needed security of life and property. They must keep a cautious and watchful attitude at all times. It is impossible to invest the surplus of their production for the extension of their business. They have to exchange the surplus of production for gold and silver, and bury it under the ground for safety. Direct and immediate self-sustainance was their main daily concern, and the idea of future development was unfamiliar to them. This society is approximataly the same as the "militaristic type of society" defined by Herbert Spencer, and no development can be expected from it. In peace time people need not spend their time and energy defending themselves against thieves and bandits. They can concentrate their strength on their work. They can extend their business and gradually plan for the future. Again, we may use Spencer's definition and classify this state as an "industrial type of society". Once 178 established, its development will be accelerated. In Taiwan, after peace and order were established by the colonial government police system, production was extended, 648 and the population gradually increased.

The various kinds of social change in Taiwan were basically influenced by the colonial policy of Japan. Before World War I the policy was typically colonial. After the war, the spirit of democracy permeated the whole world. In Japan, serious social problems broke out. Democratic and Socialistic movements likewise became widespread. Social movement of the modern type among students and young people broke out in China at about the same time. Under the influence of both China and Japan, political, social, and cultural movements started in Taiwan for the first time around 1920. At first the colonial government tried to suppress them by force, but the current was too strong and the government had to change its policy somewhat. From around 1920, the policy of assimilation was adopted, and there were some improvements in administration. Though the improvement was limited in character, it had a fairly significant effect on Taiwan, and its results were reflected in population data. From [161] 1926 on the system of modern Taiwan was generally molded, and after that date population growth was speeded up.

Japan started her invasion of Manchuria in 1931, intruded in northern China in 1937, and then struck Pearl Harbor in 1941. As the war for expansion was extended, Taiwan was considered a strategic base, and the colonial policy had to change again.

Note 6: Yanaihara, T.: Taiwan under Imperialism. 1929, Tokio, pp. 241-242. Shiomi, T.: "Police System and Economy of Taiwan under Japanese Rule". Quarterly of the Bank of Taiwan. Vol. 5, No. 4, 1953, Taipei, pp. 259-261.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

CHAPTER VI

Public Health and the Risks of Death

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In the preceding pages, we have given attention to various features of intercourse between Taiwanese and Japanese in Taiwan. Most of the evidence has been in agreement on one point—the policies of Japanese as rulers of the island failed to make any substantial difference in the social structure of its people. The more it seemed to change in some particular, the more it turned out to be essentially the same thing. As a matter of official design many innovations were concentrated in the hands of a favored few. Even when it came to implementing their aims, Japanese found ways to meet the population on its own terms. Much of their success in colonial administration was due to the ability to make the social system serve their purposes without changing its form.

The most significant exception was their effort on behalf of the health of the inhabitants. Japanese have never received full credit for their achievement in this realm, either on the part of the Taiwanese (who resented the intrusions that it involved in their lives) or from Western students of population and public health (who mostly ignored or belittled it). The "benefits" of rationalizing Taiwanese agriculture may be a matter of dispute, for it enormously enriched a few Japanese at the same time that it broadened standards of consumption in the population. The motives of Japanese in introducing to Taiwan some of the advantages of scientific discovery from the outside world may likewise be suspect, for they managed to keep control over most of the fruits of improvement. But there is no doubt that in the field of public health Japanese rule added many years to the expected lifetime of Taiwanese. This, in an environment of opinion that looks with approval upon any postponement of death, deserves to be given adequate attention.

Early Health Conditions in Taiwan

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166

Prior to 1895, Taiwan was renowned as an unhealthful place to live. It presented special hazards to survival in addition to those which its people had learned to accept in South China. Unusual efforts had been called forth in expanding settlement into the relatively empty area, and these entailed unusual risks of death. Early Chinese migrants to Taiwan had to attend to clearing new lands,

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

721 165 and to contend with many types of hardship not found on the mainland. As they pushed toward the island's foothills, they also suffered the consequences of many bloody incidents of violence that they provoked among aboriginal tribesmen.

164 Even in the lowlands, where activities were comparatively settled and routine, life itself was a very uncertain thing. From their environment people were subjected to attack by several kinds of fatal sickness. Through certain traditional practices they unwittingly exposed themselves to many others. The semi-tropical climate of Taiwan favored the spread of a multitude of disease-producing agents. Accustomed methods of cultivating the land—especially those having to do with the conservation of human wastes as fertilizer—encouraged the transmission of these organisms to humans.[1]

Through conditions such as these, the population harbored many body parasites and other sources of infection. As a result, many people passed their lives chronically enfeebled, and others remained constantly exposed to the onset of illness. Certain types of disease often spread over the island, restrained only by the isolation of many localities and the difficulty of travel. From time to time, some would grow to spectacular epidemics in which thousands perished. Disease even proved to be one of the best defenses that Taiwan had against attack by the troops of Western powers, and delayed the Japanese in taking control of the island.

Plague was the foremost among these epidemic diseases.[2] Taiwan was repeatedly swept by attacks of this illness, with heavy fatalities. An uncontrolled traffic of shipping from the mainland and from elsewhere in Asia, much of it illicit, made it easy to introduce infected rats and persons. Conditions of knowledge and sanitation in Taiwan were wholly inadequate to cope with the problem.[3]

Cholera was the second most important disease that occurred in epidemic proportions. Lacking knowledge or facilities to control the spread of cholera, Taiwanese sometimes suffered the full course of epidemics throughout a whole season without being able to take counter-measures.[4] Cholera also was well known and feared in the

[1] For an able popular account of some of the connections between custom and the "food cycle" that propagates these organisms, see Winfield, G. F. (1948), p. 112 ff.

[2] See Hsü Tze-wei (1936), p. 444.

[3] For some of the futile steps adopted against plague by the people, see Campbell, W. (1915), p. 77.

[4] Drinking water was usually taken from the rivers or from shallow wells, making them easily subject to pollution. See Takekoshi, Y. (1907), p. 285.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

F 175 648 ists brought a change in regime to Taiwan. This is known as the "Restoration." At the outset the Taiwanese people welcomed the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been killed in the war in Southeast Asia. The other villagers from Hsin Hsing who had surrendered or been taken as prisoners while working in Japanese labor groups were returned to Taiwan in ships. The return of these men to the land was followed by a general population increase, and in the Hsin Hsing area this quickly aggravated the problem of land scarcity; tenancy became a greater problem than ever before. Families could neither buy nor rent enough land to support themselves adequately, and, in addition, the war period had brought about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

F 175 648 722 727 161 423 464 [178] [462]

Tn 175 423 [648] [241] [434] Tn [161] After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

Tn 197

LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

4:Grajdanzev--144-146 S-4 (no date) 1942 Formosans-1-3
116, 439, 656, 722, 177.43 Japan
636.43

"These tables [pages 143-144 in category 116--analyst] are of some value beyond the topic of immediate interest. Elaborate theories of international trade have been constructed, the purpose of which is to explain the movement of international trade as distinct from internal trade, but these theories pay little or no attention to factors of political control which are so often of paramount importance in this sphere. Before the occupation of Taiwan, Japan occupied a very modest [145] place in the trade of the island and even after the conquest, her share was at first small; in the period 1896-1900 imports from Japan made up on the average only 27 percent of the total and exports to Japan, only 19.6 percent. It is true that these figures are rather too low because of the absence of data on Japan's trade in 1896, but if these data were available, they would probably increase Japan's share by only 4 or 5 percent. The fact is that even after the occupation of the island, and in spite of the presence of large detachments of troops and swarms of Japanese officials and adventurers, trade continued for some time to flow chiefly in the old channels. However, this situation was soon changed. In 1926-1930 exports to Japan amounted to 85.5 percent of total exports and in 1937 reached a maximum of 93.2 percent, a figure probably unsurpassed in the history of other colonial countries. The same development was achieved in imports. In 1926-30 Japan's share was 68.3 percent, in 1931-35 it was 83.4, and in 1938 it reached a maximum of 89.4. The slight fall

in Japan's share in 1938 and 1939 is apparent rather than real, for in these years Kwantung, Manchoukuo, and maritime China became to all intents and purposes Japanese colonies and for the Japanese in Taiwan it makes no difference from the point of view of profits and foreign exchange whether they trade with Japan or with these regions. In 1939 the share of this 'yen bloc area' of Taiwan's trade was 97.8 percent of her exports and 96.5 percent of her imports. For comparison let us look at the share of China. In 1896-1900 her share in Taiwan exports averaged 63.1 percent, in 1926-30, only 7.0, in 1936, 2.0, and in 1937, 1.3. The same picture appears in the case of imports, for which the corresponding percentages are 37.4, 13.8, 2.9, and 1.9. China is near, --just across the Taiwan Strait, her population is vast her cities are growing, her products are held in high esteem by the Chinese population of the island, she is in great need of Taiwan's products, and yet the trade between these two regions continued to fall catastrophically, But in 1937-1938 the most important points on the Chinese coast were occupied by the Japanese. By 1939 the area under the latter's domination has increased further, and a surprising change is occuring [sic]--the trade of Taiwan with China now shows a remarkable increase. [146]In 1937 exports from Taiwan to China were valued at 5,575,000 yen, but by 1939 they had risen to 33,840,000. Imports from China in 1938 were valued at 1,954,000 yen, in 1939, at 4,253,000. Although China experienced war in the last three years, though many of her cities were ruined, and the purchasing power of the population has fallen, the trade is better than at the start of the conflict. The reason for this reversal

lies not in the economic situation; it is rooted in the change in the political conditions for now maritime China is virtually a Japanese colony.

This will help us to understand why the foreigners--British, Americans, and others--were gradually ousted from Taiwan. Before 1895 British and American trade with the island was larger than that of Japan, the most important branches of trade, as well as shipping, were in British hands. The British owned Douglas Co. monopolized shipping, the Hongkong and Shanghai Banking Corporation dominated the financial sphere, Jardine Matheson, Dent, and Samuel Samuel traded in camphor, sugar, tea, and other products, while the trade in rice was chiefly in the hands of Chinese. Mitsui Bussan--the pioneer Japanese firm--did not appear on the island till 1898. The share of Great Britain in Taiwan's imports fell from 7.3 percent in 1896-1900 to 0.1 in 1936 and to almost zero in 1939, while in the same period that of the United States fell in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. from 5.3 to 1 and to 0.4. [sic] In 1896-1900 Taiwan's average annual imports from Great Britain were valued at 1,326,000 yen, in 1926-30 (in depreciated yen) at 3,083,000 yen and in 1936, at 392,000. The imports from the U.S.A. amounted to 957,000 yen in 1896-1900, 3,413,009 in 1929, and 1,750,000 in 1939. (The purchasing power of the yen of 1939 is probably not more than one-fourth of what it was in 1896-1900.)"

"In return for exports to the value of 593 million yen in 1939 Taiwan received only 409 million yen worth of imports (69 percent). In order to move these exports to Japan certain conditions are obviously necessary. Taiwan must import rails, railway equipment, harbor equipment, bags for rice and sugar, fertilizers, etc. Taiwan's exports--rice, bananas, sugar, tea, pineapples, fresh fish, etc. --are foodstuffs. But most of the imports enumerated are of no direct use to the islanders themselves; they are beneficial only insofar as they help them to secure other goods. They are really costs of production. In 1939 at least 60.7 million yen worth of fertilizers, including bean cakes and other cakes, (included in 'all others' in the table above) and about 8 million yen worth of gunny sacks were imported. Another group of imports is connected with the effort to turn the island into a powerful base for further advances into China [152] and the Southern countries. Port facilities far beyond the needs of Taiwan itself, powerful radio stations, fortresses, strategic railways, factories producing war materials are being built. Again we cannot determine exactly how great this group of imports is, though we can guess its growth by following the growth of 'ores, metals and manufactures thereof', etc. These two groups, which in themselves contribute little to the welfare of the islanders, increased from 28 million yen in 1925-1929 to 62 million in 1936, to 70 million in 1937, to 78 million in 1938 and to 86 million in 1939. To some extent this growth is purely illusory since it reflects the rise in prices in these years, but we know that in the Japanese colonies just as in Japan, the consumption of metals, machines, for peace time uses,

4:Grajdanzev--151-152 S-4 (no date) 1942 Formosans-2
116, 439, 722, 177.43 Japan
636.43

etc., was reduced or stopped completely, so that the greater part is now available for military purposes."

625 blown up and water works wrecked if the Com-
648 munists had had their way. The lives of responsible personages would have been in constant danger, too. Then, the risk of internal trouble during a possible invasion from outside would have been very grave."[17] It appears that, in order to save Formosa from Communist domination, rigid government control may not be entirely indefensible.

722 During the past few years, as conditions
698 on the island grew more stable, the Nationalist
693 Government has been taking measures to guard against unwarranted arrest and imprisonment. In a decree issued on January 29, 1951, the Executive Yuan prescribed that public defenders should be provided in the military court to defend persons accused of violating martial law in cases where the minimum punishment would be not less than five years' imprisonment. A spouse, lineal blood relative, collateral blood relative within third degree, or a statutory agent may be present at the trial and testify on behalf of the accused.

722 Since 1949 Formosa has been subject to
698 martial law. Article 8 provides that the following offenses committed in strategic zones may be tried by the military court: (a) offenses against the internal security of the state, (b) against the external security of the state, (c) against public order, (d) against public safety, (e) forgery, counte r feiting of currency, valuable securities, documents, (f) murder or homicide, (g) restraining personal liberty, (h) snatching, robbery, and piracy, (i) intimidation and kidnapping, and (j) malicious mischief. If provisions

17. Lih-wu Han, op. cit., p. 49.

722 698 of martial law should be strictly applied, the military court would replace the civil courts of law in Formosa. However, orders issued by the Executive Yuan on June 1, 1952 and reissued on October 14, 1954, restrict the jurisdiction of the military court. The order of October 14, 1954, specifies that military courts have jurisdiction only in those cases involving espionage and insurrection; all other offenses are to be tried in civil court. This order seeks to protect the rights and freedoms of the people of Formosa against infringement by over-zealous, defense-minded militarists.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

"ECONOMIC DEVELOPMENT" IN TAIWAN

Industrial Growth during the War

•722 After setting the stage for limited industrialization by their treatment of large business in Taiwan, Japanese leaders after 1940 began actively to move the players. The centralized corporate structure had been expected to be adequate preparation for most of the demands of war. The Government-General made frantic last-minute attempts to expand specific fields in which Japan itself was short, particularly aluminum and coal. But before long the subordination of Taiwan's economy to heavy industry in Japan, which had seemed so satisfactory, turned out to be a source of weakness. Naval losses started to interfere with shipping between Japan and Taiwan. Many of the small but essential items supplied from the home islands (special equipment, replacement parts, fuels, and skills) became unobtainable. Certain large imports such as fertilizer were cut off.

None of these shortages was fundamentally important for the island itself, since food was sufficient for its population and little else had previously been imported. Lack of articles of the first sort did play havoc with some of the new industrial output, and caused much of the equipment to deteriorate. Exports of aluminum and coal slowed down to a trickle by 1944, and practically all shipping to Japan—even rice and sugar—was discontinued early in 1945.[29] By the time of Japan's surrender much of the highly organized economic life had come to a stop, but Taiwan suffered no devastating damage as a result of the war. Agriculture was still conducted as usual, except that without fertilizer and other accustomed capital the yields had fallen off substantially.

Accomplishments of Japanese Colonial Policies

648 659 Having described the workings of colonial administration in Taiwan, one should have some idea of its accomplishments before going on to discuss in later chapters its consequences in the lives of the Taiwanese. For this purpose, the abundance of records kept by the Japanese is often a hindrance rather than a help. In general the economic statistics are not up to the standards of the population data. Numerical tables are plentiful, but explanations of what the numbers mean are not. They disagree from source to source, seldom with any reason given for the discrepancies. One must therefore look for summarizing measures, and not for fine detail.

[29] See Cohen, J. (1949), pp. 154-156.

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-1-2
116, 563, 659, 723, 177.65 Japan
636.65

"The expenditures on the government apparatus, including police, courts, prisons, and pensions are chiefly, in some cases [139] exclusively, expenditures on the Japanese staff and for the benefit of the Japanese. All important government positions are occupied by Japanese and their salaries are much higher than those of the Chinese. Expenditures on roads, railroads, and communications, of course, benefit the local population as well as the Japanese, but as was shown in preceding chapters, these improvements are used chiefly by the Japanese or for commerce with Japan which brings little net gain to the islanders. Expenditures on ports are out of all proportion to the needs of the island. Their function is, as the Japanese openly announce, to serve as a base for the advance to the South, and such expenditures have little to do with the welfare of the islanders. Expenditures on rice control are again expenditures in the interest of Japan proper for this system has in view simply the interest of Japanese. In the war expenditures we have included expenditures on airfields, on Red Cross activities, on air defense and contributions to the war chest of Japan. These expenditures grew from the modest figure of 287,000 yen in 1935 to 21,150,000 yen in 1939; thus Taiwan contributes to the conquest of China by the Japanese. In the war expenditures should be included expenditures on meteorological stations. Their remarkable growth from 73,000 yen in 1935 to 900,000 yen in 1939 is explained not by any interest in meteorological phenomena, but by the

4:Grajdanzev--138-139 S-4 (no date) 1942 Formosans-2
116, 563, 659, 723, 177.65 Japan
636.65

needs of the Japanese military aviation. Taiwan lies in the path of typhoons and information on weather conditions there is of extreme value to the Japanese forces in China."

4:Grajdanzev--140-141 S-4 (no date) 1942 Formosans
116, 648, 652, 659, 723, 177.65 Japan
636.65

"The large expenditures on railways and communications, on research, on investments in the South Seas, etc., show what importance the Japanese attach to the part of Taiwan in the schemes for an advance to the South. The money [141] collected in the Taiwan budget--almost 200 million yen--is thus mainly used, on the one hand, for the construction of the all-important base for Japanese penetration in the South Seas, on the other, for the purchase of Taiwanese products to be sent to Japan (1).

1. In the last few years the Japanese government has started the practice of direct contributions by the Taiwan Treasury to the Japan's Treasury. The sum appropriated in Taiwan's budget for 1941, for example, is 24.5 million yen."

4:Grajdanzev--188-189 S-4 (no date) 1942 Formosans
116, 723, 177.72 Japan
636.72

"As for the future, the Japanese writers are not sure themselves whether Taiwan will not follow the fate of Okinawa Islands which, after the acquisition of Taiwan became a forgotten geographic name. But there is little doubt as to the importance of the island for the southern advance now and in the immediate future. First of all, the geographic position of Taiwan is favorable. Takao, in the southern part of Taiwan, is nearer to Manila than to Yokohama, and is just half way between Yokohama and Saigon, southern Indo-China. Takao is 1,495 miles from Yokohama and 1,800 miles from Singapore. [189] For certain purposes Hainan Island, seized by the Japanese in 1938-39 is an even better base for Japanese action in Southeast Asia, and there is no doubt that many of the transports of troops that are now attacking the Philippines came from Hainan. However, Haikow, the chief port of Hainan, was occupied by the Japanese only on February 10, 1939, and there was not time enough to make it a good modern base, especially because of the continued unrest and guerilla activities in the interior of the island. Taiwan for many years was being systematically prepared as a base for the army and navy operations in the South while the United States undertook an obligation not to fortify its bases in the western Pacific."

4:Grajdanzev--191 [2] S-4 (no date) 1942 Formosans
116, 162, 563, 668, 656, 723, 177.66 Japan
636.66

"It was shown in the first chapters of this book that the Japanese on the island form only a very small part of the population of the island. The mass of the population is formed by the Chinese who came to the island from Fukien and Kwangtung. In spite of the Japanese government during the past decades they have remained Chinese in their thought, in their language, religious beliefs, customs, dress. The importance of Taiwan as a base for Japanese aggression is in this respect anomalous. An island where there are more than five million potential (and in some cases actual and active) enemies cannot be considered as a perfect base. Just across the straits lies China, unconquered in spite of four years of war. Underground organizations of Chinese exist on the island, and their representatives in Chungking claim many achievements, including acts of sabotage, open fighting with the Japanese troops by Taiwan guerillas and so on. There is no way to check these claims, because the [Japanese--analyst] Government-General a long time ago turned Taiwan into a news-proof prison, from which no information is available, except that which the Government-General pleases to publish for the benefit of credulous foreigners."

4:Grajdanzev--191-193 S-4 (no date) 1942 Formosans-1-3
116, 553, 563, 723, 177.65 Japan
636.65

"In any case. the Japanese government understands the abnormality of the situation [i.e. the unexpressed and expressed hostility of the people of Taiwan toward the Japanese--analyst] and the dangers connected with [192] it. To this 'domestic' consideration a special consideration of grand strategy is added. The militarists of Japan realize that the successful management of the Eastern Asia Co-prosperity sphere cannot be realized without the goodwill of at least some groups of the local population. They plan to retain the semifeudal organization of the Dutch Indies, Thailand, Malaya, etc., but to supplement it on the one hand with direct control over rajahs, sultans, chiefs and so on, on the other hand with an indirect control through the Chinese. In each country of Southeastern Asia there are millions of Chinese, chiefly of Kwangtung and Fukien origin. Their numbers could be easily increased, because through administrative measures their immigration has been kept down. In some countries only a very small number were admitted annually; in other permits to immigrate were given more or less freely, but on condition of payment of a very high head tax. The Japanese can easily double or treble the number of immigrants, putting as the only condition of migration a guarantee of the 'political reliability' of the emigrant. The Chinese have played an extremely important part in the economic life of the countries of Southeastern Asia. This part would be greatly increased on the one hand through repeal of certain limitations upon the activities of the Chinese, on the other hand through the systematic financial assistance given by the Japanese banks to the Chinese businessman, especially to middlemen. Of

course, the activities of the Chinese would be controlled by the Japanese, and here the Chinese from Taiwan come into the picture. Many of them beside their own native language speak Japanese also. The number of such persons can be easily increased, especially if the youth of Taiwan knows that lucrative positions will be opened for them. Thus, two lines of control can be used: on the political side—local population—rajahs—the Japanese commissioners—Tokyo; on the economic side—local population—Chinese middlemen controlled by the Taiwanese or with the help of the Taiwanese—the Japanese monopolistic concerns. The local population will be then thoroughly con-[193] trolled by the Japanese; on the other hand it will be racially divided and unable to present a united front against its masters. The Chinese will know that their interests and privileges depend upon the favor of the Japanese, their economic interests will oppose the interests of the local population. The Japanese militarists hope in this way to reconcile the native population of the island to alien rule. They declare that the greatest immediate problem in respect to the Chinese population of the island is kominka or turning them into imperial people, or more simply, some kind of assimilation. A campaign for the spread of the Japanese language is being conducted; the Chinese are encouraged to change their names into Japanese; various patriotic and chauvinistic societies have been established in order to influence the mind of the Chinese youth. One should not conclude from these facts that the Japanese want to establish a racial equality in this

4:Crajdanzev--191-193 S-4 (no date) 1942 Formosans-3
116, 553, 563, 723, 177.65 Japan
636.65

'co-prosperity' sphere. The Japanese authorities complain that very few islanders change their names. Actually only a few hundred have used this privilege. However, this change of name is not so simple: each case has to be approved by the governor, and it is clear that approval is given only to those who can prove their complete fidelity to their masters."

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

Annex "A," Subparagraph 2g,
Political Background

PROPAGANDA

PROPAGANDA AGENCIES

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647 The principal propaganda agencies of the Chinese government in Formosa are the Fourth Section of the Kuomintang Central Committee, which is in charge of publicity, operates newspapers in Formosa and abroad, publishes magazines and books, and promotes radio programs; and the political department of the Ministry of National Defense, which makes frequent airborne leaflet raids and broadcasts daily to the China Mainland. In addition, it runs a motion picture studio, stages plays, operates mobile units which urge the people to support the government, publishes periodicals, and distributes reading matter to the armed forces.

PROPAGANDA POLICY AND ACTIVITIES

Propaganda to the Mainland

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923 Propaganda is directed to the China Mainland by airborne leaflets and radio broadcasts. In 1954 some 375,000 leaflets were dropped every two weeks over Chekiang,

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

Kiangsu, Fukien, and Kwangtung provinces. Leaflets were also dropped on special occasions, such as the New Year Day, Double Ten National Anniversary, the death of Stalin, the liquidation of Beria,[1] and the arrival of prisoners of war in Formosa. Daily radio broadcasts are made by the Voice of Free China, the air force, the army, and the Cheng-i stations. The Voice of Free China, with 750 kilocycles, is able to reach all parts of China, including Manchuria and Sinkiang.[2]

The propaganda distributed in leaflet form covers a wide range of subjects, including the growing strength of anti-Communist forces, Communist treachery, corruption, extortion, oppression, and massacres, the eventual failure of Russian and Chinese Communists, and so forth. The daily broadcasts contain programs such as, "Everyday Comment," "What to Do," "Whistling," "The Comfortable Home," etc. Experts are engaged to write special features, and distinguished scholars and celebrities are invited to broadcast. The new radio station on Quemoy Island (Kinmen)

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1. China Handbook, 1954-55, Taipei, China Publishing Co., 1954, p. 265.
2. Chung-hua Nien-pao [China Annuals], 1954, Taipei, China News Press, Feb. 1955, Vol. II, p. 90.

208 is also making special broadcasts to the
723 Mainland.

The propaganda policy toward the Mainland is to damage the morale of enemy troops and weaken their fighting power as well as to urge the Chinese people not to co-operate with the Communists and to wait for the opportunity to rise against the Communist regime.

Propaganda Directed to the Overseas Chinese

The Kuomintang publishes Chinese newspapers in all parts of the world where there are large communities of Chinese. The Voice of Free China daily broadcasts news items in different local dialects and music programs for the entertainment of the overseas Chinese. Occasionally exhibits depicting Communist atrocities and documentary films showing military maneuvers and industrial progress on Formosa are circulated under the auspices of the Chinese consulates. Special personalities are sent abroad on lecture tours. One such instance was a tour arranged for representatives of the Communist prisoners-of-war who refused to be repatriated to Red China after the Korean armistice.

The purpose of propaganda work among the overseas Chinese is to guard against the growth of pro-Communist sympathies among

them by publicizing the decline in living standards on the Mainland under Communist control, and to rally support for the reconstruction work in progress on Formosa.

Propaganda in Formosa

In Formosa, stage plays and motion pictures are used for purposes of propaganda. To reach the rural population in far-off districts, mobile units have been organized to bring the people musical programs followed by the performance of a play or the projection of documentary films, interspersed with anti-Communist speeches. Maximum use is made of posters. It has been found that pictorial posters are most effective among illiterate people. Wherever one goes in Formosa, one encounteres slogans painted in huge characters on the walls, posted on every public building, even printed on the labels of beer bottles: "Wrest Back the Mainland," "Liberate Our Brothers," "Crush Communism," "Resist Russia," and "He who does not denounce traitors is a traitor himself."[3]

To military personnel, lectures on the teachings of Dr. Sun Yat-sen are given

3. The Manchester Guardian Weekly, Vol. 73, No. 13, Sept. 29, 1955, p. 12.

208 regularly. Periodicals and other anti-Com-
73 munistic pamphlets are distributed free to the armed forces. Among the publications written especially for military personnel are the Soul of the Nation, the Army Reader's Digest, the Light of Victory Pictorial, and Entertainment Monthly, and the Life of National Heroes.

Propaganda activities inside Formosa exhort the people to give full-hearted support to the government in its avowed policy to liberate the Mainland and strengthen the will of the armed forces to fight.

EFFECTIVENESS OF PROPAGANDA WORK

On Mainland China, all radio receiving sets must be registered with the police.[4] There is a strict ban on the reception of programs of foreign origin. As early as 1950 the Communist Liberation Daily urged readers to report those who listened to the Voice of America.[5] Even the children are encouraged

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4. There are about one million receiving sets in Red China. See chapters on propaganda in the regional handbooks on China.

5. Chieh-fang Jih-pao [Liberation Daily], Shanghai, Nov. 12, 1950, p. 1.

208 to denounce their parents for illicit listening.
723 In view of the limited number of radio sets and the vigilant ban on reception, it is doubtful that many people on the Mainland would risk imprisonment by listening to the broadcasts from Formosa. At any rate, the radio receivers are owned by people of means, and broadcasts rarely reach the workers or people in rural districts.

For psychological warfare directed to the Mainland, airborne leaflets appear to be effective, and especially so if they are pictorial, in view of the high rate of illiteracy among the masses. In spite of the Communist threat to punish those who do not destroy or surrender leaflets immediately after such material is found, it stands to reason that many of the people will read the leaflets, if only out of curiosity. Leaflets are dropped in both urban and rural areas.

Political work by Free China among the overseas Chinese seems to be highly successful. The general attitude of the overseas Chinese is best reflected in the varying degrees of enthusiasm with which they observe the anniversaries of the founding of the Chinese Republic and that of the Red regime. Even in localities where the authorities have already recognize the Peking Government, and in spite of the efforts of the Communist diplomatic representatives, the Chinese residents display

less zeal each year in celebrating the Communist National Day. From radio programs and news columns the overseas Chinese are well informed of the ruthless manner in which their kinsmen in China are treated by the Communists. Anti-Communist associations have been organized in San Francisco, Chicago, New York, Mexico, Colombia, Chile, Peru, the Philippines, Tahiti, Korea, Singapore, and Thailand. Many groups of overseas Chinese have pledged moral and financial support to the Nationalist Government.

On Formosa, largely due to the intensive efforts of government propaganda, the people are wholeheartedly anti-Communist. However, some observers are skeptical about the response of the Formosan Chinese to the cause of the liberation of the Mainland.[6] Since Formosa not only serves as the rallying point for all overseas Chinese, but also keeps alive the hope for eventual emancipation of 600,000,000 Chinese people now under the

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6. "These slogans may have some effect on the youth or on the soldiers from Mainland China, but create very little impression on the adult Formosan, who views them with mild cynicism." The Manchester Guardian Weekly, Sept. 29, 1955, p. 12.

208 Communist yoke, the Nationalist Government
123 feels that it must keep on publicizing the coming liberation of the Mainland, whether or not it has the means to achieve its avowed mission. Because a gigantic military campaign would draw heavily on the resources of Formosa, it is not improbable that a section of the populace might react unfavorably to government propaganda relating to an impending invasion of China. However, in the present state of emergency an opinion adverse to the declared national policy is not tolerated. Consequently there is very little public expression by means of which one can gauge the extent of response if an invasion of the Mainland were to be launched.

4:Grajdanzev--189-190 S-4 (no date) 1942 Formosans -1-2
116, 487, 724, 496

"A base of operations cannot be considered only as a port. It must have enough room for deployment of troops and for general defense purposes. Taiwan is excellent in this respect; its few defects will be mentioned later. Its system of communications permits the authorities easily to move troops to any threatened point. An attack on Taiwan can be only air-borne or sea-borne. The nearest place on the continent, Foochow, is 115 miles from Tamsui. Under existing conditions in China, (and they hardly can be greatly changed in the next two years) an air attack from this direction is unlikely. An airborne attack on a large island from an aircraft carrier cannot be decisive. Aside from long-range sporadic bombing, Taiwan may expect only a major seaborne attack, an eventuality foreseen by the Japanese and widely discussed on the island. To repel an invasion by sea a well-developed network of communications exists on the island. The state of railways and roads on the island was discussed earlier in this book. Here it is sufficient to point out one defect in the railway system of the island: the western longitudinal railway is not connected with the eastern longitudinal railway because of the prohibitive cost of construction in the mountainous districts. However the whole coastline is followed by a road and there are four good automobile roads connecting the east coast with the west, so that troops may be easily shifted to most of the points on the east coast. [190] The west coast of the island is largely flat and easy for debarkation, but on that side of the island the communications are best. The eastern shore presents a mountain barrier falling abruptly to the sea, except for mouths of some rivers where beaches are available. However, in one respect this mountainous character may be a help to the invading

4:Grajdanzev--189-190 S-4 (no date) 1942 Formosans-2
116, 487, 724, 496

party: in case of air superiority on its side the bombing of bridges, viaducts, etc., may prevent the arrival of reinforcements and will permit a landing party to consolidate its hold over some part of the shoreline."

4:Grajdanzev--190 S-4 (no date) 1942 Formosans
116, 504, 724

"The island has ten ports, some of which are very well developed (1). Large sums

1. There are also three ports on the adjacent islands, two of them of small capacity.

have been spent on improvements and installations. The military port is at Bako (Mako) on the outlying Pescadores Islands between Formosa and China, but this area has long been a prohibited area and no information concerning its facilities is available."

4:Grajdanzev--190-191 S-4 (no date) 1942 Formosans
116, 392, 724, 177.39 Japan
636.39

"Any good [Military--analyst] base must also have a well developed industry, especially a metal industry. Taiwan's supply of munitions, tanks, airplanes comes from the industrial centers of Japan Proper. It is, of course, impossible to change this situation. However, the more can be made or repaired, or assembled in Taiwan, the better. It was shown above that in spite of the rapid growth of industry in the last years the metal and machine industry of the island is small in size. We have no data on the years 1939, 1940 and 1941 when industrialization of the island was declared to be one of the basic policies in the construction of the base for southern advance. Yet indirect data (changes in bank credits, movement of railway goods, imports of the island, etc.,) do not suggest any very rapid change. Undoubtedly some growth took place, and it was well-oriented, but there were many obstacles to the realization of the plans: shortage of metals and machinery; shortage of labor, in some cases due to the unwillingness of the military authorities to pay higher wages; difficulties in the public finances of Taiwan [191] Government-General in view of the several bad harvests of rice and extraordinarily low production of sugar. All this suggests that by 1941 the development of machine and metal industry has hardly made great progress since 1938."

4:Grajdanzev--191 S-4 (no date) 1942 Formosans

116, 328, 724

"It should be pointed out also that since 1936 the government spared neither money nor efforts in development of gold production on the island, and, judging by the official reports, (which do not give actual figures of production) was quite successful. However, this success is hardly success in war-time, because of Japan's isolation and consequent inability to export the gold. Another important industry—production of aluminum—is dependent upon the import of bauxite from the Netherlands Indies."

10: Schumacher--222-223 T-1 (ca. 1896) 1898 Formosans-1-2
116, 241, 311, 727

In the north of Formosa are cultivated a variety of products. The region from Kelung to Tamsui is the section that has most definitely been under the influence of Europeans because it is close to the port of Tamsui and the main settlement of the Europeans in Tuatutia. Here in the north all available land is utilized. The industrious people have even turned slopes into productive agricultural land. Yet only rice is cultivated on a large scale although there are indications that at one time in the past other less common products must have been grown. During war time [MC: 1895?] the sugar-cane fields were furrowed and ruined and the tea plantations were neglected. The land as far as Gosche is mainly used for fields of indigo and sweet potatoes; batatas and rice are rare. The region as far as Tschanghua, on the other hand, [223] is claimed almost exclusively by rice culture. It has escaped the destructive instinct of the Japanese because the Japanese troops wear straw sandals on their marches and would have dirtied their feet with mud and walked them sore on the irrigated rice fields; this would have been a definite impediment although it would not actually have been a danger. Economically the most valuable and the most beautiful part of Formosa extends from Tschang-hua to about 20 kilometers beyond Kia-y. The palm groves are rather clear in some sections and here one finds many remnants of protective shelters against the tropical sun where formerly the most precious products were cultivated. Here and there palm groves are lacking. It seems that for the last ten years the Chinese in these districts have confined themselves to a cultivation of rice or sugar-cane, because they required less capital and less

10: Schumacher--222-223 T-1 (ca. 1896) 1898 Formosans-2
116, 241, 311, 727

labor. In view of the political uncertainty and the greed of the mandarins it did not seem advisable to invest large sums for the cultivation of plants of the optimum state.

665 rather than in its doctrine, or in its organization, or even in the social basis of its membership, that one can discover a key to the understanding of the Kuomintang."

665 At the outbreak of war with Japan, the Kuomintang and the Communist Party composed their differences, resulting in a truce. A People's Political Council was established. Leaders of the Communist Party as well as several smaller parties which had pledged their support to the national war effort were chosen to direct a united front against Japanese aggression. However, the political honeymoon did not last very long. As soon as the United States entered the war and ultimate defeat of Japan was assured, hostilities again broke out between the Kuomintang and Communist forces. Minority parties then clamored for the relinquishment of the one-party rule by the Kuomintang. Mediation by the United States, the convocation of the National Assembly, and the adoption of a new Constitution which placed all political parties on a footing of equality, failed to prevent the outbreak of civil war. In the subsequent political and military clashes, the weakness of the Kuomintang became more and more obvious. The party was almost on the verge of total collapse. President Chiang, in introducing a reform program for the Kuomintang in 1950, admitted[11] that the disastrous military

11. Addressing the Central Executive Committee of the Kuomintang in July 1950. China Handbook 1952-53, Taipei, China Publish-

(continued next page)

665 reverses on the Mainland was not due to the
127 overwhelming strength of the Communists, which would be not strong enough to defeat the Nationalist forces, but due to the Nationalist Party's organizational weaknesses, loose discipline, and low morale.

665 In his capacity as Director General of the Kuomintang, Chiang proposed to reform thoroughly the Party by "getting rid of all factional and personal differences." A Central Reform Committee of 16 members was appointed in August 1950 to overhaul the party machinery on Formosa and the party branches in various overseas Chinese communities. At the same time the Kuomintang announced that it would respect the position of and co-operate with all democratic political parties that were anti-Communist in nature in order to struggle together for the salvation of the country and the defense of democracy. The reorganizational work of the Reform Committee was concluded in October 1952. A National Congress[12] of the Kuomintang was held on October 10, 1952. It adopted a political platform for the guidance of the government and formed a Central Advisory Committee with 48 members, and a Central

11. (continued) -ing Co., 1954, p. 341.
12. The Seventh National Congress.

[178] Economic dependency on Japan was accentuated
648 by the employment of only Japanese in both
439 technical and managerial positions. From the beginning of the Japanese control, trade was confined almost exclusively to territories within the Japanese empire and managed for the most part by Japanese personnel. Japan took between 90 and 95 per cent of Formosa's exports and supplied 85 to 90 per cent of the island's imports. Some sugar and coal were shipped to China, and small quantities of tea and camphor were sent to the United States.
(148 Banking and currency were linked to the
154 Japanese system, and all capital investment was controlled by the Japanese.[5] "Every year, for at least fifteen years previous to the war, Japan is believed to have gained directly 150 million yen from her investments in Taiwan, all for the fifteen years before that lesser but still significant sums".[6]

648 Some of the Japanese industrial projects
727 were never completed. Others wer destroyed

5. By 1939, 90% of all the capital invested in the island was held either by the Japanese government or Japanese nationals; the remaining 10% held by Formosans was mostly invested in small shops. Taiwan, A Geographical Appreciation, Ottawa, Department of Mines and Technical Surveys, Government of Canaca, 1952, p. 16.

6. Ginsburg, op. cit., p. 25.

648 or severely damaged by Allied bombing during
727 World War II. Further depreciation and deterioration of Japanese installations were caused during and immediately after the war by typhoons and floods coupled with lack of maintenance and repair. Even the railway system, the principal means of freight and passenger transportation, was capable of handling only a fraction of the freight and passenger demand. "Rails were worn thin, one-third of the cross ties were rotten, rolling stock was seriously depleted or in need of complete overhaul."[7] The war and
727 the repatriation of Japanese nationals after-
433 ward also caused disruption of rural services in credit collection, processing, and marketing of farm produce. Due to a scarcity of imported fertilizers, production of the two principal cash crops, sugar and rice, dwindled considerably. The production of rice fell from 1,100,000 metric tons in 1943 to 600,000 metric tons in 1945 and sugar production dropped from 1,022,000 metric tons in 1942-43

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7. "Economic Progress on Formosa" Chinese-American Economic Co-operation, pub. by Mutual Security Agency Mission to China, Taipei, Vol. 1, No. 2., Feb. 1952, p. 12.

45;Stanford U. S-4, 51956 AD1 Formosa
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727 to 86,000 metric tons in 1945-46. The
433 Formosan farmer was faced with the "worst prospect in living memory," as one observer remarked.[8]

434 In spite of the seriousness of economic
178 conditions on Formosa, the Chinese government was able to make only limited progress in reconstruction following the restoration of the island to Chinese control. For one thing, the Nationalist Government was involved in a costly war with the Communists and faced with a huge rehabilitation program on the Mainland. Furthermore, without a surplus of exportable goods, China could not obtain the foreign exchange necessary to re-equip the damaged plants and restore agricultural production on Formosa. The island's economy continued to deteriorate until 1949, when Mainland China was overrun by the Communists and the National Government was withdrawn to Formosa.

458 The sudden influx of over one million
185 mainlanders and half a million soldiers further strained the resources of the island. Inflation was running wild and food was short. However, the removal of the national government to Formosa was not without benefit to the island.

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8. H. Maclear Bates, Report from Formosa, New York, Dutton, 1952, p. 117.

178 kilowatt-hours in 1936 to 1,195 million kilowatt-hours in 1943. Aluminum factories were built at Kaohsiung and Hualien, the combined production of which was 12,000 metric tons in 1942, one-eighth of the total production of the Japanese empire.[2] An oil refinery was constructed in Kaohsiung in 1942 for the use of the Japanese Navy. The largest single investor was the Government-General. "By 1939, 90 per cent of all the capital invested was held by the government and government-backed Japanese; the remaining 10 per cent, held by Formosans, was mostly invested in small shops."[3] Sugar accounted for 54.5 per cent of all exports[4] from Formosa in 1937. Taiwan Seito was the largest of the four sugar companies, and the Japanese imperial family was its principal shareholder.

178 Most of the machinery of the new industrial 179 plants were either made in Japan or had been used in Japan for a number of years. During the war, industrial production was at the breaking point. Machinery and equipment which had become obsolete were not replaced and

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2. Ibid., p. 123.

3. Taiwan: A Geographical Appreciation, published by the Department of Mines and Technical Surveys, Canadian Government, Ottawa, Canda, 1952, p. 16.

4. E.B. Schumpter, The Industrialization of Japan and Manchukuo 1930-40, New York, Macmillan Co., 1940, p. 295.

177 were rapidly worn out. After 1943, Allied
178 aerial attacks dealt them a further crippling blow.

At the time of Japan's surrender it was found that thirty-four of the forty-two sugar mills in Formosa had been reduced to ruins by American bombing. The oil refinery at Kaohsiung suffered 800 bomb hits. The generating capacity of the Western Power System at Sun-Moon Lake was reduced from 308,000 kilowatts to 32,000 kilowatts. The mills of the Taiwan Pulp and Paper Corporation were damaged -- 50 per ent of the buildings and 30 per cent of the machinery -- by Allied aerial bombings.[5]

471 On August 14, 1945, Japan surrendered to the Allies, and Formosa was restored to China. The Chinese government took over all the industrial enterprises previously owned by Japanese nationals. Some of these, including printing houses, match and food

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5. Industrial Enterprises of National Resources Commission in Taiwan -- General Information, National Resources Commission, Taipei, 1951.

433 241 439 resources would have to be supplemented by the integration of Taiwanese and Koreans into the industrial nexus of Empire.

THE CONTEMPORARY PROSPECTS

178 727 Today the plans of the Japanese for the further development of Taiwan are somewhat irrelevant. The Chinese administration has penetrated every aspect of political, social and economic life. Initially the transfer of sovereignity resulted in sharp retrogressions. The great war industries were destroyed. The Japanese army departed, but Chinese soldiers from the Mainland now use the island for training to repel an invasion expected from the Mainland. The land is cultivated but the agricultural supervisors have been repatriated to Japan. In October, 1948, when we were in Taiwan, there were markets for surpluses that would yield funds to purchase the fertilizers essential to the maintenance of production. Disease and premature mortality were reported to be increasing. All this was descriptive, for statistics were a casualty of the liberation. Bureaucrats and university professors had been moved back to Japan and Japanese policy had produced totally inadequate numbers of Taiwanese to take their places.

177 198 The political travesty of the Chinese liberation of the Chinese population of Taiwan needs no recapitulation. It placed almost insuperable obstacles before even the most reasonable programs and the most capable administrators. Furthermore the Taiwanese were now a peculiar Chinese-Japanese cross-product and the cultural heritage of the half century of occupation complicates all aspects of Chinese-Taiwanese adaptations. The Taiwanese spoke Hakka or Fukienese, neither comprehensible to the other; the Mainland Chinese spoke Mandarin, which was incomprehensible to the Taiwanese who spoke either Hakka or Fukienese. So Japanese became the lingua franca between Chinese groups.

Had Taiwan been reintegrated into a functioning Republican China it seems probable that inundation from the Mainland would have reduced the Taiwanese to Chinese levels of living and absorbed their particular population problem into one of the greatest of all population problems, the demographic prospects of a modernizing and industrializing China. Today the future of the Taiwanese people is unpredictable. They are again pawns in a struggle for control of the East.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

F 175 648 F 175 648 722 729 161 423 464 [178] [462] Tn 175 423 [648] [241] [434] Tn [161]

ists brought a change in regime to Taiwan. This is kno[illegible] the "Restoration." At the outset the Taiwanese people welco[illegible] the change, feeling that the coming of the Chinese represented a reunion with their own "race." With the advent of peace, there was a general return of men to the land. Only one Hsin Hsing villager had been killed in the war in Southeast Asia. The other villagers from Hsin Hsing who had surrendered or been taken as prisoners while working in Japanese labor groups were returned to Taiwan in ships. The return of these men to the land was followed by a general population increase, and in the Hsin Hsing area this quickly aggravated the problem of land scarcity; tenancy became a greater problem than ever before. Families could neither buy nor rent enough land to support themselves adequately, and, in addition, the war period had brought about a significant alteration in local patterns of division of labor. In the absence of the men the women had assumed new roles and responsibilities and had begun to take an active part in the operation of the land. This change was so well established that from about 1948 on it became possible for the men to work elsewhere for periods of varying length to supplement the family's farm income. This was the beginning of a new and ever-increasing trend of mobility to Taipei, a trend not confined to the Hsin Hsing area, although it may have begun there earlier than in most other parts of Taiwan. Some men hired out as farm laborers or worked as itinerant merchants in the area. But it is significant that local industrial development has been so slight that it has offered no economic alternatives to the villagers.

After 1949, when the movement of the remnants of the Chinese Nationalist forces from the mainland to Taiwan was halted, the regime instituted a new policy of government rule and reform. The Land Reform Acts between 1949 and 1953 were the most important aspect of this policy. The Land Reform, the increased availability of fertilizer, the infusion of great quantities of economic aid from the United States, and the great increase of supplementary income from villagers working in Taipei have all contributed to an apparent rise in the Taiwanese farmer's standard of living. But the basic problem of population pressure and land scarcity continues to worsen, affecting both economic and social aspects of village life.

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LANGUAGE AS AN INDICATION OF HISTORICAL SEQUENCE

In 1958 there were four main languages spoken in Taiwan: Japanese, Taiwanese, Mandarin, and Hakka. The latter three are usually referred to as dialects of Chinese, but since they are not mutually intelligible, they are actually different languages, and will be referred

4:Grajdanzev--8 S-4 (no date) 1942 Formosans
116, 133, 731

"Situated in the Pacific belt of volcanoes, Taiwan has very many earthquakes, on the average 330 each year in various parts of the island, but few are of great violence. In the earthquake of March 17, 1906, 3,643 persons were hurt and 20,987 houses damaged; on April 21, 1935, 15,329 persons were hurt and 54,688 houses damaged."

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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III. PUBLIC HEALTH PROBLEMS

A. General Background

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Many of the communicable diseases usually associated with a tropical and sub-tropical climate were common to Formosa until the end of the nineteenth century. At that time, Formosa was still commonly called the island of epidemics. Plague, cholera, and smallpox caused the most serious epidemics; malaria, dysentery, typhus, and pneumonia were widespread but less prevalent. The control and prevention of these diseases became a major task of the Japanese administration which took over control of the island in 1895. The activities of the health bureau were closely coordinated with the exercise of the police power. Such measures as enforced vaccination, isolation of patients, destruction of contaminated houses, elimination of rats, and strict quarantine at seaports brought quick results. Since 1920, no major epidemics have occurred on Formosa.[16] Preventive activities against venereal diseases, parasitic diseases, trachoma, tuberculosis, and leprosy were begun by the Japanese in the late 1920's. By 1942, deaths from contagious and other diseases among Chinese inhabitants of Formosa had been reduced to the following yearly rate:[17] tuberculosis, 4,834; malaria, 5,792, parasitic diseases, 5,775; tracheitis, 4,661; pneumonia, 18,922; diarrhea and intestinal inflammation, 14,789; and kidney disease, 5,993. The least results were achieved in controlling tuberculosis, malaria,

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16. Shao-hsing Chen, "Population Growth and Social Change in Taiwan," Bulletin of the Department of Archeology and Anthropology, Nat'l. Taiwan Univ., Taipei, May 1955, pp. 76-103.

17. [next page]

746 for citizenship. The four provincial relief homes at Taipei, Pingtung, Hualien, and Makung house the old, educate and train the disabled, the poor, and dependent children, and give medical care wherever necessary. The Provincial Women's Home in Tainan accomodates aged women and aids destitute
747 women. Some of the private relief organizations have a long history of relief activities extending back to the time of the Ch'ing Dynasty (1644 1912). For instance, the Private Taipei Ai-Ai Relief Home and the Taipei Jen-chi Relief Home have long engaged in caring for the aged, the giving of medical care, rehabilitation of the disabled, and guarding and caring for the mentally ill. Four orphanages, two in Taipei and the others in Taichung and Tainan, receive orphans of 2 to 12 years of age. The Taipei Provincial Orphanage, located at Peitou, has full-time custody of 300 orphans and dependent children. The children are well-fed by Formosan standards; each receives 500 grams of rice and NT $1.50 equivalent of meat and vegetables per day. In addition the orphanage provides both kindergarten and elementary education. Some 50 other children of the poor in the area attend the orphanage's primary school, and 162 attend its kindergarten.

731 Emergency relief entails disaster relief,
746 winter relief, and refugee relief. The law

931 provides that the local authorities of disaster-
746 stricken areas (most disasters being the result of typhoons, earthquakes, and floods) report to the provincial authority, so that afflicted people may be given shelter, food, and medical attention. The government, in addition to the supervision of relief work, contributes about one-third of the financial expenses, and private organizations of all kinds and public-minded individuals contribute to make up the rest. When the southern part of the island was stricken by a destructive typhoon in 1952, the whole island joined in a "Relieve-the-South" campaign, in which schools, business enterprises and organizations, public agencies, and private individuals were urged to contribute cash or "in kind" to a relief fund which was administered by the government.

746 Every year from December to March, hsien and municipal governments take the lead in providing winter relief to the poor. Contributions from schools, from various organizations, including churches, and from individuals are pooled under the administration of the local authority and money, food and clothing are given to the needy.

Relief of refugees from the China Mainland, and recently from the Tachen Islands, is being carried out chiefly by the government

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

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In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

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Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W. S. Thompson, who stayed some months in Nanking, China, in 1930-31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67-68).

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Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation,

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Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparision of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C. W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1962, Taipei, p. 66.

15: U.S. Navy --26 [9] (no date) 1944 Formosans
116, 732, 759, 548, 874, 177.73 Japanese
636.73

"Schools for the blind, the deaf, and the dumb are maintained at Government expense at Taihoku and Tainan. In addition to instruction in Braille, pupils are taught various skills, of which the most important are weaving, chiefly of panama hats, and massage. Graduates of the school who have passed the required masseur's examination are licensed to practice, and are assigned districts or routes over which they go every evening from nightfall until midnight, with a whistle or pipe and a tune peculiar to each masseur. They travel, both men and women, in pairs or with a small child or elder person as a guide. Many are not wholly blind, but qualify to practice. Sometimes they work at home or in shops at various tasks during the day, making the evening work as a masseur a supplementary livelihood. Many Chinese hotels or lodging houses have masseurs regularly employed. A certain amount of illegal solicitation for prostitution is carried on by them as well as by the masseurs who travel a regular beat through the city streets."

15: U.S. Navy --26 [10] (no date) 1944 Formosans
116, 732, 743, 735, 177.73 Japanese
636.73

"There is a Government hospital for the insane at Taihoku. The general impression is gained, however, that the mentally deficient and the hopelessly crippled are not usually placed in institutions but are simply cared for in a haphazard fashion by their families. Occasionally such persons are found living or begging along the roads leading to popular temples and shrines."

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

greater labor force, and this absorbed the men who had formerly worked in Lukang.

The expanded area of land under cultivation increased the food supply and generally improved the standard of living. In addition, the Japanese introduced some Western public health ideas and new means for controlling disease. Apparently, these factors are closely related to the extensive population growth which then began to take place in Taiwan. The Japanese also improved the primitive communication systems of the area. A major program of electrification and improvement of rail and bus lines was instituted throughout the heavily populated areas of the island.

The material influence of the Japanese occupation and administration of Taiwan was enormous. Not only did Japan create in Taiwan an important element of its colonial empire but in so doing it indirectly began to produce important economic changes which had implications for the development of the rural areas and the island itself. While agriculture provided the major portion of Taiwan's exports to the home country, new, imported commodities also became readily available to the Taiwanese villager at low prices; many inexpensive canned foods became common in the village household. In spite of these changes, the world depression had apparently little effect in the Hsin Hsing area. In fact, few villagers were even aware that there was a world depression in 1929 and in the 1930's, which may be due to the almost total lack of industry in rural Taiwan or in Taiwan generally at that time.

The advent of the Japanese brought a higher standard of living for the Taiwanese people, but the improvements were offset by the war with China in 1937 and, more notably, by the entrance of the United States into the war in 1941. Japan had to muster all its own resources and those of its colonies, and good times soon turned into hard times for the Taiwanese farmer. At first, village men were lured off the land to work at high pay on Japanese construction projects, and others were conscripted to work in Japanese army labor gangs in both Taiwan and in Southeast Asia. Often families were left with only the women, children, and old men to work the land. The supply of artificial fertilizer which had been so important in developing intensive rice cultivation was almost completely cut off. The little food that could be produced under these difficult conditions was usually confiscated by the Japanese authorities to supplement the food supplies in Japan, and villagers were frequently reduced to a diet consisting mostly of sweet potatoes. The gratitude they had felt for the prewar accomplishments of the Japanese was offset by the severity of Japanese rule during the hard war years.

The defeat of the Japanese and the coming of the Chinese National-

4:Grajdanzev--175-176 S-4 (no date) 1942 Formosans
116, 276, 435, 733

"In the early days of British commercial domination Taiwan was notorious for the prevalence of opium smoking. When the Japanese conquered the island, they decided to apply a method of licensing opium smokers. Those who were addicted to this evil practice were permitted to continue it on payment of a certain fee for a license, but no new addicts were permitted. In 1898 95,449 addicts were licensed. However, some years later a more careful survey brought to light (1) as many as 165,752. In 1908 there were

1. Y. Takagi. Japan Magazine. 1930, pp. 244-248.

119,991 licensed opium smokers, in 1926 there were 31,434 and it was said that the majority of them were over 55 years age. However, in 1938 there were 10,788 opium smokers still alive. In 1906 when there were at least 130,000 licensed opium smokers, they bought 4,395,497 yen worth of opium; in 1938, when there were only 10,788 opium smokers, they bought 1,863,063 yen worth. The explanation is that in 1906 one kilo of opium was sold by the government for 23.0 yen, in 1938, it cost 120 yen, or five times as much. This reliance on price increases, however beneficial it may have [176] been for the Treasury. has unfortunately led some addicts to turn to other, cheaper substitutes, such as morphine and heroin."

15: U.S. Navy--26 [7] (no date) 1944 Formosans
116, 735

"In normal times it is rare to encounter beggars other than religious mendicants."

15: U.S. Navy --26 [10] (no date) 1944 Formosans
116, 732, 743, 735, 177.73 Japanese
636.73

"There is a Government hospital for the insane at Taihoku. The general impression is gained, however, that the mentally deficient and the hopelessly crippled are not usually placed in institutions but are simply cared for in a haphazard fashion by their families. Occasionally such persons are found living or begging along the roads leading to popular temples and shrines."

15: U.S. Navy --26 [11] (no date) 1944 Formosans
116, 735, 792

"Religious mendicants, chiefly Japanese Buddhists, go from house to house with a begging bowl, praying or chanting, sometimes ringing a small bell or blowing upon a conch."

15: U.S. Navy--28 [3] (no date) 1944 Formosans
116, 515, 735, 744, 177.74 Japanese
636.74

"General standards of personal cleanliness are not high, but the universal shabbiness must be attributed to poverty rather than to sheer neglect. The principles of elementary hygiene are not widely understood. The Japanese have been making some progress in establishing habits of public cleanliness and have been trying to introduce new measures of household hygiene (careful disposal of waste, daily bathing). The problem is very great, however, among six million people. Although general standards are lower than the average in America, they are as high as standards maintained in backward districts in the South or in city slums, and are infinitely better than standards existing among Chinese villages on the China coast across the Straits of Taiwan."

15: U.S. Navy --26 [8] (no date) 1944 Formosans
116, 596, 736, 626, 177.73 Japanese
636.73

"There are social welfare departments in the Government which endeavor to care for persons without support or livelihood. The family system absorbs the majority of such cases, for a moral obligation lies upon the entire family to support and to share with all members. Property and the income from it is held in common. An able-bodied person who shirks his duties and tends to become a charge upon the family is open to reproof by the elders and by the family council. In extreme cases a member may be cut off from the clan in disgrace and so have no further claim upon it.

Those who are ill, the aged and the physically handicapped can claim the same support from the family group. Hence few appear as public charges."

15: U.S. Navy --26 [6] (no date) 1944 Formosans
116, 741, 596, 177.74 Japanese
636.74

"The Japanese officially list 1,676 organizations or facilities for philanthropic and social welfare work in Taiwan. These include semi-official organizations such as 'Improvement of Village' associations, pawnshops, public markets, and others which under government supervison perform the work which would be financed elsewhere either through the government budget directly or through spontaneous private charity. There is less need for such organizations in a social system which is built on family units in which the individuals share and share alike."

15: U.S. Navy --26 [10] (no date) 1944 Formosans
116, 732, 743, 735, 177.73 Japanese
636.73

"There is a Government hospital for the insane at Taihoku. The general impression is gained, however, that the mentally deficient and the hopelessly crippled are not usually placed in institutions but are simply cared for in a haphazard fashion by their families. Occasionally such persons are found living or begging along the roads leading to popular temples and shrines."

MEDICAL FACILITIES -- FORMOSA 1952*

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Health centers	22
Health stations	343
Provincial Hospitals	13
Provincial Sanitoria	3
Hsien maternity and child health centers	1
Hsien and municipal hospitals	9
Hsien and municipal isolation hospitals	6
Municipal sanitoria	3
Private hospitals	121
Private clinics	3,895
Total	4,416

*/ China Handbook 1952-53. Taipei, 1952, p. 114.

759 The number of licensed physicians alone in 1953 was sufficient to provide one doctor for about every 1900 people.[24] This compares with a ratio of one doctor to every 70,000 people in Indonesia, one to 13,300 in Burma, one to 4,000 in the Philippines, and one to 739 in the United States.[25] Many of the doctors in Formosa have

24. Based on latest population estimate of 10,400,000.

25. Economic Co-operation Administration, Far East Data Book, Nov. 1951, Washington, D.C. These are 1950 figures.

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,600 physicians were registered as engaged in private practice or public service. There were about 600 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per cent in this 35-year period and virtually all 161 241 177

48: Chen E-4 (no date) 1955 ADl Formosa ADl

done in Japan was adopted in Taiwan with some slight time lapse. In 1916 a hygienic survey was made in Japan, and five years later, in 1921, the same project was adopted in Taiwan. Between 1922 and 1925, and also from 1926 to 1928, an extensive hygienic survey was carried out in various parts of the island. After the results were published the planning of sanitary works was mostly based on the data of the survey.

The prevention of trachoma was started around 1926, and was most active in the 1930's. The prevention of tuberculosis began from 1932. The Association for the Prevention of Tuberculosis was organized in 1934, Regulations for the Prevention of Tuberculosis were enacted in 1938, Tuberculosis Prevention Day was initiated in 1939, and a sanatorium was constructed in most prefectures, most of them being completed in 1942-43. These activities were quite effective, and the death rate from tuberculosis declined after 1938 (cf. Fig. 11, line D.) Activities of tuberculosis prevention were started in the U.S. in 1890, and as a result, deaths from tuberculosis declined sharply. It has been pointed out by a social scientist that, though the improvement in living conditions will lower the death rate from tuberculosis, community preventive activity is also very significant (20: p. 631). It is interesting to note that, this was true both in the U.S. and in Taiwan.

The preventive activities against venereal disease, mental disease, parasitic disease, and leprosy were also started by the 1930's. For the administration of these activities, a section of preventive hygiene was added to the Health Department of the government-general in 1935. This may be taken as a sign that more emphasis was put on preventive hygiene.

11. Sanitary Facilities and Medical Personnel

Various kinds of basic sanitary facilities such as drainage, water supply, disposal of garbage and night-soil, supervision of slaughter-houses and markets, inspection of food and businesses such as barber shops, restaurants, and hotels were started rather early. These were started in the cities, particularly in the wards of the city which were largely occupied by the Japanese, and gradually extended to wider areas. The establishment of public hospitals and public doctors was also early in time. Naturally, these were established first and foremost for the benefit of the Japanese in Taiwan. Japanese business men in Taiwan had enjoyed various kinds of privileges, Japanese officers received an allowance 60% greater than that of their brothers at home, and all of them could utilize these public facilities. This was the reason why their death rate was not only lower than the death rate of Japan proper, but even comparable to that of the most advanced countries in the world.

Before the Japanese occupation there were a few hospitals operated by Christian missions. Physicians in these hospitals were the only doctors of western medicine, and other physicians were doctors who practiced Chinese medicine. Some Japanese doctors of western medicine came to Taiwan after the occupation, but their number was very small. In response to the urgent need for medical personnel, training classes for doctors and nurses were set up in Taipei Hospital in 1897. The medical training class

4:Grajdanzev--173 S-4 (no date) 1942 Formosans -1-2
116, 744, 759, 177.74 Japan
636.74

"In all books and articles published under the auspices of the Japanese government the remarkable successes of the Taiwan government with respect to the health of the population are described, and there is no doubt that improvements took place in Taiwan after 1896—it would be strange if this were not so. More than 300,000 Japanese live there now and their health depends to an important degree upon the health of the surrounding population, especially in case of epidemic diseases. First of all, for the sake of comparison, we give the basic figures for Taiwan and Japan.

Number of Physicians, Dentists, etc. in Japan and in Taiwan, 1936

	Japan	Taiwan	
	1936	1936	1938
Physicians	61,799	1,834	1,983
Dentists	22,072	402	407
Pharmacists (yakusaishi)	28,156	190	213
Nurses	124,402	...	170
Midwives	61,732	1,744	1,796
Per 10,000 of population			
Physicians	8.8	3.4	
Dentists	3.1	0.7	
Pharmacists	4.0	0.3	

4:Grajdanzev--173 S-4 (no date) 1942 Formosans-2
116. 744. 759. 177.74 Japan
636.74

Nurses	17.7	0.3
Midwives	8.8	3.2

Source: Dainippon teikoku nenkan and Taiwan Jijo."

4:Grajdanzev--173-174 S-4 (no date) 1942 Formosans
116, 171, 278, 744, 759

"In the section on education it was shown that Chinese college students from Taiwan prefer to study medicine because this is a profession in which it is relatively easier to establish oneself than in others. Now we see that in spite of this attraction [174] there are two and a half times as many physicians per 10,000 population in Japan as there are in Taiwan. The same is true of midwives, though the need for midwives is greater in Taiwan, where the birth rate is one and a half times as high as in Japan. On the same per capita basis there are four times as many dentists and thirteen times as many pharmacists in Japan as in Taiwan. These and many other figures which could be quoted show that as regards health services Japan is several times better served than Taiwan. And actual conditions are even worse than these figures suggest because the equipment of hospitals is poorer and the physicians rely chiefly on advice and prepared drugs, which are sold by some 6,600 stores as well as 6,700 peddlers."

15: U.S. Navy --26 [13] (no date) 1944 Formosans
116, 625, 556, 744, 177.74 Japanese
636.74

"The Japanese policeman undertakes to instruct rural peoples in sanitation, house-building, religious observance and many other things elsewhere usually left to private initiative. Large-scale public works projects have raised the whole standard of health and public welfare. Extremes of wealth and poverty are not very apparent in normal times."

15: U.S. Navy--28 [2] (no date) 1944 Formosans
116, 744, 177.74 Japanese
636.74

"Compulsory house-cleaning as a public health measure is rigorously enforced by the Japanese. Towns and country districts are systematically organized for semi-annual house-cleaning days and cooperation is expected of everyone. The movable contents of every house and most shops must be taken out into the open air and the premises must be cleaned thoroughly. Before replacement a police inspection is obligatory, and a certificate of approval must be issued and posted at the door of each building."

15: U.S. Navy--28 [3] (no date) 1944 Formosans
116, 515, 735, 744, 177.74 Japanese
636.74

"General standards of personal cleanliness are not high, but the universal shabbiness must be attributed to poverty rather than to sheer neglect. The principles of elementary hygiene are not widely understood. The Japanese have been making some progress in establishing habits of public cleanliness and have been trying to introduce new measures of household hygiene (careful disposal of waste, daily bathing). The problem is very great, however, among six million people. Although general standards are lower than the average in America, they are as high as standards maintained in backward districts in the South or in city slums, and are infinitely better than standards existing among Chinese villages on the China coast across the Straits of Taiwan."

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648 362 designs -- actually built -- was opened in October 1955 in Taipei.[8] The model houses are built of reinforced concrete, kiln brick wall, cement or brick floor, new style tile roof, and are equipped with electricity and running water. The houses range from four-to seven-room units. The best and most expensive type of design provides for a living room, three bedrooms, a kitchen, a dining room, and a bathroom equipped with flush-toilet -- rarely found in Formosan homes. It is believed that the self-help, low-cost housing program as well as the efforts of NHC will go a long way toward improving housing conditions in Formosa.

II. ENVIRONMENTAL SANITATION

A. General Sanitary Conditions

741 Climate and economic conditions are the main determinants of the living environment of the Formosan people. Although sanitation is being constantly improved, it is still far from adequate and, with the housing situation, presents a most serious problem in the field of public health. The long summers, relatively warm weather throughout the year, and usually abundant rainfall, provide conditions favorable to the spread of communicable diseases. The rapid increase of population, especially in urban areas, unmatched by proportionate expansion of housing, public sanitation, and fresh water supply facilities has created such new problems as congestion in living quarters, lack of sufficient water, and shortage of public toilets. These conditions aggravate the previously existing situation of poor housing, drainage systems, and waste-disposal facilities.

8. Chung-yang Jih-pao [Central Daily News], Oct. 17, 1950.

B. Specific Conditions and Problems

744 Few homes in Formosa are equipped with modern facilities. Brick stoves burning charcoal are the most common medium for cooking and heating; oil and kerosene lamps provide most of the lighting. Smoke from both these sources is a polluting agent within and outside the home, particularly in the rural areas. According to a recent study, 15 per cent of urban homes and 40 per cent of rural homes are not equipped with electric lighting, to say nothing of other electrical facilities.[9] Drinking water is piped into only about 30 per cent of urban houses and less than 15 per cent of rural dwellings; about one-third of urban households and two-thirds of rural homes obtain water for drinking and cooking from wells; and the rest of the households get their water from irrigation ditches, streams, and springs.[10] Towns under 20,000 population generally do not have a system for piping water into homes.[11] Some wells have pumps, but most are open to pollution by dirt, insects, and the runoff of surface water. Flush-type toilets are rare, only about 1 per cent of urban dwellings have such a facility; the majority of households use inside or outside privies, periodically emptied of night-soil for disposal as fertilizer.

744 362 Sewer systems in towns and cities are networks of open drains designed to carry storm runoff and waste water from domestic and industrial sources. The brick or cement gutters, from one to four feet deep, are generally located between the street and the sidewalk. Occasional cross drains lead into

9. A.F.Raper and others, op.cit., p. 348.
10. Ibid., p. 349.
11. [next page]

744 trunk lines, which empty into open canals. Most
362 urban centers have a system of high-level canals bringing in fresh water, and another network of low-level canals carrying away waste water. However, it is a common sight to see children swimming and women washing clothes or vegetables in low-level canals. Often garbage, night-soil, and other refuse are dumped into the fresh-water canals. Some municipal authorities are now considering elimination of open sewage systems with all their disadvantages, but the enormity of the job and financial difficulties preclude any immediate fulfillment of such plans. For instance, the municipality of Taipei is contemplating the construction of an underground drainage system costing hundreds of millions of Formosan dollars and requiring more than ten years to complete.[12]

744 The scarcity of chemical fertilizers and the
514 average farmer's lack of financial resources necessitates the use of all organic refuse materials from human and animal sources to enrich the soil. The consumption of raw vegetables fertilized by unprocessed night soil is a primary cause of the spread of intestinal diseases. In addition the use of night soil presents problems of collection and disposal. In cities, human excrement from one or more households is often stored in water-tight vaults. The contents are periodically emptied by

11. E. A. Turner, "Environmental Sanitary Conditions in Taiwan," Chinese American Economic Cooperation, Volume II, No. 2, Feb. 1953, pp. 51-65.

12. Central Daily News, Jan. 11, 1955.

744 364 long-handled dippers into wooden buckets and carried to collectors' carts for transportation to reservoirs outside the city. There the night soil is sterilized before being distributed to rural areas. In the countryside, human excrement is usually taken directly from the privies and applied to the soil without processing.

744 364 Refuse of all kinds is extensively utilized. Private or municipal collectors of refuse carefully sort waste material to salvage and resell as much of it as possible. Organic waste is used for composting fertilizer; paper, rags, glass, and metals are sold for scrap. While waiting for disposal, the compost piles and junk heaps provide breeding places for disease, rats, and insects. Other breeding places for diseases and their carriers are provided by waste accumulation in the streets and back yards of cities; the number of workers engaged in the collection and disposal of night soil and refuse is insufficient for prompt waste disposal. In Taipei, for instance, while the population was doubling in the 1950-54 period, the number of night-soil collectors [13] increased only from 410 to 428. However, under the cooperative efforts of the American MSMC, the JCRR, and government agencies, more efficient and sanitary methods for the collection and disposal of waste materials are being adopted.

744 The problem of sanitation is complicated by public ignorance concerning it. Although the people

13. The Central Daily News, Jan. 21, 1955.

744 are being made increasingly conscious of the need for sanitation, such unsanitary habits are still common as spitting in public places, discarding waste onto streets, dumping refuse in open sewers, and permitting chickens to wander freely through homes. Garbage cans are scarce, and the too-few public toilets are often not kept clean. In an attempt to improve the situation, the provincial government has organized the Committee for Supervision and Guidance of Environmental Sanitation. The committee is divided into small groups which tour the island to inspect sanitation facilities and to direct the improvement of them in all government agencies, schools, public meeting places, public markets, and slaughter houses.[14] Each local government also has a similar committee to formulate sanitation policies. However, government assistance in improving public sanitation is limited by lack of sufficient finances. In the municipality of Taipei, only 8.37 per cent of the 1954 budget was allocated for all public health needs, of which environmental sanitation was only a part.[15] Government efforts are supplemented by the work of various social organizations, such as the Women's Association, in improving public sanitation.

As will be discussed in the following section, considerable advances have been made in the improvement of health and medical facilities and in the prevention and control of disease, leaving environmental sanitation as the major challenge in the field of public health.

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14. T'ai-wan Sheng-cheng-fu Kung-pao [The Official Gazette of the Taiwan Provincial Government], Feb. 21, 1955.

15. The Central Daily News, Jan. 30, 1955.

III. PUBLIC HEALTH PROBLEMS

A. General Background

744 731 Many of the communicable diseases usually associated with a tropical and sub-tropical climate were common to Formosa until the end of the nineteenth century. At that time, Formosa was still commonly called the island of epidemics. Plague, cholera, and smallpox caused the most serious epidemics; malaria, dysentery, typhus, and pneumonia were widespread but less prevalent. The control and prevention of these diseases became a major task of the Japanese administration which took over control of the island in 1895. The activities of the health bureau were closely coordinated with the exercise of the police power. Such measures as enforced vaccination, isolation of patients, destruction of contaminated houses, elimination of rats, and strict quarantine at seaports brought quick results. Since 1920, no major epidemics have occurred on Formosa.[16] Preventive activities against venereal diseases, parasitic diseases, trachoma, tuberculosis, and leprosy were begun by the Japanese in the late 1920's. By 1942, deaths from contagious and other diseases among Chinese inhabitants of Formosa had been reduced to the following yearly rate:[17] tuberculosis, 4,834; malaria, 5,792, parasitic diseases, 5,775; tracheitis, 4,661; pneumonia, 18,922; diarrhea and intestinal inflammation, 14,789; and kidney disease, 5,993. The least results were achieved in controlling tuberculosis, malaria,

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16. Shao-hsing Chen, "Population Growth and Social Change in Taiwan," Bulletin of the Department of Archeology and Anthropology, Nat'l. Taiwan Univ., Taipei, May 1955, pp. 76-103.

17. [next page]

764 medical facilities, training of personnel and
164 distribution of medical supplies have been effected through the joint undertakings of Chinese Government, United States, and international agencies, namely, the American MSMC, American Board for Medical Aid to China, Sino-American JCRR, World Health Organization (WHO), and United Nations International Children's Emergency Fund (UNICEF). The decline in the death rate during the 1948-53 period from 14.3 to 9.5 per 1,000 population[18] is clear evidence of the advances made by these joint efforts.

B. Specific Measures

744 Malaria. The Japanese in the last years of their malaria-control program maintained 375 malaria stations throughout the island for the administration of suppressive drugs. During the war the efforts were discontinued and an epidemic broke out in the post-war years. The Malaria Eradication Program begun in 1952 under the joint sponsorship of the Provincial Government, WHO, MSMC, and JCRR, arrives at complete elimination of the disease from the island by the end of 1956. By early 1956, the program had provided direct protection against malaria to more than 5,500,000 residents of formerly malarial areas.[19] The control program is carried out through (1) continuous checking and study of malaria parasites and treatment of malaria patients in the rehabilitated 144 malaria control stations throughout the island, and (2) the planned residual spraying with DDT of all dwellings in

18. See Table 8 in chapter on Population.

19. Mutual Security Mission to China, International Cooperation Adm., The Public Health Program on Taiwan (unpublished pamphlet), Taipei, 1955, p. 6.

744 malaria-affected areas to break the cycle of infection.

Tuberculosis. This is one of the most serious and crippling diseases in Formosa; one out of every ten deaths on the island is attributed to tuberculosis.[20] The control program has mainly employed a preventive technique, giving tuberculin tests, mass chest surveys, and BCG vaccination shots (believed to increase the resistance of infants and children against tuberculosis). The JCRR assisted the government in constructing and equipping a laboratory for productio of BCG vaccine, and the Taipei Tuberculosis Center, a unit of the Provincial Health Administration (PHA), has been acting as a sponsoring agency for extensive vaccination. Hospitals, rural health centers and stations and mobile units co-operate in carrying out this program. As of 1955, all school children had received tuberculin tests, and youngsters showing negative reactions were given BCG vaccinations. Testing and vaccination have now been extended to pre-school children.

Serum and vaccine production. The Taiwan Serum and Vaccine Laboratory, organized with JCRR assistance after World War II, has since received help from JCRR, WHO, UNICEF, and MSMC. Through co-operation with the National Taiwan University School of Medicine, the laboratory is now able to produce most of the serum and vaccine needed for the population. In 1952, the

20. A. F. Raper, Rural Taiwan -- Problem and Promise, Taipei, Joint Commission on Rural Reconstruction, 1953, p. 230.

.744 laboratory manufactured smallpox vaccine for 8,800,000 persons and distributed it free to 350 health stations. In the same year, mixed vaccine against cholera and typhoid was produced for 2,355,000 persons and issued to the health stations for free inoculations.[21]

Other programs. Campaigns against trachoma through examination and treatment of school children; the control of venereal diseases through education, periodic examinations, and treatment; and the establishment of a blood bank to meet emergency needs; all are being carried out through the co-operation of various governmental, United States, and international agencies. In addition, the provincial government operates a leprosy colony for the custodial care of some 700 patients.

C. Medical Education

874 There are currently three medical schools and two college-level nursing schools in Formosa -- the National Taiwan University School of Medicine, the National Defense Medical College, and the non-Government Takau Medical College; the National Army Defense Nursing Schools and the Provincial Technical School of Nursing.

The National Taiwan University (NTU) School of Medicine is the island's highest medical institution. It trains dentists and pharmacists as well as physicians and surgeons. The doctoral

21. China Handbook 1953-54, Taipei China Publishing Company, 1953, p. 140.

874 training for nurses will begin in 1956 with the expectation of graduating forty nurses with B.S. degrees yearly after 1960. In addition, nine nurses have received training in the United States under the technical assistance program; three are scheduled to enter the program in 1956 and seven in 1957. In Formosa, the Provincial Health Administration is also conducting seminars for hospital administrators, chief nurses, and head nurses.

D. Outlook

744 Today, the major challenge in the field of public health lies in environmental sanitation. The problem entails, in particular, the improvement of waste collection and disposal, of food sanitation in private homes, food stands, and restaurants, and of insect and rodent control. Concentration of attention in these areas is vital to maintain the present general level of the population's health as well as to reinforce the curative and preventive accomplishments already made in the treatment of specific diseases.

Since the improvement of environmental sanitation is closely related to a higher standard of living, the attainment of completely satisfactory conditions will be a long and hard pull. Under the co-operative efforts of the government, the United States, and international agencies, Formosa has made great advances in health work and looks forward to achieving a clean and healthy community free from major diseases in the not too distant

744 future. Before attaining this goal, however, health education will have to be ex ded to all classes of the people, and the economy made stable and prosperous.

IV. MEDICAL FACILITIES AND PERSONNEL

759 Formosa is better provided with professional medical personnel and better equipped with medical and health facilities than the average Asian nation. The latest reports on medical personnel and facilities on the island show the following situation:

LICENSED MEDICAL PERSONNEL -- FORMOSA 1955 *

Physicians	5,443
Herbalists	1,755
Dentists	781
Pharmacists	906
Nurses	877
Midwives	2,310
Dental technicians	234
Druggists	327
Total	12,633

*/ [illegible] Taiwan

759 been trained in Western countries; the doctors who have not are capable of providing treatment equivalent to that of their Western counterparts except for the administering of the newest medicines. Many of the midwives are well trained and capable of efficient practice in their specialty.

744 Health centers at 22 cities under hsien and provincial administration and health stations at more than 350 townships and villages throughout the island provide a network of medical facilities for the administration of preventive and curative measures on a mass basis.[26] A health center is usually staffed with from 20 to 25 persons, including four or five physicians, three to six nurses, two or three midwives, and one or two laboratory technicians. The health stations are branch units of the health centers; a typical health station has a physician, a nurse, a midwife, a sanitarian, and a technician. Since 1954, the provincial government has established 120 sub-stations in aboriginal villages to extend its health services; a sub-station is permanently staffed with an attendant nurse and a midwife. In addition to out-patient clinical care, the health centers and stations provide obstetrical services, home and school visits by nurses, preventive inoculations, health education, laboratory services, and mobile clinical treatment in neighboring villages. The centers and stations also gather and compile vital statistics. The stations are now an integral part of rural communities and are financially self-supporting.

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26. Mutual Security Mission to China, International Co-operation Administration, op. cit., p. 5. The number of health stations is constantly increasing.

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,600 physicians were registered as engaged in private practice or public service. There were about 600 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per cent in this 35-year period and virtually all 161 241 177

48: Chen E-4 (no date) 1955 ADl Formosa ADl

Hitherto the development of chemical production, heavy industry, and consumer goods industries on Taiwan had declined, but now they were earnestly promoted. This gave another impetus to social change.

8. Elimination of Epidemics

After the occupation of Taiwan, two things troubled the Japanese most: the revolts of the Taiwanese and epidemics. One branch of the Japanese expeditionary army landed on the Pescadores on March 21, 1895. By mid-May, fully 1945 people out of 6,190 were afflicted by cholera, and 1,247 died. Another branch of the expeditionary army landed on Taiwan at about the same time and was also stricken with cholera, malaria, dysentry, typhus, pneumonia, and beri-beri. Only one fifth of the total army was free from illness by the end of September (5: Vol. 2, No. 12). During the early years of the Japanese occupation epidemics spread widely, and thus, elimination of epidemics was the first administrative task for the new rulers of Taiwan.

Plague, cholera, and small-pox were three serious epidemics in Taiwan. Plague broke out in Hongkong in 1894, invaded in Taiwan two years later, and had spread to many places during the next twenty-two years. During this time more than thirty thousand people were inflicted, and twenty-four thousand died. It was wiped out in 1917 (5: Vol. 2, No. 12). The activities of extermination and prevention by police power were conspicuous. They included the isolation of patients, destruction and burning of contaminated houses, extermination of rats, quarantine at sea ports etc. Though the means adopted were harsh and cruel, they were effective. Cholera was not as serious as plague in Taiwan. A greater prevalence of cholera occured in 1902, 1912, 1913, and 1920. After 1921 the preventative arrangements were more or less completed and by the cooperation of the people and the public health system, the occurence of cholera could be closely controlled.

During the early years of Japanese occupation small-pox was a serious problem. With the enforcement of vaccination, it began to decline after 1903. Since then, except for a greater prevalence in 1918–1920, small-pox has not been a menance in Taiwan (5: Vol. 2, No. 12).

Plague was wiped out in 1917. Cholera and small-pox were under control by 1920. Since then there has been no serious problem of epidemics in Taiwan. Incidentally, the cattle pest which ravaged Taiwan from 1896 and killed more than forty thousand head of cattle, was also exterminated in 1920.[7]

Whether or not a society is menaced by epidemic is always a significant social fact. We may say that freedom from epidemics is the first step toward modernization. In Taiwan, the course of this change can be traced in the data of population change. Before 1920 the death rate was high, and it also fluctuated frequently, and the extent of fluctuation was great. This is a sign of the uncertainty of life. In fact, living in a society where epidemics constantly spread, one could not estimate in the morning what would be happen before nightfall. Fatalism, such as shown in the saying "man proposes,

Note 7: *Animal Resources of Taiwan*, published by the Bank of Taiwan, 1962, p. 172, p. 296.

48: Chen E-4 (no date) 1955 ADl Formosa ADl

but God disposes", "Der Mensch denkt, und Gott lenkt", "Der Mensch schaltet, Gott waltet", was fostered under such circumstances. In Taiwan there was a saying: Confucius did not accept an invitation for the next day, since he didn't know whether he would be still alive in the evening or not. Under these circumstances, the attitude of the people is always "looking backward", and planning for the future will be laughed at as utopian. Once epidemics were wiped out, the death rate not only lowered, but its fluctuation became more infrequent and of lesser extent. This is a sign of more stability of life, and thus the traditional fatalism gradually dies out. The attitude of the people changes from "looking backward" to "looking forward", and planning for the future becomes a realistic idea. Ancestor worship and all kinds of cult and ritual are the main concern of people who are always looking backward, but for the peole who are looking forward, the upbringing and education of the younger generation is the most important.

9. Prevention of Endemic Disease

Malaria was the main endemic of Taiwan. Though epidemics are disastrous enough, their prevalence is intermittent, and the extent of their devastation is not necessarily very large. In contrast, malaria creeps in slowly, destroys vitality and attacks human life directly and indirectly. From the time of the Japanese occupation (1895) until 1916, about one tenth of all the deaths in Taiwan were caused by malaria, and during this period it was always the first or second in rank among the leading causes of death. Unaccustomed to the climate of Taiwan, the Japanese in Taiwan had to pay a heavy toll to malaria. In 1899 for instance, one quarter of the total deaths of Japanese in Taiwan were caused by malaria. In 1907, under the supervision of a professor of medicine, prevention of malaria was started by a camphor manufacturing corporation in a village of southern Taiwan, and some results were obtained. Preventative activity by the government-general was started at Peito, a town near Taipei, in 1910. As it was found effective, the regulations for the prevention of malaria were enacted in 1913, and were enforced through the system of police and paochia. The area of prevalence was designated, inhabitants within the area were complelled to have a blood test, and the patients were compelled to take medicine. The use of mosquito nets, drainage, and other sanitary works were enforced. The means adopted were harsh, but the result was good. The malaria death rate began to decline after 1916, considerable improvement has been made since 1925, and as a result the crude death rate was lowered. (cf. Fig. 11).

10. Activities of Preventive Hygiene

The devastation from epidemics and malaria was great, and thus the activities for their prevention were begun first. Some simple facilities for patients of leprosy and mental disease were also provided in earlier years. Other diseases, such as tuberculosis, venereal diseases, trachoma, and parasitic diseases, did not show any serious devastation, and they were not considered as serious problems by the government. The administration in Taiwan was mainly an imitation of that in Japan. What they had

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

done in Japan was adopted in Taiwan with some slight time lapse. In 1916 a hygienic survey was made in Japan, and five years later, in 1921, the same project was adopted in Taiwan. Between 1922 and 1925, and also from 1926 to 1928, an extensive hygienic survey was carried out in various parts of the island. After the results were published the planning of sanitary works was mostly based on the data of the survey.

The prevention of trachoma was started around 1926, and was most active in the 1930's. The prevention of tuberculosis began from 1932. The Association for the Prevention of Tuberculosis was organized in 1934, Regulations for the Prevention of Tuberculosis were enacted in 1938, Tuberculosis Prevention Day was initiated in 1939 and a sanatorium was constructed in most prefectures, most of them being completed in 1942–43. These activities were quite effective, and the death rate from tuberculosis declined after 1938 (cf. Fig. 11, line D.) Activities of tuberculosis prevention were started in the U. S. in 1890, and as a result, deaths from tuberculosis declined sharply. It has been pointed out by a social scientist that, though the improvement in living conditions will lower the death rate from tuberculosis, community preventive activity is also very significant (20: p. 631). It is interesting to note that, this was true both in the U. S. and in Taiwan.

The preventive activities against venereal disease, mental disease, parasitic disease, and leprosy were also started by the 1930's. For the administration of these activities, a section of preventive hygiene was added to the Health Department of the government-general in 1935. This may be taken as a sign that more emphasis was put on preventive hygiene.

11. Sanitary Facilities and Medical Personnel

Various kinds of basic sanitary facilities such as drainage, water supply, disposal of garbage and night-soil, supervision of slaughter-houses and markets, inspection of food and businesses such as barber shops, restaurants, and hotels were started rather early. These were started in the cities, particularly in the wards of the city which were largely occupied by the Japanese, and gradually extended to wider areas. The establishment of public hospitals and public doctors was also early in time. Naturally, these were established first and foremost for the benefit of the Japanese in Taiwan. Japanese business men in Taiwan had enjoyed various kinds of privileges, Japanese officers received an allowance 60% greater than that of their brothers at home, and all of them could utilize these public facilities. This was the reason why their death rate was not only lower than the death rate of Japan proper, but even comparable to that of the most advanced countries in the world.

Before the Japanese occupation there were a few hospitals operated by Christian missions. Physicians in these hospitals were the only doctors of western medicine, and other physicians were doctors who practiced Chinese medicine. Some Japanese doctors of western medicine came to Taiwan after the occupation, but their number was very small. In response to the urgent need for medical personnel, training classes for doctors and nurses were set up in Taipei Hospital in 1897. The medical training class

48: Chen E-4 (no date) 1955 ADl Formosa ADl

181 matters of sanitation, and at times on matters of agriculture. With the passage of
178 time, experience lead them to compare their traditional way of life with that imposed by the colonial government. Some of these ways were found to be not too bad, some even adoptable. This kind of change in attitude through hard experience was fairly significant. By this, people realized for the first time that there were another ways of life besides their traditional one, and that some elements were worthy of adoption. Once the people began to adopt the new way of life, change began to speed up. From the following instances we can see that change in the attitude of people became conspicuous after the 1920's. We have discussed the influence of war and peace, the prevalence of epidemics, and the development of transportation on the attitude of the people (§ 7, 8, 12). Here the change of attitude concerning medical treatment and agriculture will be discussed.

178 Since treatment of illness touches the innermost part of life, it is only natural that
144 conservative people do not dare to allow an unfamiliar doctor with strange ways of
156 treatment to approach them. For Taiwanese, who had been accustomed to the traditional Chinese medicine and folk medicine, doctors of western medicine, particularly with their injections and operations, were dreaded. During the early years of the Japanese rule there was a prevalence of cholera. Colonial officers compelled the people to take the preventive injection. Great consternation arose among the people, and many of them, particularly young girls, escaped and hid, in order not to have the dreaded injection. In the old city of Tainan a young girl of a wealthy family was escaping in a palanquin, but unfortunately she was caught by a Japanese police on the way, and forced to take the injection. Perhaps because the shock was too great, she died in a short time. Another young girl who took the injection killed herself after she went home, because it was a dreadful shame for a young girl of high standing to expose a part of her body to the public gaze. When a person died, his family had to have a medical certificate in order to get permission for burial. In 1906 90% of the medical certificates were issued by doctors of Chinese medicine, and certificates issued by doctors of western medicine constituted only 10% of the total. The proportion of
[175] the latter increased gradually, attained to 45% by 1917 (11:1917, p. 29). By 1920, the number of doctors of western medicine already exceeded those of Chinese medicine, and by 1935, 90% of medical certificates for the dead were issued by doctors of western medicine. Thirty years after 1906, doctors of Chinese medicine and doctors of western medicine had changed positions completely. By 1935, people did not object to injections and operations any more. On the contrary, they even believed blindly in injections, and asked for an injection when they saw a doctor. This was a remarkable change in attitude.

178 Farmers are tenaciously conservative in their work. In Taiwan, farmers originally
241 used only compost and night-soil, and did not use any commercial fertilizer. When a sugar corporation started to promote the cultivation of sugar cane, they bought commercial fertilizer from Japan, and distributed it free of charge to farmers. Once a

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

PUBLIC HEALTH AND THE RISKS OF DEATH

The Japanese and Public Health

165 The Japanese military forces that first set out to subdue Taiwan met no firmly organized resistance among the people, but were nearly overcome by sickness in their own ranks before taking possession of the island. Out of an undisclosed total number of troops taking part in the campaign, the Japanese acknowledged only 154 combat fatalities, but over 4,000 died of disease within the first several months, and 27,000 had to be hospitalized (most of them in Japan).[8] Epidemic illness did not, like poverty, stay confined to the Taiwanese population and leave the new rulers unmolested. Mosquitoes that carried malaria, for example, did not observe this distinction. The Japanese liking for raw fish was said to make them even more vulnerable than Taiwanese to the parasites that infested the food. Among the garrison alone, annual deaths of more than 40 per thousand were reported during the first decade of occupation, probably a higher figure than in the adult population of Taiwanese. In order to make this region of the world safe for imperialism, the Japanese found that they had to take drastic measures to curb the spread of disease.

657 744 They started almost at once to devise ways of counteracting the most serious sources. The steps that they adopted are instructive, for the result was a marked success with only a modest outlay. The campaign against sickness was launched when scientific knowledge as to the nature of these diseases was by present standards still rudimentary. Its weapons were crude and sometimes misguided. Moreover, there were many other goals of administration that competed with public health for attention. The authorities were never in a position to divert large blocs of funds to make their program elaborate or munificent. It lacked the grandeur of projects sometimes contemplated by those who draw up plans for "backward" areas today. The whole approach of the Japanese to the problem of disease in Taiwan was an austere one. They avoided every possible expense in equipment and physical facilities, and depended on intensive use of all the administrative resources at their command.

744 In slightly over a decade the authorities almost eradicated plague as a major disease, through strict vigilance for suspected cases of infection, rigorous quarantine regulations, and careful inspection of incoming ocean cargoes for infected rats.[9] Cholera was similarly pre-

[8] Davidson, James W. (1903), p. 354.
[9] Naito, Hideo (1937), p. 84 ff.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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vented from spreading in the population by incessant search for afflicted persons, and quarantine of those cases that were found. Inoculations gradually were developed into an indispensable preventive measure against both of these diseases.

The cities, where crowded and unsanitary living conditions invited some deterioration of health standards, were made less favorable to cholera by piping in water from mountain streams and from specially constructed wells. In nearby localities, regulations were issued—and enforced—requiring villagers to tap sub-surface sources of water with deep wells that were kept covered.[7] Contamination of food supplies in the larger cities was minimized by crude provision for sewage disposal—a few septic tanks and public sewers were built, but most municipal authorities merely supervised the removal of sewage by cart. Agencies of the Sanitation Bureau regulated food handling and butchery in the public market places.

Malaria had to be attacked indirectly, and hence proved more stubborn to keep in check. It remained a source of widespread enervation and an important cause of death even during the 1930's, when measures for its control had become most effective. There were then no very satisfactory ways to kill mosquitoes or to check their breeding under conditions in Taiwan. The government drained many swamps, but the irrigation procedures necessary for the island's food supply depended on open water storage and flooding of fields.[8] The localities most frequently affected soon became known, and the authorities relied on detection and compulsory treatment of cases that were discovered. They sent special medical personnel to these districts, backed up by police power, and forced all suspected individuals to undergo blood tests and compulsory treatment with quinine. In the later 1930's, over three million examinations were regularly being performed each year. By unremitting and energetic insistence on these devices, the Japanese managed at least to prevent any large epidemic outbreak of malaria during their stay in Taiwan.

With these few outstanding dangers under control, the principal remaining causes of ill health and death were respiratory ailments and enteric disorders. As the former ceased to produce epidemics, these more common types of sickness came to account for an increas-

[7] U.S. War Department. *Technical Bulletin* (TB Med 30) (1944), p. 2.

[8] It is moreover alleged that certain types of mosquitoes bred in streams of the interior foothills. See U.S. War Department, *Technical Bulletin* (TB Med 30), p. 9.

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ing share of all deaths.[9] They were diseases that could readily be avoided by individuals whose livelihood did not continually expose them to contact with likely sources of infection, and whose income permitted them to observe simple precautions. Most Japanese were consequently protected by the nature of their occupations from the common forms of fatal illness in Taiwan. These diseases did not jeopardize their possession of the island as had epidemics in the past.

Even so, the Japanese conducted among the Taiwanese population a wide program of education and instruction in some of the simpler techniques of contending with these sources of ill health. They issued countless sanitation rules, and utilized much of their apparatus of government to enforce their observance.[10] Administratively, the health and sanitation functions of government were coordinated in several departments. In practice most of the regulations were put into effect under the authority of the police. Some trained specialists participated, bringing elements of Western medicine to Taiwan where formerly there had been none except for scattered and uncoordinated efforts of missionaries.

The level of skill among the personnel at their disposal suffers by comparison with that of modern Western countries, and it probably also fell below the standards of the more restricted public health work in some of the tropical dependencies of European powers. The strength of the system established by the Japanese, however, was in its organization and generality, and not in its equipage. It was a comprehensive program rather than a piecemeal offering of the most elaborate medical treatment.[11] Though the physical facilities of sani-

[9] For reasons that we shall come to presently, the statistics on causes of death are hard to interpret in Taiwan. They show clearly, however, a decline in malaria and the epidemic diseases, and a relative increase in deaths due to these other more insidious ailments.

[10] Indeed, it sometimes almost appeared that they used these objectives to cement their control over the population. The enforcement of public health regulations provided an excellent occasion for the police to enhance their authority over everyday activities. The Taiwanese who protested that these measures were mere excuses to interfere in the private lives of the people probably had a certain amount of justification for their charges. See Hsü Tze-wei (1946), p. 444.

[11] The Japanese did not ignore training, but assigned it a special role in their general health program. Various medical schools were established for medical instruction of Taiwanese, the first as early as 1902. The staffs of these schools and part of the faculty at Taihoku Imperial University included some competent medical specialists, but these men were retained primarily for research that had no close bearing on public health in Taiwan. Through such limited educational facilities as these and the licensing of local doctors and midwives, Japanese managed to give elementary instruction to many Taiwanese practitioners. Though superficial, the training was distributed widely enough for a striking effect on mortality.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

tation were confined to some of the major cities, the influence of these broader health measures gradually spread evenly over most of the island. In this way Japanese gained results that were very substantial through the use of none but crude techniques.

The Japanese policy toward opium addiction was less consistent, for here they found welfare goals to be in conflict with profit motives. They made the manufacture of opium a government monopoly, and closely regulated its sale. The announced purpose for this control was to eradicate the use of the drug, but the Taiwanese occasionally complained that officials secretly abetted its consumption. The truth of the matter is not clear, but their success in other tasks suggests that opium addiction could have been stamped out far more quickly if they had made a determined effort to do so. Some of their own records show that new users of opium were being granted licenses as late as the 1920's. It is likely that the Japanese appreciated the effectiveness of addiction in enervating the resistance to their rule among wealthy families, and they made no secret of the steady public revenues that they derived from opium sales.[12]

The Evidence for Measurement of Mortality

There is not much point in describing the purposes and methods of public health work without having some independent appraisal of results. Such efforts have often been sponsored elsewhere with much fanfare and little accomplishment. The only trustworthy way to view the results of economic and sanitation policies in prolonging life is through some form of measurement; this is likewise the only precise way of comparing the risks of death in Taiwan and in other areas.

Fortunately the data that exist to gauge mortality in Taiwan are excellent. The occurrence of many kinds of illness involving danger of contagion was required by law to be reported to the authorities. Partly as a means of avoiding contamination of the living by the dead, and partly just as a means of tightening official control over the reporting of disease, the Japanese also strictly regulated burials and cremations.[13] The rigors of enforcing these rules led to concealment of some illness and evasions by mis-stating exact causes of

[12] A careful study of opium addiction in Taiwan and its relation to mortality is contained in Tu Tsung-ming (1935 and 1938).

[13] See Hsü Tze-wei (1946), p. 449.

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

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TABLE 42

RELATIVE VARIATION OF MORTALITY AMONG PREFECTURES IN SELECTED YEARS

Coefficients of Variation for the Death Rates of Each Year in Table 41

Year	*Crude Death Rates*	*Infant Death Rates*	*Deaths/ Women 15-49*
1906	19.2	—	36.0
1915	17.7	13.2	27.9
1925	15.2	10.8	27.3
1930	9.6	9.3	15.2
1935	5.1	6.3	16.6

Source: Computed from data of Table 41.

conditions. Much headway was made in this process after 1925, when the life tables above revealed such large gaps in the degree of control over sickness and death. It must be kept in mind when studying mortality here and in other areas of rapid decline that initial achievement is likely not to extend to many in the population, and that later progress may be no more than bringing more types of people nearer to the same point as the ones who were privileged in the beginning.

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Taiwan formerly had a well-earned reputation as a spot of capricious and unchecked risks to life among its inhabitants. Its position athwart trading routes of the last century made it a likely place to introduce epidemic disease from the rest of Asia. As it became drawn into contact with the outside world and its wider sources of infection, the state of medical knowledge among its people did not keep pace. The former government lacked the capacity and the incentive to adopt measures that might alleviate or forestall such sickness. Taiwanese were therefore often subjected to intense attacks of these diseases, some of them becoming general over the island.

In fifty years of administration the Japanese quickly eliminated epidemics. They succeeded in gradually making the other sources of fatal illness and ill health less prevalent, and thus postponed the prospect of death for Taiwanese. While some characteristics of the decline in mortality that they induced followed familiar patterns, it also carried certain distinctive traits of the society in which it occurred. Special features like the apparent vitality of adult women

52:Barclay S-5 (no date)1954 AD1 Formosa AD1

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and the importance of neonatal mortality in the decline of total infant mortality we have established with repeated observations. As far as present knowledge is equipped to deal with them, these peculiarities must remain inexplicable.

The means to this accomplishment were inexpensive and rudimentary. Aside from probably raising levels of living, the Japanese developed a concerted program against an important group of dangers to health. They attacked those pestilent conditions that can be reached through sanitation and slight reorganizations on a mass scale of practices that were deeply rooted in custom. More thorough measures, which were also more burdensome, were avoided. Their health program relied on administrative efficiency and energy in execution to make up for what it lacked in elegance of equipment and technique.

It is significant to find that such an approach could achieve the results that it did. In many other areas of high mortality the desire to reduce the risks of death is prompting steps in the same direction, and Taiwan's experience ought to prove instructive for such efforts. It is only a modest sample of what might be done in a "backward" region with effective administration—without necessarily incurring the great expense often thought to be associated with high standards of public health. Recent progress in research and development of drugs can make success more certain than before. Future strides in medical knowledge can enhance it still further.

The greatest limitation is that health promotion among people with high mortality requires constant vigilance. Default threatens such a program with collapse, for medical procedures now known are still not automatic, nor are they foolproof. Japanese measures to control disease were primarily suppressive. They did not eradicate malaria or remove the potential sources of cholera infection. Failure to appreciate these latent dangers led to severe outbreaks of cholera and malaria after the island was taken over by forces from the mainland in 1945. Since then the standards of administration, which had been allowed to deteriorate, have been raised again; with the improved technical knowledge at its disposal, the Nationalist government may be able to keep mortality at levels even below those of the Japanese period. The example of Japanese health policies, however, remains a useful lesson in what energetic measures can accomplish without the benefit of these superior medical facilities.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

121 eastern part of the mainland to Taiwan had been going on for several
167 hundred years, beginning in the 1600's and virtually ending about
177 1900 when it was almost completely stopped by the Japanese regime.
178 Throughout the early period and even after the Japanese occupation and administration of the island, the traditional Chinese culture brought over from southeastern China was maintained with little major change.

648 During the Japanese occupation of Taiwan, except for the period
179 just before and during World War II when they attempted to Jap-
178 anize the island, the government tried deliberately to inhibit fundamental changes in the Chinese culture.[1] As George Barclay (1954b:52) has pointed out, during most of their occupation it was advantageous to Japanese colonialism to maintain the Chinese social and economic order which already existed in Taiwan. It was by means of the traditional Chinese system, which facilitated the maintenance of social control, that Japan was best able to function as a colonial power and to derive the greatest advantage from this area, which soon became an integral economic part of the Japanese empire. Because of this policy of maintaining and utilizing the existing Chinese social and economic system, the fifty years of Japanese rule had limited direct effect on much of the traditional social life of the Taiwanese. This was especially true of the rural agricultural areas of Taiwan, where direct contact with the Japanese was infrequent and where the Japanese had, therefore, limited influence on the cultural level of life. Some superficial changes—religious forms, for example—were in later years forced on the Taiwanese rural people by the Japanese, but they were quickly dropped when Chinese rule was restored at the end of World War II. Today, unlike the situation in the urban centers of Taiwan where Japanese cultural influence was much stronger and is still evident, only few Japanese-introduced traits can be observed in rural Taiwan, and the people attach little importance to them.

However, during the later years of the Japanese period and especially during most of these past two decades under the Nationalist Chinese, the socioeconomic impact on the whole Taiwanese population has been significant. The combination of relatively efficient gov-
[744] ernment, orderliness of life, and public health measures, together with
[20] an extensive system of communications on a relatively small island has
[161] greatly facilitated rapid population increase on a stable land base and
[369] a rapidly increasing growth of urban centers.

Out of these developments, the most significant changes for the rural
369 population have been the extension of village contacts and involvement with urban centers far beyond the immediate village area, and, with this an increased spread of urban influences or at least their
[167] effects into the rural villages. These increasingly significant extensions

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

eating, while continuing to push more food on him. When old people talk, even though the younger people may consider their words pure nonsense, they merely smile and agree. When the evening is over there is usually some young grandchild waiting to lead the old man back over the dark paths to his house.

Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

ILLNESS, DISEASE, AND MEDICINE

As has already been shown in Chapter 2, the tremendous increase in population on Taiwan is a reflection of the great reduction in the death rate, which results, primarily, from the lower incidence of fatal diseases. The control of disease has been effected by such factors as public health programs which have helped eliminate diseases like cholera and malaria, an increase in the number of Western-style doctors, an increased reliance on Western medicine and medical techniques, and somewhat better sanitation as a result of education of the public and governmental enforcement of health standards.

It was during the Japanese period that Taiwan saw the advent of Western-style doctors and medicines, especially in the 1930's. However, they were few, and their practice was limited mainly to the wealthy. The benefits of their knowledge, therefore, and the everyday use of Western-style medicines did not reach many of the rural people. During this period the rural people continued to rely primarily on Chinese doctors and herbal medicines, as well as magical cures effected by shamans and healing priests. (The magical techniques are discussed more fully in Chapter 8.) However, public health measures introduced by the Japanese government to combat epidemic diseases did benefit

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

the rural people. Some forms of improved sanitation reached the rural areas through the schools and, perhaps more effectively, through the publishing of government edicts enforcing practices of sanitation. Semiannual government inspections forced villagers to clean up their houses and the villages twice a year. The inspections were carried out by the Japanese police and civil officials, and any family which did not pass the inspection was subject to fine and to reinspection, which meant that "the party was punished by having to clean up all over again." The policy of inspections instituted by the Japanese has been continued under the Nationalist Chinese regime.

During the latter part of the war, and especially after the restoration of Chinese rule to Taiwan, there was a marked increase in the incidence of disease, particularly communicable diseases. There was even a recurrence of cholera. This was a direct result of the poor living conditions brought about by the war and, with the coming of the Chinese government, a chaotic administration which was unable or unwilling to deal with health problems. However, the situation gradually began to improve after 1948 and 1949 when Taiwan became the new stronghold of the Nationalist Chinese regime. This improvement is evidenced by the general situation in the Hsin Hsing area. Beginning in the early 1950's the number of Western-style doctors practicing in the area increased. At this date, there are a number of such doctors, and the villagers consider their fees reasonable and within their means. The reason for this great increase lies in the different licensing practices of the Japanese and the Nationalist governments. Under the Japanese a man had to be a graduate of a medical school before he could practice medicine; under the Chinese government, the applicant is required only to pass a practical examination. This means that people who have worked in hospitals as aides or technicians and have had some opportunity to observe others practicing medicine may have accumulated enough knowledge to pass the examination and obtain a license. Therefore, while there are now a large number of licensed doctors practicing in the Hsin Hsing area, only a few who went to school in Japan have had formal medical training.

In addition to the great increase in the number of doctors practicing in the local area, in recent years there has also been a marked expansion in the number of private and public hospitals in the cities. These hospitals, which are sometimes very large, can accommodate many patients, house relatively modern facilities such as operating rooms, X-ray and other equipment, and provide modern drugs for patients. Although most of the patients treated in these hospitals are city people, village people sometimes go to them for treatment. They are usually referred there by a local doctor who is capable of diagnosing an illness as one requiring hospital care or who is honest enough to

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

ment of the local area. In such villages, composed of a single large *tsu* organization, the *tsu* could virtually control the lives of its member families, unite the entire village population on the basis of common kinship, and thus furnish security to all its members. But even villages like Hsin Hsing, fragmented into many small kinship groups, found their security in complete identity with the village, which made it possible for them to band together and cooperate for mutual security against the everday dangers and problems.

The coming of the Japanese at the end of the nineteenth century saw the introduction of a strong central government which led to an increased orderliness of life. The Japanese also introduced an expanded and efficient system of communications and public health and sanitation measures. These measures, coupled with a stable and secure life, made possible a radical increase in population which became even more pronounced in the late 1940's and 1950's under the Nationalist Chinese government. As all of these developments took place, particularly the maintenance of local order, the ties of the village began to loosen with the loss of its protective function and ability to initiate control beyond its own village boundaries.

In Hsin Hsing (and probably other villages like it), some of the numerous kinship groups began to increase in size and develop into *tsu* organizations as described in Chapter 5. With growth, each group became increasingly concerned with its own sociopolitical influence within the village and even in the nearby area, especially as the former imperative necessity for village unity declined. Thus, Hsin Hsing began to develop into a village with several significant competing *tsu* organizations which started, to some degree, to undercut the formerly necessary coalition of the different village kinship groups. So began the weakening of Hsin Hsing village as a unified community.

As the population increase continued in recent decades, and an already developing problem of land scarcity became even more extreme, it gradually became both necessary and possible for increasing numbers of rural villagers to migrate to the growing cities to find work to supplement their insufficient income from the land. This migration has broadened the villagers' urban contacts and relationships beyond the village. At about the same time, as we have seen in earlier chapters, the villagers have become increasingly more dependent upon and involved with the greater market economy. This has become especially true as patterns of land use have changed in response to all of the changing conditions, so that many villagers are increasingly shifting from what was primarily a subsistence form of agriculture to what is now participation in the market economy of the country. Therefore, there has been an acceleration of the impingement on the village by the outside world.

15: U.S. Navy--32 [6] (no date) 1944 Formosans
116, 745, 466, 177.46 Japanese
636.46

"Hours of labor average about ten per day, including Sundays, although most employees get two days off each month. There are no labor laws or workmen's compensation laws, as there are in Japan. Excepting in cases of Government laborers, as in the Monopoly Bureau or the Government Railways, there are no provisions for bonuses or overtime payment, but most Japanese employers follow the Government example and pay for overtime work. The Government provides free housing for certain classes of Government employees, and retires long-time employees on small pensions. Private industry makes no such provisions, except sometimes where the employer is a wealthy family bearing a paternal relationship toward workmen long in service. The Government also has a scheme for compulsory social insurance payments. No such provisions exist in private industry. If a laborer is injured on the job, it is customary for the employer to pay hospital expenses. If he is killed or totally disabled, the employer makes a money contribution, called 'consolation money' to the injured man or to his family. Thirty days' notice is usual in discharging an employee; in lieu of notice, thirty days' wages are generally paid."

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph lq,
Sociological Background

PUBLIC WELFARE

5746

Industrialization and other economic developments have been the main cause of rapid urbanization in Formosa in the last few decades. During this time much social dislocation has occurred and many new social problems have arisen. Within the traditional family system there was practically no need for social insurance. The clan provided for its aged, unfortunate, infirm, and destitute members, as did the extended families to members who needed assistance (see chapter on the Family). In the agricultural society, life was serene and subject to few changes. With the advent of industrialization and the introduction of new techniques, the pattern of life was partially, if not wholly, geared to a social system characteristic of Western industrial society. Even surpassing the rapid rate of increase in the total population, the number of urban population (those living in communities with over 40,000 population) has increased more than 5 times[1] since 1930.

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1. These data are derived from A. F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 255.

746 In recent years, the number of households on relief and the number of urban persons who must earn their livelihood by "marginal self-employment" have increased. However, the need for unemployment insurance may not be as urgent as it is in countries that are dependent upon industry for the major part of their national income, although some such scheme is perhaps becoming more necessary. Changes in the family system and the concept of the family, the trend of population growth, education, and technology, are all likely to create social problems of far-reaching effect. The unfortunate aspects of such changes must eventually be made a national concern, and a comprehensive social-security program must be created.

A. Social Insurance

In Formosa, as well as in some other societies, a strong sense of family obligation acts as a kind of social insurance. Parents support their children, children support their parents, husbands assist their wives' relatives, and relatives provide each other with such help as they can render in time of trouble. This sense of obligation arising from kinship is still very strong in rural areas, but it is less common in industrial areas.

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Efforts toward the establishment of such a system of social insurance as is known in industrialized countries have been increasing in the last few years, although Formosa is still far from the attainment of a comprehensive system. A collective labor-insurance policy was put into effect on June 1, 1950 for all the workers in public and private factories, mines, salt fields, communications, and public utilities. Insurance coverage includes injury, disability, maternity, death, and old age. However, there is no sickness insurance, although it is in demand among the workers.

An injured worker, while unable to work, receives free medical attention and also daily maintenance assistance amounting to one-half to two-thirds of his earnings. Maternity insurance gives pregnant workers two months with full pay and some maternity benefits. It also allows maternity benefits to the wife of the insured worker, but the benefit is paid for a period of ten days only.

Insurance against death is provided for the worker or for any member of his family, and the beneficiary receives a payment amounting to 10 to 24 times the worker's monthly earnings, as well as an additional amount to cover some of the funeral expenses, depending upon the length of the period during which the insured has held the policy and paid

741 premiums. For instance, if a worker has held his policy for four years or more, his beneficiary is entitled to 20 times the amount of monthly earning at the time of death. Death of any member of the family of the insured brings benefits equivalent to one month's wages.

Old-age insurance has some restrictive and impractical provisions regarding the payment of benefits. An insured worker must carry the insurance for at least fifteen years and must reach 60 years of age before he can be considered for retirement with a lump sum benefit equal to 15 months of his earnings.

The insurance premiums are paid to the Labor Insurance Agency (a branch of the government-operated Taiwan Life Insurance Company) at the rate of 3 per cent of an insured worker's monthly earnings. Of this 3 per cent, 20 per cent is paid by the insured, 20 per cent by the provincial government, and 60 per cent by the employer. A similar insurance plan for fishermen has been in operation since 1953; there is a slight variation in the payment of premiums. By the end of 1954, insurance had been acquired by 255,000 workers and 73,900 fishermen, and over NT $50,000,000 [US $2,657,000] in benefits had been paid to

746 142,488 cases.[2]

Another and similar type of insurance designed for all levels of government employees is now in the process of being instituted. An interesting feature of this plan is that it allows insurance against sickness, a provision which is lacking now in both labor and fishermen's insurance. All employees under this plan, regardless of their official rank, will pay a flat-rate, and the government will assist in the payment of premiums -- paying a greater share of the premium for those of lower rank.[3]

As industrialization and urbanization continue there will rise a need for other types of social insurance, such as unemployment insurance and old-age pensions.

B. Social Welfare

746 747 Welfare activities in Formosa are promoted and fostered by the government through legislation and supervision, with a view to the improvement of the living conditions and the mental well-being of the people.

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2. Hsin-she-hui [New Society Monthly], Vol. 8, No. 3, pp. 3-5.

3. Chung-yang Jih-pao [Central Daily News], Aug. 11, 1955.

45:Stanford U. S-4, 5 1956 AD1 Formosa
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In recent years, activity in labor welfare has been most conspicuous. The law provides that all enterprises set aside a certain portion of their capital stock and income for the establishment of "welfare units" such as cafeterias, low-cost housing, clinics, night classes, public baths, barber shops, nurseries, placement offices, laundries, and libraries. As an example, a government-owned cigarette-manufacturing factory at Sung-shan (near Taipei) furnishes its workers with free transportation, has a clinic of its own, and provides such benefits as a day nursery, laundry facilities, cold-drink stands, a barber shop, and public baths. Labor unions also participate in establishing welfare units. Each of the general labor unions and hsien federations has a "Labor Welfare Committee" with the function of improving living conditions and mitigating the hardships imposed by the low wage scale. For instance, there is a "labor clinic" in the Keelung City General Labor Union and in the Hsien Federation of Labor at Taichung, Hsinchu, Yilan, Chiayi, and Taoyuan.[4] There is also a "home of labor," forming a center of welfare activities, in the Hsien Federation of Labor at

4. China News Service, T'ai-wan Ching-chi Nien-pao 1953 [Annual of Taiwan's Economy 1953], Taipei, 1953, p. 174.

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747 Kaohsiung.[5] Most of the welfare units have stores which sell daily necessities to union members and workers at lower prices than those prevailing in the markets. As of 1954, there were 354 such welfare units on Formosa, with 2,120 sub-units such as clinics and cafeterias.[6]

Similar welfare benefits exist for fishermen, farmers, and salt workers. For instance, the Tainan Salt Field Welfare Service provides for its workers, emergency loans, medical service, a milk supply and motion pictures.

To alleviate housing problems, a low-cost housing program was completed in 1954 for Keelung dockworkers. Housing programs in large cities are also being carried out under the auspices of the government, United States agencies, and related organizations.

The Committee for Directing Women's Movements has a welfare division where a

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6. China Annual, 1954, Vol. III, p. 90.

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C. Social Relief

746 Regular relief is given to the aged, the destitute, and the dependent. The relief organizations emphasize self-help rather than direct relief. There are 5 provincial and 11 private relief homes on the island, accommodating over 3,200 persons. Their activities are generally confined to medical attention, classes in trades and techniques, and education

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731 provides that the local authorities of disaster-
746 stricken areas (most disasters being the result of typhoons, earthquakes, and floods) report to the provincial authority, so that afflicted people may be given shelter, food, and medical attention. The government, in addition to the supervision of relief work, contributes about one-third of the financial expenses, and private organizations of all kinds and public-minded individuals contribute to make up the rest. When the southern part of the island was stricken by a destructive typhoon in 1952, the whole island joined in a "Relieve-the-South" campaign, in which schools, business enterprises and organizations, public agencies, and private individuals were urged to contribute cash or "in kind" to a relief fund which was administered by the government.

746 Every year from December to March, hsien and municipal governments take the lead in providing winter relief to the poor. Contributions from schools, from various organizations, including churches, and from individuals are pooled under the administration of the local authority and money, food and clothing are given to the needy.

Relief of refugees from the China Mainland, and recently from the Tachen Islands, is being carried out chiefly by the government

746 and the China Mainland Refugee Relief Association, and to some extent by other organizations. The association extends its activities to Hong Kong and other areas of the world; it receives contributions and donations at home and from abroad. In the fall of 1955, about 1,000 fishermen who fled to Hong Kong from the Mainland were each given HK $20 by the relief association.

For refugees in Formosa, direct relief, low-rate loans, relocation on farms, and employment assistance are administered by the relief association. Some 5,000 families evacuated from the Tachen Islands are now being integrated into the economy of Formosa. Villages and farms have been constructed for them, and many have entered the fishing, farming, small business, and handicraft industries. A total of 514 disabled persons among the refugees from the Tachen Islands were given medical treatment and shelter by the provincial government.

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Frequently, even though the older man has virtually retired as head of the household, he may still bear the title of *chia chang*. In such instances, it is usual for him, rather than for the son who is actually head of the house, to be elected to village positions. These positions may be political, religious, or social: the man may be charged with the arrangements for the *pai-pai* for the village god or elected *lin chang*, and so on. Although everyone knows that old men are not able to handle the extensive duties of these jobs, they are nevertheless elected by their fellow villagers out of respect. The selection is made with the knowledge that the duties and responsibilities of the position will be carried out by the man's sons, but his election tends to give the old man a great deal of face in the village. This arrangement is made possible by the manner in which elections are usually conducted in the village. Although there is an election, the outcome is usually pretty well predetermined by the families concerned, who agree before the vote is cast who will be elected and who will actually serve in the position.

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757 Traditional Chinese medical services were provided on Formosa by 1,755 herbalists in 1954. A recent survey of 1,383 urban households showed that 75 per cent of them sought medical care from modern physicians, 50 per cent from herbalists, and 15 per cent from temple healers.[27] Obviously, many households relied on two or more types of medical practitioners. This practice probably has close affinity to the widespread custom of simultaneous belief in two or more religions, with emphasis placed on one or the other at various milestones or crises in individual or family life. Some Chinese shop for medical cure as they do for religious help. There are numerous reports of illnesses cured by herbalists after long and fruitless treatment by Western-style doctors. Age and education also affect attitudes toward the various kinds of medical services. It is not uncommon for the older members of a household to depend on temple healers and herbalists at the same time that younger members of the family are relying on Western-trained doctors.

758 The supply of medicines and drugs on Formosa is adequate by modern standards, and a wide range of new medicines are now considered necessities rather than luxuries. The central government maintains a medical supply bureau which manufactures thirty kinds of standard

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27. A. F. Raper and others, op. cit., p. 316.

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4:Grajdanzev--174 S-4 (no date) 1942 Formosans
116, 164, 171, 758

"In 1937 about 22 times as many cases of dysentery per 1,000 inhabitants, twice as many cases of typhoid fever, 9 times as many of paratyphoid, 17 times as many of scarlet fever, 3 times as many of diphtheria and 21 times as many cases of insanity were registered in Japan as in Taiwan. But this does not mean that Taiwan is a remarkably healthy place in which to live. There are more cases of epidemic diseases per 1,000 population in Taiwan than in Japan, but they are not registered because the masses of the population cannot afford to pay a physician, far less a hospital. From the official sources we know, for example, that each year out of 100-108 thousand deaths at least 9,000 are due to tuberculosis; probably far more because it is doubtful whether all cases are registered. According to the official estimates the number of tubercular persons is '80-90 thousand', but there are only 150 beds in the tuberculosis hospital for the whole island. Besides tuberculosis the island is ridden by trachoma, intestinal parasites, venereal diseases, leprosy, and malaria. Concerning the first two, official sources say only that they are 'widespread'. As to venereal diseases the chief means of their transmission is licensed and unlicensed prostitution."

4:Grajdanzev--175 S-4 (no date) 1942 Formosans
116. 164, 758

"According to the police investigation of 1930, there were at that time 1,084 lepers on the island, but the actual number is certainly larger. (In Korea there were 13,786 lepers in 1937, not including incipient cases, and probably this also underestimates the situation.) Only 700-800 of these are segregated."

757 Traditional Chinese medical services were provided on Formosa by 1,755 herbalists in 1954. A recent survey of 1,383 urban households showed that 75 per cent of them sought medical care from modern physicians, 50 per cent from herbalists, and 15 per cent from temple healers.[27] Obviously, many households relied on two or more types of medical practitioners. This practice probably has close affinity to the widespread custom of simultaneous belief in two or more religions, with emphasis placed on one or the other at various milestones or crises in individual or family life. Some Chinese shop for medical cure as they do for religious help. There are numerous reports of illnesses cured by herbalists after long and fruitless treatment by Western-style doctors. Age and education also affect attitudes toward the various kinds of medical services. It is not uncommon for the older members of a household to depend on temple healers and herbalists at the same time that younger members of the family are relying on Western-trained doctors.

758 The supply of medicines and drugs on Formosa is adequate by modern standards, and a wide range of new medicines are now considered necessities rather than luxuries. The central government maintains a medical supply bureau which manufactures thirty kinds of standard

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27. A. F. Raper and others, op. cit., p. 316.

758 pharmaceutical preparations for the market, and imports other medical supplies for distribution at cost to schools, nurseries, and other public agencies.

4:Grajdanzev--173 S-4 (no date) 1942 Formosans -1-2
116, 744, 759, 177.74 Japan
636.74

"In all books and articles published under the auspices of the Japanese government the remarkable successes of the Taiwan government with respect to the health of the population are described, and there is no doubt that improvements took place in Taiwan after 1896—it would be strange if this were not so. More than 300,000 Japanese live there now and their health depends to an important degree upon the health of the surrounding population, especially in case of epidemic diseases. First of all, for the sake of comparison, we give the basic figures for Taiwan and Japan.

Number of Physicians, Dentists, etc. in Japan and in Taiwan, 1936

	Japan	Taiwan	
	1936	1936	1938
Physicians	61,799	1,834	1,983
Dentists	22,072	402	407
Pharmacists (yakusaishi)	28,156	190	213
Nurses	124,402	...	170
Midwives	61,732	1,744	1,796
Per 10,000 of population			
Physicians	8.8	3.4	
Dentists	3.1	0.7	
Pharmacists	4.0	0.3	

4:Grajdanzev--173 S-4 (no date) 1942 Formosans-2
116. 744. 759. 177.74 Japan
636.74

Nurses	17.7	0.3
Midwives	8.8	3.2

Source: Dainippon teikoku nenkan and Taiwan Jijo."

4:Grajdanzev--173-174 S-4 (no date) 1942 Formosans

116, 171, 278, 744, 759

"In the section on education it was shown that Chinese college students from Taiwan prefer to study medicine because this is a profession in which it is relatively easier to establish oneself than in others. Now we see that in spite of this attraction [174] there are two and a half times as many physicians per 10,000 population in Japan as there are in Taiwan. The same is true of midwives, though the need for midwives is greater in Taiwan, where the birth rate is one and a half times as high as in Japan. On the same per capita basis there are four times as many dentists and thirteen times as many pharmacists in Japan as in Taiwan. These and many other figures which could be quoted show that as regards health services Japan is several times better served than Taiwan. And actual conditions are even worse than these figures suggest because the equipment of hospitals is poorer and the physicians rely chiefly on advice and prepared drugs, which are sold by some 6,600 stores as well as 6,700 peddlers."

15: U.S. Navy --26 [9] (no date) 1944 Formosans
116, 732, 759, 548, 874, 177.73 Japanese
636.73

"Schools for the blind, the deaf, and the dumb are maintained at [illegible]
at Taihoku and Tainan. In addition to instruction in Braille, pupils are taught various skills, of which the most important are weaving, chiefly of panama hats, and massage. Graduates of the school who have passed the required masseur's examination are licensed to practice, and are assigned districts or routes over which they go every evening from nightfall until midnight, with a whistle or pipe and a tune peculiar to each masseur. They travel, both men and women, in pairs or with a small child or elder person as a guide. Many are not wholly blind, but qualify to practice. Sometimes they work at home or in shops at various tasks during the day, making the evening work as a masseur a supplementary livelihood. Many Chinese hotels or lodging houses have masseurs regularly employed. A certain amount of illegal solicitation for prostitution is carried on by them as well as by the masseurs who travel a regular beat through the city streets."

40: Kirk--20 [2] S-2 (no date) 1941 Formosans
116, 563, 759, 871, 177.56 Japanese

"Theoretically, Japanese and Formosans may attend the middle and high school as well as the university, but in practice the Formosans find many difficulties in their path. The more important positions in business and the professions, with one exception, seem to be held by Japanese exclusively. Medicine is the one profession open to educated Formosans on equal terms with the Japanese."

744 future. Before attaining this goal, however, health education will have to be ex[illegible]ded to all classes of the people, and the economy made stable and prosperous.

IV. MEDICAL FACILITIES AND PERSONNEL

759 Formosa is better provided with professional medical personnel and better equipped with medical and health facilities than the average Asian nation. The latest reports on medical personnel and facilities on the island show the following situation:

LICENSED MEDICAL PERSONNEL -- FORMOSA 1953 *

Physicians	5,443
Herbalists	1,755
Dentists	781
Pharmacists	906
Nurses	877
Midwives	2,310
Dental technicians	234
Druggists	327
Total	12,633

*/ [illegible] Yearbook 1954-55, Taipei [illegible]

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD-1~~ AD1

MEDICAL FACILITIES -- FORMOSA 1952*

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Health centers	22
Health stations	343
Provincial Hospitals	13
Provincial Sanitoria	3
Hsien maternity and child health centers	1
Hsien and municipal hospitals	9
Hsien and municipal isolation hospitals	6
Municipal sanitoria	3
Private hospitals	121
Private clinics	3,895
Total	4,416

*/ China Handbook 1952-53, Taipei, 1952, p. 114.

759 The number of licensed physicians alone in 1953 was sufficient to provide one doctor for about every 1900 people.[24] This compares with a ratio of one doctor to every 70,000 people in Indonesia, one to 13,300 in Burma, one to 4,000 in the Philippines, and one to 739 in the United States.[25] Many of the doctors in Formosa have

24. Based on latest population estimate of 10,400,000.

25. Economic Co-operation Administration, Far East Data Book, Nov. 1951, Washington, D.C. These are 1950 figures.

759 been trained in Western countries; the doctors who have not are capable of providing treatment equivalent to that of their Western counterparts except for the administering of the newest medicines. Many of the midwives are well trained and capable of efficient practice in their specialty.

744 Health centers at 22 cities under hsien and provincial administration and health stations at more than 350 townships and villages throughout the island provide a network of medical facilities for the administration of preventive and curative measures on a mass basis.[26] A health center is usually staffed with from 20 to 25 persons, including four or five physicians, three to six nurses, two or three midwives, and one or two laboratory technicians. The health stations are branch units of the health centers; a typical health station has a physician, a nurse, a midwife, a sanitarian, and a technician. Since 1954, the provincial government has established 120 sub-stations in aboriginal villages to extend its health services; a sub-station is permanently staffed with an attendant nurse and a midwife. In addition to out-patient clinical care, the health centers and stations provide obstetrical services, home and school visits by nurses, preventive inoculations, health education, laboratory services, and mobile clinical treatment in neighboring villages. The centers and stations also gather and compile vital statistics. The stations are now an integral part of rural communities and are financially self-supporting.

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26. Mutual Security Mission to China, International Co-operation Administration, op. cit., p. 5. The number of health stations is constantly increasing.

only to furnish their labor and then to give from their limited incomes to pay for the increasingly heavy fertilizer input that insured heavy yields three times a year from the same land. Taiwan was thus transformed into a garden island where only the most venturesome of weeds could grow. Increasing quantities of rice, sugar and tropical products were transported northward to meet the growing food deficits of Japan's increasing population. 177 433

PUBLIC HEALTH AND MEDICAL CARE

The Sanitary Bureau of the Police Department was the authority in public health. Administration and enforcement were supported by police power. In the prewar years there were about 2,000 qualified doctors. Many others were trained in Taiwan and given local licenses. At the end of the war there were some 5,000 to 6,000 local doctors, or almost one per thousand population. Since public posts and private practice were limited, many of these doctors were unemployed. In 1948 about 3,000 physicians were registered as engaged in private practice or public service. There were about 600 nurses and numerous midwives. In both these groups the majority were substandard in grade. The number of hospital beds included approximately 1,000 in the capital and perhaps 6,000 on the Island, most of them in small units. In 1948 effective hospital capacity was less than half this prewar level. 744 759 743 177

Under Japanese control plague was eliminated and cholera and smallpox became rare, although the last two recurred in 1946 to 1947. Tropical diseases are common, malaria in particular. The Japanese had a special malaria service, based on extensive blood examinations, which administered quinine to positive cases. By these means 30 to 40 per cent of the people were examined annually and malaria mortality was reduced by treatment. This suppression improved the health record temporarily, but it did not contribute to permanent amelioration. The program has since been largely discontinued. 177 164 744

THE INCREASE OF THE POPULATION

Population increase paralleled economic expansion. In 1905 there were 3.0 million people on the Island; in 1940, there were 5.9 million. Population thus increased 93 per cent in this 35-year period and virtually all 161 241 177

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

done in Japan was adopted in Taiwan with some slight time lapse. In 1916 a hygienic survey was made in Japan, and five years later, in 1921, the same project was adopted in Taiwan. Between 1922 and 1925, and also from 1926 to 1928, an extensive hygienic survey was carried out in various parts of the island. After the results were published the planning of sanitary works was mostly based on the data of the survey.

The prevention of trachoma was started around 1926, and was most active in the 1930's. The prevention of tuberculosis began from 1932. The Association for the Prevention of Tuberculosis was organized in 1934, Regulations for the Prevention of Tuberculosis were enacted in 1938, Tuberculosis Prevention Day was initiated in 1939, and a sanatorium was constructed in most prefectures, most of them being completed in 1942-43. These activities were quite effective, and the death rate from tuberculosis declined after 1938 (cf. Fig. 11, line D.) Activities of tuberculosis prevention were started in the U.S. in 1890, and as a result, deaths from tuberculosis declined sharply. It has been pointed out by a social scientist that, though the improvement in living conditions will lower the death rate from tuberculosis, community preventive activity is also very significant (20: p. 631). It is interesting to note that, this was true both in the U.S. and in Taiwan.

The preventive activities against venereal disease, mental disease, parasitic disease, and leprosy were also started by the 1930's. For the administration of these activities, a section of preventive hygiene was added to the Health Department of the government-general in 1935. This may be taken as a sign that more emphasis was put on preventive hygiene.

11. Sanitary Facilities and Medical Personnel

Various kinds of basic sanitary facilities such as drainage, water supply, disposal of garbage and night-soil, supervision of slaughter-houses and markets, inspection of food and businesses such as barber shops, restaurants, and hotels were started rather early. These were started in the cities, particularly in the wards of the city which were largely occupied by the Japanese, and gradually extended to wider areas. The establishment of public hospitals and public doctors was also early in time. Naturally, these were established first and foremost for the benefit of the Japanese in Taiwan. Japanese business men in Taiwan had enjoyed various kinds of privileges, Japanese officers received an allowance 60% greater than that of their brothers at home, and all of them could utilize these public facilities. This was the reason why their death rate was not only lower than the death rate of Japan proper, but even comparable to that of the most advanced countries in the world.

Before the Japanese occupation there were a few hospitals operated by Christian missions. Physicians in these hospitals were the only doctors of western medicine, and other physicians were doctors who practiced Chinese medicine. Some Japanese doctors of western medicine came to Taiwan after the occupation, but their number was very small. In response to the urgent need for medical personnel, training classes for doctors and nurses were set up in Taipei Hospital in 1897. The medical training class

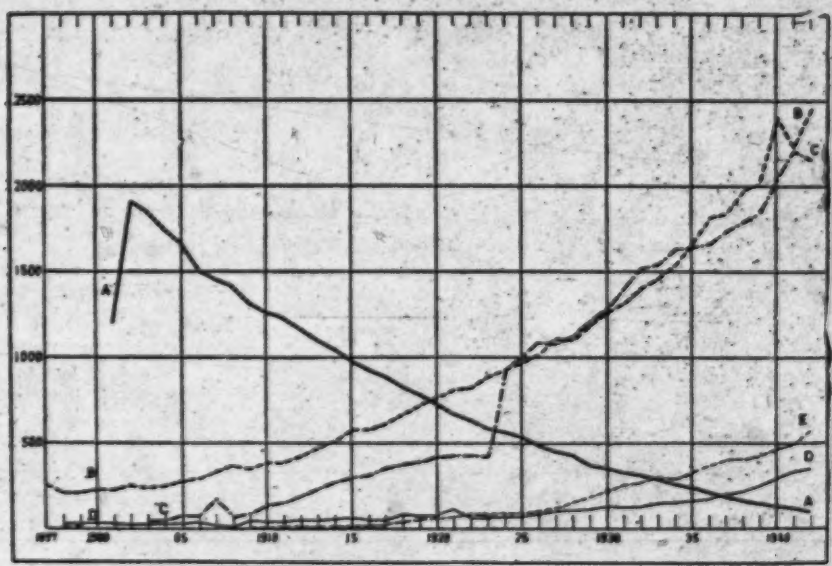
48: Chen E-4 (no date) 1955 ADl Formosa ADl

759 was raised to a medical vocational school, to a medical college, and at last became a school of the Taipei Imperial University. Within the 47 years between 1899 and 1945, a total of 2,813 doctors (1,888 Taiwanese doctors and 925 Japanese doctors) were trained by the school.[9]

759 The trend of change in the number of medical personnel in Taiwan is given in
179 Figure 3. The decrease in the number of doctors of Chinese medicine and the increase
162 of doctors of western medicine is interesting. It is also significant to note that, the number of the latter exceeded the number of the former by 1920. As to the ratio of inhabitants to doctors (of western medicine), the number of inhabitants per doctor was as follows:

years	number of inhabitants per doctor
1897–1906	10,000–12,000
1907–1911	8,000– 9,000
1912–1913	around 7,000
1914–1916	around 6,000
1917–1919	around 5,000
1920–1926	around 4,000
1927–1935	around 3,000
after 1936	around 2,000

Fig. 3 Number of Medical Personnel, Taiwan, 1897-1942



A: Doctors of Chinese Medicine B: Doctors of Western Medicine C: Midwives
D: Pharmacists E: Dentists
Source, 14: Table 484

Note 8: Li Ting-yeh: Part on Sanitation, Manuscript of the History of Taiwan Province, 1952, Taipei, p. 10.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

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In 1942 there were 2,593 inhabitants per doctor, or 4 doctors per 10,000 inhabitants (computed from 14: Table 484).[9]

12. Transportation

A railroad from Keelung to Hsinchu was already constructed by the Machurian government. The railroad mileage increased gradually after the Japanese occupation. The main line from Keelung to Kaohsiung was completed by 1908. New branches, double tracks, and sidings were added rapidly, particularly during the 1920's. By 1930, the railroad system of the Japanese era was generally completed. As to passenger traffic, the number of passengers in 1931 was about 21 times of the number of 1901, and between 1931 and 1941 the number of passenger was almost tripled.[10] The mileage of highways was also rose rapidly after the 1920's (14: Table 449). It is interesting to note that, the number of bicycles, automobiles and trucks began to increase after 1920 (Fig. 4, Fig. 5). When bicycles were first imported, people were surprised by their high speed, and thought they were some magical thing. Now they became familiar with them, and utilized them more and more. This is a sign of the change of attitude among the people.

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Before transportation was developed, different localities within an area could not exchange and trade their products, and the failure of crop in one locality would cause local famine. W.S. Thompson, who stayed some months in Nanking, China, in 1930-31, reported: at that time rice was so cheap in Nanking that many farmers were going bankrupt. At the same time people were starving by the hundred of thousands (some say by the millions) in northwest China. There was no means of transportation to let the two embarassed localities help each other, so local famine was inevitable. This situation has been very common in the past. Such prosperous and well-organized countries as England, France, and Sweden had severe local famines from time to time, even during the first half of the nineteenth century (16: pp. 67-68).

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Development of transportation not only can stabilize the living of the people, but at the same time it can significantly influence the extent of the peoples' economic activity and attitudes. When transportation is poor, surplus products of one locality are useless, and people are obliged to live a self-sufficient and closed economic life. Effective transportation can change surplus products into commodities, extending the sphere of economic and social activities. Thus, a self-sufficient and closed society will change into an open, circulating society living by division of labor and exchange. In a closed society, not only are the things produced different, but customs and manners are also different. In an open and circulating society, everything will gradually become uniform through continual contact and communication. In the vital statistics of Taiwan we can see a reflection of this change. During the early years of Japanese occupation

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Note 9: As to the situation of medical facilities in 1945, see Li, Ting-yeh: op. cit. 12. As to the comparison of the situation of Taiwan with other parts of the world, cf. 27: Table 120.

Note 10: Tang, C.W.: "Railways in Taiwan". Chinese-American Economic Cooperation, Vol. 1, No. 5, 1953, Taipei, p. 65.

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

181 178 matters of sanitation, and at times on matters of agriculture. With the passage of time, experience lead them to compare their traditional way of life with that imposed by the colonial government. Some of these ways were found to be not too bad, some even adoptable. This kind of change in attitude through hard experience was fairly significant. By this, people realized for the first time that there were another ways of life besides their traditional one, and that some elements were worthy of adoption. Once the people began to adopt the new way of life, change began to speed up. From the following instances we can see that change in the attitude of people became conspicuous after the 1920's. We have discussed the influence of war and peace, the prevalence of epidemics, and the development of transportation on the attitude of the people (§ 7, 8, 12). Here the change of attitude concerning medical treatment and agriculture will be discussed.

178 744 156 Since treatment of illness touches the innermost part of life, it is only natural that conservative people do not dare to allow an unfamiliar doctor with strange ways of treatment to approach them. For Taiwanese, who had been accustomed to the traditional Chinese medicine and folk medicine, doctors of western medicine, particularly with their injections and operations, were dreaded. During the early years of the Japanese rule there was a prevalence of cholera. Colonial officers compelled the people to take the preventive injection. Great consternation arose among the people, and many of them, particularly young girls, escaped and hid, in order not to have the dreaded injection. In the old city of Tainan a young girl of a wealthy family was escaping in a palanquin, but unfortunately she was caught by a Japanese police on the way, and forced to take the injection. Perhaps because the shock was too great, she died in a short time. Another young girl who took the injection killed herself after she went home, because it was a dreadful shame for a young girl of high standing to expose a part of her body to the public gaze. When a person died, his family had to have a medical certificate in order to get permission for burial. In 1906 90% of the medical certificates were issued by doctors of Chinese medicine, and certificates issued by doctors of western medicine constituted only 10% of the total. The proportion of [759] the latter increased gradually, attained to 45% by 1917 (11:1917, p. 29). By 1920, the number of doctors of western medicine already exceeded those of Chinese medicine, and by 1935, 90% of medical certificates for the dead were issued by doctors of western medicine. Thirty years after 1906, doctors of Chinese medicine and doctors of western medicine had changed positions completely. By 1935, people did not object to injections and operations any more. On the contrary, they even believed blindly in injections, and asked for an injection when they saw a doctor. This was a remarkable change in attitude.

178 241 Farmers are tenaciously conservative in their work. In Taiwan, farmers originally used only compost and night-soil, and did not use any commercial fertilizer. When a sugar corporation started to promote the cultivation of sugar cane, they bought commercial fertilizer from Japan, and distributed it free of charge to farmers. Once a

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

the rural people. Some forms of improved sanitation reached the rural areas through the schools and, perhaps more effectively, through the publishing of government edicts enforcing practices of sanitation. Semiannual government inspections forced villagers to clean up their houses and the villages twice a year. The inspections were carried out by the Japanese police and civil officials, and any family which did not pass the inspection was subject to fine and to reinspection, which meant that "the party was punished by having to clean up all over again." The policy of inspections instituted by the Japanese has been continued under the Nationalist Chinese regime.

During the latter part of the war, and especially after the restoration of Chinese rule to Taiwan, there was a marked increase in the incidence of disease, particularly communicable diseases. There was even a recurrence of cholera. This was a direct result of the poor living conditions brought about by the war and, with the coming of the Chinese government, a chaotic administration which was unable or unwilling to deal with health problems. However, the situation gradually began to improve after 1948 and 1949 when Taiwan became the new stronghold of the Nationalist Chinese regime. This improvement is evidenced by the general situation in the Hsin Hsing area. Beginning in the early 1950's the number of Western-style doctors practicing in the area increased. At this date, there are a number of such doctors, and the villagers consider their fees reasonable and within their means. The reason for this great increase lies in the different licensing practices of the Japanese and the Nationalist governments. Under the Japanese a man had to be a graduate of a medical school before he could practice medicine; under the Chinese government, the applicant is required only to pass a practical examination. This means that people who have worked in hospitals as aides or technicians and have had some opportunity to observe others practicing medicine may have accumulated enough knowledge to pass the examination and obtain a license. Therefore, while there are now a large number of licensed doctors practicing in the Hsin Hsing area, only a few who went to school in Japan have had formal medical training.

In addition to the great increase in the number of doctors practicing in the local area, in recent years there has also been a marked expansion in the number of private and public hospitals in the cities. These hospitals, which are sometimes very large, can accommodate many patients, house relatively modern facilities such as operating rooms, X-ray and other equipment, and provide modern drugs for patients. Although most of the patients treated in these hospitals are city people, village people sometimes go to them for treatment. They are usually referred there by a local doctor who is capable of diagnosing an illness as one requiring hospital care or who is honest enough to

10: Schumacher--223 [2] T-1 (ca. 1896) 1898 Formosans
116, 351, 361, 764

The Chinese villages in the lowland plain are mostly hidden in bamboo jungles. Some of them are situated at the foot of mountain spurs where they are well protected against the weather. They are surrounded by burial grounds and enclosed within high brick walls. Wide and swampy ditches gird these unimpressive places, whose inhabitants make a meager living. But for centuries the Chinese have preserved the ruins and trash with sentimental care.

15: U.S. Navy--24 [7] (no date) 1944 Formosans
116, 493, 788, 764

"Funeral ceremonies and wedding parties occasion the passage of large numbers of people into and out of the cities. Cars, rickshaws, and coolie-borne palanquins are used. The hours at which funerals are held are determined by divination. Hence it is not unusual to encounter many people moving rapidly and noisily along the road at any hour of the night. Police permission must be secured for such affairs."

764 164 parasitic diseases, pneumonia, diarrhea, and intestinal inflammation, but the remarkable success in general of the health measures undertaken by the Japanese is evident in the decreased death rate during the course of the Japanese occupation.

DECLINE OF DEATH RATES DURING 1906-1942

Year	Total Population	Number of Deaths	Crude Death Rate per 1,000 pop.
1906	3,156.7	104.7	33.2
1925	4,147.5	98.0	23.6
1942	6,249.5	112.0	18.0

Source: Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Tables 50 an d 87. Crude death rates are calculated by the author.

Since the end of World War II, the most prevalent and menacing diseases have been tuberculosis, pneumonia, malaria, trachoma, leprosy, parasitic diseases, and diarrhea. Of lesser incidence are diphtheria, typhoid, smallpox, typhus, plague, cholera, and venereal diseases. Significant progress has been made since the war in controlling a number of these diseases, particularly malaria, tuberculosis, the venereal diseases, leprosy, and trachoma. Progress in this area and in the building of hospitals, expansion of

17. [from previous page] The Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Table 91.

764 144 medical facilities, training of personnel and distribution of medical supplies have been effected through the joint undertakings of Chinese Government, United States, and international agencies, namely, the American MSMC, American Board for Medical Aid to China, Sino-American JCRR, World Health Organization (WHO), and United Nations International Children's Emergency Fund (UNICEF). The decline in the death rate during the 1948-53 period from 14.3 to 9.5 per 1,000 population[18] is clear evidence of the advances made by these joint efforts.

B. Specific Measures

744 Malaria. The Japanese in the last years of their malaria-control program maintained 375 malaria stations throughout the island for the administration of suppressive drugs. During the war the efforts were discontinued and an epidemic broke out in the post-war years. The Malaria Eradication Program begun in 1952 under the joint sponsorship of the Provincial Government, WHO, MSMC, and JCRR, arrives at complete elimination of the disease from the island by the end of 1956. By early 1956, the program had provided direct protection against malaria to more than 5,500,000 residents of formerly malarial areas.[19] The control program is carried out through (1) continuous checking and study of malaria parasites and treatment of malaria patients in the rehabilitated 144 malaria control stations throughout the island, and (2) the planned residual spraying with DDT of all dwellings in

18. See Table 8 in chapter on Population.

19. Mutual Security Mission to China, International Cooperation Adm., The Public Health Program on Taiwan (unpublished pamphlet), Taipei, 1955, p. 6.

31: Hofmann--611 [2] N-3 (1909) 1912 Formosans
116, 769

In a Chinese village in the vicinity of Taikokan I had an opportunity to observe a peculiar mortuary custom of the Chinese. A young woman in mourning visited a cemetery together with a worker. The ceremonies began with prayers and with the burning of yellow paper, symbolizing money, which the deceased needs in the after-life, and similar ceremonies. The worker then opened the grave. The large wooden coffin was placed on the earth instead of in it; it was covered with earth so that a mound was formed above the grave. When I asked what the purpose of this was I was told that it was customary to exhume the remains of the body several years after the funeral. The young Hakka girl, a working girl dressed in shabby clothes, answered my questions willingly. She told me that she had been saving up money for a long time to have the body of her mother exhumed and buried anew I asked her whether she was sure that this was the right grave and that she might not have dug up another body by mistake; she answered that her mother was pregnant when she died and that signs of this might be seen in the grave. She was right: the gravedigger lifted up the top of the casket with little trouble and began to take out and clean the bones. They were then placed in a large urn to be presented there. When this container has been set up in the house, the ceremonies have been concluded. Ordinarily the bodies are exhumed after three years; by that time, since the body is hastily buried and little is done to preserve it, it is already a skeleton. If it should happen that some flesh and tissues still remain, the Chinese take this as a sign that the deceased was a bad man and cannot find peace in the after-life.

775 removed.[12]

After death, the souls of one's ancestors are believed to live in Yin-chien, where there prevails the same set of moral and economic values that govern the living. The descendants 779 are considered unfilial if they fail to worship their ancestors or do not consecrate periodic sacrifices to make the dead happy in Yin-chien.[13] The dead are considered a part of the family, determining the fortunes and misfortunes of their descendants in strict accordance with the amount of filial piety shown them. Some families build temples for the worship of their ancestors. Of the dead who have no offspring to worship them, most become lost souls wandering the universe as malevolent spirits and have such a strong influence on the living as to be assumed the cause of their misfortunes.

III. RELIGIOUS PRACTICES

793 Awe of the universe intermixed with Taoist sorcery results in one thousand and one strange practices among the less-educated people. Religious practitioners, mostly of the Taoist order, serve in the invocation of gods and spirits, communication with spirits,

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12. Masuda, op. cit., pp. 54-60.
13. Ibid., p. 63.

10: Schumacher--226 T-1 (ca. 1896) 1898 Formosans
771, 115

Both Chinese and Japanese priests following the field armies have unanimously assured me, after long questioning, that the Tschin-Huan have continued to be Brahmans until this very day...

596 The extended family was in itself a
.771 religious group. Worship of common ancestors, observation of their birthdays, and participation in annual festivals were ceremonies observed by all members of the family. Religious practices served to impress family members with a feeling of kinship and common heritage.

596 The education of children became the
871 function of an extended family when there were no public schools. Tutors were invited to join the family and all the children studied at common expense, regardless of their parents' status within the family. All the children had an equal opportunity to learn.

596 The family was also an economic unit. Male adults participated in the family business and the entire family shared a common budget. In rural families, rice paddies were hulled and cloth was woven by women in the home. Chickens, ducks, vegetables, and preserves were produced in the household, thus making it unnecessary to buy more than a few necessities at the market. In this manner, the family functioned as a unit of production and consumption. Another feature pertaining to the extended family was the system of community property. Family property belonged to the entire family, and at the dispersion of the family it was divided among the sons, with a relatively larger share going to the eldest son, who assumed responsibility for maintenance of the family shrine.

796 perilous voyage from the Mainland across the stormy waters of the Formosan strait. Kuan-yin, the goddess of mercy, offered protection to those building settlements in a primitive and often hostile land. The Land God is also remembered, since Formosa is primarly a land of farms. These ceremonies include street processions, music, dancing, religious dramas, and feasts.

F. Folk Beliefs

771 In an agrarian society, folk beliefs are always naive and superstitious. When ways of life change, folk beliefs undergo transformation, for folk beliefs are but reflections of reality. In the present century, when science and technology had begun to modify the conditions of life of the Formosan people, folk beliefs altered. Infant mortality was once a serious concern on the island, and the gods who protected children were propitiated. The dragon who regulated the amount of rainfall received offereings from people in rural districts. After irrigation canals were constructed it was no longer necessary for farmers to seek the favor of a

771 rain-making god.[7] In 1903, Formosa had 3,662 temples consecrated to the dragon god; only one remains today.

In 1715, grasshoppers destroyed crops in the district of Fenshan. Soon after, a temple was erected to appease and honor the god of the grasshopper. For over two hundred years, farmers went to the temple before each harvest to make offerings and invoke the mercy of the god. Only now that the use of insecticides has become widespread has the temple been torn down. Similarly, vaccination has dethroned the god of smallpox. The same fate befalls the gods who look after mothers and children as modern medicine minimizes the dangers of childbirth and lowers the rate of infant mortality.

Folk beliefs in Formosa were fostered in rural areas; with increasing industrialization and urbanization, folk beliefs lose their

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7. In 1902, only 23 per cent of the cultivated land on Formosa was irrigated by a system of canals. In 1942, approximately 64 per cent of the farmland was under irrigation.

• 771 power to determine the customs of the people.

G. Superstitions and Taboo

784 In spite of the enormous strides made by education in the past three decades, many superstitions and prejudices persist among the Formosan people. They often take the form of taboo or premonitions.

Some uneducated Formosans believe that if a person stumbles on the threshhold of his home just before commencing a journey, danger awaits him en route. To choke while eating presages bad luck. An itching ear is a sign that others are talking about us. The crowing of a rooster at night is a bad omen. Illness and misfortune are punishments sent by angry gods who demand propitiation. An earthquake is caused by the restlessness of a sleeping bull. The dead, especially those who have drowned, are objects of fear. People who waste rice may be struck by lightning.

The aborigines have their own superstitions and taboos. Twins and crippled [826] babies are misfortunes to a family and are allowed to die at birth. Intermarriage among members of the same clan is forbidden. Only members of the immediate family may touch

45:Stanford U. S-4, 5 1956 AD1 Formosa
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Annex "A," Subparagraph 1k,
Sociological Background

RELIGION

I. GENERAL BACKGROUND

771 The dominant, yet nameless, religion which exists in Formosa today is a system of worship, derived from such diverse sources as Taoism, Buddhism, and Confucianism, each of which has contributed some of its teachings and practices to the system, intermixed with folk beliefs. The religion is polytheistic and has its roots in the worship of Nature and one's ancestors. Most of the people on the island do not belong to a single religion but worship the gods of the three religions. Their religion, thus, is inclusive and tolerant. In almost every Formosan Chinese household an altar may be found in the central hall. On the altar, beside the tablets of ancestors, the images or symbols of several gods are displayed. Among them are usually Kuan-yin [Goddess of Mercy], a Buddhist goddess; Sheng-mu or Matsu [the Holy Mother of Heaven], Tsao-chün [the God of the Hearth], Fu-te-cheng-shen [the God of Wealth and Virtue] -- these three being derived from the Confucian system; and T'ien-kung [the Jade Emperor or Supreme God of Heaven], a Taoist god. In addition, each house has a Men-shen

771 [Diety of the Door].[1] There is also among the Formosan Chinese another common object of worship, Ch'eng-huang-yeh [the Judicial God], who is believed to have judicial and policing powers over the living and the dead. In essence, these folk-beliefs constitute the religion of the island; it is estimated that about 7,000,000 people (about 70 per cent of the population) subscribe to them in one way or another. Wide latitude seems to exist between strict surface adherence and true belief among the younger generation. Young people and urban intellectuals are less enthusiastic about the religion and follow it only as a matter of family observance. But it is still very influential among women, older men, and the less-educated. More than 3,000 temples of various gods existed throughout the

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1. Fukutaro Masuda, Taiwan hontojin no shukyo [Religion of Taiwan Islanders], Tokyo, 1935 p. 47. Classification of these gods into certain philosophical schools such as Confucianism and Taoism may appear arbitrary. But it is done so in this source probably because the gods of the folk religion tend to be ascribed to one school or another, by the general public.

771 period of Japanese rule.[2] The number of temples has not decreased; since the Restoration in 1945, many temples have been repaired and new ones have been built.

797 On Formosa the faithful of other religions
779 are numerically unimportant. There were only 41,000 "true" Buddhists among the Formosan Chinese[3] in 1942. In 1954, there were about 34,000 Catholics with 126 churches, and 80,000 Protestants (about 4,600 of them Presbyterians) with about 600 churches.[4] There were about 900 Taoists[5] on Formosa in 1955. These various religious groups constitute less than 2 per cent of the total

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2. Taiwan Provincial Government, Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Table 507.

3. Ibid., Table 510. This seems to be the latest figure available on the number of Buddhists on the island.

4. China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], Vol. II, Taipei, 1955, pp. 103-106.

5. There were about 900 Taoist believers on the island in 1955. Chung-yang Jih-pao [Central Daily News], Taipei, Oct. 7, 1955.

797 There is a Catholic hospital in Kaohsiung and another in Lotung. Many of the missions give time to Bible classes, English classes, and kindergartens. The increase in the number of Catholic converts has been most remarkable. There were fewer than 10,000 Catholics in 1941, and the number had increased[9] to more than 34,000 in 1954. While many Protestant denominations have been established in the last ten years, the number of their adherents has increased relatively little -- about 70,000 in 1942, to slightly over 80,000 in 1954.

There seems to be no open conflict between the tolerant native religion and Christianity, nor any objection to the introduction and expansion of Christianity. It has been noted that some non-Christian families celebrate Christmas and many Christian families continue to celebrate traditional Chinese festivals.[10]

II. THE CHARACTER OF FOLK BELIEF

• 771 The Chinese have "concerned themselves less with the hereafter than with the proper

9. China News Press, op. cit., p. 103.
10. A.F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 334.

conduct of affairs and attainment of happiness in the here and now."[11] Unlike the Hindus, the "Chinese are not a passionately religious people preoccupied with a spiritual quest." However, the daily life of the Formosan Chinese is tremendously influenced by religion, although they worship in order to resolve the problems of the here and now. Everything that is useful for living, no matter whether it is native or foreign, rational or naive, is generously absorbed and preserved. Naturally their system of religion has no rigid principles, they adhere to no single discipline of teaching and practice, and their idea of the godhead is not clearly defined.

The Formosan Chinese religion has been resolved, in the main, from the material needs of life. When the Chinese came to Formosa, they carried with them the image of Matsu, the patron goddess of navigation, and the images of other local gods as patrons and protectors. Sometimes they carried consecrated incense as a symbol of the gods. Before steam navigation, it was dangerous to cross the Formosa Strait.

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11. "Religion in the Land of Confucius," Life, Vol. 38, No. 14, April 4, 1955, pp. 44-84.

771 After the Chinese arrived in Formosa, they were subject to epidemics, bandits, and raiding parties of aborigines. The patron gods were their only refuge.

Religion in those early days of settlement also had a social function. Immediately after a settlement was made, a temple was built. Intimate co-operation was absolutely necessacy in the new settlement, and shared beliefs gave a basis for mutual endeavor. The temple was their community center for discussions and decisions on public affairs. Once an argument had been settled in the presence of their gods, the agreement was binding and adherence was assured.

For the Formosan Chinese, everything that man cannot control is attributed to the work of supernatural force. This force governs every aspect of human life. All natural phenomena are deified, and ancestors, sages, virtuous women, and historical personalities are often given the status of gods. In heaven, there is the supreme god, the Jade Emperor. Under him, in successive ranks are the gods of heaven, of earth, and of water; the gods of the seasons, the god of the five elements (water, wood, earth, gold, and fire); the god of the thunder, of the lightning, of the wind, of the clouds, and of the rain; the gods of the mountains and the rivers -- and so on. Each branch of trade

771 has its god; there are patron gods for pharmacists, rice traders, carpenters, tailors, musicians, etc. There are household deities for the door, the well, and the hearth. For child-bearing and child-upbrining there are specific gods. There are gods of longevity and happiness. In short, there is a god to correspond to each and every human need. It is inevitable that beliefs as general as these result in superstitious practices.

775 The conception of a realm of the dead (Yin-chien) as contrasted with the world of the living (Yang-chien) includes a hell after death, judgment, reward, or punishment, and transmigration into another living form as punishment or entry into paradise as reward. It is generally believed that a person after his death will go to the realm of the dead where Ch'eng-huang-yeh [the Judicial God] will send him to Yen-lo-wang [the King of Hell]. The King will try each case with impartial care, sending those who have done good deeds to the Paradise of the West (the Buddhist Paradise) and give adequate punishment to those who have done evil. The seriousness of the offense determines whether the person is to be re-born as a new person or as a lower creature, say, a water buffalo or an insect. The punishments imposed are cruel, and those who have sinned may be boiled in oil, cut in half, or have their tongues

787 adhere to the folk-religion. With the advance of science and Western education, the belief in communication with the spirits of the dead and the various forms of taboo will lose much of their force. However, their influence on the religious life of the people in Formosa still seems to remain far stronger than that of Christianity.

IV. GOVERNMENT POLICY TOWARD RELIGION

• 771 Since the establishment of the Republic of China, the government has assumed an attitude of "non-interference" toward religious practices. Confucianism, which is a system of ethnical principles rather than a religion, receives official support and encouragement in matters of education and propaganda. On the birth day of Confucius, heads of central and local governments become chief priests in worshiping and commemorating the great sage.

Of the greater number of government officials who have begun to observe Christian services, some may have done so, in part, because the wish for co-operation with the West, particularly with the United States, is growing. Church attendance, however, is by no means widespread.

45:Stanford U, S-4, 5 1956 AD1 Formosa
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• 771 The wartime austerity campaign launched by the government has, to a certain extent, imposed measures against waste and extravagance during local festivals and other annual religious rites. However, these restrictions have had little effect on traditional religious practices, to which the people stubbornly cling for solace.

771 has its god; there are patron gods for pharmacists, rice traders, carpenters, tailors, musicians, etc. There are household deities for the door, the well, and the hearth. For child-bearing and child-upbrining there are specific gods. There are gods of longevity and happiness. In short, there is a god to correspond to each and every human need. It is inevitable that beliefs as general as these result in superatitious practices.

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775 removed.[12]

After death, the souls of one's ancestors are believed to live in Yin-chien, where there prevails the same set of moral and economic values that govern the living. The descendants 779 are considered unfilial if they fail to worship their ancestors or do not consecrate periodic sacrifices to make the dead happy in Yin-chien.[13] The dead are considered a part of the family, determining the fortunes and misfortunes of their descendants in strict accordance with the amount of filial piety shown them. Some families build temples for the worship of their ancestors. Of the dead who have no offspring to worship them, most become lost souls wandering the universe as malevolent spirits and have such a strong influence on the living as to be assumed the cause of their misfortunes.

III. RELIGIOUS PRACTICES

793 Awe of the universe intermixed with Taoist sorcery results in one thousand and one strange practices among the less-educated people. Religious practitioners, mostly of the Taoist order, serve in the invocation of gods and spirits, communication with spirits,

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12. Masuda, op. cit., pp. 54-60.
13. Ibid., p. 63.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien
Formosa AD1

With the advent of the Japanese in 1895, Lukang very soon lost its importance as a port, for Japan's plans for the colonization of Taiwan did not include maintaining Lukang as a trade and immigration center. The Japanese set about cutting off the movement of people and goods between Taiwan and the mainland, and, to divert the colony's trade from China to Japan, they built the port of Keelung in northern Taiwan (Barclay, 1954b:12, 18–42). The demise of Lukang both as a port and as a major urban center was hastened by the silting up of the harbor, which had begun even before the coming of the Japanese. As a result of Japanese indifference to Lukang as a port, the harbor soon became unusable. 175 648 504 167 439

The final blow by which the Japanese doomed Lukang's importance was the routing of the extensive west coast railroad system far from Lukang. The city could then neither be maintained as a major market town nor as a point of trans-shipment for the area's produce. Its decline as an urban center and as an influence on the surrounding area was reflected in an accompanying population decrease from one hundred thousand in the late eighteenth century to fifty-one thousand in 1954 (*Women te Lukang Chen*, 1954). The decrease took place despite the high rate of population growth in the rest of Taiwan. 175 648 496 162 [161]

Today, Lukang stands several miles from the sea, a city much diminished in size and importance. It offers little economic opportunity for its inhabitants, and despite some light industry, few village people are employed there. Nevertheless, although it is now a small, out-of-the-way city, it offers nearby villagers a convenient local marketplace and a center for some entertainment. Most important, it still functions as a religious center. From the earliest times the Chinese immigrants brought their gods with them from the mainland to Taiwan. These gods and goddesses, such as Matsu, became firmly established as important deities in Taiwan; the Matsu temple in Lukang is believed by the people of the area to be the oldest or second oldest Matsu temple on the island. For this reason Lukang is still one of the most important focal points for the religious pilgrimages of those who maintain loyalty to the Godless Matsu. 464 369 443 442 778 776 167 175

The historical picture of this area at the time of the late Ch'ing dynasty comes from data furnished by older or better educated residents of the area and several local Chinese and Japanese gazetteers.[3] These various sources were used, wherever possible, to corroborate one another. The sources note that in the late nineteenth century the area was sparsely populated and that its inhabitants lived in constant fear of bandits. Up to the early part of the twentieth century dry farming produced most of the staples grown, since there was only a very limited system of irrigation. Crops like wheat, soybeans, sorghum, sweet potatoes, peanuts, a plant used to make dye for cloth, and broom grass were 175 124 127 [161] [579] 241 312

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779 are numerically unimportant. There were only 41,000 "true" Buddhists among the Formosan Chinese[3] in 1942. In 1954, there were about 34,000 Catholics with 126 churches, and 80,000 Protestants (about 4,600 of them Presbyterians) with about 600 churches.[4] There were about 900 Taoists[5] on Formosa in 1955. These various religious groups constitute less than 2 per cent of the total

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797 population.[6] Mohammedanism was introduced
779 after the Restoration; the number of believers are very few. The majority of the recent converts to Christianity are high school and college students.[7] These students are believed to have become Christians largely because of their wish to follow Western practices.

797 Many Protestant and Catholic missionaries have continued and expanded their vigorous activities since the end of the war. Many who were forced to leave the China Mainland are now continuing their work on Formosa. Besides the preaching of the Gospels, they have intensified their educational and social services. For instance, there were some 270 priests and 160 sisters of the Catholic Church on Formosa in 1955. Twelve priests and four nuns were teaching at Taiwan National University.[8]

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6. The number of Buddhists in 1942 was added to that of Christians in 1954. The result may not be presenting a true picture of the numbers of these faithful, but only a rough approximation.

7. China News Press, op. cit., p. 104.

8. China Handbook 1954-55, Taipei, China Publishing Company, 1954, pp. 62-63.

793 and the exorcism of malevolent spirits. At the time of births, deaths, sickness, the building of new houses, and other important family occasions, priests are invited to offer prayers and sacrifices and extended services appropriate for each case.

A. Prayers and Sacrifices

•782 Gods and ancestors on the family altar are worshiped generally on the first and the fifteenth days of each month (lunar calendar). Usually candles are lit, incense consecrated, and symbolic "paper currency" is burned for use in the other world. In the minds of the faithful, each god has a personality. Earthly problems and difficulties are brought before gods for assistance, and conditional promises are given that certain sacrifices and donations will be offered if and when the prayers are answered. Sacrifices differ according to the hierarchal positions of the gods in the pantheon. A whole pig is sacrificed, among other food, to the Jade Emperor, to the God of Earth, of Heaven, and of Water, and to the Judicial God in celebration of their name days, on which gay, joyful, and carnival-like festivals are held. To the gods just described and the less important deities may be offered "three sacrifices," generally pork, fish, and chicken; to ancestors, cooked rice and other dishes.

782 Sacrifices and food offered once to a god may be again offered to gods of lower rank. All the sacrifices are eventually consumed by those who offer them because gods are thought to require only the essence of each sacrifice.[14]

Prayers may be offered by a priest (usually a Taoist), who is paid to ask the gods for the patient's quick recovery, a safe birth, the removal of distress supposedly caused by evil spirits, etc. Prayers commonly heard in temples are not offered in order to seek strength to live a holy life but to ask for practical and immediate benefits.

B. Communication with Spirits

787 Since souls are popularly believed to live in Yin-chien, communication is possible through the media of Taoist practitioners. When someone wishes to communicate with those who are dead, he may ask a medium, usually a devout woman of the faith, to go to a Taoist priest practicing spiritualism. Before the presence of a god, the priest places the medium in a trance. In the trance the medium meets the dead soul through the guidance of the god and is able to answer questions which

14. Masuda, op. cit., pp. 86-88.

771 power to determine the customs of the people.

G. Superstitions and Taboo

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784 the dead. No person may eat the food raised by a clan to which he does not belong.

These are taboo, superstitions, and prejudice, and yet all have a symbolic reference to reality; some tend to protect the group against the wilfulness of the individual; others can be explained in psychosomatic terms; still others are poetic interpretations of natural phenomena.

828 Belief in the value of the interpretation of dreams is another aspect of the folk-culture of the Formosan people. Those who dream of wearing a yellow robe or of sighting fish swimming in a well may expect to receive money.[8] Those who dream of drinking on a high terrace may expect to be offered a position in government. To dream of murder or suicide is interpreted as a good omen. To dream of ants in bed or of a clouded mirror are evil omens. All of these have their Western equivalents, the patently absurd in dream books, the poetically accurate in the literature of psychoanalysis.

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8. This superstition led many families to attempt to breed fish in the family well.

11: Haguenauer--27 T-3 (no date) 1929 Formosans
116, 787

A Formosan woman scarcely ever passes the altars of the gods without stopping to ask for advice; she tosses two little crescent-shaped pieces of wood in the air, lets them fall and reads the horoscope. Then she prays, throws the pieces of wood and burns incense or "money for the gods" until the fates tell her something pleasant. All this is done to the accompaniment of the little firecrackers, which are the favorite form of popular amusement in Formosa, as they are in China.

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14. Masuda, op. cit., pp. 86-88.

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the seeker wishes to ask. The questions may pertain to the circumstances in which the soul has left the Yang-chien, the conditions of life in Yin-chien, the causes of misfortune which now exist in the family, etc.[15]

Hung-i [a sorceress] also renders services as a medium to the spiritual world. She may ask the gods in heaven or spirits wandering in the universe to descend and dwell in her so that the inquirer may directly converse with the gods or spirits involved in a particular problem. One may ask the hung-i such questions as: "Where may medicine for the sick be obtained?" "Will the expected birth be easy or difficult?" "Where can lost treasure be found?" "Are the dead happy and how do they live in Yin-chien?" An interesting saying, "Your mouth is exactly like that of a hung-i," (meaning that you are as great a liar as a hung-i), is used in irony and suggests the combination of belief and distrust with which

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15. Seiichiro Suzuki, Taiwan kyukan - kankon sosai to nenchu gyoji [Traditional Customs of Taiwan - Coming-of-age, Marriage, Funeral, Ancestor Worship and Annual Events], Taihoku, Taiwan nichinichi shimposha, 1934, pp. 52-54.

787 the people of Formosa regard the practice of sorcery.[16]

C. Taboo

787 The belief that the world is full of
791 spirits which control all aspects of life and every part of the universe has led to a system of taboo. A doubtful science called feng-shui (literally meaning "wind and water") is concerned with a study of the spirits dwelling in earth and mountains. The breaking of earth for the purpose of erecting a house, opening a mine, or digging a grave site at a certain time and on a certain date can begin only after a geomancer has assured the questioner that the spirits concerned will not be disturbed. For more or less the same reason, the date of a marriage or the time a funeral procession should begin is determined by a fortuneteller.

787 It should be made clear that these beliefs and practices are observed by a limited number of people among those who

16. Keirai So, Taiwan shukyo to meishin roshu [Religion and Superstitious Practices in Taiwan], Taihoku, Taiwan shukyo kenkyukai, 1938, pp. 34-44.

787 adhere to the folk-religion. With the advance of science and Western education, the belief in communication with the spirits of the dead and the various forms of taboo will lose much of their force. However, their influence on the religious life of the people in Formosa still seems to remain far stronger than that of Christianity.

IV. GOVERNMENT POLICY TOWARD RELIGION

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Of the greater number of government officials who have begun to observe Christian services, some may have done so, in part, because the wish for co-operation with the West, particularly with the United States, is growing. Church attendance, however, is by no means widespread.

15: U.S. Navy--24 [6] (no date) 1944 Formosans
116, 484, 788

"Few Formosan-Chinese have an opportunity to travel for pleasure or sightseeing, and that which is performed is often done as a pilgrimage to some well-known or favorite shrine or temple. Following the example of the Japanese, Formosans of the upper and middle classes have begun to frequent the hot-spring resorts (around Shirin and Hokuto in the north, near Giran on the northeast and north of Koshun on the southern peninsula)."

15: U.S. Navy--24 [7] (no date) 1944 Formosans
116, 493, 788, 764

"Funeral ceremonies and wedding parties occasion the passage of large numbers of people into and out of the cities. Cars, rickshaws, and coolie-borne palanquins are used. The hours at which funerals are held are determined by divination. Hence it is not unusual to encounter many people moving rapidly and noisily along the road at any hour of the night. Police permission must be secured for such affairs."

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15: U.S. Navy --26 [11] (no date) 1944 Formosans
116, 735, 792

"Religious mendicants, chiefly Japanese Buddhists, go from house to house with a begging bowl, praying or chanting, sometimes ringing a small bell or blowing upon a conch."

775 removed.[12]

After death, the souls of one's ancestors are believed to live in Yin-chien, where there prevails the same set of moral and economic values that govern the living. The descendants 769 are considered unfilial if they fail to worship their ancestors or do not consecrate periodic sacrifices to make the dead happy in Yin-chien.[13] The dead are considered a part of the family, determining the fortunes and misfortunes of their descendants in strict accordance with the amount of filial piety shown them. Some families build temples for the worship of their ancestors. Of the dead who have no offspring to worship them, most become lost souls wandering the universe as malevolent spirits and have such a strong influence on the living as to be assumed the cause of their misfortunes.

III. RELIGIOUS PRACTICES

• 793 Awe of the universe intermixed with Taoist sorcery results in one thousand and one strange practices among the less-educated people. Religious practitioners, mostly of the Taoist order, serve in the invocation of gods and spirits, communication with spirits,

12. Masuda, op. cit., pp. 54-60.
13. Ibid., p. 63.

793 and the exorcism of malevolent spirits. At the time of births, deaths, sickness, the building of new houses, and other important family occasions, priests are invited to offer prayers and sacrifices and extended services appropriate for each case.

A. Prayers and Sacrifices

782 Gods and ancestors on the family altar are worshiped generally on the first and the fifteenth days of each month (lunar calendar). Usually candles are lit, incense consecrated, and symbolic "paper currency" is burned for use in the other world. In the minds of the faithful, each god has a personality. Earthly problems and difficulties are brought before gods for assistance, and conditional promises are given that certain sacrifices and donations will be offered if and when the prayers are answered. Sacrifices differ according to the hierarchal positions of the gods in the pantheon. A whole pig is sacrificed, among other food, to the Jade Emperor, to the God of Earth, of Heaven, and of Water, and to the Judicial God in celebration of their name days, on which gay, joyful, and carnival-like festivals are held. To the gods just described and the less important deities may be offered "three sacrifices," generally pork, fish, and chicken; to ancestors, cooked rice and other dishes.

527 Members of the family who live at a distance revisit the home. Poorer families, who seldom eat meat during the year, have feasts during the New Year's festival, even if it means slaughtering the family pig or a number of hens.[6] Formosans also celebrate the Dragon-boat Festival on May 5 and the Moon Festival on August 15. The birth of Confucius, the birthday of Dr. Sun Yat-sen, and the anniversary of the founding of the Chinese Republic are national holidays. Government offices and schools are closed and there are memorial ceremonies.

574 The family itself celebrates marriages and births with elaborate feasts for relatives and friends. Funerals are also a time for large gatherings; a feast is usually provided for those who walk with the procession and attend the rites of burial.

•796 Many religious ceremonies provide additional opportunities for celebrations. A day devoted to Matsu, goddess of travel, is remembered. Her traditional importance to the Formosans may be attributable to the protection she offered those who made the

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6. Low-income groups eat little meat except at festival times. Raper, op.cit., p. 274.

796 perilous voyage from the Mainland across the stormy waters of the Formosan strait. Kuan-yin, the goddess of mercy, offered protection to those building settlements in a primitive and often hostile land. The Land God is also remembered, since Formosa is primarly a land of farms. These ceremonies include street processions, music, dancing, religious dramas, and feasts.

F. Folk Beliefs

771 In an agrarian society, folk beliefs are always naive and superstitious. When ways of life change, folk beliefs undergo transformation, for folk beliefs are but reflections of reality. In the present century, when science and technology had begun to modify the conditions of life of the Formosan people, folk beliefs altered. Infant mortality was once a serious concern on the island, and the gods who protected children were propitiated. The dragon who regulated the amount of rainfall received offereings from people in rural districts. After irrigation canals were constructed it was no longer necessary for farmers to seek the favor of a

4:Grajdanzev--176 S-4 (no date) 1942 Formosans
116, 177, 797

"There is a widespread but false belief that the Japanese lack the missionary spirit and that because of this, at least in the field of religion, the islanders may cling to the faith of their forefathers. The Japanese have their own societies for the propagation of the faith, missions and other implements of spiritual conquest, but the results are not very encouraging:

Number of Followers of Japanese Sects and Churches in Taiwan

	Japanese	Chinese
Various Buddhist sects (incl. nichiren, sodoshu, etc.)	73,504	27,398
Shinto and other churches)*	18,159	13,024
Buddhist churches †	40,025	17,008

* But there were only 5 Chinese as against 573 Japanese followers of pure shintoism.

†This does not include followers of Chinese Buddhism.

These figures show that the successes of the Japanese missionaries have not been conspicuous, especially if we compare them with the 41,708 Chinese followers of the Presbyterian Church and 7,399 of the Catholic Church, neither of which have a state organisation behind them. But with the increasing pressure being put on foreign Christian churches in Japan. the work of the Taiwan Christian missions is now endangered."

40: Kirk--22-23 S-2 (no date) 1941 Formosans
116, 123, 626, 797, 177.79 Japanese

"Religion. Besides changing the language and social customs of the people, the Japanese wish to destroy the Taiwan religion and the local temples, and substitute in their place the Japanese torii, shrine, and the Shinto [23] ritual. This policy is well illustrated by a personal experience. During his stay in Formosa, the writer was closely guarded by the military police. One gendarme, and sometimes two, always accompanied the 'foreign suspect' on his visits to the Chinese and primitive settlements. Even in Taihoku, the principal city, a policeman in plain clothes was invariably on hand when the writer would appear in the morning, and this 'guard-of-honor-' would not take his leave until the day's work was done. The 'foreigner' made a useful discovery very early in his Formosan career. Whenever a new 'guard' appeared, a visit to the nearest Shrine came first on the day's schedule. At once the whole attitude of the policeman toward his non-Japanese companion seemed to change from one suspicion to friendliness and he unconsciously became more or less an interested 'research assistant.' Unfortunately, the Japanese system seemed to call for a change of policemen as soon as one 'guard' showed signs of proving his worth as 'a social investigator.'

The residents of Formosa today, it appears, if they with to gain status in the eyes of public officials, may do well to forsake all other religions and follow the teachings of Shintoism."

40: Kirk--23-24 S-2 (no date) 1941 Formosans
116, 797

"Christianity. Christian missionaries are facing formidable obstacles in their daily work. In fact, the white families (February, 1941) have already left for their home countries in despair, and the native pastors of local Christian churches are being closely watched by the police. In general, the government is unfriendly to the missionaries; and, in turn, the missionaries, as a rule, have not been in sympathy with the policy of ko-min-ka. The white Christians have taught the natives in the Formosan Chinese dialects rather than in Japanese, and they have mingled almost exclusively with Formosan people. The government has naturally suspected that the influence of the [24] missionaries has been thrown on the side of the Chinese and against national unity."

45:Stanford U. S-4, 5 1956 AD1 Formosa
AD1

period of Japanese rule.[2] The number of temples has not decreased; since the Restoration in 1945, many temples have been repaired and new ones have been built.

On Formosa the faithful of other religions are numerically unimportant. There were only 41,000 "true" Buddhists among the Formosan Chinese[3] in 1942. In 1954, there were about 34,000 Catholics with 126 churches, and 80,000 Protestants (about 4,600 of them Presbyterians) with about 600 churches.[4] There were about 900 Taoists[5] on Formosa in 1955. These various religious groups constitute less than 2 per cent of the total

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2. Taiwan Provincial Government, Statistical Summary of Taiwan for the Past Fifty-one Years, Taipei, 1946, Table 507.

3. Ibid., Table 510. This seems to be the latest figure available on the number of Buddhists on the island.

4. China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], Vol. II, Taipei, 1955, pp. 103-106.

5. There were about 900 Taoist believers on the island in 1955. Chung-yang Jih-pao [Central Daily News], Taipei, Oct. 7, 1955.

•797 population.[6] Mohammedanism was introduced
779 after the Restoration; the number of believers are very few. The majority of the recent converts to Christianity are high school and college students.[7] These students are believed to have become Christians largely because of their wish to follow Western practices.

797 Many Protestant and Catholic missionaries have continued and expanded their vigorous activities since the end of the war. Many who were forced to leave the China Mainland are now continuing their work on Formosa. Besides the preaching of the Gospels, they have intensified their educational and social services. For instance, there were some 270 priests and 160 sisters of the Catholic Church on Formosa in 1955. Twelve priests and four nuns were teaching at Taiwan National University.[8]

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6. The number of Buddhists in 1942 was added to that of Christians in 1954. The result may not be presenting a true picture of the numbers of these faithful, but only a rough approximation.

7. China News Press, op. cit., p. 104.

8. China Handbook 1954-55, Taipei, China Publishing Company, 1954, pp. 62-63.

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

797 There is a Catholic hospital in Kaohsiung and another in Lotung. Many of the missions give time to Bible classes, English classes, and kindergartens. The increase in the number of Catholic converts has been most remarkable. There were fewer than 10,000 Catholics in 1941, and the number had increased[9] to more than 34,000 in 1954. While many Protestant denominations have been established in the last ten years, the number of their adherents has increased relatively little -- about 70,000 in 1942, to slightly over 80,000 in 1954.

There seems to be no open conflict between the tolerant native religion and Christianity, nor any objection to the introduction and expansion of Christianity. It has been noted that some non-Christian families celebrate Christmas and many Christian families continue to celebrate traditional Chinese festivals.[10]

II. THE CHARACTER OF FOLK BELIEF

771 The Chinese have "concerned themselves less with the hereafter than with the proper

9. China News Press, op. cit., p. 103.
10. A.F. Raper and others, Urban and Industrial Taiwan, Taipei, Foreign Operations Administration and National Taiwan University, 1954, p. 334.

4:Grajdanzev--182 S-4 (no date) 1942 Formosans
116, 804

"Note on Weights and Measures

1 ko (chia)	=	2.377 acres or 0.961 hectares
1 koku	=	1.804 hectolitres or 5.119 U. S. bushels
1 kin	=	0.6 kg. or 1.32 lbs.
100 momme	=	0.827 lbs.
1 go	=	0.3 lbs."

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

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.804

(This table follows p. 652.)

APPENDIX III

A TABLE OF WEIGHTS AND MEASURES

Area

Hectare	Taiwan (China)	Shih Mow	Mow	Japanese Tsubo	Acre
1	1.06108	10.00000	10.27630	3025.00000	2.47114
0.00947	0.00973	1	1.02808	301.66667	0.16476
0.81444	0.08338	0.92189	1	196.69419	0.11183
0.00033	0.00034	0.00404	0.00508	1	0.00068
0.00992	0.01023	0.14679	0.16148	30.00000	0.02451
0.40469	1	14.54969	15.79257	2934.00000	2.39630
0.40469	0.41724	6.07321	6.59277	1224.17996	1

Length

Meter	Kilometer	Shih Foot	Chinese Foot	Foot	Mile
1	.001000	3.00000	3.12800	3.28090	0.00062
0.33333	.00033	1	1.04267	1.09363	0.00021
0.32000	.00032	0.96000	1	1.04908	0.00020
0.30508	.00030	0.90969	0.94897	0.99421	0.00019
0.30479	.00030	0.91426	0.95369	1	0.00019
1000.00000	1	3000.00000	3128.00000	3280.99217	0.62138
3239.27273	3.92727	11781.81820	12291.72728	12884.96690	2.44094
1609.31498	1.60931	4827.94477	5033.13008	5280.00000	1

Weight

Kilo	Taiwan Catty	Shih Catty	Japanese Kin	Pound	Long Ton
1	1.67	2.00	1.66	2.20	0.00098
0.59882	1	1.19	0.99	1.31	0.00059
0.50000	0.83	1	0.83	1.09	0.00049
0.60000	1.00	1.20	1	1.32	0.00059
0.00375	0.01	0.01	0.01	1	0.000005
0.45459	0.76	0.90	0.75	2240.00	0.00045
1016.04754	1702.45	2032.09	1693.41	2000.00	1
907.18600	1520.08	1814.37	1511.97		0.89286

Volume

Hectoliter	Liter	Japanese Koku	Japanese To	Gallon Standard
1	100.00	0.55	55.45	26.41
1.80	180.39	1	10.00	47.65
0.02	1	0.01	0.55	0.26
0.02	1.80	0.01	0.10	0.47
0.18	18.03	0.10	1	4.76
0.04	4.54	0.02	0.21	1.10
0.03	3.79	0.02	0.20	1

[this table follows p. 652]

814 Intellectual Activity. The Japanese colonial government encouraged training in medicine, agriculture, and management in order to increase the number of technical personnel for local industry. Training in the humanities and the social sciences was not encouraged, since these endeavors might tend to awaken national consciousness. But many Formosans persisted, migrated to Japan and China for additional training, and returned to publish in various academic journals. Few positions were open to graduates in the humanities and the social sciences, and there is little evidence of collective activity in these fields, although some intellectuals formed small groups.

III. POSTWAR EXPRESSION

53 After Formosa was restored to China in 1945, artistic and intellectual activities received a new impetus from the abandonment of cultural restrictions imposed by the Japanese. They have continued to increase as the result of the great number of artists and intellectuals from the Mainland who have taken refuge in Formosa. Participation in various groups has grown steadily. This is particularly true in the fields of literature.

The revival of traditional drama, opera, and native music is underway, and all forms of artistic expression are studied. Motion pictures, particularly those imported from the United States are popular. A provincial orchestra has been forme and often broadcasts. An annual art exhibition has been established by the provincial government.

"In order to see what place industry occupies in the life of Taiwan and what its size is by comparison with Japan, we give below the gross value of production of industry as compared with other branches of Taiwan's economy. We give figures only since 1914 because, as has already been pointed out, data for previous years are of doubtful value. To give but one example, the official sources put the total value of industrial production (1) in 1907 at only ¥273,128; but however primitive this industry may have been it is hardly

1. Sugar and tea industries excluded.

possible that on an island with a population of three millions the gross value of industrial production should be so small.

Thus the value of industrial products increased from ¥45.7 million yen in 1914 to ¥374.9 million in 1937 and at the same time the proportion in industry rose from thirty-four per cent to forty-four per cent of the total. This rise in value is, however, to a considerable degree illusory, reflecting only the rise in prices (the index of wholesale prices prices in 1937 was almost double that of 1914), but this factor alone could not account for an eight-fold increase. Again, the part of industry, as compared, for example, with agriculture, is exaggerated here because, for farmers, who buy very little from outside, the net value of production approaches seventy and may be as high as eighty per cent of gross value, while in industry the net value, i.e. the value created in industry itself, is

very often only half the gross value of production. This suggests that even now agriculture is responsible for about two-thirds of the [91] total value product. But the fact remains that the value of industrial production has increased greatly, that its part in total production of the island has grown, and that the tendency is for industry's share to grow at the expense of agriculture."

10: Schumacher--225 [10] T-1 (ca. 1896) 1898 Formosans
116, 135, 214, 823

In the north of Formosa, sulphur is cut in large blocks. In the center of the island (Kagee) considerable coal seams are found and the same is true of the northern region around Kelung. The Su-ao river carried gold dust together with rubble as it flows down from the mountains, but the Chinese do not attribute special importance to the gold of the stream. Their interest in camphor is much greater.

15: U.S. Navy--30 [9] (no date) 1944 Formosans
116, 293, 825

"Strangers notice that most country people, when going any distance, carry with them a large black umbrella. In this they seem to share with the Japanese a curious and pronounced reluctance to let the hair be wet by rain. And they behave toward moths fluttering about in a room as Americans behave when they find a hair in the soup, showing signs of extreme repugnance."

771 power to determine the customs of the people.

G. Superstitions and Taboo

784 In spite of the enormous strides made by education in the past three decades, many superstitions and prejudices persist among the Formosan people. They often take the form of taboo or premonitions.

Some uneducated Formosans believe that if a person stumbles on the threshhold of his home just before commencing a journey, danger awaits him en route. To choke while eating presages bad luck. An itching ear is a sign that others are talking about us. The crowing of a rooster at night is a bad omen. Illness and misfortune are punishments sent by angry gods who demand propitiation. An earthquake is caused by the restlessness of a sleeping bull. The dead, especially those who have drowned, are objects of fear. People who waste rice may be struck by lightning.

The aborigines have their own superstitions and taboos. Twins and crippled [826] babies are misfortunes to a family and are allowed to die at birth. Intermarriage among members of the same clan is forbidden. Only members of the immediate family may touch

784 the dead. No person may eat the food raised by a clan to which he does not belong.

These are taboo, superstitions, and prejudice, and yet all have a symbolic reference to reality; some tend to protect the group against the wilfulness of the individual; others can be explained in psychosomatic terms; still others are poetic interpretations of natural phenomena.

• 828 Belief in the value of the interpretation of dreams is another aspect of the folk-culture of the Formosan people. Those who dream of wearing a yellow robe or of sighting fish swimming in a well may expect to receive money.[8] Those who dream of drinking on a high terrace may expect to be offered a position in government. To dream of murder or suicide is interpreted as a good omen. To dream of ants in bed or of a clouded mirror are evil omens. All of these have their Western equivalents, the patently absurd in dream books, the poetically accurate in the literature of psychoanalysis.

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8. This superstition led many families to attempt to breed fish in the family well.

15: U.S. Navy--30 (no date) 1944 Formosans
116, 581, 836, 585, 842

"The Chinese make no pretense that marriage is other than a useful procreational arrangement. Sometimes the tradition is observed that the parents or elder relatives of the groom's family send back to the bride's house evidence that the bride was virginal. In any case, for at least three days(and sometimes longer according to family customs) the bride must remain within the bedroom and there receive the groom's friends and their congratulations and gifts. The new father-in-law or other elder male will proudly show guests the bedchamber and invite them to feel of the softness or note the elegance of the bed. All are supposed to receive a cup of ceremonial tea from the hands of the bride. As they finish it, a gift of money is usually left in the empty cup (wrapped in red paper) and the blushing bride is urged to have as many male children as possible, quickly."

15: U.S. Navy--30 [2] (no date) 1944 Formosans
116, 585, 837, 851

"If it can be afforded, in many families the bride is expected to remain within the house for a long period and under no circumstance to go out unaccompanied by an elder woman of her husband's family for three months. This appears to be an elementary and practical form of assurance that the first-born (preferably a son) shall certainly be issue of the new husband and of no other and that therefore the house is assured of a genuine heir to its name and to the duties of worship of the ancestors."

15: U.S. Navy--30 (no date) 1944 Formosans
116, 581, 836, 585, 842

"The Chinese make no pretense that marriage is other than a useful procreational arrangement. Sometimes the tradition is observed that the parents or elder relatives of the groom's family send back to the bride's house evidence that the bride was virginal. In any case, for at least three days(and sometimes longer according to family customs) the bride must remain within the bedroom and there receive the groom's friends and their congratulations and gifts. The new father-in-law or other elder male will proudly show guests the bedchamber and invite them to feel of the softness or note the elegance of the bed. All are supposed to receive a cup of ceremonial tea from the hands of the bride. As they finish it, a gift of money is usually left in the empty cup (wrapped in red paper) and the blushing bride is urged to have as many male children as possible, quickly."

15: U.S. Navy--30 [4] (no date) 1944 Formosans
116, 581, 587, 595, 842

"Too many daughters in a house which cannot employ them to economic advantage are an embarrassment and must be sent out to marriages or to common-law cohabitation or concubinage on a less favorable social basis. It is almost unheard of that a widow or divorcee should remarry."

15: U.S. Navy--30 [6] (no date) 1944 Formosans
116, 595, 842

"The secondary wife has a legal status little inferior to that of the first wife. If no children are forthcoming from the first marriage, a man is under obligation to provide heirs to continue the worship of his forefathers. Frequently, too, as a woman gets older she is more and more willing that her husband enjoy the comforts and pleasures of younger companionship, and it is not uncommon that a cordial relationship is established among the two wives and the children. Concubinage on the other hand, has a less elevated object in the satisfaction of physical pleasures without the excuse of a need for heirs. Only the upper classes with an income well above average can afford to maintain two households or one establishment big enough to keep wives and concubines happily aloof from one another. Concubines usually have no status in law and can hold no implicit claim against the estate of their master. Concubines are recruited usually from families too poor to overlook a source of ready cash and perhaps other economic favors."

15: U.S. Navy--30 [2] (no date) 1944 Formosans
116, 585, 837, 851

"If it can be afforded, in many families the bride is expected to remain within the house for a long period and under no circumstance to go out unaccompanied by an elder woman of her husband's family for three months. This appears to be an elementary and practical form of assurance that the first-born (preferably a son) shall certainly be issue of the new husband and of no other and that therefore the house is assured of a genuine heir to its name and to the duties of worship of the ancestors."

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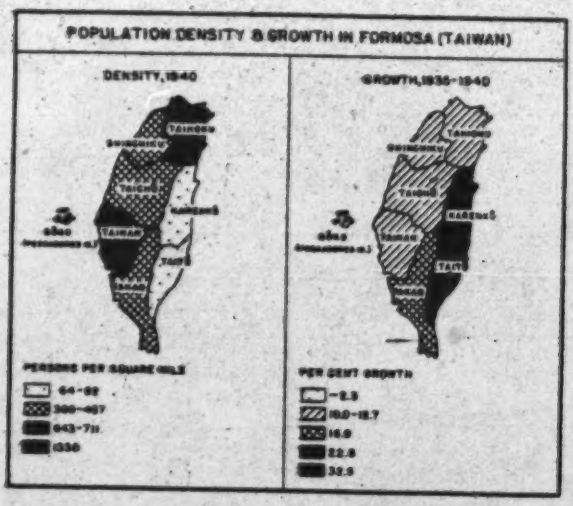

Taiwan, Population Density (1940) and Growth (1935-1940)

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291
854

Peasant Scene in Southern Taiwan

4:Grajdanzev--115 S-4 (no date) 1942 Formosans
116, 461, 857

"There is no information concerning the number of children occupied in Taiwan's industry, nor of hours of work and leisure. Japanese Labor Year Books (Rodo nenkan) contain hundreds of pages on labor conditions in foreign countries, but not on the conditions of workers in Taiwan and Korea."

22: Wiedfeldt--23 [3] F-5 (1913) 1914 Formosan Aborigines
116, 862 Atayal

The mother nurses the child until she ceases to have any milk before the birth of the next child.

15: U.S. Navy --21 [4] (no date) 1944 Formosans
116, 177, 867, 563

"Social life among the younger generation of Japanese of both sexes is more liberal than in the homeland and their outlook less traditional. Improved educational opportunities, local temples, cemeteries and other social institutions now tend to lessen the attraction of the homeland for the middle-aged."

E. Marital Status

162 A great proportion of the people 15 years old or more are married. The rate of divorce in Formosa is low, about 0.45 per 1,000 population as compared with 2.48 for the United States.[12]

Table 5. Marital Status of Population 15 Years Old and Over - 1953 */

	Number	Percentage
Single	1,447,803	30
Married	2,966,356	62
Widowed	388,191	8
Divorced	30,508	-
Total	4,832,858	100

*/ China News Press, Chung-hua Nien-pao 1954 [China Annual, 1954], p. 77.

F. Educational Status

212 87 Forty-five per cent of the total population know how to read and write. If children under six years are excluded, the percentage of literacy rises to 59 per cent. Over 90 per cent of the children from six to twelve years of age now attend primary schools; primary education is compulsory. Because many illiterate people are over school age, a literacy movement as well as other types of adult education are being promoted. A detailed breakdown of the educational status of the population is shown in Table 6.

12. United Nations, Demographic Yearbook, 1953, pp. 276-77.

212 But Formosa's position appears less favorable when compared with that of industrially advanced countries such as the United States, which has a literacy rate of about 95 per cent.

The potential literacy of Formosa's population holds promise. More than 90 per cent of the children of school age are now attending primary schools, and it is expected that within fifty years the percentage of literacy will have increased to that current in the United States. Meanwhile, adult education in Mandarin Chinese is being vigorously promoted. During the school year of 1954, approximately 610,000 people attended 5,670 classes (mainly for the teaching of Mandarin) given by hsien governments and municipalities.

II. EDUCATIONAL SYSTEM

•87 The educational system in Formosa follows closely that of the United States, though use of terms may differ somewhat. In the main, six years of primary and six years of secondary education constitute the basis for advancing to the collegiate level, which generally runs for four years. Post-graduate work leading to a Master's degree requires two years of study. Vocational education begins at junior middle-school level, at senior middle-school level, or at college level. Normal-school education (teacher-training) begins at senior middle-school level, where primary-school teachers are trained. Because educational facilities are limited, competitive entrance

45:Stanford U. S-4, 5 1956 AD1 .Formosa
~~AD1~~ AD1

SIMPLIFIED EDUCATIONAL SYSTEM
School Year 1954-55

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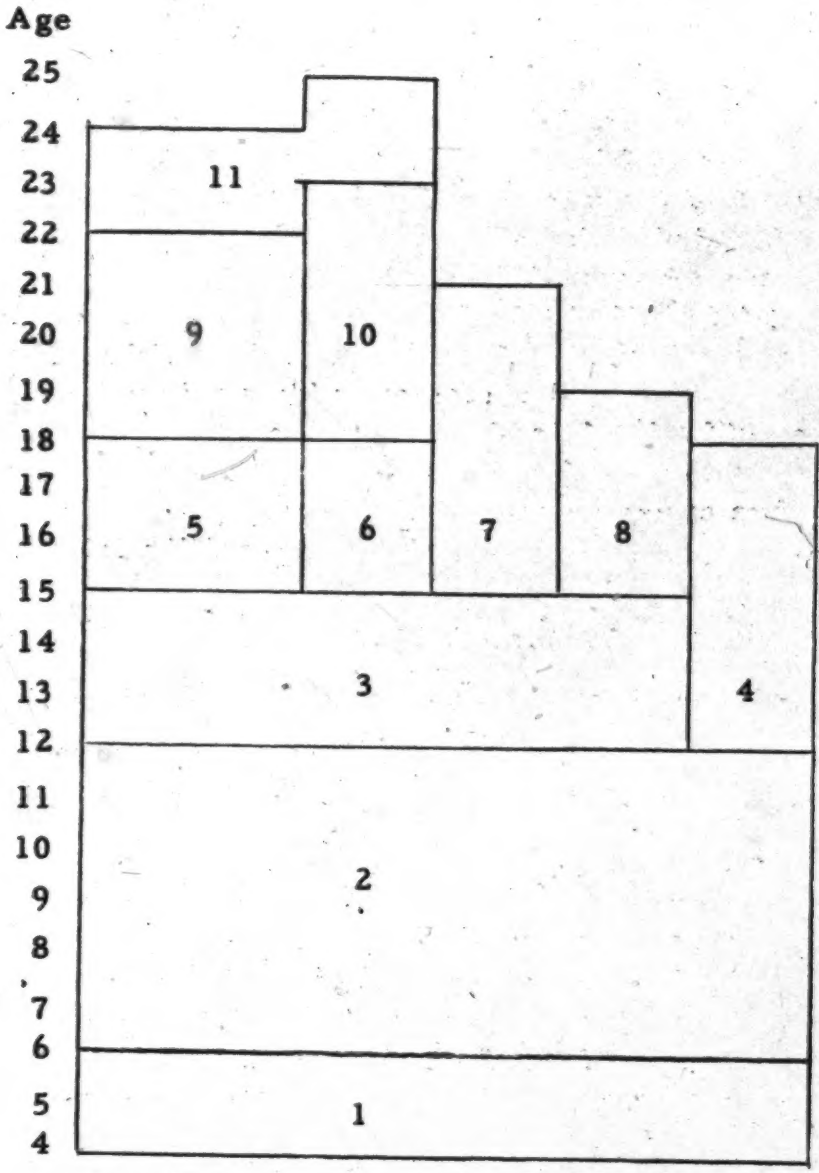

45:Stanford U. S-4, 5 1956 AD1 Formosa
~~AD1~~ AD1

KEY

• 87

1. Kindergarten -- one to two years
2. Primary School -- six years
3. Junior Middle School -- three years
4. Vocational School -- one to six years
5. Senior Middle School -- three years
6. Normal School -- three years
7. Junior College -- two to six years
8. Senior Vocational School -- four years
9. College -- four years
10. Normal College -- five years
11. Graduate School -- two years

87 examinations are required at each educational level above junior middle schools.

A. Primary Education

872 Primary education begins when a child reaches the age of six and lasts for six years. Primary education is compulsory and free to all school-age children, "school age" being defined as from 6 to 12 years. Salaries of the teaching staff are paid by local governments. Textbooks and tuition are free, but children must buy their own notebooks and pencils.

The objectives of primary education are good citizenship, proper habits, and the basic knowledge and skill necessary for earning a living. As to language, emphasis is placed on the teaching of Mandarin Chinese as evidenced by the fact that all children entering school must be taught the Mandarin phonetic symbols during the first twelve weeks of school. All texts are in the Chinese language, the compilation of which emphasizes commentary on Dr. Sun Yat-sen's "Three People's Principles,"[3] exposure of the barbarism of the Communists, explanation of the nature of Soviet imperialism, stories illustrative of a patriotic spirit, material relating to Formosa past and present, and other items conducive to the building of morale and to the strengthening of determination to fight against Communist and Soviet imperialism.[4]

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3. Nationalism, Democracy and Livelihood. For details, see the chapter on Structure of Government.

4. China Handbook 1954-55, Taipei China Publishing Company, 1954, p. 313.

217 libraries have a total of 46,187 books in European languages, 241, 574 in Chinese, and 240,603 in Japanese.

874 The provincial Department of Education also maintains two trade schools for the deaf, dumb, and blind at Taipei and Tainan. These schools provide free education in trades such as woodworking, barbering, shoemaking, massaging, etc., and can accommodate 436 students, principally children.

658 Special attention has been given to fine arts education in order to encourage the aesthetic aspirations of the people. The Ministry of Education recently established for this task the Committee for Fine Arts Education and the Committee for Research and Improvement of Chinese Opera. New plays are being written and concerts, art exhibitions, and other cultural events are provided under the committees' promotion.

III. ROLE OF THE GOVERNMENT

A. Content and Character of the Role

•87 In Formosa, the government has general control over the supervision, educational policies, and organization of schools at all levels.

The Executive Yuan, in its proposal of an administrative program to the Legislative Yuan in March 1952, set its educational objectives as follows: "that in order to meet the needs of time...

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the education program should develop the moral character of the citizens...should denounce the false doctrine of class struggle so as to eradicate the contamination of Communism and Soviet imperialism...and should guide and assist youth who cannot afford to attend school and encourage them to participate in the gigantic work of national salvation..." Within these broad principles, the Ministry of Education, a part of the Executive Yuan, exercises supervisory power over the education of the entire country and controls the compilation of textbooks. Financing, maintenance, and administration, however, are left to the provincial and local governments. In the academic year 1954-55, the budget of the Ministry of Education, including a supplementary budget, amounted to NT$ 73,580,000 (US$4,7560,000, at NT$15.65 to US$1 as of June 1954) which constituted 2 per cent of the national budget. However, educational expenditures are borne largely by the provincial government, which allocated 25 per cent of its NT$1,200,000,000 expenditures for educational purposes in the 1954 fiscal year. The educational appropriations of 16 hsien and 5 municipalities and the Yangmingshan board of administration averages 35 per cent of their total budgets.[13] All the primary schools on the island are publicly owned. Only 29 of the total of 237 secondary schools (including 21 middle schools and 8 vocational schools) are privately owned. Of 14 institutions of higher learning, 3 are owned and administered by private interests. The organization or dissolution of any school, moreover,

13. Chang Chi-yun, Education in Free China, Taipei, China Culture Publishing Foundation, 1954, pp. 2-3.

87 is subject to the permission of the educational authorities of the government.

New requirements in the courses offered in all levels of schools -- non-academic labor and military training -- are recent implementations of the educational program. All primary and secondary schools are required to provide vegetable gardens, workshops, implements, tools, machines, etc., in order that students may learn the habit of manual work and productive efforts. Efforts are being made to achieve closer coordination between the school and the community and between vocational schools and factories or farms.

87 Needs of the time, especially in Formosa, clearly indicate the necessity for military pre-
701 paredness. The Ministry of Education is of the opinion that educated people should be prepared to serve on the home front if they are not to serve in the front line. Students of all schools above junior middle-school level are required to take military training at school and upon graduation Girls are required to take nursing instead of
87 military training. As of 1954, more than 90 per cent of the schools at junior middle-school level were giving scout training, and there were approximately 8,876 Boy Scouts and 3,084 Girl Scouts[14] in Formosa.

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14. Chung-hsin Ch'en "T'ai-wan-sheng T'ung-tzu-chun Chiao-yu Kai-k'uang," ["Boy Scout Education in Taiwan"] Chiao-yü Yü Wen-hua [Education and Culture Weekly], Vol.6, No.10, pp.9-11.

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87 In addition to training, Boy Scouts in Formosa render social service by contributing radios and books to the armed forces and by such services as maintaining order in public meetings.[15]

B. Education of Overseas Chinese

87 648 Education of overseas Chinese is under the charge of the Ministry of Education. It is undertaken on the premise that overseas Chinese support the government of their motherland and wish to preserve their traditional culture. Chinese Communists are now making a tremendous effort to indoctrinate overseas Chinese and to attract them to study on the Mainland.

There are about 2,338 primary and secondary schools[16] of overseas Chinese over the world, more than 90 per cent of which are in Southeast Asia. The ministry supplies textbooks to 1,817 of these schools and also distributes periodicals and books intended to familiarize the Chinese with Chinese culture and institutions. The ministry plans to establish a university in Formosa for overseas Chinese; in the meantime, the National Middle School for Overseas Chinese, with an enrollment of 200 students from Vietnam, Korea, and other countries began instruction on October 21, 1955.

The ministry has continually helped the overseas students by assigning them to various

15. Ibid.
16. Asia Foundation Bulletin, Aug. 5, 1955.

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schools on the island, assisting them in finding part-time employment, and offering them counseling while at school. It is reported that, during 1951-54, there were 2,350 overseas Chinese attending colleges and universities in Formosa through the encouragement of the ministry.[17] About one-fourth attended National Taiwan University.

An Overseas-Chinese Teachers' Department is being established at the Provincial Normal University, where 50 teachers, to be selected from middle schools of overseas Chinese, are to complete a two-year training program.

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17. Ibid., May 31, 1955.

4:Grajdanzev--155-156 S-4 (no date) 1942 Formosans
116, 167, 457, 484, 563, 871, 177.43 Japan
636.43

"One must, however, consider the invisible items in the balance of payments. The Chinese of the island rarely emigrate from Taiwan; as we have [156] already seen, the number of islanders living abroad is negligible. There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year—a small quantity in comparison with the figures involved. The islanders do not travel abroad, they have no investments abroad from which they draw income and there are only a few foreigners on the island, so that the general picture of an island having economic connections exclusively with Japan remains undisturbed."

4:Grajdanzev--156 S-4 (no date) 1942 Formosans
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"There are about 1,300-1,500 Taiwanese students in Japan proper, but their support by their parents and relatives can hardly cost more than one million yen a year—a small quantity in comparison with the figures involved."

4:Grajdanzev--163 [2] S-4 (no date) 1942 Formosans
116, 171, 625, 659, 871, 177.62 Japan
636.62

"Many times on the preceding pages it has been shown that Taiwan is more poorly supplied with this or that commodity than is Japan proper. But in one respect Taiwan is better supplied——with policemen. According to Dainippon teikoku nenkan (Statistical Year Book of the Japanese Empire) for 1937, there was one policeman for every 1,052 persons in Japan proper in 1937, while in Taiwan there was one for every 580 persons. According to the same source there were more policemen than teachers in Taiwan—— 9,972 policemen in 1937 as compared with 9,651 teachers of all kinds in 1936——while in Japan proper the number of teachers was almost six times as large as the number of policemen. The number of policemen in Taiwan is almost three times the number of physicians."

4:Grajdanzev--165 S-4 (no date)1942 Formosans
116, 208, 563, 658, 871, 177.87 Japan
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"In the sphere of education the island has passed through two periods, one before 1919 and another since that year. Before 1919 the policy of the government with respect to the Chinese of the island was vacillating. It was ready to recognize the existence of the Chinese in the Japanese Empire as a separate entity, and was ready even to help them preserve their Chinese character. A special society was created to investigate Chinese customs and habits and these were to be taken into consideration in court practice. Later, the failure of this policy was recognized and the avowed end became the japanization of the inhabitants of the islands in order to make them loyal subjects of the Empire. The elementary school was to become the chief instrument in this japanization. While before that period the education of the Chinese was completely neglected, since then school expenditures have grown and the number of pupils has increased from year to year. But this does not mean that there is any equality between the Japanese and Chinese as regards education. A literate population is necessary for the japanization of the islanders. Knowledge of the Japanese language is indispensable for workers, policemen, for the paocheng, for clerks, for all who work for their Japanese rulers. It does not mean, that there is any intention of raising the Chinese to an equal position with the Japanese."

4:Grajdanzev--165-166 S-4 (no date) 1942 Formosans
116, 208, 871, 876

"The school is considered the best instrument for turning the islanders into docile, law-abiding, hardworking servants. As may be seen from the following table the results, before 1930, were hardly impressive:

Number of Chinese on Taiwan who Understand the Japanese Language
(census data)

	1905	1915	1920	1930
Women	469	4,194	11,168	70,750
Men	10,801	50,143	87,897	294,677
Total	11,270	55,337	99,065	365,427

Source: Kokumin nenkan, 1940, p. 665.

[166] If we look at the rate of growth these figures may appear imposing. But actually the results can hardly be considered satisfactory since by 1930, after thirty-five years of Japanese rule over such a small area, only about ten per cent of the population understand the language of the rulers—and the degree of understanding required by the census-takers was small."

4:Grajdanzev--168 [3] S-4 (no date) 1942 Formosans
116, 563, 871

"School Enrolment in Taiwan, April 1, 1939

	Japanese	Chinese
Youth of school and college age (8-22)	88,000*	2,000,000*
Pupils in primary schools	44,000*	557,135*
Pupils in secondary schools	10,437	6,658
Pupils in special secondary schools	3,343	2,610
Students in teachers' colleges (1936)	985	384
Students in the university	192	90
School Enrolment per Thousand Children of School Age		
Pupils in primary schools	500*	278*
Pupils in secondary schools	118	3.3
Pupils in special secondary schools	38	1.3
Students in teachers' colleges	11	0.2
Students in the university	2	0.05

* Approximate figures."

15: U.S. Navy --21 [10] (no date) 1944 Formosans
116, 871, 177.87 Japanese
636.87

"The Japanese educational program calls for a great deal of physical training, marching, drilling, and calisthenics. Swimming, and judo and kendo (traditional Japanese military games) are also taught in all schools but are popular only among the Japanese."

15: U.S. Navy--32 [5] (no date) 1944 Formosans
116, 467, 668, 871, 177.87 Japanese
636.87

"Formosan peasant and trade unions were not organized along class lines, owing perhaps to the essential democracy of the Chinese guild system. Members of the middle and well-to-do classes actively supported the peasants and workers in their agitation for better working conditions and attempted to work for legislation to that end. The biggest handicap to any such movement has been the lack of education for peasants and workers, especially of education which could be gained outside of the Japanese 'National Schools.'"

31: Hofmann--631 [2] N-3 (1909) 1912 Formosans
116, 342, 351, 871

These Chinese capitalists know how to live luxuriously; their houses are beautiful even by European standards. A drive leads from the street to a large garden enclosed by the house and annexes. There are high, cool porticos leading to the residence proper. Many of the houses have a small theater. Since in former times there were no public schools in China, or at least none that were attended by the children of the rich, the Chinese here have set aside one wing of the building for the children and their tutors. As the Chinese ideal is to have a large family and this ideal is often realized, this wing is usually very large. In the center of the courtyard, there is a pond. There are small arbors and arcades arranged in excellent taste. From the terrace one has a beautiful view of the estate, which is hidden from the observer on the street. The house where I stayed had been made into a Japanese hotel but the features characteristic of the original estate had been retained.

40: Kirk--20 S-2 (no date) 1941 Formosans
116, 191, 658, 871, 177.87

"Koshusho, or national language training schools, which have sprung up to facilitate the teaching of Japanese to adults, numbered 7,306 in 1939. The classes meet in schoolrooms, public halls, or private homes under the leadership usually of Japanese-speaking Formosans who contribute their services free. From the year 1934 Formosan children will attend primary school for at least six years under a cumpulsory education law similar to the law in Japan proper."

40: Kirk--20 [2] S-2 (no date) 1941 Formosans
116, 563, 759, 871, 177.56 Japanese

"Theoretically, Japanese and Formosans may attend the middle and high school as well as the university, but in practice the Formosans find many difficulties in their path. The more important positions in business and the professions, with one exception, seem to be held by Japanese exclusively. Medicine is the one profession open to educated Formosans on equal terms with the Japanese."

45:Stanford U. S-4, 5 1956 AD1 Formosa AD1

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Table 6. Educational Status of the Population*
(December 1953)

	Male	Female	Total
Over 6 years of age	3,368,349	3,168,769	6,567,118
College education:			
Graduates	62,090	10,964	73,054
Students	13,972	2,868	16,840
High school education:			
Senior high graduates	117,846	45,846	163,692
Senior high students	42,359	13,679	56,056
Junior high graduates	142,626	73,325	215,961
Junior high students	109,852	44,288	154,140
Primary school education:			
Graduates	993,071	565,583	1,558,654
Students	766,410	571,184	1,337,594
Private school education	174,109	91,093	265,202
Illiterate	946,014	1,779,921	2,725,935
Under 6 years of age	958,359	912,539	1,870,899

*China News Press, Chung-hua Nien-pao, 1954 [China Annual, 1954], p. 78.

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The extended family was in itself a religious group. Worship of common ancestors, observation of their birthdays, and participation in annual festivals were ceremonies observed by all members of the family. Religious practices served to impress family members with a feeling of kinship and common heritage.

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The education of children became the function of an extended family when there were no public schools. Tutors were invited to join the family and all the children studied at common expense, regardless of their parents' status within the family. All the children had an equal opportunity to learn.

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The family was also an economic unit. Male adults participated in the family business and the entire family shared a common budget. In rural families, rice paddies were hulled and cloth was woven by women in the home. Chickens, ducks, vegetables, and preserves were produced in the household, thus making it unnecessary to buy more than a few necessities at the market. In this manner, the family functioned as a unit of production and consumption. Another feature pertaining to the extended family was the system of community property. Family property belonged to the entire family, and at the dispersion of the family it was divided among the sons, with a relatively larger share going to the eldest son, who assumed responsibility for maintenance of the family shrine.

642 If he is not satisfied with the decision of the
694 provincial government, he may file a further complaint with the proper department of the Central Government. If the charge is against a wrongful decision, the decision on the second complaint by a superior government body will be final. But if the complaint is against an unlawful decision or an illegal execution, the dispute may be referred to the administrative court for final judgment.[25]

642 The Chinese Constitution provides that
871 the people shall have the right to receive as well as the obligation to accept public education.[26] The state has the responsibility of providing the necessary educational institutions so that all the people may have a chance to receive elementary education; and the state may compel children of school age to attend school. Articles 159 and 160 of the Constitution specify that all citizens shall have an equal opportunity to receive education and that primary education shall be free of charge. Children from poor families shall be supplied with textbooks at the expense of the government.[27]

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25. Law of Administrative Procedure, 1942, Article 1.

26. Constitution, Article 21.

27. Constitution, Article 160.

631 substantiate this contention. For instance,
635 in the realm of finance, all taxes with the exception of customs duties, are collected by the provincial government. The Bank of
[652] Taiwan, a provincial bank, takes over all the functions of the central bank. It issues currency notes, supplies foreign exchange, and acts as the fiscal agent both of the national and provincial governments. With
871 regard to education, only the Taiwan National
631 University is under the supervision of the
635 Ministry of Education of the national government. All other schools in the province, including the College of Engineering and the Normal University are under the direct jurisdiction of the provincial government. Actually the different ministries in the national government have undergone so much consolidation after they had been moved to Formosa, that most of them are now maintaining only a skeleton staff.[4]

631 The relative importance of the Taiwan
635 provincial government does not, however, diminish the highly centralized authority of President Chiang Kai-shek, for the provincial

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4. There are now 12,000 employees in the national government vs. 113,000 in the provincial government. Time, op. cit., p. 34.

this growth was due to the natural increase of the Chinese people. Density of settlement increased to 378 per square mile of total land area in 1935, and to 424 in 1940. This was a high density in a country where 70 per cent of all gainfully occupied men were in agriculture and cultivated land was limited to the river valleys of the northern tip and the fertile areas facing China. Industry was limited largely to the processing and transportation of agricultural products until the war preparations of the Japanese induced rapid industrialization and urbanization in the middle and the late thirties. 161 241 177

In this economic development, Japan's main interest lay in agricultural commodities which enabled her to be less dependent on sources outside of the Empire. The Japanese occupied the major administrative, technical and managerial positions while the Chinese comprised the farmers and the unskilled laborers. The latter were maintained in relative isolation from the outside world with minimum possibilities for economic or cultural advancement. However, an increasing proportion of the children of the Island received elementary education and some even received a secondary education. A select few attended the Imperial University in Taiwan and went on to study in Japan. This cultural leaven was Japanese-oriented to a degree far beyond linguistic adaptation. In fact, the Japanization that had been in process of slow evolution since the initial conquest became a firm policy of forced cultural assimilation by the late thirties. 463 563 177 871

Here was a classical experiment in the potentiality of the Chinese peasant to reproduce his numbers under favorable conditions. Famines were eliminated and food available for subsistence increased in amount. Epidemics were controlled and the effects of endemic diseases were mitigated. All forces conspired to preserve and to sustain life in so far as possible with known technologies and at minimum cost. The same economic and political ideology insured the continuation of high birth rates. The familial values which had insured survival throughout the millenia in the rice lands of the Mainland were preserved in the isolated peasant villages of Taiwan.

THE DEATH RATE

The demographic paradox of colonialism appeared early in Taiwan. A combination of forces produced a decline in the death rate without either a concomitant or a delayed decline in the birth rate. Recorded death rates 165 563

48: Chen E-4 (no date) 1955 AD1 Formosa AD1

productivity and the progress in public works and social establishments were the cause of this contrast.

14. *Education*

Modern society is a society based upon science and technology, and it is a prerequisite that most of its members have a scientific attitude. If many of its member do not realize that epidemics are spread by germs, if the large part of the people believe disease to be the malicious work of devils, then it is impossible to wipe out epidemics. For farmers to use modern agricultural tools and machines, for workers to work in a modern factory, for soldiers to fight with modern weapons, the scientific attitude is indispensable. In order to give its members the scientific attitude, modern society, which respects individual freedom in principle, does not allow freedom in regard to education. Thus the system of compulsory education has been universally adopted. It is only natural that the decline of death rate and the growth of population should have an intimate relation with the spread of education.

During the Manchurian period, except for small number of public schools operated by the government, education was carried out mostly by private schools, operated by family or kinship groups. Primary education of a modern type was started by the colonial government, and the trend of growth of the number of schools and students is given in Table 6. By the change of colonial policy, the increase was speeded up after 1920, particularly since the 1930's. Enrollment of girls was very poor in the earlier years, but had improved with the passage of time. In 1943, enrollment of school age children in primary schools was 81% for boys, and 61% for girls (14: Table 481). However, the improvement was mostly limited to primary education, and with regard to secondary and higher education, it was very poor. The improvement in education after the restoration in 1945 was essentially an improvement in secondary and higher education (cf. §6).

Table 6: Number of Schools and Students of Private Schools and Public Schools for Taiwanese in Selected Years

	Private Schools				Public Schools for Taiwanese			
	Number of Schools	No. of Students			Number of Schools	No. of Students		
		Total	Boys	Girls		Total	Boys	Girls
1899	1,721	25,215	25,089	126	96	9,817	9,435	382
1909	655	17,101	16,701	400	231	40,650	37,023	3,627
1919	301	10,936	10,347	587	438	129,580	107,253	22,327
1929	160	5,805	5,043	762	754	232,829	179,024	53,805
1939	17	932	632	300	810	546,209	361,068	185,141
1944					944	872,507	500,333	372,174

Originally there were primary schools for Japanese and primary schools for Taiwanese. In later years some Taiwanese students were permitted to enter primary schools for Japanese. The above table do not include this part of Taiwanese students.

Source: 14: Table 477.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the accent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1943, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1954b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

words in Japanese, such as expressions to be used when entering the predominantly Japanese-manned police stations and other official places. Some uneducated men, however, learned a modicum of Japanese when they served in the Japanese army labor corps during the war period.

Under the Japanese the teaching of the Chinese written language as well as the traditional Chinese classical literature in the schools was illegal. However, village men tell about a Chinese school "secretly" conducted in a temple in Lukang even through the late 1930's. There children and teenagers were taught to read and write Chinese and to study the Chinese classics. Only a very limited number of people from Hsin Hsing and the neighboring villages attended such schools, and there were few who attended the Chinese school who did not attend the Japanese primary schools as well.

In the Hsin Hsing area, then, except for the few Taiwanese who managed to attend secondary schools or colleges or who were laborers during the war, the number of persons able to read and speak Japanese (or read Chinese) was small. Grajdanzev, mostly on the basis of Japanese sources, noted that "after 1937 five and one half million Chinese (in Taiwan) could not read a newspaper in their own language, though most of them do not know Japanese" (1942:170). The effectiveness of the Japanese educational system for much of the population of the rural area has perhaps been exaggerated. Although the Japanese school system was greatly expanded between 1937 and 1943, it appears that it did not have time to develop any depth in its effect on the peasant.

Under the Nationalist government's theoretically "compulsory" education, almost all students and former students of the present school system can now speak some Mandarin, which is the only language used in the school after the first or second year. Some of the younger middle-aged men have developed a functional knowledge of simple Mandarin as a result of recent work contacts in Taipei or service in the Chinese army.

The language situation in Hsin Hsing and the surrounding rural area is as follows (for 1958): Very young children speak only Taiwanese (Min-nan) up through the first few years of school. Children in higher grades and young people up to the age of about twenty-six speak Mandarin with varying degrees of fluency in addition to their native Taiwanese. Their fluency depends upon the amount of schooling they have had, how long they have been out of school, and the amount of contact they have had with the language at work or in other special situations after leaving school.

Some men and a few women between twenty-four and forty-five speak some Japanese in addition to Taiwanese. The men learned it

36: Rowe S-4 (no date) 1955 AF1 China AF1
Formosa ADJ

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Education

Free primary school education is now available to everyone, and the average number of children attending school is 80 percent. (The Japanese had restricted the education of the Taiwanese, with few exceptions, to a certain level and to certain schools). All Taiwanese are free to attend any school or college.

In 1950, there were 121 middle schools in Taiwan. Of these 34 were provincial schools, 74 established by *hsien* or municipalities, and 13 private schools. In 1950, there were eight normal schools, as compared to three on V-J Day, several vocational schools, and six institutions of higher learning, including a national university with a total enrollment of 6573 students.

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Since most of the institutions of higher learning are run by the government with a view to keeping costs down, a Taiwanese may obtain a high school or college education with only a small outlay of money. However, the demand for education far exceeds the opportunities because educational facilities are still in short supply. Thus the schools are overcrowded and competition for admission to them is keen. Education remains a major unsolved problem.

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Evaluation of Nationalist Achievements

The Taiwanese economy today supports a considerably larger population than in the past. It also supports an army, which though it has itself cultivated land and increased other types of production in an attempt to provide in part for its own consumption, still creates a heavy drain upon the government treasury. By Western standards government employees are poorly paid; an army officer, for example, earns less than a storekeeper or peddler. The cost of living remains high in relation to average income, despite the fact that the currency is more stable than it has been for over a decade. There is some unemployment (though no beggars).

In general, however, the island's postwar record of internal peace, order, and achievement is impressive. The police force and local administration are efficient and reasonably free from corruption. Crime is at a low level. For the first time in many centuries, the government has taken an accurate census. The government gives every evidence of sincerely respecting the wishes and opinions of the people. To be sure, a permit is required for entering and leaving the island, and all residents carry identification cards. Some would attribute such measures to an overzealous secret police, but the alleged reason for them, military security, appears to be the real one. It must be remembered that a government constantly on the defensive against a merciless enemy, must take extensive precautions. The important point is that despite these precautions, and the presence of five hundred thousand exiled troops on the island, the Taiwanese who keeps within the law is not likely to be deprived of life, liberty, or property. This is rather confirmed than disproved by the considerable amount of grumbling in which they indulge. At any Taiwanese newsstand one may purchase magazines and papers critical of the existing regime as well as those favorable to it, and there are no restrictions on listening in on the short-wave radio. There is, on the other hand, no mercy shown genuine political offenders. The Communists employ every method in the book in their attempt to recruit Taiwanese, including blackmail and threats of harm to relatives on the mainland. The Communist slogan, familiar to everyone on the mainland, is: "We will use blood to wash Taiwan clean!" The secret police in Taiwan have good reason, therefore, to keep on the alert, and the government good reason to mete out swift justice to the proven spy or traitor. It is the general opinion

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD1

655 471 ments or sold to private industrialists by means of competitive bidding.[40]

Taiwan's industrial growth in recent years reflects mostly the development of government enterprises. Such state industries as gasoline, kerosene, and Diesel oil have registered considerable increase over the peak year production figures under the Japanese.[41] Other government-operated industries such as electric power, sugar, alcohol, cement, and camphor, though lower in production volume than in the prewar peak year, have made extensive recoveries in contrast to their chaotic conditions at the conclusion of World War II.[42] Augmented by ECA assistance, the over-all industrial picture may be described as one of steady growth.

Educational Policies

871 177 [212] The Nationalist government inherited from Japan an educational legacy which comprises a mixture of salutary and disadvantageous factors. Of the former is a more than 70 per cent literacy among the people.[43] A framework of primary and secondary schools scatters over the island. A fair foundation of vocational education has been laid. There are also several higher institutions of learning. A tradition of discipline, hard work, and thriftiness prevails among the students.

871 177 197 On the disadvantageous side is the predominant position of the Japanese language, both spoken and written, as a medium of learning. Many island inhabitants can hardly read Chinese or speak their native Fukien tongue flu-

[40] *Taiwan Reconstruction**, Vol. 2, pp. 408–547.

[41] *Ibid.*

[42] *Ibid.*; also *Taiwan Today*, pp. 99–122.

[43] *Taiwan Reconstruction**, Vol. 1, p. 89; also for a general treatment of the subject, see Taiwan Provincial Government, *The Administration of Planned Education**, Taipeh, 1949.

[p. 220 (A)]

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD1

871 177 197 ently. Besides, the key educational personnel was composed mostly of Japanese. To fill their vacated posts with competent indigenous educators is a time-consuming process.

872 A review of existing educational regulations indicates a policy to extend equal opportunity for free education to all the people, beginning with primary education and gradually extending to junior high school level. Of children in primary schools, 79.08 per cent were being given free education as of September 1949, in contrast to 71 per cent during 873 the pre-Nationalist period. Under the Japanese, higher education for Taiwanese youths was discouraged by means of admission technicalities. This restriction has since been removed. Government scholarships are available to deserving youths with inadequate financial means. The current problem is to provide additional facilities to relieve congestion in secondary and higher institutions of learning. It has been made more acute by the influx of some 100,000 refugee students from the mainland.[44]

871 The over-all Nationalist objective in education is to implement the political, economic, and social policies of the National Government. To meet the current emergency, a series of regulations have been adopted to "establish a central thought," "to strengthen Nationalist concepts," "to carry out reconstruction and defeat Communism," and to link education with various extension programs.[45]

The "central thought" policy revolves around Dr. Sun Yat-sen's *San-min*

[44] Data in this paragraph drawn from *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 83–146; *Taiwan Today*, cited note 11 *supra*, pp. 147–48; *The Administration of Planned Education**, cited note 43 *supra*, p. 7.

[45] "Educational Program of Taiwan during Emergency Period"* (text appears in *Taiwan Reconstruction**, Vol. 1, pp. 84–88).

[F.220 (8)]

52:Steiner S-4 (no date) 1951
AF1 China
FORMOSA AD 1

871 *chu-i*.[46] "Nationalist concepts" are to be strengthened by means of the National Language or "Speak Mandarin" movement,[47] by enhancement of civic, history, and geography lessons with "glorious historical events," and by supplementary teaching material relating to Russian aggression committed on China. The program of reconstruction calls for specified training to meet the needs of local self-government, economic development, and military requirements. The "defeat Communism" projects include anti-infiltration organizations, anti-Communist propaganada, and youth service groups. The extension program deals with the mobile library, audio-visual demonstration, and other measures of adult education. Just how far these programs have been carried out and how the students react to them cannot be ascertained at this moment, for lack of sufficient data.

Defense Policies

701 The security forces of Taiwan are largely composed of army, navy, and air units transferred from mainland
702 China. They are augmented by Taiwan youths inducted through a system of selective service and the provincial police. For lack of conclusive data, the discussion will be confined to local conscription and police administration.

Selective service in Taiwan is administered in accordance with a number of national laws[48] and provincial regula-

[46] For a brief summary of *San-min chu-i*, see *China Handbook 1950*, pp. 238–39; Paul E. Eckel, *The Far East Since 1500* (New York, 1950), pp. 477–80; Paul H. Clyde, *The Far East* (New York, 1948), pp. 512–17. For complete text, see F. W. Price, *San-Min-Chi-I*, Shanghai, 1927.

[47] *Taiwan Reconstruction**, Vol. 1, pp. 143–46.

[48] National laws include: (1) Universal Military Service Ordinance of the Republic of China*, Oct. 10, 1946; see *National Govern-*

[P. 221(A)]

4:Grajdanzev--166-167 S-4 (no date) 1942 Formosans-1-2
116, 563, 872, 177.87 Japan
636.87

"The growth in the number of pupils in elementary schools may be seen from the following table:

Primary Schools in Taiwan

	1935	1936	1937	1938	1939
Number of schools	781	783	789	796.	812
Number of teachers	6,255	6,659	7,239	7,888	8,718
Number of pupils, 1,000	373.9	407.6	450.0	505.5	557.1
Number of pupils as percentage of children of school age	41.5	43.8	46.7	49.8	...
Graduates, 1,000	42.3	45.7	50.3	59.0	...

Source: Taiwan Jijo.

From this it appears that in five years the number of pupils in primary schools increased from 373.9 thousand to 557.1 thousand. About half the Chinese children of school age (8-14) are now in primary schools. This increase is partially due to the absorption of new pupils by schools, and partially to the fact that the schools have been increasing the length of the courses they offer from four to six years. If one takes into consideration the fact that during these six years the pupils must master thousands of characters as well as a foreign language and that most of the teachers are foreigners

(to them), it is clear that a six-year course is not a long one. These statistics do not include the schools for Japanese children. Theoretically there is complete equality in Taiwan and there are no special schools for the Japanese, but there are schools where instruction is carried on in the Japanese language. With the permission of the governor of the province Chinese may also be admitted to such schools, even if they do not know the Japanese language, but this permission is not given willingly. Many parents among the lower groups of Chinese [167] officials want to send their child to a Japanese school so that he or she will have a thorough knowledge of the language of the rulers and a better chance to get a higher paid job. But in 1936, out of 42,576 pupils in these schools, there were only 2,975 Chinese. There is another important fact with respect to the Japanese pupils; while in 1938 only fifty per cent of the Chinese of school age were in school, 99.4 per cent of the Japanese of this age were attending school in 1936."

15: U.S. Navy --24-25 (no date) 1944 Formosans
116, 191, 212, 872, 186, 177.19 Japanese
636.19

"Japanese, spoken by the 323,148 Japanese, is the official language of the island, and is spoken by a high percentage of the middle-aged and younger Formosan-Chinese in urban centers, but by few of the older agricultural community. About 42 percent of the Formosan-Chinese children attend elementary public schools to learn the Japanese [25] language and doctrines. They learn very little Japanese and at the same time lose the opportunity, when young, to learn something of written Chinese. Hence these younger Chinese are technically 'literate', and can understand orders issued in simple Japanese. Japanese is supposed to be compulsory for all who know it, and it is true that Japanese has become the lingua franca of the island. It may be said that Japanese, as the official language, will be understood by someone in any large gathering of people or in every village outside of the most remote savage territory, although the Formosan-Chinese avoid using it when they can."

87 examinations are required at each educational level above junior middle schools.

A. Primary Education

• 872 Primary education begins when a child reaches the age of six and lasts for six years. Primary education is compulsory and free to all school-age children, "school age" being defined as from 6 to 12-years. Salaries of the teaching staff are paid by local governments. Textbooks and tuition are free, but children must buy their own notebooks and pencils.

The objectives of primary education are good citizenship, proper habits, and the basic knowledge and skill necessary for earning a living. As to language, emphasis is placed on the teaching of Mandarin Chinese as evidenced by the fact that all children entering school must be taught the Mandarin phonetic symbols during the first twelve weeks of school. All texts are in the Chinese language, the compilation of which emphasizes commentary on Dr. Sun Yat-sen's "Three People's Principles,"[3] exposure of the barbarism of the Communists, explanation of the nature of Soviet imperialism, stories illustrative of a patriotic spirit, material relating to Formosa past and present, and other items conducive to the building of morale and to the strengthening of determination to fight against Communist and Soviet imperialism.[4]

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3. Nationalism, Democracy and Livelihood. For details, see the chapter on Structure of Government.

4. China Handbook 1954-55, Taipei China Publishing Company, 1954, p. 313.

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.872 In the academic year of 1954-55, there were 1,350 primary schools in Formosa, with 22,025 classes and an enrollment of 1,113,438 students. The teaching staff numbered 27,944. Percentage of attendance averaged 90.83 with 95.95 the average for boys and 85.32 for girls.[5] From this percentage, it may be inferred that compulsory education is not necessarily enforced. It is possible that some families are too poor to send children to school, and the children are needed at home to supplement the family income. Since most of the schools do not have bus transportation for children, those who live too far away to walk to school may be unable to attend.

B. Secondary Education

873 Three types of secondary schools may be noted, namely, academic middle schools (called middle schools throughout this study), vocational schools, and normal schools (for teacher-training).

1. Middle schools Academic middle schools are divided into those that have both junior and senior divisions and those that have only the junior division. Generally, each division requires three years of study in which Chinese, English, mathematics, physics, chemistry, biology, physiology, hygiene, geography, history, civics, and manual work are taught. Military training is required of senior middle school boys (girls take nursing instead),

5. Provincial Dept. of Education, T'ai-wan-sheng Chiao-yu T'ung-chi 1954-55 School Year [Statistics of Education in Taiwan Province], [cont.]

32:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD1

871 177 197 ently. Besides, the key educational personnel was composed mostly of Japanese. To fill their vacated posts with competent indigenous educators is a time-consuming process.

872 A review of existing educational regulations indicates a policy to extend equal opportunity for free education to all the people, beginning with primary education and gradually extending to junior high school level. Of children in primary schools, 79.08 per cent were being given free education as of September 1949, in contrast to 71 per cent during 873 the pre-Nationalist period. Under the Japanese, higher education for Taiwanese youths was discouraged by means of admission technicalities. This restriction has since been removed. Government scholarships are available to deserving youths with inadequate financial means. The current problem is to provide additional facilities to relieve congestion in secondary and higher institutions of learning. It has been made more acute by the influx of some 100,000 refugee students from the mainland.[44]

871 The over-all Nationalist objective in education is to implement the political, economic, and social policies of the National Government. To meet the current emergency, a series of regulations have been adopted to "establish a central thought," "to strengthen Nationalist concepts," "to carry out reconstruction and defeat Communism," and to link education with various extension programs.[45]

The "central thought" policy revolves around Dr. Sun Yat-sen's *San-min*

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[45] "Educational Program of Taiwan during Emergency Period"* (text appears in *Taiwan Reconstruction**, Vol. 1, pp. 84–88).

[F.220 (R)]

4:Grajdanzev--167 [2] S-4 (no date) 1942 Formosans
116. 563. 873. 177.87 Japan
636.87

"A further important test of any system of education is the number of students in secondary schools and in universities. As was mentioned, literacy is a necessity under modern conditions, even in the colonies. But to give a secondary education and especially a university education to the colonial peoples en masse is quite a different proposition. On April 1, 1939, there were 5,125 Japanese and 4,117 Chinese in the Taiwan secondary schools for boys. It will be recalled that the number of Chinese on the island is almost twenty times as great as the number of Japanese, and the proportion between the children of the two groups is even greater. In the girls' secondary schools the situation is even less favorable to the Chinese—5,312 Japanese pupils as compared with only 2,541 Chinese (1939)."

4:Grajdanzev--168 S-4 (no date) 1942 Formosans
116, 563, 873

"The fact that in 1936, for example, there were 5,576 applications for entrance to secondary schools, but only 1,622 boys were admitted (29.1 per cent of the applicants) and most of those were Japanese shows that there is an ardent desire to study on the part of Taiwanese youth. In 1936 there were 985 Japanese students and 384 Chinese in the teachers' colleges (which prepare teachers for the Chinese schools)."

4:Grajdanzev--168 [2] S-4 (no date) 1942 Formosans
116, 563, 658, 873

"In discussing the public finances of Taiwan, it was noted that the expenditures on the only university in Taiwan. which is in Taihoku, cannot be considered as expenditures purely for the education of the Chinese population. In 1939 there were 192 Japanese and 90 Chinese students in this university."

4:Grajdanzev--168-169 S-4 (no date) 1942 Formosans -1-2
116, 177, 563, 873

"It may be thought that the figures of students in secondary schools and colleges[see table on page 168, category 116--analyst] are not complete because they do not include those who are studying in schools and colleges in Japan proper. It is quite natural that those who have the means prefer to send their children to Japan to get their education at the centre of the Empire. We know that many Japanese from Taiwan are studying in Japan; probably their number far [169] exceeds the number of those who study in Taiwan, but unfortunately, we have no statistics. However, we have complete statistics of the Chinese from Taiwan who are students of Japanese colleges and universities. In 1936 there were in Japan 1,113 Chinese pupils from Taiwan in secondary schools of all types and 952 students in colleges and universities. These students studied: law 204 persons, medicine 507 persons, literature 27 persons, political science and economics 66 persons, commerce 71 persons, music 3 persons, art 7 persons, religion 6 persons, housekeeping 13 persons, physical culture 3 persons, all other subjects 45 persons, or a total of 952 persons.

These figures reflect the views of the students as to their future chances in life. The corresponding figures for the university in Taiwan are not so instructive because there the choice is very limited, while in Japanese they may choose in accordance with their future plans. The great majority of the students select courses leading to liberal professions—law, medicine, etc. They do this because they know that all other roads in

Taiwan are closed to them. These figures show also that the inclusion of those who study in Japan in the number of pupils and students in Taiwan does not materially change the picture."

15: U.S. Navy--22 [3] (no date) 1944 Formosans
116, 208, 609, 873, 177.20 Japanese
636.20

"The general population knows little of the outside world. The United Nations have individually and consistently been placed in an unfavorable light by the Japanese press, radio and educational policies. However, the Formosans who have reached the Middle and Higher Schools and those who have studied in Japan Proper, where they have had access to more evidence of American standards of living and national character, uniformly seem to admire the United States and what they understand of its liberal policies. The record of America's administration in the Philippines has made a considerable impression on educated Formosans. A few Formosans have received their higher education in America colleges and universities. For some years now they have been subject to strict surveillance."

15: U.S. Navy--25 [6]. (no date) 1944 Formosans
116, 191, 873, 177.87 Japanese
636.87

"There are 7,306 'National Language Training Schools' (Kokugo-koshusho) which exist for the purpose of teaching Japanese to adults. According to statistics as of March, 1938, the number of schools and students was as follows:

Table 21: Number of Language Schools and Students

	Number	Pupils	Annual Cost
Elementary training schools.....	3,454	34,865	¥1,576,975
Training schools.....	3,852	257,277	---
	7,306	292,142	

According to the Taiwan Government General, Bureau of Education, in 1939 the number of institutes remains the same, although the pupils now number 470,000."

15: U.S. Navy --26 (no date) 1944 Formosans
116, 873, 177.87 Japanese
636.87

"Texts used in the training schools are published especially for the purpose by the Taiwan Educational Association. The language used is extremely simple and few Chinese characters are introduced. The subject matter includes lessons on Japanese etiquette, polite phrases, Japanese holidays, and shrine worship, as well as consideration of Formosan village and rural daily life."

15: U.S. Navy--26 [4] (no date) 1944 Formosans
116, 198, 873, 177.19 Japanese
636.19

"English has been taught in the private mission schools and in the government schools for many years. It has been a compulsory subject in all middle and higher Schools, i.e., affecting the student age-group from 13 years upward. Pidgin English is not generally known; those who speak it will be found among the clerks and compradores who have worked for foreign firms.

The Imperial University at Taihoku, the High School at Taihoku and the Higher Commercial Colleges at Taihoku and Takao have trained small numbers of Japanese and Formosan students in Malay, Dutch, German, Thai, French, and two dialects of Chinese."

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B. Secondary Education

8B3 Three types of secondary schools may be noted, namely, academic middle schools (called middle schools throughout this study), vocational schools, and normal schools (for teacher-training).

1. Middle schools Academic middle schools are divided into those that have both junior and senior divisions and those that have only the junior division. Generally, each division requires three years of study in which Chinese, English, mathematics, physics, chemistry, biology, physiology, hygiene, geography, history, civics, and manual work are taught. Military training is required of senior middle school boys (girls take nursing instead),

5. Provincial Dept. of Education, T'ai-wan-sheng Chiao-yu T'ung-chi 1954-55 School Year [Statistics of Education in Taiwan Province], [cont.]

and scout training is given to all junior middle-school students. (This subject is further discussed in the section on "The Role of Government" below.) Stress is placed upon the study of the Chinese and English languages; in fact, these two courses take up one-third of the weekly teaching hours. Mathematics, natural sciences, and military training or scout training each takes one-tenth of the total week-hours. Since 1950, some schools have adopted, on an experimental basis, the so-called 4-2 system--four years in the junior division and 2 years in the senior division. It was recommended that the traditional 3-3 system be adjusted to a 4-2 system so that those pupils who could not afford to go through the whole period of six years might stop at the end of the fourth year. Repetition of junior-division courses in the senior division is avoided. The system has the advantage of giving general courses in the first four years, while in the last two years students are grouped into arts and science majors for concentrated study.

In the academic year 1954-55, there were 137 middle schools in operation, 82 of which had both senior and junior divisions. Enrollment reached 125,203, with 24,198 in senior divisions and 101,005 in junior divisions. Less than one-third of the primary-school graduates entered junior middle schools; 42,053 students enter junior middle schools in the autumn of 1954; although there were 141,384 graduates from primary schools in the summer of [6]

[5. continued] Taipei, 1955, Tables 1-4, p. 69.

6. Statistics in this paragraph are from Provincial Department of Education, op. cit., Tables 32, 44, and 76.

873 the same year. Traditionally, the highest graduates from primary schools enter public academic middle schools; the less able graduates enter vocational schools. With a few exceptions, a nominal tuition fee is paid in secondary schools. Tuition at private universities is expensive by Formosan standards.

874 2. Vocational Education Vocational schools give youth the necessary training in production techniques and practical knowledge to earn a living, with emphasis on the "patriotic nature of all endeavor." There were, in the 1954-55 school year, 91 vocational schools, which included 41 agricultural schools, 18 engineering, 18 commercial schools, 3 maritime schools, 8 schools of home economics, and 3 nursing schools. All have junior and senior divisions with the exception of nursing schools, which have only a senior division. Students enrolled in the same period numbered 52,830, of which 17,823 were in the senior division and 35,007 in the junior division.

To emphasize the practical aspects of vocational education, the Ministry Education in October 1954 called a conference of educators with leaders in agriculture, industry, commerce, and medicine to discuss problems and techniques of developing teamwork between schools and employers. Although no concrete program was adopted, individual schools are making efforts to increase field practice to give their students practical experience. However, it is reported that many factories and enterprises are reluctant to make their facilities available to students.[7]

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7. Provincial Dept. of Education, Vocational-Industrial Education in Taiwan, Taipei, 1953, p. 6.

45: Stanford U. S-4, 5 1956 AD1 Formosa AD1

(Table faces p. 181.)

Institutions of Higher Education

Autumn-1956*

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Name of Institution	Location	Enrollment	Number of Faculty
National Taiwan University	Taipei	4,797	1,583
Graduate School, National Political University	Near Taipei	86	30
Provincial Normal University	Taipei	1,428	329
Provincial College of Agriculture	Taichung	941	298
Provincial College of Technology	Tainan	1,584	292
Christian Tunghai University	Near Taichung	890	—
Provincial College of Law and Commerce	Taipei	1,583	126
Law School of Soochow University	Taipei	430	49
Tunhang English College	Tunshui	821	86
Taiwan Medical College	Kaohsiung	81	14
Provincial Maritime Junior College	Keelung	305	75
Provincial Junior College of Agriculture	Pingtung	150	41
Provincial Junior College of Technology	Taipei	1,553	353
Provincial Junior College of Nursing	Taipei	83	23

*Enrollment and size of faculty are for academic year 1954-55; statistics, with the exception of Christian Tunghai University, are from the Provincial Department of Education, T'ai-wan-sheng Chiao-yü T'ung-chi /Statistics of Education in Taiwan Province, 1954-55, Taipei, 1955, Tables 6 and 8. The figure for Christian Tunghai University is from The Asian Student, November 3, 1955. Number of faculty not available.

[facing p. 180]

874 Four Books[10] and training of students in farming as well as in handicrafts are emphasized, so that they will in turn be able to instruct children in such matters.

C. Higher Education

873 After 12 years of primary and secondary education, students may take a competitive examination for entrance to institutions of higher learning. In the autumn of 1955, approxi mately 2,300 freshmen entered colleges and universities although some 12,000 students sat for the examination. There are 14 institutions of higher learning, with an enrollment of about 14,000. Location, enrollment, and size of faculty for these instutions are given in the following table.

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10. The Great Learning, The Doctrine of the Mean, Confucian Analects, and the Works of Mencius, all pertaining to Confucian philosophy and moral principles.

873 More than half of these institutions are located in or near Taipei. Indeed, Taipei is the most important educational center of the island.

In addition to concentration in specialized fields, all students are required to take four courses in common before graduation, namely, courses in modern Chinese history, the Three Peoples' Principles, the history of Soviet encroachment upon China, and world organization and current conditions. Since October 1954, military training in the school as well as upon graduation is required of all male college students (girls are required to take courses in nursing). Conferring of a degree is conditional upon completion of the training.

Educational facilities and opportunities are being continually expanded and improved, but they are still far short of the demand for higher education. Through co-operation of some American universities and the sponsorship of the American Mutual Security Mission to China, educational systems and teaching methods are being revised and educational facilities are being improved.

874 D. Graduate Education and Research Facilities

The National Taiwan Universirty, the National Political University, and the Provincial Normal University have graduate divisions where students complete a two-year course. Upon successful passing of an examination and the completion of a thesis, the Master's degree is conferred upon the graduate.

In National Taiwan University there are 13 graduate divisions, one in the College of Law, another in the College of Arts, and the remainder

The promotion of a national consciousness, the improvement of public sanitation, and the furtherance of co-operation between the armed forces and the people. The main objective of such a program is the training of those people who have missed opportunities to attend schools. They are trained in one or several of the following fields:

1. Languages -- overwhelmingly Mandarin, with English to a considerable extent.
2. Citizenship -- cultivation of national spirit and promotion of traditional moral principles.
3. Vocation -- accounting, typewriting, drawing, auto mechanics, radio and telecommunication, handicraft, etc.
4. Arts -- drama, music, writing, etc.
5. Sciences -- physics, chemistry, and biology.
6. Health -- physical education and sanitation.

Local schools and private educational organizations participate in the educational program. All the primary schools on the island have "mass continuation classes" where Mandarin and citizenship are taught. In some instances, attendance by the underprivileged is made compulsory.[12]

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12. Chung-kuo Chiao-yü Hsüeh-shu Yü Wen-hua 1954 [Education, Learning, and Culture in China], Taipei, Education and Culture, Inc., 1955, p. 47.

45:Stanford U. S-4, 5 1956 AD 1 Formosa
~~AD 1~~ AD1

873 In 1954, there were 23 provincial and private vocational schools which provided teaching staffs and facilities for some 10,000 people, mostly factory workers and farmers, and gave classes in vocational education for periods ranging from 2 to 12 months. In the same year, there were also 418 vocational classes, most of private organization, of which 213 taught the fundamentals of tailoring, 39 taught English, 30 taught typewriting, and 30 accounting.

Active promotion of social education by the government is worthy of mention. The provincial Department of Education has built four social education halls in Hsinchu, Changhua, Tainan, and Taitung, which are used for counseling and teaching in all fields of social education. These education halls are often used for concerts, movies, and social meetings of various kinds. Audio-visual aids are now widely used in teaching, and local governments are ordered to set aside a certain portion of their budgets for this purpose. A radio network for educational purposes, reaching the entire island, is now in operation. (See chapter on Propaganda and Public Information.)

217 With the exception of those located in various schools, the following are the most important libraries and museums on the island: The National Central Library with 120,000 volumes, located at the Botanic Garden, Taipei; two provincial libraries, at Taipei and Taichung, and 15 hsien and municipal libraries at Taipei, Tainan, Kaohsiung, Keelung, Hsinchu, Yilan, Taoyuan, Taichung, Changhua, Chiayi, Pingtung, Hualien, Penghu, Miaoli, and Nantou. These seventeen

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6
Formosa AD1

to as such. Taiwanese, also called Min-nan *hua*, is a Fukienese language like Amoy. It is spoken by the majority of the people of Taiwan, and, although it is spoken with different accents, the speakers of the different variants can understand each other. The accents vary according to the place of origin of the speaker's ancestors. Regional differences have developed in Taiwan as well, so that the accent of the coastal area where Hsin Hsing is located differs from the accents of Taichung or the mountains.

Hakka, another Chinese language, is spoken by the Hakka people (*k'o jen*, "guest people") who originated in Kwangtung province on the mainland. Because of the minority position of the Hakka in Taiwan, they have often had to learn Taiwanese, although Min-nan speakers seldom learn Hakka. The Hsin Hsing village area has no Hakka speakers, and there has been little or no reason for the people of the region to learn Hakka. They are, however, well aware of the Hakka people and of the differences between their languages.

Mandarin, the third Chinese language, is now the official language of the government, replacing Japanese. Japanese first became important in Taiwan through the school system developed by the former rulers. In the 1920's the Japanese government began to augment Taiwan's school system, and "by 1943, 70 percent of Taiwanese children of legal school age were attending some sort of school" (Barclay, 1954b:68n). A limited number of Taiwanese children, usually those whose parents had some status, attended a special primary school system set up by the colonial government for the Japanese children on the island. Classes in these schools were conducted in Japanese. Most children, however, attended the public primary schools whose classes were "conducted in the local dialect" although the children "were required to learn to read in Japanese" (Riggs, 1952:138). All secondary schools and colleges conducted classes "exclusively in Japanese" (Riggs, 1952:138).

In the rural area some children from wealthy landed families attended school beyond the primary level. Because of their education, they were given official jobs under the Japanese regime and mainly spoke Japanese. Today, these men, like a great many urbanites educated under the Japanese, still speak fluent Japanese. The same men now are working for the Mandarin-speaking Nationalist regime and so usually speak Mandarin. They have rarely had the opportunity to use their native Taiwanese and are often chided for speaking their own language very badly.

Most of the rural people though, who did attend public school, usually did not go beyond the primary school level. Many villagers, and almost all rural women, attended school irregularly or not at all. Among all these villagers then, many learned no more than a few

36: Rowe S-4 (no date) 1955 AF1 China AF1
Formosa ADJ

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Education

Free primary school education is now available to everyone, and the average number of children attending school is 80 percent. (The Japanese had restricted the education of the Taiwanese, with few exceptions, to a certain level and to certain schools). All Taiwanese are free to attend any school or college.

In 1950, there were 121 middle schools in Taiwan. Of these 34 were provincial schools, 74 established by *hsien* or municipalities, and 13 private schools. In 1950, there were eight normal schools, as compared to three on V-J Day, several vocational schools, and six institutions of higher learning, including a national university with a total enrollment of 6573 students.

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Since most of the institutions of higher learning are run by the government with a view to keeping costs down, a Taiwanese may obtain a high school or college education with only a small outlay of money. However, the demand for education far exceeds the opportunities because educational facilities are still in short supply. Thus the schools are overcrowded and competition for admission to them is keen. Education remains a major unsolved problem.

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Evaluation of Nationalist Achievements

The Taiwanese economy today supports a considerably larger population than in the past. It also supports an army, which though it has itself cultivated land and increased other types of production in an attempt to provide in part for its own consumption, still creates a heavy drain upon the government treasury. By Western standards government employees are poorly paid; an army officer, for example, earns less than a storekeeper or peddler. The cost of living remains high in relation to average income, despite the fact that the currency is more stable than it has been for over a decade. There is some unemployment (though no beggars).

In general, however, the island's postwar record of internal peace, order, and achievement is impressive. The police force and local administration are efficient and reasonably free from corruption. Crime is at a low level. For the first time in many centuries, the government has taken an accurate census. The government gives every evidence of sincerely respecting the wishes and opinions of the people. To be sure, a permit is required for entering and leaving the island, and all residents carry identification cards. Some would attribute such measures to an oversealous secret police, but the alleged reason for them, military security, appears to be the real one. It must be remembered that a government constantly on the defensive against a merciless enemy, must take extensive precautions. The important point is that despite these precautions, and the presence of five hundred thousand exiled troops on the island, the Taiwanese who keeps within the law is not likely to be deprived of life, liberty, or property. This is rather confirmed than disproved by the considerable amount of grumbling in which they indulge. At any Taiwanese newstand one may purchase magazines and papers critical of the existing regime as well as those favorable to it, and there are no restrictions on listening in on the short-wave radio. There is, on the other hand, no mercy shown genuine political offenders. The Communists employ every method in the book in their attempt to recruit Taiwanese, including blackmail and threats of harm to relatives on the mainland. The Communist slogan, familiar to everyone on the mainland, is: "We will use blood to wash Taiwan clean!" The secret police in Taiwan have good reason, therefore, to keep on the alert, and the government good reason to mete out swift justice to the proven spy or traitor. It is the general opinion

52:Steiner S-4 (no date)1951
AF1 China
FORMOSA AD1

871 177 197 ently. Besides, the key educational personnel was composed mostly of Japanese. To fill their vacated posts with competent indigenous educators is a time-consuming process.

872 A review of existing educational regulations indicates a policy to extend equal opportunity for free education to all the people, beginning with primary education and gradually extending to junior high school level. Of children in primary schools, 79.08 per cent were being given free education as of September 1949, in contrast to 71 per cent during 873 the pre-Nationalist period. Under the Japanese, higher education for Taiwanese youths was discouraged by means of admission technicalities. This restriction has since been removed. Government scholarships are available to deserving youths with inadequate financial means. The current problem is to provide additional facilities to relieve congestion in secondary and higher institutions of learning. It has been made more acute by the influx of some 100,000 refugee students from the mainland.[44]

871 The over-all Nationalist objective in education is to implement the political, economic, and social policies of the National Government. To meet the current emergency, a series of regulations have been adopted to "establish a central thought," "to strengthen Nationalist concepts," "to carry out reconstruction and defeat Communism," and to link education with various extension programs.[45]

The "central thought" policy revolves around Dr. Sun Yat-sen's *San-min*

[44] Data in this paragraph drawn from *Taiwan Reconstruction**, cited note 12 *supra*, Vol. 1, pp. 83–146; *Taiwan Today*, cited note 11 *supra*, pp. 147–48; *The Administration of Planned Education**, cited note 43 *supra*, p. 7.

[45] "Educational Program of Taiwan during Emergency Period"* (text appears in *Taiwan Reconstruction**, Vol. 1, pp. 84–88).

[F. 220 (2)]

4:Grajdanzev--167-168 S-4 (no date) 1942 Formosans
116, 563, 874

"In the specialized schools the situation is similar—[i.e. proportionally fewer Chinese than Japanese students--analyst] in the industrial schools there are 963 Japanese boys and 460 Chinese; in the commercial schools, 1,791 Japanese [168] boys and 724 Chinese. The agricultural schools form the only exception, but even here there are 588 Japanese to 1,426 Chinese pupils though there are at least 300 times as many Chinese farmers as Japanese."

15: U.S. Navy --26 [9] (no date) 1944 Formosans
116, 732, 759, 548, 874, 177.73 Japanese
636.73

"Schools for the blind, the deaf, and the dumb are maintained at Government expense at Taihoku and Tainan. In addition to instruction in Braille, pupils are taught various skills, of which the most important are weaving, chiefly of panama hats, and massage. Graduates of the school who have passed the required masseur's examination are licensed to practice, and are assigned districts or routes over which they go every evening from nightfall until midnight, with a whistle or pipe and a tune peculiar to each masseur. They travel, both men and women, in pairs or with a small child or elder person as a guide. Many are not wholly blind, but qualify to practice. Sometimes they work at home or in shops at various tasks during the day, making the evening work as a masseur a supplementary livelihood. Many Chinese hotels or lodging houses have masseurs regularly employed. A certain amount of illegal solicitation for prostitution is carried on by them as well as by the masseurs who travel a regular beat through the city streets."

873 the same year. Traditionally, the highest graduates from primary schools enter public academic middle schools; the less able graduates enter vocational schools. With a few exceptions, a nominal tuition fee is paid in secondary schools. Tuition at private universities is expensive by Formosan standards.

2. Vocational Education Vocational
• 874 schools give youth the necessary training in production techniques and practical knowledge to earn a living, with emphasis on the "patriotic nature of all endeavor." There were, in the 1954-55 school year, 91 vocational schools, which included 41 agricultural schools, 18 engineering, 18 commercial schools, 3 maritime schools, 8 schools of home economics, and 3 nursing schools. All have junior and senior divisions with the exception of nursing schools, which have only a senior division. Students enrolled in the same period numbered 52,830, of which 17,823 were in the senior division and 35,007 in the junior division.

To emphasize the practical aspects of vocational education, the Ministry Education in October 1954 called a conference of educators with leaders in agriculture, industry, commerce, and medicine to discuss problems and techniques of developing teamwork between schools and employers. Although no concrete program was adopted, individual schools are making efforts to increase field practice to give their students practical experience. However, it is reported that many factories and enterprises are reluctant to make their facilities available to students.[7]

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7. Provincial Dept. of Education, Vocational-Industrial Education in Taiwan, Taipei, 1953, p. 6.

894 Vocational schools lack competent teachers because the salaries offered are low compared with those offered for work in factories and business enterprises. Equipment and size of workshops in the schools are reported to be inadequate to provide full opportunities for all students. Consequently, undue emphasis is put on the theoretical aspects of the subjects studied and lack of practical experience makes comprehension difficult.[8] Efforts are being made to find solutions to these problems.

3. Teacher-training Schools There are 9 teacher-training schools, with 6,539 students, of whom 3,750 are boys.[9] The importance of teacher-training is appreciated because it is recognized that the quality of teachers determines the quality of the generation to come. The traditional feeling toward vocational schools, as has been mentioned, and the generally low salaries of teachers, make the profession of teaching less attractive. To encourage people to become teachers, the training schools offer free tuition, room and board, and uniforms. Those who complete their training agree to serve as teacher for at least three years after their graduation.

In teacher-training, cultivation of a national consciousness and patriotic sentiment, a strong background in Mandarin Chinese, and an understanding of the value of labor are given closest attention. For these purposes, teaching of materials from the

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8. Ibid.

9. Provincial Dept. of Education, Statistics of Education in Taiwan Province, 1954-55, Table 45.

874 Four Books[10] and training of students in farming as well as in handicrafts are emphasized, so that they will in turn be able to instruct children in such matters.

C. Higher Education

873 After 12 years of primary and secondary education, students may take a competitive examination for entrance to institutions of higher learning. In the autumn of 1955, approxi mately 2,300 freshmen entered colleges and universities although some 12,000 students sat for the examination. There are 14 institutions of higher learning, with an enrollment of about 14,000. Location, enrollment, and size of faculty for these instutions are given in the following table.

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10. The Great Learning, The Doctrine of the Mean, Confucian Analects, and the Works of Mencius, all pertaining to Confucian philosophy and moral principles.

873 More than half of these institutions are located in or near Taipei. Indeed, Taipei is the most important educational center of the island.

In addition to concentration in specialized fields, all students are required to take four courses in common before graduation, namely, courses in modern Chinese history, the Three Peoples' Principles, the history of Soviet encroachment upon China, and world organization and current conditions. Since October 1954, military training in the school as well as upon graduation is required of all male college students (girls are required to take courses in nursing). Conferring of a degree is conditional upon completion of the training.

Educational facilities and opportunities are being continually expanded and improved, but they are still far short of the demand for higher education. Through co-operation of some American universities and the sponsorship of the American Mutual Security Mission to China, educational systems and teaching methods are being revised and educational facilities are being improved.

D. Graduate Education and Research Facilities

874 The National Taiwan Universirty, the National Political University, and the Provincial Normal University have graduate divisions where students complete a two-year course. Upon successful passing of an examination and the completion of a thesis, the Master's degree is conferred upon the graduate.

In National Taiwan University there are 13 graduate divisions, one in the College of Law, another in the College of Arts, and the remainder

45:Stanford U. S-4, 5 1956 AD 1 Formosa
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874 in the departments of natural and applied science. In the academic year 1954-55, there were 149 graduates at the university. A graduate division of the College of Sciences publishes periodic reports on the results of its research. With the assistance of American agencies, the university is improving and expanding its facilities to be comparable to those in the United States. The government has recently established an Atomic Energy Committee and five atomic-resarch centers. Two of the centers are located in the university. Research is concerned with the peaceful use of atomic energy.

The Graduate School of the National Political University has four institutes, known as the Institute of Civic Education, the Public Administration Institute, the Institute of Journalism, and the Institute of International Relations. They lack satisfactory library facilities of their own and must borrow books from the National Central Library or from the Library of the Ministry of Education. Efforts are being made to buy more books at home and abroad. In early 1955, the total enrollment was 56.

In view of the increasing number of students, library collections in general at these institutions are not adequate and space is limited. Most of their collections are old, and books in the Japanese language constitute a major part of the collections.

The Academia Sinica, established as the highest institution for scientific research in China,

45:Stanford U. S-4,5 1956 AD1 Formosa AD1

•874 carries on a program of scientific research, which includes its direction, co-ordination, and promotion. Thirteen institutes, composed mostly of academicians (Yüan-shih or research scholars), were established before the government's removal to Formosa, but only one institute, the Institute of History and Philology, was moved from Nanking to Formosa with its collections intact. Its research work has continued. Some academicians of such institutes as those of astronomy, geography, botany, and medicine also are continuing their research work with the existing facilities on the island. In 1955, a new Institute of Modern Hstiroy was established under the direction of the distinguished scholar Kuo T'ing-i. The announced purpose of the institute is to collect and organize source materials and to support critical research on "Chinese history since the beginning of the 19th century, inclusive of changes in diplomatic relationships, military and political conditions, social and economic institutions, letters and arts, and systems of thought; successes and failures of the modernization movement; and the development and growth of Chinese Communism." [11]

E. Social Education

The core of social education in Formosa centers around the obliteration of illiteracy and

11. "General Scope of the Research Program for the Institute of Modern History, Academia Sinica." Typescript, distributed by the Institute in August 1955.

217 libraries have a total of 46,187 books in European languages, 241, 574 in Chinese, and 240,603 in Japanese.

874 The provincial Department of Education also maintains two trade schools for the deaf, dumb, and blind at Taipei and Tainan. These schools provide free education in trades such as woodworking, barbering, shoemaking, massaging, etc., and can accommodate 436 students, principally children.

658 Special attention has been given to fine arts education in order to encourage the aesthetic aspirations of the people. The Ministry of Education recently established for this task the Committee for Fine Arts Education and the Committee for Research and Improvement of Chinese Opera. New plays are being written and concerts, art exhibitions, and other cultural events are provided under the committees' promotion.

III. ROLE OF THE GOVERNMENT

A. Content and Character of the Role

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In Formosa, the government has general control over the supervision, educational policies, and organization of schools at all levels.

The Executive Yuan, in its proposal of an administrative program to the Legislative Yuan in March 1952, set its educational objectives as follows: "that in order to meet the needs of time...

744 laboratory manufactured smallpox vaccine for 8,800,000 persons and distributed it free to 350 health stations. In the same year, mixed vaccine against cholera and typhoid was produced for 2,355,000 persons and issued to the health stations for free inoculations.[21]

Other programs. Campaigns against trachoma through examination and treatment of school children; the control of venereal diseases through education, periodic examinations, and treatment; and the establishment of a blood bank to meet emergency needs; all are being carried out through the co-operation of various governmental, United States, and international agencies. In addition, the provincial government operates a leprosy colony for the custodial care of some 700 patients.

C. Medical Education

•874 There are currently three medical schools and two college-level nursing schools in Formosa -- the National Taiwan University School of Medicine, the National Defense Medical College, and the non-Government Takau Medical College; the National Army Defense Nursing Schools and the Provincial Technical School of Nursing.

The National Taiwan University (NTU) School of Medicine is the island's highest medical institution. It trains dentists and pharmacists as well as physicians and surgeons. The doctoral

21. China Handbook 1953-54, Taipei China Publishing Company, 1953, p. 140.

874 degree requires seven years of work -- three in pre-medical courses at the College of Sciences and four in specialized studies at the school. In the 1954-55 school year, the school had 175 pre-med students and 361 medical students, 66 of them studying pharmacy. The National Defense Medical College trains doctors and medical technicians for the armed forces. The private Takau Medical College, recently established, has an enrollment of 61 students. It admits graduates of senior middle schools for six years of professional education in general medicine, dentistry, and pharmacy. The National Army Defense Nursing Schools offers nursing diplomas and bachelor degrees in nursing. For the degree, graduation from a senior middle school is required for admission to a four-year course. The Provincial Technical School of Nursing, established in 1953, gives training in nursing education. It admits about forty students yearly.[22] In addition, there are four provincial nursing schools which offer courses in nursing only; two of the schools are at Taipei, one at Tainan, and the other at Taichung. The Provincial Taipei School of Nursing is the only institution on the island that maintains four-year diploma programs in nursing and midwifery.

874 648 In addition to recently expanding its medical facilities, the NTU School of Medicine has made progress in medical education through a United St ates two-way technical assistance group. Under

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22. The statistics in this paragraph are from the Department of Education, Taiwan Provincial Government, T'ai-wan-sheng Chiao-yü T'ung-chi, [Statistics of Education in Taiwan Province, School Year 1954], Taipei, 1955, Tables 10, 18, and 21.

•874 648 the program, key local faculty members are sent to the United States for training, and United States medical consultants are sent to the NTU School of Medicine for short periods to teach and to assist in the revision of curriculum and teaching methods. In co-operation with Duke University 32 man-months of United States consultant work at the school was scheduled for the fiscal year 1955 and 36 man-months for fiscal 1956. With the help of these and other U.S. technical assistance consultants, much of the school's curriculum has already been completely revised along modern lines. It is expected that the personnel of the school now receiving training in the United States will eventually take over the work of incorporating new medical knowledge and teaching methods into the curriculum. Recent improvement of school facilities includes the renovation of all key buildings and the establishment of a clinical pathology laboratory and a completely equipped therapeutic and diagnostic X-ray building at the NTU Hospital.[23]

874 A nursing program has been developed to provide more nurses by establishing new schools and to improve the existing training of personnel by short training courses as well as education abroad. A new program at NTU to provide college-level

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23. Mutual Security Mission to China, International Co-operation Administration, op. cit., pp. 3-4.

874 training for nurses will begin in 1956 with the expectation of graduating forty nurses with B.S. degrees yearly after 1960. In addition, nine nurses have received training in the United States under the technical assistance program; three are scheduled to enter the program in 1956 and seven in 1957. In Formosa, the Provincial Health Administration is also conducting seminars for hospital administrators, chief nurses, and head nurses.

D. Outlook

744 Today, the major challenge in the field of public health lies in environmental sanitation. The problem entails, in particular, the improvement of waste collection and disposal, of food sanitation in private homes, food stands, and restaurants, and of insect and rodent control. Concentration of attention in these areas is vital to maintain the present general level of the population's health as well as to reinforce the curative and preventive accomplishments already made in the treatment of specific diseases.

Since the improvement of environmental sanitation is closely related to a higher standard of living, the attainment of completely satisfactory conditions will be a long and hard pull. Under the co-operative efforts of the government, the United States, and international agencies, Formosa has made great advances in health work and looks forward to achieving a clean and healthy community free from major diseases in the not too distant

625 374 The exact number of personnel belonging to the police force on Formosa is not available. According to the China Handbook for 1954-55, the total police force numbered a little more than 20,000 in 1953. There are two schools devoted to the training of police personnel: the Central Police Academy trains officers, the Taiwan Police Academy trains enlisted men. In 1953, ten officers were selected for advanced training in the United States and Japan.

III. MEASURES AGAINST COMMUNIST ACTIVITIES

668 648 The Communists in Peking see Formosa as a potential threat to their regime in contradistinction to the Chinese people on the Mainland, who look to Formosa in the hope of ultimate emancipation. As long as Formosa remains free, it is a thorn in their flesh. The Nationalist Government may use the island as a staging area in preparation for an attack on the China Mainland, much as the Allies made use of Britain prior to the invasion of Nazi-dominated Europe. In consequence, Communists never relent in their effort to infiltrate into the island.

648 625 The Nationalist Government, alert to the presence of saboteurs and spies, has organized a security network under the direction of Lt. General Chiang Ching-kuo, son of Chiang Kai-shek. The security network is controlled by the

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11. China Handbook 1954-55, Taipei, China Publishing Company, 1954, p. 184.

4:Grajdanzev--167 S-4 (no date) 1942 Formosans
116, 563, 875

"Whether or not the Japanese and Chinese children in their respective schools receive the same kind of education may be inferred from the following fact. In 1936 the maximum monthly salary of teachers in the schools for Japanese children was ¥82 for men and ¥70 for women and the minimum, ¥40 for men and ¥30 for women. But in the public schools (i.e. for the Chinese) the maximum salary was ¥50 and minimum ¥10, and this difference was not due chiefly to nationality, for the majority of teachers in the public schools are also Japanese, but to the calibre of the teachers (1).

1. On the average the expenditure per pupil in 1936 was twice as high in schools for the Japanese as it was in schools for the Chinese."

15: U.S. Navy --25-26 (no date) 1944 Formosans
116, 191, 875, 883, 177.87 Japanese
636.87

"Sessions of the koshusho [MC: 'National Language Training Schools' established to teach Japanese to the Formosans.] are held in schoolrooms, public halls, special buildings built for the purpose, or private homes. Teachers are almost invariably Formosan-Chinese, usually members of the local young men's association who have been graduated at least from the primary schools. Quality of instruction necessarily varies greatly. A young Formosan-Chinese states that in some districts, members of the young men's association are particularly active and enthusiastic. In such cases, instruction and results at the training school may be satisfactory. In other districts there is little local interest and the quality of instruction is poor. Often the instructors themselves have an inadequate knowledge of Japanese. It is stated that occasionally a Japanese with earnest conviction to aid in the process of assimilation will volunteer [26] to teach. Such cases are extremely rare, however. Instructors receive no pay."

4:Grajdanzev--165-166 S-4 (no date) 1942 Formosans
116, 208, 871, 876

"The school is considered the best instrument for turning the islanders into docile, law-abiding, hardworking servants. As may be seen from the following table the results, before 1930, were hardly impressive:

Number of Chinese on Taiwan who Understand the Japanese Language
(census data)

	1905	1915	1920	1930
Women	469	4,194	11,168	70,750
Men	10,801	50,143	87,897	294,677
Total	11,270	55,337	99,065	365,427

Source: Kokumin nenkan, 1940, p. 665.

[166] If we look at the rate of growth these figures may appear imposing. But actually the results can hardly be considered satisfactory since by 1930, after thirty-five years of Japanese rule over such a small area, only about ten per cent of the population understand the language of the rulers—and the degree of understanding required by the census-takers was small."

15: U.S. Navy --25-26 (no date) 1944 Formosans
116, 191, 875, 883, 177.87 Japanese
636.87

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15: U.S. Navy--32-33 (no date) 1944 Formosans
116, 462, 466, 883

"The percentage of women among the total number of [33] employed persons in various industries is indicated by the following figures:

Table 25: Percentage of Industrial Workers who are Women.

Textile industry	73.4	Chemicals	26.4
Metals	10.6	Lumber	5.8
Machinery	1.2	Foodstuffs	34.8
Ceramics	18.2	Printing	12.9
'Others'	68.2		

The textile industry is negligible in Taiwan. If it is excluded, women numbered approximately 30.6 percent of the people employed in Taiwan in 1936. Women and children labor in the mines and are used to provide motive power for wagons, push-car lines and construction gangs. The wages for women are usually about half those for men. Human life as well as labor is cheap, and the employers in Taiwan are notoriously careless of safety and sanitary conditions in industry."

40: Kirk--25-26 S-2 (no date) 1941 Formosans-1-2
116, 561, 575, 658, 883, 177.88 Japanese

"Youth movements. The Japanese are laying great stress upon the various youth movements which are actively sponsored in Taiwan by the Government General and the local provincial governments. There are young men's associations, young women's associations, and Boy Scouts. These organizations aim to

> train and drill youth spiritually and physically to inculcate loyalty, to improve character as loyal subjects, to instill a spirit of public service, to encourage self-help, self-control and initiative, to increase knowledge and skill necessary for practical life, to encourage diligence and thrift, and to improve general health conditions of the nation.

The specific purpose of the young women's association (Joshi Seinen Dan), especially among Formosan Chinese, is 'to encourage and propagate the use of the national language, to inculcate female virtue, to educate women in housekeeping, to improve home-life, to cultivate sentiments through recreation, to improve health conditions, and thus to train women in sound womanhood.' The young woman's movements, however, are far less active than the men's associations. The local territory covered by each association corresponds to a public school district. Young people under 20 years of age

who are graduates of [26] public schools may join the youth movement. The young Formosan Chinese members are particularly interested in spreading the use of the Japanese language and in raising the Formosan standards of living. The young men are called upon to assist the police in traffic control during celebrations, to serve on watch duty or to run errands, and even to do hard manual labor, on occasion, when additional workers are needed.

The geographical position of Formosa and the ethnic factors in the overwhelming non-Japanese population are largely responsible for the determined drive of the Imperial government to assimilate the Formosans as speedily as possible."